



Evaluation support study on the CAP's impact on knowledge exchange and advisory activities

Final Report



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ABSTRACT

This evaluation support study is assessing the impact of the 2014-2020 CAP on knowledge exchange, advisory activities, and innovation. Rural Development measures offer direct financial support for training or advisory activities and for the innovative projects of EIP-AGRI Operational Groups. Together with several CAP instruments such as the EU EIP-AGRI network, the Farm Advisory System and the National/Regional Rural Networks, they directly foster knowledge exchange, advisory and innovation activities. Other Rural Development measures, such as the agri-environment climate measure or the investment measure also contribute directly or indirectly to these knowledge exchange and advice activities by making the support subject to a training or advisory requirement, for example. Beyond these, in the wine sector, a specific support measure is also dedicated to innovation. This study examines these CAP supported activities across all EU-28 Member States and more specifically in eight case study Member States.

RÉSUMÉ

Cette étude évalue l'impact de la PAC 2014-2020 sur l'échange de connaissances, les activités de conseil et l'innovation. Les mesures de développement rural offrent un soutien financier direct aux activités de formation ou de conseil et aux projets innovants des groupes opérationnels du PEI-AGRI. Plusieurs instruments de la PAC tels que le réseau européen PEI-AGRI, le système de conseil agricole (FAS) et les réseaux ruraux nationaux/régionaux, favorisent directement (conjointement avec les mesures de développement rural) les activités d'échange de connaissances, de conseil et d'innovation. D'autres mesures de développement rural, telles que les mesures agroenvironnementales et climatiques ou la mesure d'investissement, contribuent également, directement ou indirectement, à ces activités d'échange de connaissances et de conseil en subordonnant le soutien à une exigence en matière de formation ou de conseil, par exemple. En outre, dans le secteur vitivinicole, une mesure de soutien spécifique est également consacrée à l'innovation. Cette étude examine ces activités soutenues par la PAC dans tous les États membres de l'UE-28 et plus particulièrement dans huit États membres ayant fait l'objet d'une étude de cas.

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LIST OF ABBREVIATIONS

AASCs	Public Agricultural Advisory Services Centres
AECM	Agri-environment and climate measures
AIR	Annual Implementation Report
AKIS	Agricultural Knowledge and Innovation Systems
AKS	Agricultural Knowledge Systems
ANC	Areas of Natural Constraints
AWU	Annual Work Unit
CAP	Common Agricultural Policy
CAP I&M	Common Agricultural Policy Instruments and Measures
CDR	Central Agricultural Advisory Centre (Poland)
CEQ	Common Evaluation Question
CIP	Competitiveness and Innovation Framework Programme
CMEF	Common Monitoring and Evaluation Framework
CMO	Common Market Organisation
CS	Case Study
CSF	Common Strategic Framework
CSR	Case Study Reports
DAFM	Department of Agriculture, Food and the Marine (Ireland)
DG-AGRI	Directorate-General for Agriculture and Rural Development
EAFRD	European Agricultural Fund for Rural Development
EAGF	European Agricultural Guarantee Fund
EC	European Commission
ECA	European Court of Auditors
EIP-AGRI	European Innovation Partnership for Agricultural productivity and Sustainability
EMFF	European Maritime and Fisheries Fund
ENRD	European Network for Rural Development
ERDF	European Regional Development Fund
ES	Evaluation Support Study
ESF	European Social Fund
ESI	European Structural and Investment Funds
ESIF	European Structural and Investment Funds
ESQ	Evaluation Support Study Question
EU	European Union
FA	Focus Area
FA Services	Farm advisory services (RDP measure 2 - see also glossary)
FAO	Food and Agriculture Organisation

FAS	Farm Advisory System (Articles 12 to 14 of Regulation (EU) No 1306/2013)
FG	Focus Group
FP7	Seventh Framework Programmes for Research and Technological Development
FTE	Full-time equivalent
GLAS	Green, Low-Carbon, Agri-Environment Scheme (Ireland)
GR	Generational Renewal
GVA	Gross Value Added
H2020	EU Research and Innovation programme Horizon 2020
HRDP	Hexagonal Rural Development Programme
I&M	Instruments and measures
IGL	Interview / Focus group Guide
JC	Judgement Criteria
KE	Knowledge exchange (mainly group activities)
KE-I-A	Knowledge exchange (mainly group activities), Innovation and Advisory activities (mainly giving one-to-one advice) which were put in place under the Common Agricultural Policy (CAP) Rural Development Regulation (EU) No 1305/2013
LAG	Local Action Groups
LEADER	Liaison Entre Actions de Développement de l'Économie Rurale", meaning 'Links between the rural economy and development actions'
LLL	Lifelong Learning
M2	RD measure funding farm advice (see also glossary)
MA	Managing Authorities (at RDP level)
MCA	Multiple Criteria Analysis
MS	Member State
NRN	National Rural Networks
NSP	National Support Programmes
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organisation for Economic Co-operation and Development
OG	Operational Groups
PA	Partnerships Agreements
R&I	Research and Innovation
RSPB	Royal Society for the Protection of Birds
RD	Rural Development
RDF	Rural Development Foundation (Estonian FAS coordinator)
RDP	Rural Development Programme
RDR	Rural Development Regulation
RRN	Regional Rural Networks
SCAR	Standing Committee for Agricultural Research

SFC	System for Fund Management
SG	Steering Group
SGM	Steering Group Meeting
SMEs	Small and Medium-sized Enterprises
SWG	Strategic Working Group
TOR	Terms of Reference
UAA	Utilised Agricultural Area
VT	Vocational Training
WFD	EU Water Framework Directive (Directive 2000/60/EC)
YF	Young Farmer

COUNTRY AND REGION ABBREVIATIONS

AT	Austria
BE	Belgium
BE-FL	Flanders (Belgium)
BE-WL	Wallonia (Belgium)
BG	Bulgaria
CY	Cyprus
CZ	Czechia
DK	Denmark
DE	Germany
DE-LS	Lower Saxony (Germany)
EE	Estonia
ES	Spain
FI	Finland
FR	France
FR-LO	Lorraine (France)
GE	Grand-Est (France)
GR	Greece
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
IT-UM	Umbria (Italy)
IT-VE	Veneto (Italy)
LT	Lithuania
LU	Luxemburg
LV	Latvia

MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	United Kingdom
UK-E	England (United Kingdom)
UK-NI	Northern Ireland (United Kingdom)

MEASURES AND SUB-MEASURES ABBREVIATIONS

- **From Regulation (EU) No 808/2014**

Abbreviation	Short reference	Detailed reference
M1	KT	Knowledge transfer and information action
<i>M1.1</i>	<i>Training</i>	<i>Support for vocational training and skills acquisition actions</i>
<i>M1.2</i>	<i>Demonstration</i>	<i>Support for demonstration activities and information actions</i>
<i>M1.3</i>	<i>Visits</i>	<i>Support for short-term farm and forest management exchange as well as farm and forest visits</i>
M2	Advisory services	Advisory services, farm management and farm relief services
<i>M2.1</i>	<i>Use of advice</i>	<i>Support to help benefiting from the use of advisory services</i>
<i>M2.2</i>	<i>Farm management and relief</i>	<i>Support for the setting up of farm management, farm relief and farm advisory services as well as forestry advisory services</i>
<i>M2.3</i>	<i>Training advisors</i>	<i>Support for training of advisors</i>
M3	Quality scheme	Quality schemes for agricultural products and foodstuffs
M4	Investments	Investments in physical assets
<i>M4.1</i>	<i>Investments in agricultural holdings</i>	<i>Support for investments in agricultural holdings</i>
<i>M4.4</i>	<i>Non-productive investments</i>	<i>Support for non-productive investments linked to the achievement of agri-environment-climate objectives</i>

Abbreviation	Short reference	Detailed reference
M5	Restoring agricultural potential	Restoring agricultural production potential damaged by natural disasters and introduction of appropriate prevention
M6	Farm and business development	Farm and business development
<i>M6.1</i>	<i>YF start up aid</i>	<i>Business start up aid for young farmers</i>
<i>M6.4</i>	<i>Investment in rural activities</i>	<i>Support for investments in creation and development of non-agricultural activities</i>
M7	Basic rural services	Basic services and village renewal in rural areas
M8	Investments in forest area	Investments in forest area development and improvement of the viability of forests
<i>M8.6</i>	<i>Investments in forest technologies</i>	<i>Support for investments in forestry technologies and in processing, mobilising and marketing of forest products</i>
M9	Producer groups	Setting up of producer groups and organisations
M10	Agri-environment-climate	Agri-environment-climate
M11	Organic farming	Organic farming
M12	Natura 2000	Natura 2000 and Water Framework Directive payments
M13	ANC	Payments to areas facing natural or other specific constraints
M14	Animal welfare	Payment for animal welfare
M15	Forest-climate	Forest-environmental and climate services and forest conservation
M16	Cooperation	Cooperation
<i>M16.1</i>	<i>Establishment of Operational Groups</i>	<i>Support for the establishment and operation of Operational Groups of the EIP-AGRI for agricultural productivity and sustainability</i>
<i>M16.2</i>	<i>Pilot projects</i>	<i>Support for pilot projects and for the development of new products, practices, processes and technologies</i>
M17	Risk management	Risk management
M19	LEADER	Support for LEADER local development (CLLD)
M20	Technical assistance	Technical assistance
<i>M20.2</i>	<i>NRN/RRN</i>	<i>Support for establishing and operating the National Rural Network</i>

- **From Regulation (EC) No 1974/2006**

Abbreviation	Short reference	Detailed reference
m111	Vocational training and information actions	Vocational training, information actions, including diffusion of scientific knowledge and innovative practices for persons engaged in the agricultural, food and forestry sectors
m114	Use of advice	Use of advisory services
m115	Setting up of advice	Setting up of farm management, farm relief and farm/forestry advisory services
m124	Cooperation	Cooperation for development of new products, processes and technologies in the agricultural and food sector
m331	Training	Training and information for economic actors operating in agriculture and rural areas

GLOSSARY OF TERMS

AKIS (Agricultural Knowledge and Innovation System)	<p>The term Agricultural Knowledge and Innovation System (AKIS) is used to describe the whole knowledge flow (interaction and generation) system: the ways people and organisations interact and generate innovation within a Member State or a region. Different AKIS-components include – Extension, Education and Research – and many more actors in the food chain that directly influence the decision making of farmers and their innovations (EU SCAR, 2015). AKIS includes farmers, foresters, advisors, researchers, actors of the whole supply chain, NGOs, businesses, authorities, research, etc. and can vary a lot, depending on the Member State or sector (EC, 2018a and 2020). AKIS covers whatever topics farming and rural activities relate to, such as landscape, environment, climate, biodiversity, consumers and citizens, food and non-food systems including processing and distribution chains.</p>
Effective functioning of MS AKIS	<p>“An effective AKIS bridges gaps between research and practice”; “a well-functioning AKIS should comprehensively cover the provision of relevant knowledge and innovation in agriculture, and network farmers and foresters with researchers, advisors, businesses etc. to this purpose” (Terms of Reference, p.4). Innovation may also be generated in innovation projects/groups without the inclusion of research (e.g. a group of farmers and an advisor, a farmer and an entrepreneur, etc.).</p>
Information flows	<p>Mainly concerns the flow of information (mainly agricultural knowledge) from one person/organisation to another through knowledge exchange, knowledge transfer, innovation or advice. Flows involve a source and a recipient or destination.</p>
Advisory activities (A)	<p>Wide range of activities that are intended to help farmers decision making.</p>
Knowledge Exchange (KE)	<p>Knowledge exchange is a multiple process that generates, shares and/or uses knowledge, through various methods appropriate to the context, purpose and participants involved. It involves multiple actors, especially farmers/land managers and the many actors they interact with (CCRI, 2013).</p>
Innovation (I)	<p>“Innovation is often described as a new idea that proves successful in practice. Innovation may be technological, but also non-technological, organisational, or social. Innovation may be based on new but also on traditional practices in a new geographical or environmental context. The new idea can be a new product, practice, service, production process or a new way of organising things, etc. Such a new idea turns into an innovation only if it is widely adopted and proves its usefulness in practice” (EC, 2017a).</p>
CAP implementation	<p>Rules governing EU CAP instruments and measures are set at EU level; however, their implementation is managed by each MS/region (RDP). MS have a certain level of flexibility in the type of schemes they use and the way they set-up programmes (in particular in RDP, wine, but also to a limited extent for certain aspects of DP) to take account of national farming conditions, which vary greatly throughout the EU.</p>
CAP architecture	<p>Refers to the CAP intervention logic, includes all CAP provisions, and the way Member States apply them considering the CAP specific and general objectives.</p>

Critical factors for success	Success means firstly uptake, followed by the effective acquisition and application into practice, of knowledge gained by farmers and foresters (and rural development actors) through training and advice. The critical factors which promote success could be identified as certain attributes of the AKIS which could be structural, situational or behavioural, and certain characteristics of the training and advice offered (features of design and delivery, technical competence and human skills of advisors and trainers, involvement in EIP-AGRI Operational Groups), which particularly favour acquisition and application of new knowledge by farmers and foresters.
M1 Rural Development "Knowledge transfer and information action" measure	M1 (Article 14 of Regulation (EU) No 1305/2013) supports various form of knowledge transfer and information action (including vocational training, workshops, coaching, demonstration activities, short-term farm and forest management exchanges as well as farm and forest visits) which Member States (MS) may want to offer to persons engaged in the agricultural, food and forestry sector, land managers and other rural areas actors.
M2 Rural Development "advisory services" measure	M2 (Article 15 of Regulation (EU) No 1305/2013) supports various kinds of advice which Member States (MS) may want to offer to farmers, foresters, etc. This advice can be delivered by any public or private body or entity in MS/regions, irrespective of the bodies designated according to the Farm Advisory System (FAS) obligation.
M16 Rural Development "Co-operation" measure	M16 (Article 35 of Regulation (EU) No 1305/2013) supports different forms of cooperation and in particular those among different actors of the agriculture, forestry and food chain sectors, the creation of new clusters and networks, as well as the establishment and operation of Operational Groups of the EIP-AGRI.
Overall CAP support (equals CAP Instruments and Measures)	Overall CAP support includes all possible support provided by CAP instruments and measures (from Regulation (EU) No 1305/2013 to Regulation (EU) No 1308/2013, namely the Rural Development Regulation (European Agricultural Fund for Rural Development - EAFRD), direct payment schemes: basic payment, green payment, Young Farmer (YF) scheme, possibly coupled support, areas of natural constraint (ANC), redistributive payment, CMO).
Farm Advisory System (FAS)	A system for advising beneficiaries on land management and farm management, established by MS under the Regulation (EU) No 1306/2013. That farm advisory system shall be operated by designated public bodies and/or selected private bodies, and cover a scope specified in the Regulation. MS shall ensure the suitable qualification of advisors, the separation between advice and checks, and the proper information of beneficiaries on the designated/selected bodies. The FAS is accessible to all CAP beneficiaries and non-beneficiary farmers on a voluntary basis. MS may determine priority beneficiaries and shall ensure access to those farmers with the most limited access to advice other than the FAS. MS must report on farmers' participation in the FAS (see Pillar 1 output indicator O58). MS are not obliged to fund it.
Standards of modern high-quality agriculture	Market oriented agricultural production systems/farming systems providing products at affordable prices while respecting strict conditions in terms of environment, animal welfare and food safety.

Standards of sustainable and environmental friendly farming systems	Rules enhancing sustainability, notably greening under Pillar 1 and cross-compliance under the Regulation (EU) No 1306/2013 on financing, management and monitoring of the CAP: Common Agricultural Policy (CAP) Payments are linked to these standards, if not fulfilled, part of the payments may be withdrawn.
Measures to stimulate environmentally friendly practices	Several measures under Pillar 2: The implementation of Pillar 2 measures requires the application of environmentally friendly practices and strict compliance with specific production methods according to the measure (e.g. without pesticides and synthetic fertilisers for organic farming). Notably: quality schemes (M3.1), agri-environment and climate measures - AECM (M10.1), Organic farming (M11), support for Areas of Natural Constraints - ANC (M13), Natura 2000 and EU Water Framework Directive - WFD (M12). Also, European Innovation Partnership for Agricultural productivity and Sustainability (EIP-AGRI) Operational Groups (M16) stimulate testing of environment/climate solutions (around 65% according to the 2018 Operational Group assessment study). Producers' organisations (Common Market Organisation Regulation) may also work on certification schemes and activities to prove the environmental friendliness of their products.
Knowledge infrastructure	This concerns the institutions and processes in place which generate, transfer and apply knowledge: from research (pure and applied/in situ) via dissemination / sharing, to informed action and feedback. In the context of this study, the structuring of active training and advisory bodies is an element of infrastructure to focus upon evaluating; other elements provide key context.
Lifelong learning (LLL)	<ul style="list-style-type: none"> • All learning activities undertaken throughout life with the aim of improving knowledge, skills and competences, within personal, civic, social or employment-related perspectives. The intention or aim to learn is the critical point that distinguishes these activities from non-learning activities, such as cultural activities (EUROSTAT, 2019a). • All learning activity undertaken throughout life, with the aim of improving knowledge, skills/competences and/or qualifications for personal, social and/or professional reasons (CEDEFOP, 2014).
Vocational training (VT)	<p>Training which aims to equip people with knowledge, know-how, skills and/or competences required in particular occupation or more broadly on the labour market (CEDEFOP, 2014).</p> <p>Vocational training and skills acquisition actions may include training courses, workshops and coaching (Article 14 of Regulation (EU) No 1305/2013).</p>
Initial education and training	General or vocational education and training carried out in the initial education system, usually before entering working life (CEDEFOP, 2014).
Skill	Ability to apply knowledge and use know-how to complete tasks and solve problems (CEDEFOP, 2014).
Adequately skilled farmers	Farmers having at least basic agricultural training ¹ (CMEF common context indicator 24) and having the necessary knowledge to correctly implement cross compliance and standards of modern, high quality agriculture on sustainable and environmentally friendly farming system as defined above.

¹ Basic agricultural training: any training courses completed at a general agricultural college and/or an institution specialising in certain subjects (including horticulture, viticulture, silviculture, pisciculture,

Coherence	The extent to which complementarity or synergy can be found within an intervention and in relation to other interventions (EC, 2017b).
Internal coherence	Correspondence between the different objectives of the same intervention. Internal coherence implies that there is a hierarchy of objectives, with those at the bottom logically contributing towards those above (EC, 2017b).
External coherence	Correspondence between the objectives of an intervention and those of other interventions which interact with it (EC, 2017b).
EU added value	Concerns achievement of results and impacts over and above what could have been achieved with national or regional programmes (measures) alone.

veterinary science, agricultural technology and associated subjects); a completed agricultural apprenticeship is regarded as basic training (source: Eurostat);

Full agricultural training: any training course continuing for the equivalent of at least two years full-time training after the end of compulsory education and completed at an agricultural college, university or other institute of higher education in agriculture, horticulture, viticulture, silviculture, pisciculture, veterinary science, agricultural technology and associated subjects (source Eurostat)

1 INTRODUCTION

This report is the final report of the evaluation support study on the Common Agricultural Policy's (CAP) impact on knowledge exchange and advisory activities. The evaluation was conducted for DG AGRI (Reference AGRI-2017-0319. Order number AGRI-2019-0258) by ADE in partnership with CCRI and CREA, as well as country correspondents in five Member States.

The report is structured as follows:

- Section 1 recalls the objective and the scope of the evaluation.
- Section 2 presents the section on the context of knowledge exchange, innovation and advisory activities in rural areas, the key legislative documents, and the inventory and description of the relevant instruments and measures (task 1.1). The intervention logic is also included in this chapter (task 1.2).
- Section 3 details the methodology used in the evaluation, as well as the limitations faced.
- Section 4 includes the replies to the evaluation support questions (ESQ), covering all six themes.
- Section 5 presents the conclusions, regrouped per theme.
- Section 6 presents the recommendations issued from the study analysis and conclusions.

The annexes include the references, the comprehensive and detailed inventory table of all relevant instruments and measures, an annex about the Farm advisory system (FAS), different reference tables including the details of the graphs presented throughout the report or additional data collected (especially for the effectiveness - evaluation questions (ESQ) ESQ4, ESQ5, ESQ6 – and administrative burden - ESQ9 and ESQ10), as well as an inventory of the State Aid cases including knowledge transfer, advice and innovation.

1.1 Objective of the evaluation

The present evaluation support study (ES) concerns the impacts of the 2014-2020 CAP instruments and measures on knowledge exchange, advisory activities, and innovation in areas under the direct influence of the CAP.

The evaluation is assessing the extent to which the objective of "fostering knowledge transfer and innovation in agriculture, forestry and rural areas" has been achieved. Several CAP instruments and measures contribute to this objective. This assessment is done by answering 16 evaluation questions (ESQ) linked to the five evaluation criteria (relevance, coherence, effectiveness, efficiency and EU added value).

1.2 Scope

The evaluation covers the CAP instruments and measures having direct effects on knowledge exchange and advisory activities in the agriculture and forestry sectors. All four CAP regulations are relevant to the topic of this evaluation: in particular the Rural Development regulation (CAP Pillar 2) "Regulation (EU) No 1305/2013"; the financing, management and monitoring regulation "Regulation (EU) No 1306/2013" covering cross-compliance and the Farm Advisory System (FAS); and the Common Market Organisation (CMO) regulation "Regulation (EU) No 1308/2013", including measures with direct and indirect effects on the studied topics. "Regulation (EU) No 1307/2013" of direct payments establishes notably the greening practices, fostering knowledge exchange on these topics.

The Rural Development Regulation includes the cross-cutting objective of fostering knowledge transfer and innovation in agriculture, forestry and in rural areas. Three Rural Development measures directly support this objective, namely knowledge transfer (Measure 1 (M1)), advisory services (Measure 2 (M2)), and cooperation (Measure 16 (M16), notably supporting Operational Groups and their pilot projects). In addition, the

EIP-AGRI Network at EU level together with the National Rural Networks have a fostering role on knowledge exchange and innovation. All Member States also have the obligation to set up a Farm Advisory System (FAS, advising CAP beneficiaries and non-beneficiary farmers on EU legal standards. These include notably cross-compliance, greening, requirements of the Water Framework Directive and principles of integrated pest management. In the CMO and the wine sector, national support programmes may include an innovation measure.

Other CAP instruments and measures not directly targeted at knowledge exchange, innovation and advisory activities but with potential indirect effect are also considered in the evaluation. The inventory of instruments and measures with direct and indirect effects is included in Table 35 (in Annex 2).

The evaluation is implemented at EU 28 level. Case studies have been conducted in eight Member States (MS) and nine regions, namely in Belgium (Flanders), Estonia, France (Lorraine, Grand Est), Germany (Lower-Saxony), Ireland, Italy (Veneto and Umbria) and Poland, with data collection at national and regional levels.

The analysis covers the 2014-2020 period, notably from 1 January 2014 onwards (2018). The situation in the previous programming period (2007-2013) is taken as a reference period for certain evaluation questions.

The general approach to the evaluation and the methodology is presented in detail in section 3.

2 DESCRIPTION OF THE STUDY TOPIC AND INVENTORY OF MEASURES

2.1 Description of the study topic

The present evaluation covers various CAP instruments and measures (I&M) related to knowledge exchange, innovation, and advice in agriculture and rural areas. As an introduction to the study topic, it was chosen to propose a comprehensive picture of these instruments and measures within a coherent framework of their contribution to Agricultural Knowledge and Innovation Systems (AKIS). This chapter first proposes an overview of the general context, the AKIS concept and the underlying challenges. A second section presents the reflections from the Standing Committee on Agricultural Research (SCAR) and policy tools implemented to address these challenges, with an introduction to the EIP-AGRI, Rural Development measures and the Farm Advisory System (FAS) as the major I&M for this evaluation.

2.1.1 General context

Major productivity gains have been achieved with innovations in agriculture since the 1960ies, with its modernisation and green revolution; however, this trend slowed down in the EU in recent years (EU SCAR, 2012). In addition, these agricultural productivity gains were achieved partly by putting serious strains on natural resources and the environment, generating negative externalities with severe impacts on the environment (soil, water, air) and biodiversity, including climate change. The latter has become a major issue, with necessary actions and adaptation from all economic sectors. Productivity orientation is also questioned regarding social and economic aspects, notably pointing out the lack of resilience of specialised farms, the increasing dependence to inputs, the instability of globalised markets, food safety issues, ethics, and animal welfare etc.

Yet with the current population growth (among other factors), the global demand for agricultural products is expected to increase significantly. This will inevitably trigger a supply reaction from major food producing countries, including the EU. The 2007 financial crisis followed by the food crises is an illustration of potential future constraints.

Public policies and regulations have increasingly integrated conditions aiming at preventing these various issues. Within the CAP, the rules under cross-compliance represents the basic standards in terms of farming practices farmers have to comply with, the failure of which possibly leading to the reduction of CAP payments received. These rules concern the respect of several standards regarding the environmental and climate performance of holdings, food safety, public and animal health, plant health or animal welfare. Within this framework, the implementation of a Farm Advisory System (FAS) has jointly been made mandatory for all Member States since 2007, in order to inform and advise farmers about those provisions, and in a voluntary basis raise their awareness on societal and sustainability challenges of agriculture.

This overall situation (with a highly productive agriculture but with important negative externalities on the environment, and also societal questions) calls for a deep re-assessment of the European way of "doing agriculture". Beyond the respect of the numerous existing standards set by the EU, substantial change of the production systems – technical as well as organisational change – are needed to face the dual challenge of sufficient food production and sustainability. This assessment has led to the political will of fostering innovation, cooperation and knowledge exchange in agriculture, emphasised as key levers for viable solutions (EU SCAR, 2012).

The Commission services then turned to the work of the Standard Committee on Agricultural Research (SCAR²), which, since 2008, had been interested in the failure of the

² Established in 1974, the Standard Committee on Agricultural Research (SCAR) has a mandate to advise the European Commission and the Member States on the coordination of agricultural research in Europe. Subsequently to the evolution of public debates and theoretical works on food systems and innovation, the SCAR mandate was extended and renewed in 2008 to better match the new needs of European agriculture and integrate the changing paradigms regarding innovation.

linear innovation model³ and had been searching for improved and more efficient links between agricultural sectors and research and innovation in Europe (EC, 2013a).

Indeed, from collective reflections and policy assessments, the SCAR concluded in 2012 that the agricultural knowledge systems in Europe were "currently unable to absorb and internalise the fundamental structural and systemic shifts that have occurred." The Committee stressed the need for renewed political attention to the effectiveness, relevance and scale of Europe's "Agricultural Knowledge and Innovation System" (AKIS) and for a reorganisation of Member States' AKIS. It furthermore highlighted that "farming is much more diverse than in the past and is often combined with other activities. New knowledge is generated by farmers, researchers (basic and applied) and private companies. The old linear model of technology transfer (from scientists to the users) is therefore outdated and should be replaced by an interactive model of networking systems, which integrate knowledge production, adaptation, advice and education." (EU SCAR, 2012).

2.1.2 The concept of 'AKIS'

In the 1960s, scholarly work on agricultural advice and extension referred to the concept of 'Agricultural Knowledge System' (**AKS**). That system was largely driven by **public resources** together with an **interventionist agricultural policy**, coordinating knowledge and innovation "transfer" in order to accelerate agricultural modernisation. In many Member States this was reflected in a strong integration of public research, education and extension bodies, often under the control of the Ministry of Agriculture.

In the 1970s, an "I" was added to the AKS: 'agricultural knowledge and "information" systems' (**AKIS**). This addition was linked to the increased attention to information⁴. Much later and rather silently the "I" was redefined as "Innovation": **Agricultural Knowledge and Innovation systems**. There were four drivers that contributed to the move (in thinking) from AKS to AKIS (EU SCAR, 2012):

- A trend towards liberalisation: led to a deep restructuring of research, extension and education (privatisation of service delivery, the multiplication of types of extension organisations, farmers contributing towards the cost of these services, competitive bidding for research and extension contracts and tighter evaluation procedures).
- Policy agenda: increasing concern over the environmental impact of industrial agriculture, the quality of life of rural populations, rural employment, and the need to support the positive externalities linked to agricultural production.
- A shift in innovation approaches: the linear model of innovation is gradually enlarged to a participatory or co-creation approach, in which innovation is 'co-produced' through interactions between the stakeholders in the value chain (and especially for 2nd order change, so called "system innovation" like the introduction of multifunctional agriculture or organic farming). The linear model still stays useful for objectives where only scientists are needed, for example research to produce vaccines.
- The growing disconnection between farmers' knowledge, research and extension systems.

The formal definition of an AKIS adopted by the SCAR is:

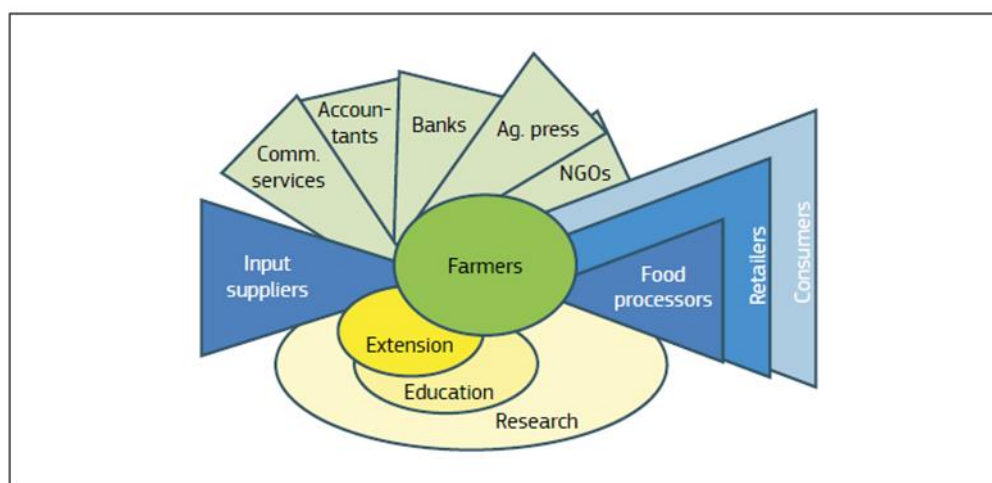
- *"a set of agricultural organisations and/or persons, and the links and interactions between them,*
- *engaged in the generation, transformation, transmission, storage, retrieval, integration, diffusion and utilisation of knowledge and information,*
- *with the purpose of working synergistically to support decision making, problem solving and innovation in agriculture"* (Röling and Engel, 1991).

³ The linear innovation model assumes that innovation is produced by scientists and then passed on to the farmers by means of advisors. Farmers would automatically implement what is advised.

⁴ The term AKIS stems from policy discourses at the Organisation for Economic Co-operation and Development (OECD) and the Food and Agriculture Organisation (FAO), which see new information very closely linked with creating innovation, and these views were adopted broadly.

This concept includes education, research, extension, and the advisory sector as well the farmers or agricultural producers and other actors (credit, producer organisations, input providers etc.), as illustrated in Figure 1 (EU SCAR, 2012).

Figure 1: Actors in the AKIS directly relevant for agricultural innovation in the food chain



Source: SCAR, 2012

This **shift in thinking has been reflected in European agricultural and innovation policies**: while previously focusing heavily on financing formal production and the transfer of knowledge by researchers, advisors and trainers ('AKS'), since 2012 there is a clear political will to integrate other actors as parts of an 'AKIS' and as partners in interactive innovation projects.

This political will has materialised in the CAP and Horizon 2020 policies (as further detailed in next sections) with in particular:

- the setting up of the EIP-AGRI network, promoting stronger partnerships for the co-creation and diffusion of innovations;
- the definition of an overall Rural Development cross-cutting priority to "Foster knowledge transfer and innovation in agriculture, forestry and rural areas", covering all rural development measures, including dedicated measures on knowledge transfer, advisory services and cooperation (in particular for innovation projects); and
- the enlargement of the historical Farm Advisory System to new topics.

The new tools proposed by the EC are aimed at **overcoming the bottlenecks to getting research results implemented on the ground**: according to the SCAR's analysis, a major weakness is the **insufficient information flow** and missing links between different actors of the AKIS (farmers, advisors, enterprises, researchers, etc.). Inadequate or weak information flow can have several causes including competition between actors notably advisors, with little or no information and knowledge sharing, isolated advisors disconnected from research, non-availability of independent advice, lack of trust in the advisory services at the level of farmers, few farmers being reached by advice, etc. (EU SCAR, 2017; 2018). Therefore, co-creation all along the interactive innovation project, including in particular advisors, is seen as essential. It should contribute to step up advisor's competences on innovative practices. Other challenges faced by the AKIS are:

- To *support pluralistic scientific approaches* to meet the numerous challenges faced by the agricultural sector (to supply safe and affordable food, in sufficient quantity, in the context of a growing world population; to provide healthy food that answers consumer demand and addresses public health concerns, and to reduce its impact on the environment in a context of resource scarcity). The required innovation cannot only be technological. Social and organisational innovations are also needed;

- To *boost advisory services* and other actors/stakeholders that act as an interface between researchers and end-users of research results in order to create co-ownership by all actors which speeds up acceptance and application of results. This will also work against the current trend of fragmentation of the organisations of research and the under-funding or non-funding of extension and advisory services;
- To facilitate the *inclusion of small and medium size farms* in the AKIS as they are not sufficiently involved in the current research and innovation systems; and
- To stimulate *collaborative and learning networks* that are recognised as effectively contributing to innovation as platforms for exchanging information and for learning processes (EU SCAR, 2012).

2.1.3 The EIP-AGRI approach to information flows

Turning to the SCAR works on the failures of Agricultural Knowledge Systems, the European Commission created in 2012 the **European Innovation Partnership⁵ for Agricultural Productivity and Sustainability (EIP-AGRI)**, aiming at finding innovative practical solutions (EC, 2012). This partnership has been initiated in the framework of the 'Europe 2020 strategy'⁶, as one of the seven *Innovation Union* flagship initiatives.

To meet the challenges of the agricultural sector – and rural development in general – the EIP-AGRI is mandated to act on several levers: better coordination of public innovation measures and mechanisms; strengthening the bridges between research and practical farming⁷; and encouraging the exchange of practices at EU level. The EIP-AGRI therefore takes the form of a **functional interface** between agriculture, business, and science at regional, national and European levels (EC, 2013a; EU SCAR, 2012).

The EIP-AGRI is also **bridging between the research policy Horizon 2020⁸ and the Common Agricultural Policy**, through its funding architecture. Hence those European partnerships incentivise more interaction between the various actors involved in projects under the funding stemming from the respective policies (EC, 2020a). The objective is to drastically **step up knowledge exchange between local projects and EU projects and ultimately to have a greater impact from the high budgets invested in Research and Innovation (R&I)**.

The support to the EIP-AGRI was introduced in the **CAP** with the **2013 reform**, strengthening the support to innovation through the funding of dedicated CAP EIP-AGRI innovative projects by Rural Development funds. This concerns in particular the funding for the setting up as well as for the implementation of innovation projects of Operational Groups, the possibility to fund innovation support services (innovation brokering, innovation facilitation etc.) and the set of activities of the EU and Member States' EIP-AGRI networks supporting and connecting Operational Groups through EIP-AGRI network activities. More details on the CAP measures and instruments are provided in Section 2.3.

By promoting co-creation and participatory approaches to innovation, inviting all the agricultural stakeholders around the same table to build innovations, the EIP-AGRI is at the core of information flows (key for an effective AKIS). An evaluation of the EIP-AGRI conducted in 2016 confirmed the interest of such an approach. Even if the EIP-AGRI Operational Group measure was voluntary, it has been largely taken up by MS and regions and substantial resources were dedicated (Fotheringham et al., 2016). Farmers and stakeholders highly appreciate the bottom-up approach of EIP-AGRI, which enables to focus on projects fitting the practical needs of farmers and foresters and facilitates the co-

⁵ The European Innovation Partnerships (EIPs) were a broad concept intended to apply to many sectors, and the agricultural sector was selected (as one of the six) in the Commission Communication of 2010.

⁶ European's growth strategy for the 2010-2020 decade, aiming EU to become 'a smart, sustainable and inclusive economy'. These three mutually reinforcing Priorities should help the EU and the member states deliver high levels of employment, productivity and social cohesion.

⁷ The OECD Innovation Strategy (OECD, 2010) highlights both the economic and social roles of innovation, stating that the "objective of policy should not be innovation as such, but the application of innovation to make life better for individuals and society at large".

⁸ Horizon 2020 is the financial instrument dedicated to the implementation of Innovation Union.

ownership of innovative solutions by the end-users, hence more rapidly applied⁹. The EIP-AGRI network also helps the exchange of expertise and good practices across borders.

2.1.4 Advice and knowledge exchange as a core element of AKIS and practice changes

Advisory activities are inherently part of AKIS. Historically extension services and farm advisory policies were not addressed by the CAP, but they were handled by MS only, under the principle of subsidiarity. Considerations to **integrate advisory activities in the CAP trace back to the early 2000s**. Farm practices are increasingly challenged by numerous environmental, climatic, economic, technical and social constraints generating new needs for advisory services (see section 2.1.1). However, public extension services had been largely scaled down and largely privatised in the 1990ies, with a growing role of pluralist private actors (many of these advisors being linked to businesses – feed, fertilizer, pesticides, machinery etc. – and not impartial). Many market failures were observed following this massive privatisation of farm advisory services (Labarthe and Laurent, 2013; Laurent *et al.*, 2006), including for example:

- *the exclusion of certain categories of farms from the access to services* (e.g. small farms), because of the new costs for advice, plus the fact that, as soon as a consultancy becomes a paying service, some beneficiaries reduce technical interaction with their peers in order to benefit from a productive advantage, and the “multipliable” nature of new knowledge is reduced. Hence, an increasing number of farmers are excluded from the benefits of technical support even though they help to provide service that society expects from agriculture (management of the land, maintenance of activities in low-density areas);
- *a decrease of connections with other actors such as research organisations*. The weakening of non-market regulation procedures, which partly guaranteed the possibilities of interaction between service providers, research institutions and beneficiaries, essential to produce new knowledge, makes the creation of an advisory service difficult;
- *a lack of coordination of sector-based advisory services*. The responsibility for combining contradictory requirements (competitiveness, environment, rural development) is then most often put on the shoulders of individual farmers who are unequipped to deal with such complex issues. Observed trends show that effects often run counter to the stated agricultural and rural development objectives of policies.

In parallel emerging deviance of productivity oriented agricultural systems were brought to public debate notably with food scandals.

In response to these market failures and growing environmental and societal (including health) concerns, the 2003 reform of the CAP introduced simultaneously the **system of cross-compliance** and the obligation to set up, by January 2007 a **Farm Advisory System** (FAS; Articles 13 to 16 of Regulation (EU) No 1782/2003 – see section 2.3.2).

Following this new obligation, MS have accredited a number of organisations that were entitled to provide services under the FAS. The implementation of the FAS leaves room for national subsidiarity. MS are also free to choose the modalities of implementation of their FAS: potential public financing of advice (in particular with or without support from the European Agricultural Fund for Rural Development), selection of service providers, scope of the FAS (limited to cross-compliance or broader) etc. **Until 2010**, it was mandatory to address all regulatory requirements in the supported advice. This led to the development of checklists of all requirements, and the advice consisted in going through all topics. According to the 2009 evaluation (ADE *et al.*, 2009) (thus at the beginning of the FAS), the core FAS approach, on-farm, mainly one-to-one advice, supported by checklists **contributed, at the level of EU beneficiary farmers, to:**

⁹ On average, twenty years separate the start of research from the mainstream application of its outcomes in agriculture (EC, 2019a).

- **raise awareness** on the effects of their farming practices related to the environment, food safety and animal health/welfare;
- **build up understanding of the related EU legal requirements**, in particular those covered by cross-compliance (SMR and GAEC), and thus increase their acceptability to farmers, resulting in a better application of those standards and a reduced risk for penalties from the cross-compliance controls; and
- to a lesser extent (when the FAS was supported by rural development measures), raise awareness on occupational safety¹⁰ and farm management (financial management).

The FAS obligation was maintained for the 2014-2020 programming period, with a scope enlarged to, beyond cross-compliance, new topics such as the greening, the Water Framework Directive, and Integrated Pest Management (among others). The current FAS is more extensively presented in section 2.3.2 and the implementation of the FAS over the two programming periods is described in detail in Annex 3.

Rural development provisions support advice and knowledge exchange with the EAFRD. For the 2007-2013 programming period, the following Rural Development measures could notably be used by Member States/regions:

- the use by farmers and forest holders of advisory services (**m114**¹¹);
- the setting up of farm management, farm relief and farm advisory services, as well as forestry advisory services (**m115**);
- vocational training, information actions, including diffusion of scientific knowledge and innovative practices for persons engaged in the agricultural, food and forestry sectors (**m111**);
- training and information for economic actors operating in agriculture and rural areas (**m331**).

In addition, a measure was dedicated the support of cooperation for development of new products, processes and technologies in the agricultural and food sector (**m124**¹²).

Based on the successful results of those measures, similar actions were included in the 2014-2020 RD regulation, to ensure a follow-up while adapting to the new needs of the sector. Those new measures are presented in section 2.3.1.

2.2 EU agricultural sector and CAP expenditure

2.2.1 Agricultural sector

The European Union (EU 28) with its **10.5 million agricultural holdings** has a total of 173 million ha (EUROSTAT, 2020a) of Utilised Agricultural Area (UAA) covering around 39% of the territory in 2016 (EUROSTAT, 2018). At global scale, the EU is an important player in terms of agricultural production and exports. In 2018, the total agricultural output was valued to EUR 365.5 billion (values at current producer prices). This total output value comes from crop output (56.3%) and animal output (43.7%) (EUROSTAT, 2018). France, Italy, Spain and Germany are the four largest agricultural producers in the EU and contribute to around 55% of the total agricultural industry output.

In 2016, the EU's agricultural labour force accounted for 4.2 % of total employment in the EU, corresponding to about 9.5 million full-time workers. However, 20.5 million people were actually involved in agriculture, as most of the EU's farmers are part-time. The **number of CAP beneficiaries under EAGF/EAFRD payments** summed to 7.09 million for claim year 2016 (financial year 2017) and **6.89 million for claim year 2017** (financial

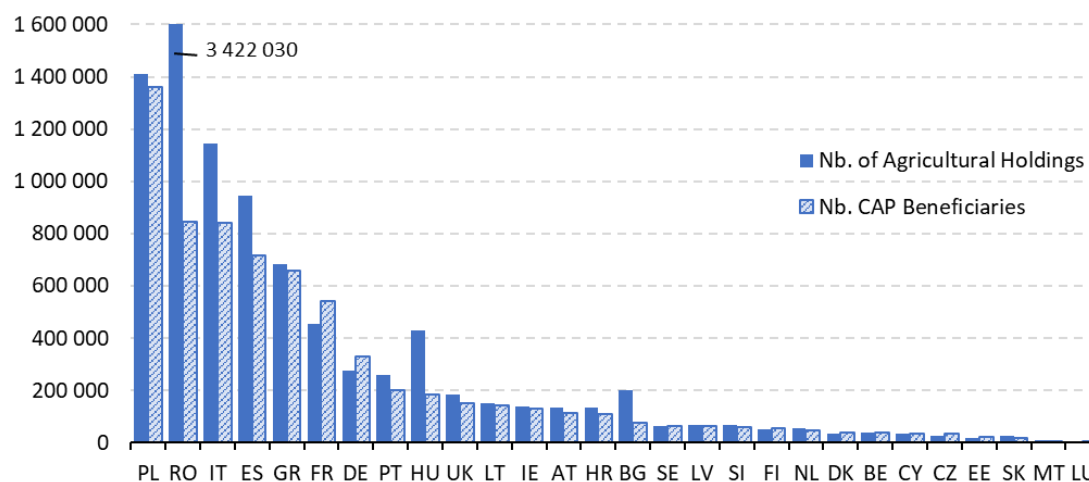
¹⁰ In those MS that made use of the EARDF in relation to farm advisory services, the minimum scope of the advice had to cover occupational safety in addition to cross-compliance.

¹¹ Measure programming codes are set in Commission Regulation (EC) No 1974/2006 on the rules for the application of the EAFRD Regulation.

¹² Cooperation for development of new products, processes and technologies in the agricultural and food sector (Commission Regulation (EC) No 1974/2006).

year 2018). A comparison between the number of holdings and CAP beneficiaries for each MS is presented in the Figure 2. Note that a same beneficiary can have more than one holding.

Figure 2: Number of agricultural holdings in the EU in 2017 compared to the number of CAP beneficiaries for claim year 2017 (financial year 2018)



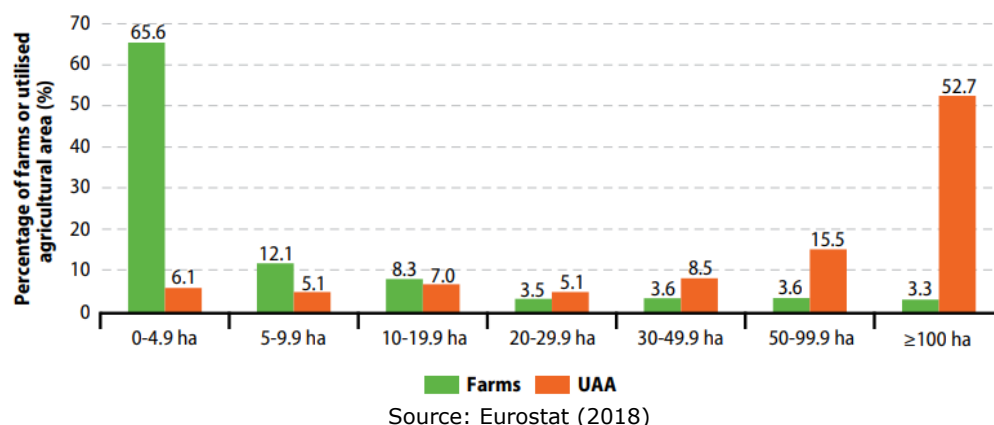
NOTE: Romania has 3.4 million agricultural holdings, but the axis was limited for presentation purposes. MS with the largest numbers of holdings are Romania, Poland and Italy. MS with the highest standard outputs are France (€62.1 billion), Italy (€51.9 billion) and Germany (€49.3 billion).

Source: ADE based on Eurostat (2019c) and DG-AGRI's number of CAP beneficiaries (fiscal year 2018)

The **agricultural income** represented EUR 154.4 billion in 2018 (the real net value added at factor cost of agriculture per total Annual Work Unit (AWU)) (EC, 2019b). It has increased by 20% since 2010. However, even if the income is increasing, there is a **general drop in the agricultural labour input** for more than 10 years. The gross value added (GVA) at basic prices was about EUR 181.7 billion and is mainly composed by the crop and animal output.

In 2016, two-thirds of the EU's farms were less than 5 ha (Figure 3). This number is partly influenced by Romania, home to one third of the EU's agricultural holdings, more than 90% of which being below 5 ha. At the other end of the production scale, 6.9 % of EU's farms were 50 ha or more, mobilising 68.2 % of the EU's Utilised Agricultural Area. However, there is high variability between MS.

Figure 3: Distribution of EU's farms and utilised agricultural area according to farm size in 2016 (in %)



Source: Eurostat (2018)

Even though small farms (economic output under EUR 8 000 per year) represent the majority of the EU's farms (67.6%), they produced less than 10% of the EU's total agricultural output in 2016. In contrast, 304 000 farms each producing a standard output of EUR 250 000 per year concentrate 56% of the EU's total agricultural economic output.

2.2.2 Forestry sector

The European forest and other wooded land cover about 182 million hectares, i.e. 43% of its land area. This includes 26 billion m³ of forest available for the growing stock of timber and wood supply. Five MS contain 61% of the European forest: Sweden, Finland, Spain, France and Germany.

Sixty percent of the European forest belongs to private owners, although there is great variability between individual MS. In many Eastern European Member States (such as Bulgaria, Poland, Czechia), forest is mainly in the public domain. In Western Europe (Portugal, Denmark, Sweden, France), forest is predominantly private.

Gross value added from forestry and logging in the EU was EUR 25.8 billion in 2015. Almost half of forest investments comes from Sweden, Finland and Germany. In 2014, the highest amounts of value added per forest area in the EU were in Denmark, Portugal, Czechia, the Netherlands and Lithuania (corresponds to the ratio of value added generated within the forestry and logging sector compared with the forest area available for wood supply).

In the EU-28, about 488 500 people worked in the forestry and logging sector in 2015. The largest workforce was recorded in Germany (10%).

As part of the EU Rural Development policy, forest support should mainly contribute to two of the six common EU Priorities: "Restoring, Preserving and Enhancing Ecosystems" (RD Priority 4) and to "Promoting Resource-efficient, Climate-resilient Economy" (RD Priority 5). Pests or diseases may attack European forests and climate change is also of great concern for European foresters.

2.2.3 Introduction to the CAP support

The EU Common Agricultural Policy (CAP) has **three long term objectives** (defined in the 2013 CAP reform), namely (i) viable food production, (ii) sustainable management of natural resources and climate action, and (iii) balanced territorial development.

The EU provides important financial support to the agricultural sector and to a lesser extent to the forestry sectors and to rural areas within the context of the CAP. For the period 2014-2020 the CAP has a total budgetary allocation in current prices of 408 billion (i.e. approximately EUR 58 billion a year), distributed between the first and second pillars as follows:

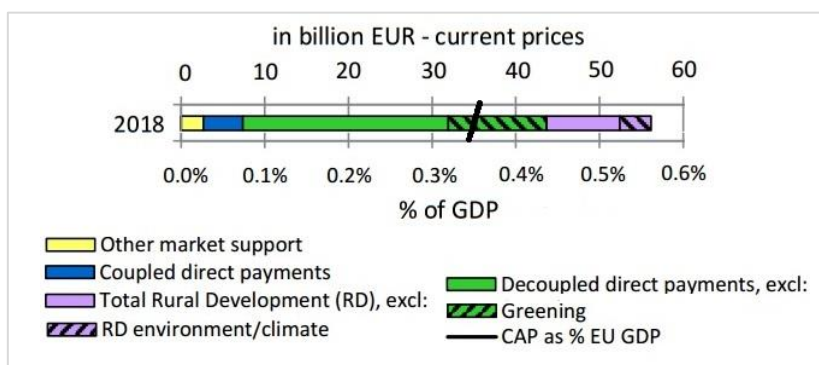
Table 1: CAP budget distribution between Pillar 1 and 2, for the 2014-2020 period

Pillar 1: Market measures and direct payments	EUR 312.74 billion (77%)	<i>EAGF: European Agricultural Guarantee Fund</i>
Pillar 2: Rural Development	EUR 95.58 billion (23%)	<i>EAFRD: European Agricultural Fund for Rural Development</i>

Source: ADE based on EC (2020d)

The EUR 96 billion allocated to the Rural Development (RD) policy are complemented by EUR 61 billion of public funding by the MS (national/regional).

As illustrated in Figure 4, Member States also have the possibility to transfer up to 15% of their national envelopes between the two pillars, which enables them to better target expenditures to their specific priorities (hatched parts).

Figure 4: The path of 2018 CAP expenditure (in current prices)

Source: EC (2019g)

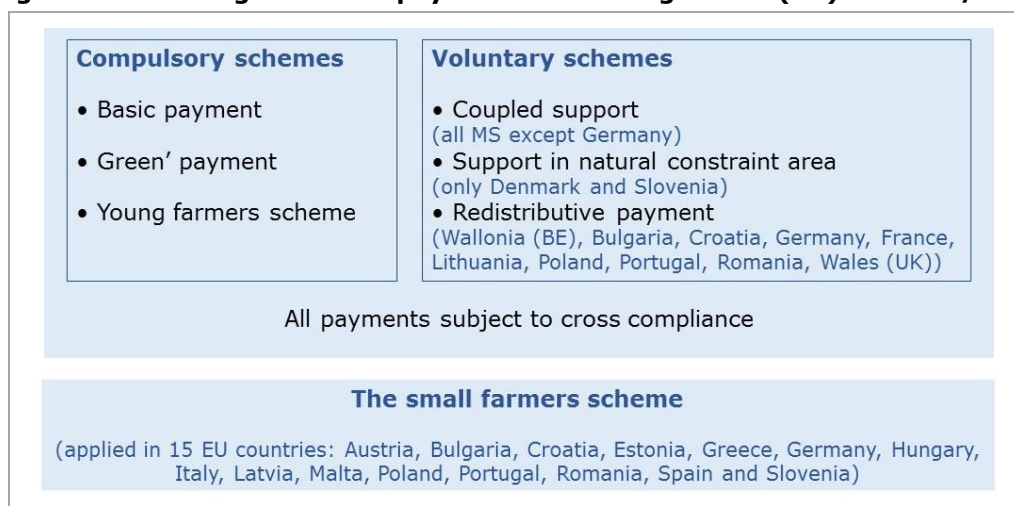
The financing, management and monitoring of the common agricultural policy is governed by the rules laid down in the Regulation (EU) No 1306/2013 (see 2.3.2). Therefore, while each Member State has a certain freedom in the implementation of the CAP in order to respond to their specific challenges, this regulation sets common rules on: the financing of expenditure under the CAP, including on rural development; on the farm advisory system; the management and control systems to be put in place by Member States; the cross-compliance system; and clearance of accounts.

The CAP Pillar 1

The CAP pillar 1 include Market measures and Direct payments, funded under EAGF.

Market measures refer to the regulation and support of agricultural products on markets, represent EUR 2.7 billion of the CAP budget each year. They include expenditure for fairer trading practices, the promotion of EU farm products, tariff rate quotas, market transparency etc. They deal with complicated market situations such as a substantial fall in demand due to a health crisis or a price drop due to an extreme competition on international markets. In these cases, the Commission can financially support the concerned sector (on average, 5% of total CAP expenditure).

Direct payments, aiming at sustaining farmers' income, amount to approximately EUR 293 billion for the 2014-2020 period (EC, 2017c), i.e. EUR 41 billion each year. Since the 2013 CAP reform, direct payments include compulsory and voluntary schemes (Figure 5). Every European farmer is eligible to receive the basic payment and the green payment. A support scheme for young farmers must also be planned. In addition, each Member State can decide to implement voluntary schemes, namely: the redistributive payment, the support in natural constraint areas and the coupled support (generally limited to 8% of the total income support budget). To consider the structural differences between farms, MS can also decide to offer a parallel support scheme to small farmers (then not involved in basic and green payments).

Figure 5: The design of direct payments under Regulation (EU) No 1307/2013

Source: ADE based on EC (2017c)

Under the "shared management" principle, the implementation of each scheme is directly led by the Member State national authority. The MS design these payments according to its features (farm size, number of hectares, types of crops and livestock, natural constraints etc.). The way direct payments are allocated in each MS gives an overview of the variety of farming activities in the European Union.

It is important to notice that all CAP payments are subject to cross-compliance except for small farmers scheme.

Direct payments are designed to support the largest number of farmers throughout the European Union: about 7 million European farms receive direct payments, contributing to about half of the farmers' income, on average (EC, 2017c). The most recent CAP reform has oriented these payments towards a more equitable and a more sustainable distribution of support.

The CAP Pillar 2

The **Rural Development policy** forms the other set of EU measures aiming to support the competitiveness and sustainability of the European agriculture, with a budget of around EUR 13.5 billion per year from the EAFRD, complemented by national and regional co-funding. Six EU priorities for the RD policy were defined for the 2014-2020 period.

Figure 6: Priorities defined for the 2014-2020 Rural Development Policy

<p>P1: Fostering knowledge transfer in agriculture, forestry, and rural areas</p>	P2: Enhancing the competitiveness of all types of agriculture and enhancing farm viability
	P3: Promoting food chain organisation and risk management in agriculture
	P4: Restoring, preserving and enhancing ecosystems dependent on agriculture and forestry
	P5: Promoting resource efficiency and supporting the shift toward a low-carbon and climate-resilient economy in the agriculture, food and forestry sectors
	P6: Promoting social inclusion, poverty reduction and economic development in rural areas

Source: ADE based on Regulation (EU) No 1305/2013

The Priority 1 is a new (since 2014) cross-cutting priority "fostering knowledge transfer in agriculture, forestry and rural areas", supporting the other five thematic priorities. Each priority is further broken down into specific areas of intervention, namely 18 Focus Areas (FA). Priorities are all designed to contribute to the cross-cutting objectives: innovation, environment, and climate change mitigation and adaptation.

The RD policy is implemented in Member States under Rural Development Programmes (RDP), drafted and coordinated by Managing Authorities at national or regional level depending on the MS. For the 2014-2020 period, 118 RDPs were drafted by the 28 MS. When drafting their RDP, MA adapt their strategy to their specific needs by choosing a combination of measures from a 'menu' of RD measures detailed in the Regulation (EU) No 1305/2013. The combination of measures chosen by the MS or region must handle a minimum of 4 priorities from the 6 listed above. Additional criteria are set by the EC:

- a minimum of 30% of funding for each RDP must be committed to measures on environment and climate change;
- a minimum of 5% of funding for each RDP must be dedicated to LEADER¹³ activities.

An emphasis was made during the current programming period to coordinate the EAFRD with the other ESI Funds (ERDF, ESF, EMFF). Regulation (EU) No 1303/2013 lays down common provisions for all ESI Funds including the EAFRD.

Some RD measures (from the above-mentioned 'menu') are dedicated to KE-I-A (see section 2.3). However, MS have no obligation to dedicate a part of their 2nd pillar budget to these measures. Allocated amounts are rather limited, with for instance (ADE based on EC, 2018b):

- EUR 1 687 million (0,4% of CAP) for M1 on knowledge transfer and training;
- EUR 1 047 million (0,3% of CAP) for M2 on advisory activities.

As a comparison, the planned budget of Pillar 2 (including national funds) for the 2007-2013 was EUR 148 billion. The indicative budget for the training measures under the 2007-2013 period was the following: "m111 - vocational training and information actions" EUR 1 658 million and "m331 - training" EUR 256 million, thus a total of EUR 1 914 million. The planned budget for the use of advisory services (m114) was EUR 1 069 million and EUR 227 million for setting-up of management, relief and advisory services (m115), thus a total of EUR 1 297 million.

2.3 Inventory of measures and intervention logic

All four CAP regulations are covered by the evaluation topic about knowledge exchange, innovation and advisory activities.

- CAP Pillar 2, EU's Rural development policy, is steered by "**Regulation (EU) No 1305/2013** of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)". This Rural Development Regulation (RDR) has a cross-cutting objective "*Fostering knowledge transfer and innovation in agriculture, forestry and rural areas*" that applies to all Rural Development measures. Three measures directly support knowledge exchange, innovation as well as advisory services. In addition, the RDR includes many other measures with indirect effects.
- "**Regulation (EU) No 1306/2013** of the European Parliament and of the Council of 17 December 2013 on the financing, management and monitoring of the Common Agricultural Policy" describes elements of the CAP common to both Pillars. In particular it includes the objectives, principles and scope of cross-compliance and of the Farm Advisory System. Cross-compliance specifies CAP basic standards regarding the environment, climate change, good agricultural and environmental condition of land, public health animal health, plant health and animal welfare.
- CAP Pillar 1 is steered by two distinct regulations. The direct payments (including greening) for farmers, covered in "**Regulation (EU) No 1307/2013** of the European Parliament and of the Council of 17 December 2013 establishing rules for

¹³ LEADER is a local development method used to engage local actors in the design and delivery of strategies, decision-making and resource allocation for the development of their rural areas. It is implemented by Local Action Groups all across EU, bringing together public, private and civil-society stakeholders.

direct payments to farmers under support schemes within the framework of the common agricultural policy". The first pillar also includes the Common Market Organisation (CMO) regulation "**Regulation (EU) No 1308/2013** of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products". It covers specific provisions in the wine sector, especially Article 51 on innovation in the wine sector. Other CMOs may also include actions on knowledge and innovation, although less specifically mentioned (e.g. the Fruit and Vegetable CMO funds advice and research actions on Integrated Pest Management in several countries).

The intervention logic has been developed on the basis of instruments and measures having direct effects on knowledge exchange and advisory activities in the agriculture and forestry sectors (see section 2.4 hereafter).

The following subsections present the four CAP regulations and the instruments and measures related to knowledge exchange, innovation and advisory activities. In addition, a detailed inventory of all measures and provisions within each of these regulations with direct and potential indirect impacts is presented in Table 35 (in Annex 2).

2.3.1 The Rural Development regulation provides for the funding (Regulation (EU) No 1305/2013)

The RD regulation (Pillar 2) provides for a set of important and possibly co-funded measures related to knowledge exchange, advisory activities and innovation. As already mentioned, Pillar 2 has a cross-cutting objective of knowledge transfer and innovation in agriculture, forestry and rural areas (Priority 1), which broadly covers all RD measures.

The five most outstanding RD support measures having effects on knowledge exchange and advisory activities are developed hereafter. Other Rural Development measures may also contribute indirectly to KE-I-A, by encouraging the adoption of new practices in agricultural, food and forestry sectors (e.g. support for investment in physical assets, conversion to organic farming, compliance to quality schemes, business start-ups for non-agricultural activities etc.), and through selection criteria in calls for projects, e.g. the need for training to receive start-up support for young farmers.

➤ **Knowledge transfer and information actions** (Article 14 - Measure 1¹⁴)

The three sub-measures concern professional training and skills acquisition activities (M1.1), demonstrations and information actions (M1.2), and agricultural and forestry management exchanges and visits (M1.3) – to enhance the human potential of farmers, foresters, land managers and SMEs in rural areas. These activities aim to strengthen farmers' professional skills, with a strong exchange and multi-actor networking dimension. They are expected to contribute to the technical, economic and environmental performance of agricultural and forestry holdings, possibly to innovation, social inclusion, and may concurrently have a positive effect on the implementation of the other CAP I&M. **Final beneficiaries** of the knowledge transfer and information actions are the persons engaged in the agricultural, food and forestry sector, land managers and other economic actors which are SMEs operating in rural areas. The **service providers** (training, other knowledge transfer or information action) are the **beneficiaries of the public financial support**.

For the selection of the service providers, MA can choose between various procedures according to their national law, including calls for applications, calls for tenders and the "in house" provision of services (only under a set of cumulative conditions)¹⁵. Where applicable in the Member State, public procurement rules have to be complied with.

The Member State or the MA should specify in the RDP as well as in the call for tender the definition of the appropriate capacities of bodies to be eligible under this measure. The

¹⁴ Measure and sub-measure programming codes are set in Commission Implementing Regulation (EU) No 808/2014 on the rules for the application of the EAFRD Regulation.

¹⁵ Measure Fiche – Knowledge transfer and information actions (Measure 1 – Article 14 of Regulation (EU) No 1305/2013)

beneficiaries of support shall then provide evidence of the appropriate capacity of their staff (appropriate qualification and regular training to conduct this task)¹⁶.

Following the so-called 'Omnibus' Regulation (EU) No 2017/2393 of December 2017, support may also cover relevant investments costs, for demonstration projects.

➤ **Advisory services, farm management and farm relief services** (Article 15 - Measure 2)

Measure M2 is divided into three sub-measures, supporting the use of advice (M2.1), the setting up advisory services (M2.2), and the training of advisors (M2.3). The latter allows to keep their capacities updated to enhance the quality and effectiveness of advice. The measure supports advice MS may want to offer to final beneficiaries in rural areas, including on topics of the FAS (Regulation (EU) No 1306/2013).

Final beneficiaries of the advisory services are farmers, young farmers as defined in the RD regulation, forest holders, other land managers and SMEs in rural areas. Either the **service providers** (authority or body selected to set up the farm management, farm relief, farm advisory or forestry advisory service) or newly the **MA** (following the 'Omnibus' Regulation (EU) No 2017/2393) are the **beneficiaries of the public financial support**.

Regulation (EU) No 1305/2013 limits the selection procedure to calls for tenders, governed by public procurement law, open to both public and private bodies. However the 'Omnibus' Regulation (EU) No 2017/2393 introduced an important change with the removal of this obligation and reference to an "objective and transparent selection procedure". In practice, the advisory service can also be procured "in house" (only under a set of cumulative conditions). Where the MA is the beneficiary of the financial support, the service provider shall be selected by a body that is functionally independent from the MA.

The authorities or bodies selected shall provide evidence of appropriate resources (regularly trained and qualified staff and advisory experience and reliability with respect to the fields in which they advise). The Member State or the MA should ensure that the authorities or bodies selected have the appropriate resources during the whole period of implementation of the measure (not only at the moment of selection).

MS can also choose to link (exclusively or not) the measure 2 support to their Farm Advisory System (FAS, see 2.3.2). Hence M2 can be used both to support the use of FAS advice and the training of FAS advisors. Note that, for the previous period (2007-2013) the RD advice measure was exclusively used to support the obligation laid upon MS to set up the FAS, even if a larger use was already possible.

➤ **Operational Groups of the agricultural EIP-AGRI**, under the 'Cooperation' measure (Article 35 - Measure 16)

The establishment (i.e. building a partnership and preparing the project) and operation (i.e. implementing the project) of Operational Groups are supported under the EAFRD. They can run innovative projects on any of the themes listed under Article 35(2), with activities such as the development of new products or practices, pilot projects, supply chain cooperation, joint environmental projects or climate change actions, cooperation in biomass provision or renewable energy, forest management and much more. This measure is based on the **interactive innovation model** following the observation that the interaction between actors with complementary knowledge (including multipliers) delivers results going beyond those feasible with individual performance. This approach helps innovation (1) to emerge, (2) to be more easily taken up thanks to co-ownership of the involved end-users and (3) to be shared as widely as possible.

➤ **Agri-environment-climate (AEC)** (Article 28.4 - Measure 10)

Member States must ensure that the persons implementing agri-environment-climate measures have the required knowledge and information. The MS may do so through, *inter*

¹⁶ Measure Fiche - Knowledge transfer and information actions (Measure 1 - Article 14 of Regulation (EU) No 1305/2013)

alia, commitment-related expert advice (possibly supported by the Measure 2) and/or by making support under this measure conditional on obtaining relevant training (possibly delivered through Measure 1).

➤ **The EIP-AGRI network for Agricultural Productivity and Sustainability**
(Article 54 – Measure 20.2)

The EIP-AGRI network (Article 53) at EU level, together with the National Rural Networks (Article 54) and/or EIP-AGRI networks in the Member States inherently have a knowledge exchange and innovation fostering role. The EIP-AGRI network is building bridges between policies, especially between the CAP EIP-AGRI Operational Group innovation projects and the Horizon 2020 R&I projects.

Innovation support (through various modalities) plays a key role in enabling the networking of Operational Groups, advisory services, researchers, and many more innovation stakeholders, both at EU and national levels.

2.3.2 The regulation on the financing, management and monitoring of the common agricultural policy (Regulation (EU) No 1306/2013)

The EU regulation on financing, management and monitoring of the CAP includes two elements relevant for this ES, namely cross-compliance (an important element in the scope of agricultural advice) and the Farm Advisory System (FAS).

➤ **Cross-compliance**

Cross-compliance is a link between CAP payments and a set of requirements that farmers must comply with independently from (SMRs) or in the context of (GAEC standards) the CAP. The cross-compliance system was introduced in the 2003 CAP reform together with other developments of the CAP such as the decoupling of direct support and the farm advisory system. From that moment, farmers incurred the risk of reductions of CAP payments should they fail to respect basic standards concerning the environment, climate change, public health, animal health, plant health and animal welfare (ADE *et al.*, 2009).

Cross-compliance aims at contributing to the development of sustainable agriculture through better awareness of beneficiaries and the respect of those basic standards. It also aims at contributing to a CAP more compatible with society's expectations, by improving consistency of that policy with the environment, public health, animal health, plant health and animal welfare policies.

➤ **The Farm Advisory System (FAS) (Article 12-14)**

The FAS refers to the obligation for Member States to establish "a system for advising beneficiaries on land management and farm management". The regulation specifies some requirements while letting a certain freedom to MS in terms of implementation choices.

Scope of the system. Historically, this obligation was introduced in parallel with cross-compliance in the 2003 CAP reform. By 2007, in order to help farmers to meet in particular cross-compliance requirements, MS had to establish a system which can offer advice on cross-compliance to farmers. In many MS, national or regional pre-existing extension and advisory services informing farmers of various legal requirements already existed prior to the creation of the FAS. Logically they were often used to fulfil the FAS obligation. The scope of the FAS has been broadened over time, notably with further standards relating to the environment, climate change, greening, measures at farm level provided in RDP, etc.¹⁷ In addition, MS may include further topics (e.g. agri-environment and climate action, risk management, etc.) (Table 2). Detailed topics with reference to EU regulations can be found in Annex 3, Table 36.

¹⁷ Recital 10 of Regulation (EU) No 1306/2013 explains the rationale behind the FAS as follows: "In order to help beneficiaries to become more aware of the relationship between agricultural practices and management of farms on the one hand, and standards relating to the environment, climate change, good agricultural condition of land, food safety, public health, animal health, plant health and animal welfare on the other, it is necessary for Member States to establish a comprehensive farm advisory system offering advice to beneficiaries".

Table 2: Scope of the Farm Advisory System

	CAP 2007-2013 Regulation (EC) No 1782/2003	CAP 2014-2020 Regulation (EU) No 1306/2013
Minimum scope	<ul style="list-style-type: none"> • Cross-compliance (environment, public health, animal and plant health, animal welfare) = SMR, GAEC 	<ul style="list-style-type: none"> • Cross-compliance (environment, public health, animal and plant health, animal welfare) = SMR, GAEC (R1306) • Greening (R1307 annex 2) • Maintenance of the agricultural area (R1307 art 4(1-c)) • Advice for RD supported measures (incl. M3, 4, 6, 9, 11, 19 EAFRD measures) (R1305) • Water framework directive (outside CAP) • Integrated pest management (outside CAP)
Optional scope	Any advisory service for the improvement of the overall performance of their holding (see Annex 3)	In particular: <ul style="list-style-type: none"> • Conversion / diversification • Risk management • Agri-environment-climate • Information on climate change, biodiversity...

Source: ADE, based on the mentioned EU Regulations

Operating bodies. The FAS can be operated by designated public bodies and/or selected private bodies. The designation and/or selection procedure is decided by the Member States themselves. The national authority should provide the potential beneficiaries, primarily by electronic means, with the appropriate list of selected and designated bodies. Each operating body has no obligation to cover the totality of the themes under the FAS scope, as long as all of them are duly covered in the region/Member State.

Advisors' qualification and training. In order to ensure the efficiency of the system, the Member State should ensure that advisors working within the FAS are suitably qualified and regularly trained. Note that the authorities or bodies selected under RD Measure 2 face greater requirements with regard to their advisors: they must, in addition to the evidence of suitable qualification and regular training, demonstrate an advisory experience and reliability with respect to the fields in which they advise.

Beneficiaries. All CAP beneficiaries (including non-farmers) and farmers not receiving support under the CAP may use the FAS on a voluntary basis. When the FAS was first introduced, Member States had to give priority to farmers receiving more than EUR 15 000 of direct payments per year (Council Regulation (EC) No 1782/2003). Since Regulation (EC) No 73/2009, Member States can set themselves, in accordance with objective criteria, categories of beneficiaries which will benefit from a priority access to the FAS. Under the current programming period (Regulation (EU) No 1306/2013), Member States that choose to implement these priority criteria should in addition ensure that priority is given to the farmers with the most limited access to an advisory service other than the FAS. Member States may also give priority access to the beneficiaries who have received for the first time an early warning after an infringement considered as minor.

Additional remarks. The FAS is not an instrument which provides for funding nor does it lay an obligation on the farmer (Article 14(1) of Regulation (EC) No 1782/2003¹⁸). Depending of MS choice, FAS activities can be funded under the Rural Development measure 2.1 on the use of advice in its RDP (Article 15 of RD Regulation (EU) No 1305/2013).

Besides, following the Commission Communication of 2010 on the FAS (COM(2010) 665 final), based on the outcomes of the 2009 Evaluation Study (ADE *et al.*, 2009),

¹⁸ Council Regulation (EC) No 1782/2003 of 29 September 2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers.

adjustments to the RD support for FAS appeared necessary. It was decided that under the 2007-2013 Rural Development regulation, a farmer asking for financial support would not be obliged anymore to take the full package of cross-compliance: only one element (e.g. on nitrates) would be sufficient and any other subject could be added according to the farmers' wishes.

2.3.3 Pillar 1 with regulations on direct payments and on market measures (Regulations (EU) Nos 1307/2013 and 1308/2013)

Pillar 1 covers direct payments and market measures.

➤ **Direct payment schemes** (Regulation (EU) No 1307/2013)

Direct payments for farmers are only **indirectly linked to KE, innovation and advice**, in the sense that some of the requirements linked to direct payments may lead to a need for advice, information or training.

Direct payments are granted to farmers for their agricultural activities. As provisioned in Regulation (EU) No 1307/2013, Article 4(1-c), agricultural activities include, besides the production, rearing and growing of agricultural products:

- **maintaining an agricultural area** in a state which makes it suitable for grazing or cultivation without preparatory action going beyond usual agricultural methods and machineries, based on criteria established by Member States on the basis of a framework established by the Commission, or
- carrying out a minimum activity, defined by Member States, on agricultural areas naturally kept in a state suitable for grazing or cultivation.

Thus CAP beneficiaries may seek for knowledge and advice on the maintenance of agricultural areas (topic to be covered by the FAS).

Furthermore, beyond the respect of cross-compliance, also true for CAP pillar 2 payments, farmers must comply with three environmentally and climate friendly mandatory farming practices to benefit from the **'green' payments**:

- crop diversification: a greater variety of crops makes soil and ecosystems more resilient;
- maintenance of permanent grassland: grassland supports carbon sequestration and protects biodiversity (habitats); and
- Ecological Focus Areas (EFA): areas within arable land that are maintained for their benefit for biodiversity (trees, hedges or fallow lands that improve biodiversity and habitats). To be considered as EFA, 5% of arable land must be dedicated to it.

Voluntary coupled payments may also encourage if duly justified to (re)develop specific value chains in strategic regions, for instance to sustain food autonomy (e.g. with protein crops) and high added value productions (e.g. hemp). Growing these crops or productions may generate changes in farming practices with linked need for advice, training and possibly innovation.

➤ **Innovation in the wine sector** (Article 51 of Regulation (EU) No 1308/2013)

Within market measures for Common Market Organisation the wine sector develops support programmes which are potentially relevant for knowledge and innovation¹⁹. In particular MS have the possibility to implement five-year national programmes with several measures supporting their wine sector, including an innovation measure. The following specific innovation measure is granted for tangible and intangible investments aimed at the development of new products, processes and technologies. As mentioned in Article 51 of the Regulation "the support shall be intended to increase the marketability and competitiveness of EU grapevine products and may include an element of knowledge transfer".

¹⁹ The fruit and vegetable sector implements operational programmes. Innovation is not explicitly mentioned as it is in the wine sector.

Introduced as a CMO measure with the 2013 reform, and previously covered by investment measures, this support shall have a direct contribution to fostering KE-I-A. However very few MS decided to implement this measure (only Germany, Spain and Cyprus). The reasons are analysed in the ESQs.

2.4 Intervention logic

The intervention logic (IL) describes the theoretical causal relationship of a public policy, showing how, in theory, the inputs (policy framework and supported actions) should provide the expected outputs, outcomes, and impacts. It is based on the relevant regulations, including their recitals²⁰ explaining the legislator's intentions.

All four CAP regulations introduced before act upon the evaluation topic. The specific articles/measures relevant for the intervention logic are made explicit in the section 2.3 and detailed in Table 35, with their potential direct and indirect effects.

The intervention logic, as described hereafter, is illustrated in Figure 7. There are strong synergies and linkages between the different measures. These are presented altogether. Indirect links are not exhaustively represented but they are detailed in Table 35.

The implementation of the relevant instruments and measures should deliver the following **outputs**:

- Knowledge transfer and information actions (M1):
 - Knowledge transfer events are supported; and
 - Farmers (forest holders and persons engaged in the food sector and rural SMEs) participate in supported events.
- Advisory services (M2):
 - Advice is provided for farmers and farmers take-up financially supported advice (M2.1); and
 - Advisors are trained (M2.3).
- Cooperation (M16.1 and 2):
 - Operational Groups are supported for the preparation and implementation of their innovation projects (with a view to collaborate in finding innovative solutions for challenges in the agricultural and forestry sector at the outcome level, bringing together complementary knowledge and ensuring co-ownership to enable a quicker implementation of novelties).
 - In certain Member States, the Operational Groups can also include an information or training component (implying Knowledge transfer), including trainings to advisors.
- Agri-environment-climate (M10):
 - May support agri-environment and climate measures' beneficiaries with knowledge transfer and/or advisory activities before implementing the agri-environment and climate measures (AECM).
- The National / Regional Rural Network (and the EIP-AGRI network which may be encompassed within):
 - May support Operational Groups for the implementation and the diffusion of their results.
- Farm Advisory System (FAS):
 - A list of advisors is provided to farmers, from whom they can seek advice; and
 - Advisors are suitably qualified and regularly trained.

²⁰ Recitals explain the reasons for the following articles and are useful to consider for the intervention logic.

- Innovation in the wine sector CMO measure:
 - Support to the development of new products, processes, technologies concerning grapevine products.

The **expected outcomes** include the following, sometimes interlinked elements.

Trained and advised farmers are aware of basic standards of EU agriculture (environment, climate change, good agricultural and environmental condition of land, public health, animal health, plant health and animal welfare etc.). Farmers/foresters are adequately skilled; some are involved in ongoing learning network or communities of practice. They perceive the usefulness and benefits of advice and/or knowledge transfer. Consequently, they implement changes from KE and advice. The KE and advice results in increased confidence and self-assurance of farmers/foresters.

The Operational Groups and their projects should increase the capacity of farmers and foresters in particular, to develop innovation and exchange knowledge and information, including dissemination of results. Information flows between practice and research should be facilitated and innovative solutions found for challenges in the agricultural and forestry sector. Collaboration between farmers, foresters, advisors, research, consumers etc. is enhanced in order to co-create knowledge and disseminate results. Results from innovation projects are more easily understood and applied, with some farmers adopting research results.

In the wine sector, increased marketability and competitiveness of grapevine products is expected.

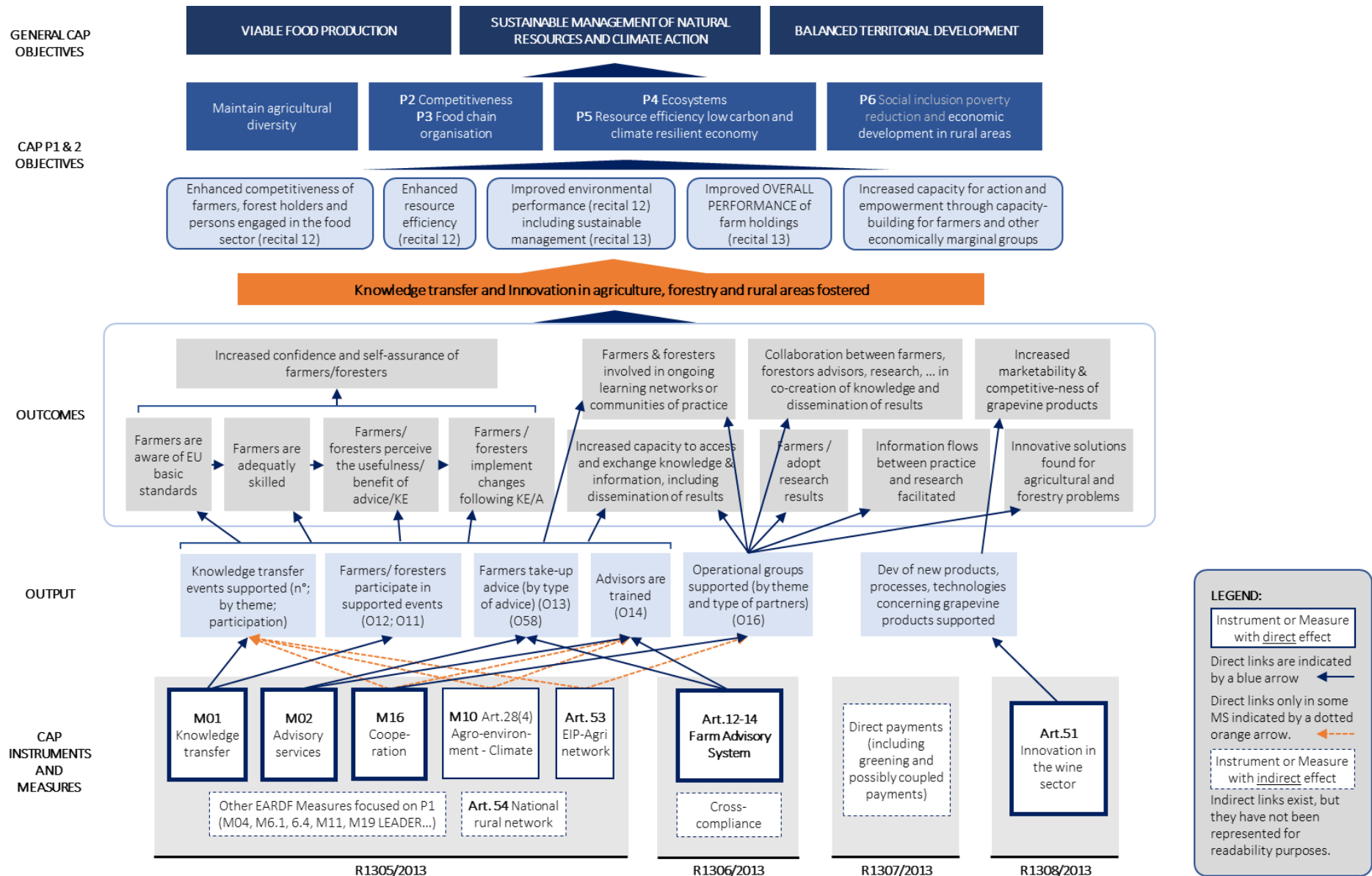
All these outcomes contribute to the Rural Development cross-cutting objective of fostering knowledge transfer and innovation in agriculture, forestry and rural areas. These in turn contribute to the **CAP pillar 1 and 2 objectives** with:

- enhanced competitiveness of farmers and forest holders and persons engaged in the food sector (recital 12 of Regulation (EU) No1305/2013);
- enhanced resource efficiency (recital 12);
- improved environmental performance (recital 12) including sustainable management (recital 13);
- improved overall performance of farm holdings (recital 13); and
- increased capacity for action and empowerment through capacity-building for farmers and other economically marginal groups.

They contribute to the impacts resumed in CAP Pillar 1 and 2 specific objectives, gathered in four main themes:

- maintain agricultural diversity: direct payment as well as advice and information activities and cooperation create a conducive environment for development/maintenance of diversified and innovative value chains;
- economic performance of agriculture and forestry, which encompasses P2 (competitiveness) and P3 (food chain organisation) of the CAP Pillar 2;
- ecological performance of agriculture and forestry, including the two CAP Pillar 2 Priorities: ecosystems' preservation (P4) and resource efficiency and climate change mitigation (P5);
- knowledge transfer and innovation also contributes to economic and human development in rural areas (P6 of CAP Pillar 2), through capacity building, networking and cooperation improving entrepreneurial opportunities and social inclusion.

Figure 7: Specific intervention logic for CAP goals and instruments related to knowledge exchange and advisory activities in rural areas



Source: ADE

3 METHODOLOGY

3.1 Overall approach

The overall approach to this evaluation support study is in line with the Better Regulation Guidance and toolbox (EC, 2017d).

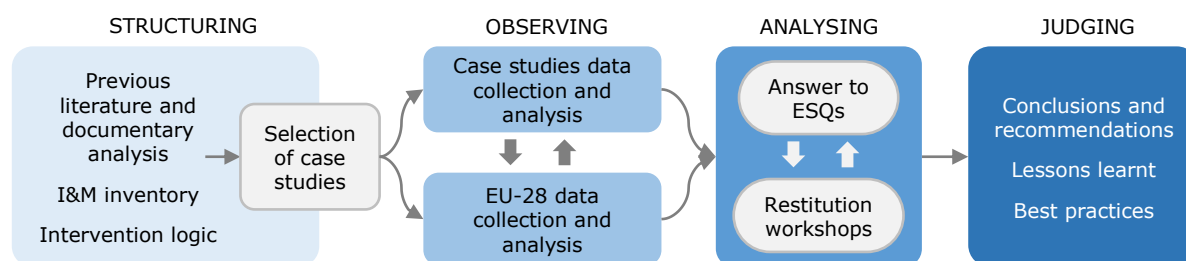
The evaluation framework was established starting with an **analysis of all CAP Regulations** (2014-2020 and 2007-2013) to recall the legal and policy framework, to inventor the CAP instruments and measures relevant to the study, and to reconstitute the intervention logic. A **comprehensive literature review** also included an overview of the concept, evolutions, and diversity of AKIS, the EIP-AGRI network, the Farm Advisory System, the agricultural and forestry context, the existing and emerging needs in rural areas, as well as the critical factors of success for policies supporting KE and innovation among farmers and foresters. In addition, the evaluation team investigated relevant research projects (including ProAKIS and AgriLink).

Case studies were undertaken in eight MS and nine regions, selected along to a clustering approach in order to catch the diversity of approaches regarding KE-I-A across the EU. Case studies cover an in-depth analysis of all CAP instruments and measures related to KE-I-A, based on a comprehensive national/regional literature review and in-depth interviews and meetings with different stakeholders (competent authorities at national and regional level, RDP managing authorities, advisory and training bodies, beneficiaries or representatives, Operational Groups, National Rural Network, researchers, etc.). **Restitution workshops** were organised online (due to the Covid-19 crises) in a selection of case studies including FR, BE-FL, DE-LS and IE, in order to discuss and validate the findings with MS representatives and other stakeholders.

Besides case studies, information and data were collected at **EU level**. An extensive desk work included report, discussion document and database analysis (ESIF, 2018 AIR, CMEF and JRC FAS databases). Interviews were organised with the EIP-AGRI Service Point and ENRD Contact Point, as well as with EC services (DG Agriculture and Rural Development - FAS unit and Innovation unit, Joint Research Center). The evaluation team also participated in webinars²¹ (AgriLink and EIP-AGRI).

RDP managing authorities and national FAS coordinators were surveyed through respective **online questionnaires**, as well as final beneficiaries in the course of the FR case study (Grand Est). A panel of final beneficiaries were also surveyed by telephone in DE-LS.

Figure 8: Overall approach to the evaluation



Source: ADE

Evaluation questions (EQs) have been answered based on (i) literature review and data analysis at EU level and CS level; (ii) all quantitative and qualitative data collected in the case study MS (literature review, interviews, focus groups and surveys), (iii) interviews at EU level as well as webinars; and (iv) the online surveys among EU-28 RDP managing authorities and FAS coordinators. On the basis of the answers, conclusions and recommendations were formulated.

²¹ Two AgriLink webinars in June and July 2020 (Online seminars on "Learning from experience to design public policies that support the contribution of farm advice to sustainable development") and one EIP-AGRI webinar in September 2020 (Online seminar on "CAP Strategic Plans: The key role of AKIS in MS").

3.2 Information sources and tools

The following information sources and tools were used for the evaluation.

Table 3: Information sources and tools used for the evaluation

Information sources	Tools
<ul style="list-style-type: none"> ⊙ Regulations, evaluations, other ⊙ EU databases (ESIF, no DG AGRI data) ⊙ CMEF indicators' database ⊙ FAS questionnaire and database from JRC ⊙ Eurostat and national statistics on the agricultural and forestry sectors ⊙ RDP and 2018 AIR (including SFC extracts) ⊙ Interviews with competent authorities and relevant stakeholders (CS and EU levels) ⊙ Other data from CS country correspondents and interviewees 	<ul style="list-style-type: none"> ⊙ Literature review (studies, RDPs, AIRs...) ⊙ Documentary analysis (Regulations, expenditures) ⊙ Data analysis (databases) ⊙ Multivariate analysis including a Principle component analysis (PCA), 2-step cluster analysis and econometric analysis ⊙ Case studies (literature review, interviews and focus groups, beneficiaries' survey, and MS restitution workshops) ⊙ Online surveys with RDP authorities and FAS coordinator units (EU-28) ⊙ Interviews at EU level

Source: ADE

The different information sources have been used to support quantitative and qualitative analysis feeding into the answer to each ESQ (structured according to judgement criteria). The information from those different sources has been triangulated, ensuring that the answers to the ESQs are based on solid and cross-checked evidence (see Table 4).

Table 4: Tools used for each EQ

ESQ	Causal analysis			Effectiveness				Efficiency				Coherence		Relevance		VA
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Literature review	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Documentary analysis	⊙			⊙	⊙	⊙			⊙	⊙		⊙	⊙		⊙	
Data analysis				⊙	⊙	⊙	⊙									
Interviews with EC	⊙			⊙					⊙	⊙		⊙	⊙	⊙	⊙	⊙
Case studies	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙
Online survey FAS		⊙				⊙					⊙				⊙	⊙
Online survey RDP		⊙			⊙	⊙					⊙				⊙	⊙
MS workshop	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙	⊙

Source: ADE

Literature review

A **comprehensive literature review** was performed by the evaluation team, and included an overview of the concept, evolutions, and diversity of:

- AKIS,
- the EIP-AGRI network,
- the Farm Advisory System (including its evolution since 2007 in terms of objectives, scope, implementation, and organisation in MS),
- the agricultural and forestry context,
- the existing and emerging needs in rural areas, as well as
- the critical factors of success for policies supporting KE and innovation among farmers and foresters (also including the reasons for take-up of advice and training, their impact on employment and a cost benchmark for their provision).

In addition, the evaluation team investigated relevant research projects (including ProAKIS and AgriLink). The bibliography of the evaluation is provided in Annex 1

A comprehensive literature review was also performed by the country correspondents in the case study MSs and regions (as further detailed in the Case studies section hereunder).

Documentary analysis

The RDP **Annual Implementation Reports (AIR) of 2018** (covering the 2014-2018 period) include an enhanced report on evaluation activities, structured along the Common Evaluation Questions (CEQ). 112 of these AIRs were shared with the evaluation team. Answers to CEQs 1, 2, 3, 21, 23 and 30 were screened on the basis of a short analysis grid. Since reports are in all EU 28 languages, the 6 mentioned CEQs were previously translated with an on-line translator. This work allows to validate or complete certain findings from the case studies.

Data analysis

Apart from previous evaluation studies, reports and internal discussion documents, the documentary review included an extended data analysis from various sources.

Regarding financial data, the evaluation relies primarily on two sources at EU level. On the one hand, the **European Structural and Investment Funds database** (ESIF 2014-2020 Finance Implementation Details – EC, 2018b), which provides a view by measure of the amounts programmed, decided and spent at 31st December 2018, calculated on the same basis. Unless otherwise stated, the financial data are expressed as total public expenditure. The financial data communicated by DG Agri does not provide a systematic view at the level of the sub-measures. The values of these financial data depend on the dates of extraction or reference of the data and may therefore vary slightly depending on the sources. However, this does not call into question the trends or findings.

These data were supplemented by **CMEF indicators**, namely output and result indicators taken from the 2018 AIR database (situation at 31 December 2018)²², an extraction of target values from the RDPs (section 11 of the RDPs) and the dynamic of CAP spending from 2017 to 2018.

A **multi-variate principal components analysis** and regression was also implemented to examine the relationship between CAP expenditure decided on KE, innovation and advice measures 1, 2 and 16, and agricultural and rural employment, in different types of rural area across the whole EU-28.

The **JRC database** developed upon the FAS questionnaire to MS (pursuant to Article 102(2) of Regulation (EU) No 1306/2013) (2017/2018) was used, as far as possible given the limitations²³, in order to provide an EU perspective of the establishment and implementation of the FAS.

Case studies

A clustering approach was adopted to propose a relevant selection of case studies across the Member States, trying to capture the variety of knowledge and innovation systems in Europe as well as possible. The clustering is based on five criteria:

- Intensity of farming, describing the farm output per labour unit;
- AKIS strength and integration, according to the PROAKIS project classification (Knierim and Prager, 2015);
- FAS operating bodies status (private, public, mixed);
- 'Knowledge sharing and innovation' RDP budget allocation (T1 – EC, 2017b p.21);

²² From DG Agri, extraction received the 11/9/2019.

²³ The JRC database covers 15 general questions and eight questions repeated for each of the FAS topics. The responses to the general questions were assessed as fairly reliable, except the one covering the 'number of farmers advised' (due to the different counting methods and large definition of advice). The responses for the eight topic questions were assessed as insufficiently reliable. It must be noted that part of the 'unreliability' arises from the impossibility for regionalised Member States to provide one single answer as required by the FAS questionnaire.

- Decision rate²⁴ of planned budget of 'knowledge sharing and innovation' at the 31st December 2018.

Based on the above, the following MS and regions have been selected:

Table 5: Case study selection and characterisation

Member State	Criteria 1 Intensity of farming in € (SO/AWU) ⁽ⁱ⁾	Criteria 2 AKIS	Criteria 3 FAS Operating body status	Criteria 4 Sharing knowledge and innovation	Criteria 5 Decision rate ⁽ⁱⁱ⁾
Belgium - Flanders	153 513	Strong, integrated	Mixed	7.1%	74%
Estonia	46 305	Rather weak, rather fragmented	Mixed	4.4%	77%
France	88 581	Strong integrated	Mixed	2.4%	36%
<i>-Lorraine</i>	93 978	Strong integrated	Mixed	2.7%	6%
Germany	100 671	Strong intermediate	Mixed	2.8%	62%
<i>-Lower Saxony</i>	162 172	Strong intermediate	Mixed	7.0%	83%
Greece	17 927	Weak fragmented	Private (both)	4.5%	5%
Ireland	41 603	Strong integrated	Mixed	5.0%	48%
Italy	60 895	Rather weak fragmented	Mixed	5.2%	25%
<i>-Veneto</i>	113 362	Rather weak fragmented	Mixed	6.1%	42%
<i>-Umbria</i>	63 576	Rather weak fragmented	Mixed	9.7%	41%
Poland	17 134	Strong integrated	Mixed	1.5%	4%
EU average		-	-	3.3%	66%

Source: ADE, based on clustering exercise. (i) Standard Output per Annual Working Unit (EUROSTAT 2019b); (ii) Calculations done by ADE based on European Structural and Investment Funds data (EC, 2020b)

Case studies are used to provide in-depth knowledge about the implementation choices of different Member States, to make a detailed assessment of efficiency and administrative burdens, and to gain robust understanding concerning the intervention logic and causal relations linking policy instruments (individually and in combination) to results and impacts. Cases also provide specific examples of good practice in the application of measures relevant to KE-I-A. Finally, they also served to collect the views of the competent authorities with regard to the relevance and coherence of the CAP I&M, their effectiveness and their added value.

The case studies include a specific and comprehensive literature review and analysis of their AKIS, policy and administrative framework and an inventory of the CAP instruments and measures mobilised. In some case studies, important literature from national/regional RD evaluations was used (DE, FR, IT, PL). In particular, in DE-LS, the country correspondent valorised work performed by the Thünen Institute since 2007 with an essential contribution to the efficiency analysis²⁵. In-depth investigations were also

²⁴ The 'decided' budget is the total amount (EU + National) allocated to the projects (operations) selected by the programme managers. It can also be referred to as the total eligible cost reported by the national and regional programmes to the Commission. The 'decision rate' is the ratio between the total planned budget and the decided budget. In this specific case, the reference to 'knowledge sharing and innovation' includes Rural Development measures 1, 2 and 16.

²⁵ Regarding efficiency, quantitative data on the implementation costs of "human capital and cooperation measures" of the MA of Lower Saxony were collected in various evaluation studies over the three funding periods (2000-2006, 2007-2013, 2014-2020) (Fährmann, Grajewski 2008; Fährmann et al 2016; Fährmann, Grajewski 2018a).

performed on the 2018 Annual Implementation Reports, especially for the FR and DE-LS case study reports.

Meetings were organised with the numerous competent authorities involved at national and, for some MS, regional level. Advisors and trainers were met (face to face, through focus groups and telephone interviews) as well as beneficiaries or their representatives (one beneficiary online survey was conducted in the Grand-Est region in France and a panel of beneficiaries were surveyed by telephone in DE-LS). Interviews were also conducted with a number of other stakeholders involved in agricultural research and education, EIP-AGRI network and Operational Groups, rural networks, and some actors specifically involved in the forestry sector.

Restitution workshops were organised online (due to the Covid-19 crises) in the following case study MS: FR, BE-FL, DE-LS and IE, in order to discuss and validate the findings with MS representatives and other stakeholders.

Online surveys

Two online surveys were conducted at the level of EU-28, among RDP managing authorities and FAS coordinators respectively. Contact information were provided by DG AGRI.

- The RDP managing authorities survey has been opened from 20 January to mid of March 2020. It was sent to 115 contacts (out of 112 RDPs; 18 appeared non-valid e-mail addresses). In total **33 partial answers were received, from 10 MS** (AT, BE, CY, DE, DK, ES, FR, IT, MT and PT) and several regions.
- FAS coordinators were surveyed between 12 February and mid of March 2020. The survey was sent to 45 contacts (some non-valid). In total 28 MS opened the survey and **21 answers were received, from 17 MS** (AT, BE, CY, CZ, DE, FR, HR, HU, IE, LU, LV, MT, NL, PT, SE, SI and SK)²⁶.

An additional survey was conducted online among final beneficiaries (farmers) in France, in the Grand Est Region, and by telephone among farmers in Lower Saxony (Germany). In France, the survey was sent to 3 600 beneficiaries of CAP Pillar 2 support, namely investment support (M4.1) and setting up of young farmers (M6.1) (contacts provided by MA). With a response rate of 3.9%, 142 farmers have answered partially the survey. In the other case studies, beneficiaries were interviewed through focus groups and/or direct phone call with farmers.

3.3 Limitations

Data availability and validity

- The data provided by DG Agri does not allow a single view of the amounts planned, decided, and spent on a same basis, which is especially important in a context of still low expenditure end of 2018 (after 4 years of implementation). The ESIF database provides this information, by measure. The latter has therefore been used for this exact reason.
- The financial data communicated by DG Agri does not provide a systematic view at the level of the sub-measures. The ESIF database also does not provide data by sub-measure.
- The values of these financial data depend on the dates of extraction or reference of the data and may therefore vary slightly depending on the sources. However, this does not call into question the trends or findings.
- The data extractions were performed in September 2019, before validation of the AIR-2019 by the EC.

²⁶ In the following Member States, Belgium and Germany, the survey addressed at national level was relayed to the regional coordinators, accounting for multiple answers received for the same Member State.

- Despite the major efforts to standardize the definitions of the indicators undertaken within the CMEF, there are major differences in the methods used to calculate certain indicators between MS (i.e. indicators of the number of beneficiaries of training (M1.1)). Some of the definition also allow possible multiple counting. Together, this makes the comparison and interpretation of the data complex at EU level.
- The relevant RD measures have small decision rates and some have very low spending rates, hence it limits the assessment of impacts.
- The absence of robust data on uptake of training and advice by farmers/foresters.
- Lack of monitoring data regarding the establishment and operation of the FAS, including advice provided under the FAS, unless advice is cofounded by the EAFRD (Measure 2).

Indeed, monitoring data about the FAS rests on MS responses to a questionnaire pursuant to Article 102(2) of Regulation (EU) No 1306/2013. The questionnaire covers general questions about the establishment and operation of the FAS, as well as all FAS topics with several questions per topic. There are two main limitations:

- 1) Regionalised or devolved MS cannot answer the questions at national level due to the diversity of situations among their regions (DE, ES, FR, IT).
- 2) Figures provided for some key indicators such as the number of farmers advised are not homogenous. This is notably due to the fact that many types of "advice" are taken into consideration with multiple choices: "one-to-one on the farm"/"one-to-one outside the farm (consultations, etc.)"/"telephone helpdesk"/"Small group advice on the farm"/"Small group advice out of the farm"/"Internet"/"Publications"/"Other"; and the guidance specifies in a footnote, that the figures *"do not need to be precise but only aim at giving an idea of the functioning of the system. The figure may compile all advices given in various forms."*

As a result, MS count differently. E.g. in Belgium, Flanders counted the farmers advised by the FAS (555) who are supported by the RDP for the use of advice (M2.1) whereas Wallonia counted 134 000 farmers advised for a total number of farms of around 12 000. Estonia counted 106 farmers advised under the FAS while there were over 3 000 under one to one advice supported by the RDP. France did not provide any figure nor did Ireland. Germany mentioned about half of the German farmers.

For each of the FAS topics, eight sub-questions are raised which are answered very briefly (with yes or no) also due to the above mentioned constraints and the complexity of this type of data collection and multiple possible answers to a single question²⁷.

Others

The time span for implementing the case studies (December/January 2020) was very short, it was solved by overlapping the Observing phase. The Covid-19 crises further delayed certain stakeholder interviews. The MS restitution workshops took place in four case study MS (FR, BE-FL, DE-LS and IE) and the other four were organised in different forms.

²⁷ List of sub-questions per FAS topic 1. *Which are the FAS designated bodies and what is their status (public, semi-public, private)?* 2. *From which date is the FAS implemented for this topic?* 3. *How many designated bodies and advisors operate?* 4. *Describe the methods used for providing advice ((Closed list/multiple choices: "one-to-one on the farm"/"one-to-one outside the farm (consultations, etc.)"/"telephone helpdesk"/"Small group advice on the farm"/"Small group advice out of the farm"/"Internet"/"Publications"/"Other"; if "Other", open box to specify) 5. How many advices are given each year for each method of advice set above? (Open box to specify, numerical value) 6. Do advisors use information, including with IT, extracted from the Integrated Administration and Control System (IACS)? (Closed list: "yes"/"No") 7. Is the advice charged to operators? 8. What are the main issues where advice was requested?*

4 ANALYSIS OF THEMES AND EVALUATION QUESTIONS

Each evaluation support study question (ESQ) is answered following the same structure. First, a methodological section details the rationale and coverage of the ESQ, the judgment criteria (established and used by the evaluation team), and the method (sources and tools). A second section provides a summary answer, based on the findings developed under each judgment criteria and indicators in the third section. For readability purposes, the definition and comprehension of the key terms are not developed under each ESQ but gathered in the Glossary of terms.

A

Theme 1: Causal Analysis

4.1 ESQ1: What is the architecture of the CAP implementation in MS in relation to all CAP instruments and measures having effects on knowledge exchange, innovation and advisory activities?

4.1.1 Methodology

4.1.1.1 Rationale and coverage of the Evaluation Question

This evaluation question, along with the next two, provides the framework for the analysis of the evaluation. It describes the architecture of CAP implementation in MS in relation to CAP instruments and measures (I&M) having effect on KE-I-A (see Table 35).

The inventory of CAP I&M having effect on KE, innovation and advisory activities is listed in Table 35 of section 2.4 and summarised in the intervention logic. These measures in turn also support MS AKIS. These are RD measures 1, 2 and 16 but also supporting networks such as the EIP-AGRI, the National Rural Network as well as many other RD measures. Again, MS use of these measures is diverse.

Beyond the description of this architecture, the ESQ also addresses the concept of an effective functioning of AKIS that "bridges gaps between research and practice." AKIS is not only expected to bridge those but also to link up any innovation actor within the AKIS for useful interaction helping any K&I initiative. This is considered as an enabling factor to respond to current and future needs in terms of knowledge provision and innovation (see theme relevance ESQ15 in particular).

4.1.1.2 Judgement Criteria

The two following criteria are adopted:

- **JC1:** an inventory of relevant CAP I&M and an overview of the architecture of their implementation in relation with KE, innovation and advice;
- **JC2:** and the identification of the overall contribution of CAP I&M implementation to the MS AKIS.

The description includes the specificities of combination, of links and interactions.

4.1.1.3 Methodology

This ESQ rests on a comprehensive literature review. The methodology for answering the ESQ is descriptive and qualitative.

An inventory of all CAP I&M having direct and indirect effects on KE, innovation and advice is made (see section 2.3 and Table 35). EU legislation is mandatory, but the way to apply it may differ, just like the use of support measures that is optional. The state of play based on literature review, and in particular the type of links between entities have been discussed with managing authorities (and other concerned stakeholders) in case study MS, including the question of the effective functioning of AKIS.

4.1.2 Summary answer

ESQ1: What is the architecture of the CAP implementation in MS in relation to all CAP instruments and measures having effects on knowledge exchange, innovation and advisory activities?

In answering this question the contractor should elaborate on how MS embedded these schemes in their overall CAP support, i.e. how the knowledge exchange, innovation and advisory activities are linked to the other CAP support schemes by means of efficient functioning of MS' AKIS.

The inventory of CAP I&M related to KE-I-A and an overview of the architecture of their implementation is provided under the first Judgement Criteria (**JC1**). The overall contribution of these CAP I&M on the respective MS AKIS is qualitatively presented under the (**JC2**). The ESQ's sub-question asks to explicit the link between the CAP I&M and MS' AKIS, especially how they participate in the effective functioning of MS AKIS. Indeed, the latter is essential to contribute to the CAP's specific and overall objectives. The role of knowledge exchange, advice and innovation is clearly specified in recitals (12), (13) and (41,42,44) of Regulation (EU) No 1305/2013 on rural development and in the intervention logic (Figure 7).

JC1. CAP I&M related to knowledge exchange, innovation and advice

The **concept of AKIS** is a useful concept to map the KE-I-A actors in a Member State/region, capture their interactions and analyse the possible room for improvement for a better functioning of the system. The PRO-AKIS project investigated this issue and proposed a characterisation along two criteria: the strength (level of available resources) and integration (degree of interaction) of the system. The AKIS concept is gradually gaining in maturity, but remains for the moment rather limited to academic research, and is very little known and used by Member States' decision-makers.

The main **CAP I&M** contributing to MS AKIS are the *Rural Development measures*. All MS have used several Pillar 2 measures to contribute directly (M1, M2, M16.1 and M16.2, as well as M10.1 Agri-environment and climate measures – AECM) or indirectly (investment support, Young Farmer (YF), etc.) to their AKIS. The implementation of these measures differs between MS, depending on the type and organisation of the actors, the specific needs of the final beneficiaries and training/advisory/research organisations. The institutional context also defines the structure of governance (centralised versus devolved managing authorities). The implementation concerns both the selection of specific measures and sub-measures (with direct or indirect effects) but also possible links established between them. In addition, the role of a national rural network varies, especially on the existence of an EIP-AGRI unit or innovation support services, supporting the Operational Groups. Some Member States have specific innovation support services. Some provide this support through their National Rural Networks (NRN) or Regional Rural Networks (RRN) (supported under M20.2). In some MS support comes from external actors (Innovatiesteunpunt-Flanders (BE)). And finally, some do not provide specific support.

The mandatory *Farm Advisory System* (FAS) has some influence on MS AKIS. Cross-compliance provides the minimum mandatory provisions to be covered by the FAS, while further topics are also explicitly mentioned. According to the pre-existing advisory landscape, the FAS is implemented diversely in MS and regions. Its contribution to AKIS is varied and limited. There is a variation along a gradient, from Member States where the FAS has simply meant an ex post 'statement' of pre-existing elements among the advisory landscape (and where the FAS can even take the form of an informative website only (BE-WL), without investment of new resources to fulfil the obligation (DE, FR)), to other Member States where CAP funding with M2 supported the FAS to provide a stimulus in order to help them provide elements that advice required (BE-FL, EE, IT).

The **implementation architecture** of these instruments and measures is very diverse across the EU. Neither the Member States' architecture of I&M with effect on KE-I-A (selection of measures/ sub-measures and their combination), nor their contribution to AKIS, actually seems to be formally related to the characteristics of the MS AKIS (according to the PROAKIS typology), although this could have been imagined.

AKISs are multifaceted and characterisation according to the integration-strength dimensions does not necessarily reflect all their diversity. And AKISs evolve as pointed out in Estonia and Italy compared to the 2014 characterisation. Causal links should also be sought in relation to other parameters such as the history of AKIS, the institutional context, the cultural and legal basis, the structure of the agricultural/forestry sector, etc. A set of elements that are very specific to each context and which do not allow generalised observations to be drawn.

It is not possible to describe a limited number of typical CAP implementation architecture models corresponding to MS AKIS profiles. Nevertheless, this descriptive exercise is essential to set the context for the rest of the analysis.

JC2. Regarding the contribution of CAP I&M related to KE-I-A on the respective MS AKIS

CAP I&M do contribute to MS AKIS in all case study MS, with the FAS and RD supported measures. In Lower Saxony (DE) this contribution is notably focused on environmental and societal topics. In Ireland, the very strong and integrated AKIS has become slightly more fragmented over the past 5 years. This is partly the result of the reduction in state support reducing the public sector resources, and partly due to CAP measures which have provided funding and training for private sector advisors (and other bodies such as the National Rural Network) to step in and become involved in AKIS delivery. The AKIS, however, is still viewed as a strong system and the changes can be seen as positive in respect of enabling a wider range of actors and views to be represented. Estonia's AKIS is supported by the number and variety of measures and sub-measures implemented both with direct and indirect effects. In the two Italian regions (Umbria, Veneto) CAP I&M do contribute to the regions or MS AKIS. However, in these regions as well as in Poland, the complicated and delayed implementation of M2 in particular hindered the contribution. Poland planned in addition a much more limited budget for KE-I-A than in the previous 2007-2013 period.

The contribution is more limited and really focused on co-operation and innovation in France. Greece, in July 2020, had not yet implemented the FAS - 11 years after the official obligation. The Greek stakeholders recognise however that the FAS's institutional capacity building has a potential added value.

All MS also support KE, I and advisory services with their own resources, as shown by the number of State Aid cases exempted or notified.

4.1.3 Detailed analysis based on the Judgement Criteria / Indicators

- [ESQ1 JC1 Description of the CAP I&M relevant to KE-I-A and the architecture of implementation, in relation with MS AKIS](#)

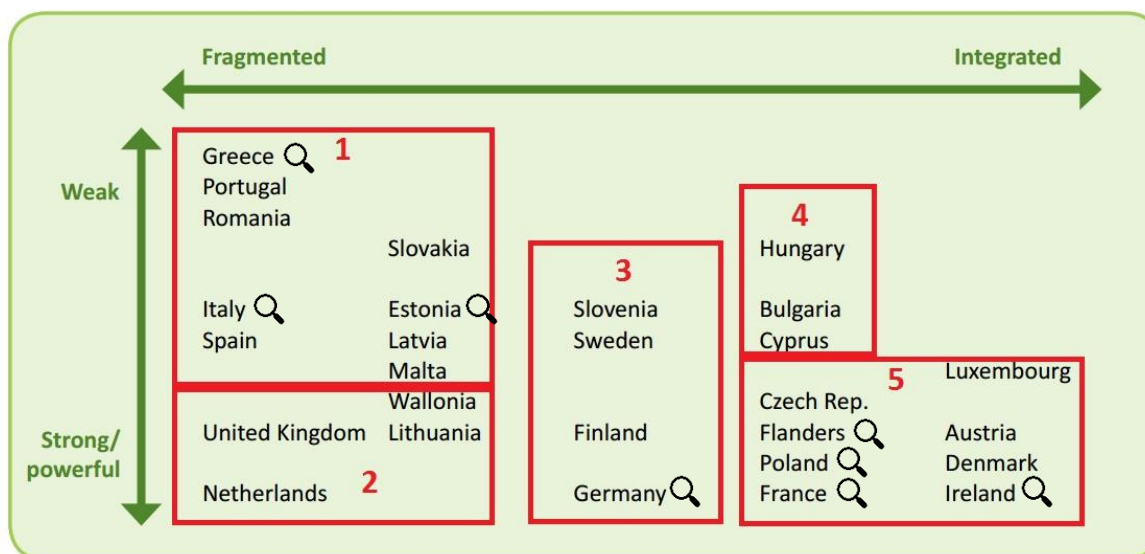
A) MS AKIS characterisation

The **Agricultural Knowledge and Innovation System (AKIS)** in EU-28 is diverse, complex and multi-faceted, based on historical organisation of AKS and its evolution over the past 20 years (EU SCAR, 2012). The comparability of national AKISs is difficult due to their embeddedness in national institutions, laws and culture (Knierim and Prager, 2015). The results of a 7th framework programme "PRO-AKIS" enabled to propose a characterisation of MS AKIS along two dimensions: the degree of strength and the degree of integration of the system (see Figure 9). This characterisation highlights the diversity of AKIS and can be summarised as follows.

- **Strong versus weak:** In a strong AKIS three elements are present: (1) predominant national actors or organizations that support at least partly the knowledge system; (2) financial resources (including public) are allocated to the AKIS, and support advisory services, knowledge production and exchange; (3) proof that farmers take advantage of advisory services.
- **Integrated versus fragmented:** The 'level of integration' refers to the importance of linkage between AKIS actors. The main characteristics of a fragmented AKIS are some knowledge networks which works separately in an independent way and there is not a good coordination nor cooperation, even can exist competition. On the other hand, in the integrated case, the structure is well coordinated and policies at national level support the AKIS. Besides, actors have strong links between them.

This typology, based on a thorough information collection and analysis on 27 countries' systems, has been extensively cited and used in publications on the subject. Hence it was used in this evaluation as a clustering criterion in order to select a number of countries for case studies as representative as possible of the European diversity (see section 3.2 – selection of Case Studies).

Figure 9: Categories of countries according to the strength of the AKIS and its level of integration



Source: Knierim and Prager, 2015 with categories and case study selection by ADE

However, it should be kept in mind that AKIS are dynamic and change over time. Some Member States have started to restructure their AKIS considerably to address the interactive innovation model, new needs and challenges (both in the agricultural sector and the government) (EU SCAR, 2015).

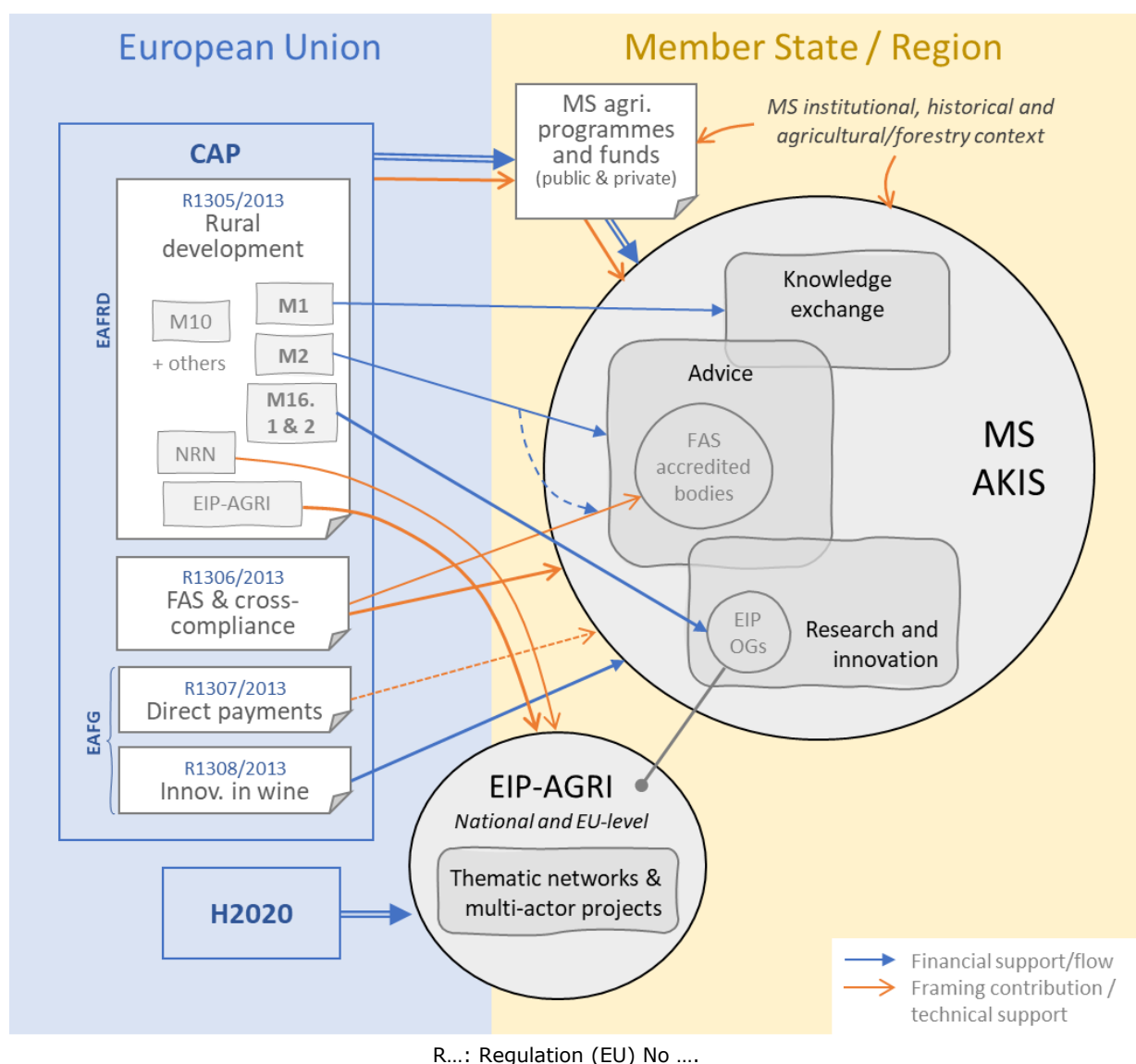
It should also be underlined that, even if gradually gaining in maturity, the AKIS concept and terminology remained at the end of 2019 rather limited to academic research, and was very little known and used by Member States' decision-makers. Efforts are made notably supported by the EIP-AGRI and H2020 projects to sensitise MS' authorities on the AKIS and the importance of its proper functioning, as one of the objectives of the Future CAP (post-2020).

B) CAP I&M contribution to AKIS

The inventory of the **CAP I&M having effect on KE-I-A** is extensively presented in sections 2.3 and Annex 2 (Table 35), and summarised in the intervention logic (Figure 7). They include Rural Development measures (CAP Pillar 2 – Regulation (EU) No 1305/2013), the Farm Advisory System (Regulation (EU) No 1306/2013, articles 12-14), Direct payments (Regulation (EU) No 1307/2013) and the innovation measure for the wine sector (CMO – Regulation (EU) No 1308/2013, article 51) both included in CAP Pillar 1. These measures in turn **support MS AKIS**.

Figure 10 gives a generic overview of all those I&M and illustrates **how the CAP**, including its I&M focused on KE-I-A, **is linked to the MS AKIS**. This figure should be seen as a support to capture the architecture of the CAP implementation – what are the key instruments to consider and how they do interact and contribute to the AKIS.

Figure 10: Generic architecture of CAP implementation with regard to knowledge exchange, innovation and advisory activities



Source: ADE based on literature review and case studies

The FAS provisions exposed in the regulation on financing, management and monitoring of the CAP provide a thematic basis to MS regarding training and advice. These provisions set the obligation for Member States to ensure the availability and quality of advisory services regarding the different legal requirements about farming practices (encompassed in the cross-compliance system). For the 2014-2020 programming period the compulsory scope of the FAS was enlarged to cover, in addition to cross-compliance, greening payments, advice for RD supported measures, the Water Framework Directive and integrated pest management (Table 2).

The CAP contributes to MS AKIS through financial supports, under Rural Development Programmes (Pillar 2 – funded by the EAFRD) and the innovation measure in the wine sector (market measure – funded by the EAGF).

RD measures directly contributing to foster KE-I-A (Priority 1 of rural development) are **M1, M2 and M16** and their respective sub-measures. M1 focuses on the knowledge exchange and information actions. M2 supports farm advice; this measure can be linked to the Farm advisory system, supporting advice provided by FAS advisors. But it is not necessarily the case, and some MS completely dissociate the FAS from M2 (FR, DE). Cooperation (M16) notably supports Operational Groups, their setting up (M16.1) and the

operation and implementation of pilot projects (mainly M16.2). All these measures directly support MS AKIS.

A strong finding is the actual **confusion**, by MS but also by H2020 research projects, **between the mandatory Farm advisory system (FAS, called EU-FAS) on the one hand, and advisory services supported by the RDP on the other hand**. Several MS²⁸ support the use of advisory services and training of FAS advisors with RD M2 and make no difference between the two (FAS instrument and M2 support to advisory services). Consequently, in these MS, the FAS instrument together with RD support contributes in a more integrated way to MS AKIS. However this doesn't prevent that the FAS contributes to AKIS, even if not supported by RD.

The implementation of Agri-Environment-Climate measures (AECM) (**M10**) can also have a direct effect on KE: indeed the Regulation²⁹ encourages (but does not oblige) MS to ensure the necessary level of knowledge and the availability of advice for the beneficiaries of M10.

Many **other Pillar 2 measures** have indirect effects to varying extent, e.g. M3 quality schemes, M4 investment, M6 farm and business development (including start-up for young farmers), M8.6 investment in forestry technologies, M11 organic farming and M19 LEADER. This indirect effect can be linked to eligibility criteria (e.g. a minimum training level required) or the induced change in agricultural/ forestry practices (raising the need for skills enhancement and/or advice, and leading to innovation) that may be linked to training and/or advice, supported through the RDP or not.

The strong indirect Pillar 2 measures include the **National Rural Networks (NRN)/ Regional Rural Networks (RRN)** funded under M20.2. Indeed, one of the objectives of the National Rural Network is specially to foster innovation in agriculture, food production, forestry and rural areas.

In addition, innovation support services (possibly funded under M20.2), EIP-AGRI service points at national and at EU level, play a key role for co-creation of innovation and dissemination of results at national and European levels. Operational Groups (territorial level), supported under M16, are strongly encouraged to link up on thematic networks and projects funded by **Horizon 2020** (the financial instrument for the R&I objective of Europe 2020).

MS also have the possibility to offer support to **innovation in the wine sector** under the CMO Regulation. The following specific innovation measure is granted for tangible and intangible investments aimed at the development of new products, processes and technologies, and may include an element of knowledge transfer.

Finally, Direct Payments may first have an indirect effect on KE-I-A through the setting-up of greening payments. Farmers have to raise their skills and/or should call upon advisory services to meet all the requirements conditioning the access to greening payments. Voluntary coupled support, implemented in order to encourage specific productions in areas where it doesn't necessarily occur by itself, may also lead to innovation and skills acquisition for farmers engaging in those productions, notably protein crops (France, Greece, Ireland). More indirectly, direct payments support KE-I-A by ensuring a minimum income to farmers, providing them with resources that can be used to access training and advisory activities (to cover service fees and/or opportunity costs) and help to handle risk-taking linked to innovation.

Beside CAP instruments and measures, MS may also provide **public resources and private funds** that affect the structure of the AKIS. Most MS do also support KE, I and A with their own resources. This is confirmed by the **State Aid** cases database. **From 2014-**

²⁸ At MS level, only eight MS do not use RD measure 2 namely Austria, Wallonia (Belgium), Germany, France, Denmark, Luxembourg, Poland and the Netherlands.

²⁹ Article 28.4. of Regulation (EU) No 1305/2013: "Member States shall endeavour to ensure that persons undertaking to carry out operations under this measure are provided with the knowledge and information required to implement such operations. They may do so through, inter alia, commitment-related expert advice and/or by making support under this measure conditional on obtaining relevant training."

2018 (and linked to the current RD Regulation) **22 out of 28 MS exempted or notified 565 cases** (546 exempted and 19 notified (see Annex 7: Financial Tables for M16)). The following MS did not yet introduce a case over this period, namely: CY, GR, MT, SL, PT, RO.

Furthermore, the existence or not of **national agricultural/rural programmes** and support will also guide the implementation architecture: those policies aim at setting clear objectives for the MS, and possibly already provide support to AKIS bodies and/or farmers.

Regarding the CAP implementation, **the institutional context** defines the structure of governance of CAP I&M (Table 6). While some MS have a centralised administration with 1st and 2nd Pillars managed at national levels (e.g. Estonia, Greece, Ireland or Poland), others have delegated Rural Development to regional authorities, in charge of the drafting and implementation of RDPs (as is the case in France). In Germany, Italy and Belgium, the CAP is completely decentralised, RDPs are regional, and Regions even have their own Paying Agency.

Table 6: Institutional context of the CAP implementation in case study MS

Case Study	Institutional set-up ^(a)	Scale of RDPs	Number of RDPs in MS	No. Paying agency	National policy
BE-FL	Decentralised	Regional	2	2	No
EE	Centralised	National	1	1	No
GR	Centralised	National	1	1	No
DE-LS	Decentralised	Regional	16	17	No
FR-LO	Mixed	Regional	30 (incl. 27 regional RDPs and 3 national)	1	Yes: Agro-écologie
IE	Centralised	National	1	1	Yes: Food Harvest 2020 Foodwise 2025
IT	Decentralised	Regional	21	1 national + 8 regional	No
PL	Centralised	National	1	1	No

Centralised: Pillar 1 and RDP both managed at the national level.

Decentralised: Pillar 1 and RDPs both managed at regional level.

Mixed: Pillar 1 and National Rural Network managed at national level, RDPs are regionalised.

Source: ADE based on case studies

C) Specificities in the architecture of CAP implementation







The **set of CAP I&M implemented (i) and the implementation architecture (ii)** differ between Member States (and between Regions within Member States in case of decentralised management, e.g. in France, Germany or Italy).

Table 7 provides an overview of the set of CAP I&M relevant to KE-I-A that each case study MS chose to implement. The drivers and reasons behind those implementation choices are subject to ESQ2, section 4.2.

Table 7: Inventory of CAP measures having direct or indirect effect on KE-I-A in case study Member States

Sub-measures	BE-Flanders	EE	FR-LO	DE-LS	GR	IE	IT-Veneto	IT-Umbria	PL
Farm advisory system									
FAS									
Supported under M2.1	✓	✓			✓		✓	✓	
RD measures having direct effect on KE-I-A									
M1	M1.1								
	M1.2								
	M1.3								
M2	M2.1								
	M2.2								
	M2.3								
M16	M16.1			30		31			
	M16.2		32						
Other RD measures having effect on KE-I-A									
M3									
M4					Delay	M1	M1-M2	M1-M2	
M5									
M6					Delay		M1-M2	M1-M2	
M7									
M8									
M9	M1.2- M16				Delay				
M10		M1		M2.1	Delay	M1 ³³	M1	M1-M2	
M11		M1		M1.1-M2.1	Delay		M1		
M14		M1					M1	M1-M2	
M19						M16.1	M16		
CMO measure having effect on KE-I-A									
Innovation in the wine sector	<i>Not implemented in the prospected Case studies. Implemented in one German Region as referred to in ESQ 12.</i>								
Pillar 1 instruments having effect on KE-I-A									
Greening									
YF "top-up"									
Voluntary coupled support									
Redistributive payment									

Legend:

	Implemented and direct effect on KE-I-A
	Planned but not yet implemented
	Implemented and indirect effect on KE-I-A
	M... and measure linked to M [...]
	Implemented (no/limited effect on KE-I-A)
	Closed / not implemented

Source: ADE based on RDPs and case studies

³⁰ Directly includes pilot projects of M16.2³¹ Sub-measure M16.1 was divided in three: i) Support for EIP, ii) EIPs- Locally Led Hen Harrier and Fresh Water Pearl Mussel, iii) EIPs- Locally Led Environment and Climate³² Covers M16.1³³ The measure engages compulsory training covered by M1.

In a nutshell, the specificities in the implementation architectures include:

- The **importance of KE-I-A within the RDP**, which is quantified through the first RD target indicator (T1). It is the percentage of planned expenditure under Articles 14, 15 and 35 of Regulation (EU) No 1305/2013 (i.e. under M1-M2-M16) in relation to the total expenditure of the RDP. The EU average is 3.3% (Table 8). Within the selected case studies, this rate goes from 1.5% in Poland to 9.7% in the Umbria region (Italy). It should be highlighted that all MS allocated a budget to fostering KE-I-A, meaning that this cross-cutting need is unanimously recognised. This is a strong characteristic, especially for MS with higher financial constraints (rather weak AKIS), generally showing a higher T1 compared to strong AKIS where these CAP resources are needed to a lesser extent.
- Packages of **“linked” EAFRD measures/sub-measures**, as a “self-support” to implementation of measures³⁴. Several measures have an indirect effect on KE-I-A in the sense that in order to be eligible for support, making use of advice and/or training may be required. In some RDPs (Italy is a major example), a support to this advice/training can be offered through M1-M2. Indirect measures can also be associated with direct measures as a technical assistance (e.g. M19 LEADER or M20.2 supporting National Rural Network).
- The **integration of an EIP-AGRI support within the National Rural Network support unit**. The implementation of a national rural network (NRN) is mandatory. It has a specific objective in terms of fostering innovation. Regional rural networks are not mandatory but exist in several regions. For both networks, a support to EIP-AGRI can be offered under the RDP.
- Different **actors playing the role of facilitator**. A facilitation role can be handled by intermediate institutions between farmers and research and other national actors. Some RDPs make use of innovation support services (within public structures of the Ministry or with private bodies).
- The **possibility to use the RD advice measure to fulfil the FAS obligation**. The Regulation on financing, management and monitoring of the CAP, provisioning the obligation of setting up a FAS, does not provide any financial support to MS neither to services providers and users of the FAS. MS can however choose to link the measure 2 support to the FAS, as is the case in five out of eight case study MS (Flanders, Estonia, (Greece³⁵), Italy Veneto and Umbria).
- The **scope of the advice supported under M2 and/or listed under the FAS**. Both the RD advice measure (now 'M2') and the FAS had their scope broadened over time (Regulation (EC) No 73/2009; Regulation (EU) No 1306/2013; Regulation (EU) No 1698/2015; Regulation (EU) No 1305/2013). The FAS scope includes compulsory topics, plus optional topics which MS may add (Agri-environment and climate action, risk management, etc.). Support for the use of advisory services (M2.1) is broader as it covers together the improvement of the economic and environmental performance of the farm³⁶.
- The **implementation choices regarding the Farm Advisory System**. Differences between MS include e.g. who are the service providers (number of operating bodies, status, level of integration...), the selection/designation procedures applied, the type of advice delivered, the potential public support to the system or not, the possible definition of priority access to some beneficiary categories, and the degree of integration with research and innovation. There is a variation along a gradient, from Member States where the FAS has simply meant

³⁴ In Veneto, the KE-I-A measures have been used jointly with other measures to promote a mix of actions addressed to the setting-up of young farmers and related investment plan. This means that M1 and M2 are included in so-called “package of measures” including also M4.1, M6.1.1, M4.4 (non-productive investments’ support) and 6.4.1 for diversification of farm activities to strengthen the financial effort and synergies among different measures in favour of business plans promoted by young farmers.

³⁵ In Greece the FAS is not yet set-up and M2 is not yet implemented (July 2020).

³⁶ Regulation (EU) No 1305/2013, article 15(1-a): “help farmers, young farmers as defined in this Regulation, forest holders, other land managers and SMEs in rural areas benefit from the use of advisory services for the improvement of the economic and environmental performance as well as the climate friendliness and resilience of their holding, enterprise and/or investment”.

an ex post 'statement' of pre-existing elements among the advisory landscape (and where the FAS can even take the form of an informative website only (BE-WL), without investment of new resources to fulfil the obligation (DE, FR)), to other Member States where the CAP RD Measure 2 funding has been used to fulfil the FAS obligation and more (BE-FL, EE, IT) (see Annex 3).

Table 8: Case Study Member States' AKIS characteristics, KE-I-A share in the RDP budget and commitment rate (classified according first to AKIS strength and then to the M1-M2-M16 share)

Member State or Region	AKIS Strength	AKIS integration	Intensity of farming in € (SO/AWU)	Share M1-M2-M16	Decision rate M1-M2-M16
GR	weak	fragmented	17 927	4.50%	5%
IT-UM	medium	rather fragmented	63 576	9.70%	41%
IT-VE	medium	fragmented	113 362	6.10%	42%
IT (average)	medium	fragmented	60 895	5.20%	25%
EE	medium	rather fragmented	46 305	4.40%	77%
BE-FL	strong	rather integrated	153 513	7.10%	74%
DE-LS	strong	medium	162 172	7.00%	83%
IE	strong	integrated	41 603	5.00%	48%
DE (average)	strong	medium	100 671	2.80%	62%
FR-LO	strong	rather integrated	93 978	2.70%	6%
FR (average)	strong	rather integrated	88 581	2.40%	36%
PL	strong	rather integrated	17 134	1.50%	4%
EU average				3.30%	66%

Source: ADE based on clustering

➤ [*ESQ1 JC2 Overall contribution of the implementation of CAP I&M related to KE-I-A on MS AKIS*](#)

The actual **contribution of CAP I&M** with effect on KE-I-A **to AKIS** varies significantly depending on the set of instruments implemented, how they were implemented, contextual data (including territorial characteristics, administrative organisation, national programmes, agricultural and forestry sectors, regional/national need, etc.), and the structure and strength of the MS AKIS.

The theoretical contribution of each individual instrument is detailed in Table 35 and overviewed under JC1. As an obligation for all Member States (and not a funding measure), the FAS has a **framing effect on the AKIS, and thus contributes to foster KE-I-A** with: development of advice on cross-compliance (and its evolution), the Water framework directive, Integrated pest management and other CAP specific issues.

Rural development directly supports training, advice and innovation and thus **provides the AKIS with financial support** complementing the national public and private resources. This support can be of substantial importance, especially for MS with strong budget constraints (weak AKIS). In addition, some measures can support each other's implementation via a form of technical assistance or support transfer. E.g. the National Rural Network may assist in EIP-AGRI operation, or M1-M2 can support training/advice associated with other RD measures or the FAS.

Contribution of CAP I&M to MS AKIS goes from superficial to essential and deeply structuring, depending on MS. Table 9 provides a summary of CAP contribution to the case study MS AKIS. It appears that discerning a clear relationship between a specific AKIS, CAP architecture and effects of I&M is not straightforward. To possibly be able to carry out more completely this exercise, it would be necessary to go beyond the parameters described above and directly related to the CAP and AKIS. Indeed, **contextual and historical data have their importance in the shaping of the AKIS** (as already

underlined) – i.e. the agricultural/forestry sectors as well as national institutions, laws and culture. Those set a historical and actual frame in which the AKIS is embedded.

Note that the Table 9 is an overall *summary* – mostly qualitative, and more precise data and examples of CAP I&M implementation and uptake in the respective CS Member States/regions are further developed in dedicated questions.

Table 9: Summary of overall CAP contribution to MS AKIS in case studies

	Overall contribution of CAP I&M with effect on KE-I-A to the MS AKIS (JC1.3)
France/ Lorraine <i>FAS not supported under M2</i>	<p>CAP I&Ms contribution to MS AKIS is limited, apart from M16 (Operational Groups) and the EIP-AGRI.</p> <p>Pillar 1 requirements may foster KE-I-A when farmers need to acquire knowledge (training and/or advice) related to new agricultural practices (greening, protein crops, etc.).</p> <p>EAFRD support provides complementary resources to training organisms, but the most important contribution of the CAP to AKIS is the support to setting up and operating Operational Groups: significant contribution to a better integration of stakeholders in the innovation process and the promotion of bottom-up approaches. The EIP-AGRI support service (within the National Rural Network at the Ministry of Agriculture) supported its implementation and made links with Horizon 2020 / the EIP-AGRI (organisation of workshops at national level). The Regional Rural Network of Grand Est also supports the implementation of Operational Groups.</p> <p>The FAS has very little added value, in an already existing diverse and multifaceted advisory landscape with a wide service offer. The accreditation of the advisory bodies is done at the regional level. Both public and private bodies are eligible. The DRAAFs are responsible for examining and validating applications for accreditation. The DRAAF facilitate the system, in particular by informing the FAS bodies/networks of changes in cross-compliance, and by ensuring that agro-ecology is integrated into implementation. It also runs the system in terms of advisors training. DRAAF ensures monitoring via annual activity reports transmitted by the FAS networks, in order to be able to re-examine accreditation (in particular to check that skills are maintained), and to complete the MAA monitoring system.</p> <p>For both period (2007-2013 and 2014-2020) the FAS did not receive funding. The accreditations issued for the FAS are independent of the selection procedure carried out under RD measure 2.</p> <p>An advisor/body may participate in an unlimited number of FAS networks. FAS-accredited bodies/networks must offer face-to-face advice (exclusion of advice by telephone, transmission of documents by e-mail, etc. in the definition of "advice"). The French technical instruction on the implementation of the FAS foresees a reduction in the pressure of cross-compliance controls for farmers who use accredited advice. Accredited bodies are also the only ones that can deliver the first level of environmental certification.</p>
Lower Saxony (DE) <i>FAS not supported under M2</i>	<p>CAP I&M do contribute to the region's AKIS especially on environmental and societal topics</p> <p>Regarding pillar 2, Lower Saxony (and Bremen) planned very large use of M1, M2, M16 (T1 is 7.0%, compared to 3.3% average in EU). This is especially due to M1.2 focused on water protection advice (EUR 75 million) further to the WFD and M2.1 (EUR 9.7 million); both have been given more weight in this programming period based on the positive experience of the 2007-2013 period. M1 with M1.1 that includes notably training for advisors (usually under M2.3) also supports the regions' AKIS. M16 Operational Groups (EUR 17.5 million) are supported by an innovation support service.</p> <p>On contrary, the FAS has no specific added value and no net effect on AKIS. As the region already has broad and comprehensive advisory services, the FAS is somehow considered as an artefact only to fulfil the EU regulation. The Chamber of Agriculture is designated as FAS body for activities already in place. The FAS is not contributing to AKIS (compared to a situation without FAS, it would be strictly the same). But advisory services under RD M2.1 are contributing especially on environmental and societal topics.</p>

	Overall contribution of CAP I&M with effect on KE-I-A to the MS AKIS (JC1.3)
	No link is made to Horizon 2020 (this topic is complicated and stakeholders both at regional and national level do not know how to link up with Horizon 2020). In Germany (and LS) pillar 1, in addition to basic payments, covers greening, redistributive payments and YF premium.
Ireland <i>FAS not supported under M2</i>	<p>The Irish AKIS is strong, integrated and heavily subsidized by national funds, the latter having decreased significantly after the financial crises of 2007-2008.</p> <p>CAP I&M play a key role. M1 support for Knowledge Transfer discussion groups³⁷ enabled a significant increase in the number of participants while at the same time broadening the scope of attendees (six sectors). It has also created a level playing field for private consultants to participate in the scheme and facilitate Knowledge Transfer groups. M1 funding has been equally pivotal in providing training for advisors and farmers in relation to agri-environment and climate measures' schemes (M10).</p> <p>FAS is assured via an accreditation system: to be eligible to apply for CAP-funded support as an advisor, it is necessary to be on a government-approved list of FAS advisors, to be professionally qualified and to attend regular training. This has helped to strengthen advisors' capacities. The same has been noted for conditions on M2 and M1, as well as stricter accreditation to be authorised to advise farmers on agri-environment and climate measures (AECM) or M4 'TAMS' projects, which all require advisors to undergo specific training courses and CPD.</p> <p>The CAP I&M have widened the pool of actors involved in the AKIS delivery by subsidizing not only the public advisory system but also the private system. Public agency Teagasc has retained its strong position in respect of research and education, however, it is no longer the main player for advisory services provision. Private consultants play a significant role (more than 55 000 farmers are advised by private consultants). The National Rural Network, Universities, cooperatives with their own specialist advisors, and the agricultural press also play an important role. The AKIS 'fragmentation' is therefore more accurately seen as a diversification, the result of a wider range of actors becoming involved in provision of advice. This diversification is mentioned as positive by some stakeholders, providing more choice for farmers and an element of competition among advice providers.</p> <p>Overall, Ireland is an interesting case as the CAP measures have contributed to integrate effectively more institutions of AKIS than was previously the case (comparing the current situation with the position of Ireland cited in the Pro-AKIS study by Knierim <i>et al.</i> (2015)). Within the current programming period, CAP measures in Ireland have enabled a wider range of actors to participate in AKIS and the picture is more diverse and complex in comparison to the 2015 study findings. Gradual changes have been noted by stakeholders since 2015, although almost all those interviewed identified Ireland in the same quadrant with a strong and integrated AKIS. This change is partly the result of reductions in state support for the public sector services, and linked to CAP measures providing funding and training for private sector advisors (and other bodies such as the National Rural Network) to step in and become involved in AKIS delivery. The Irish AKIS is still viewed as a strong system, and the changes can be seen as positive in respect of enabling a wider range of actors become involved in provision of advice.</p>
Flanders (BE) <i>FAS supported and assimilated to M2 by MS</i>	<p>CAP I&M do contribute to Flemish AKIS.</p> <p>CAP measures contribute to connect the Ministry (MA) to a wide variety of actors (beneficiaries) such as farmers, advisors, experimental stations, training centres, etc. Contribution to a greater connection between farmers and other actors through Operational Groups (especially researchers).</p> <p>The support managed by the government complements Flemish research funds. The Flemish government created KRATOS, set-up by M2.1 offering advice for free, to fulfil the FAS obligation as well as additional advisory themes. However, M2-FAS advisors sourced through public procurement are not well integrated in AKIS (not well known by farmers; M2-FAS advisors are not /little connected to research).</p>

³⁷ The M1 Knowledge Transfer discussion groups support was different in scope, structure and focus to the Knowledge Transfer groups which were established prior to the current period and were run mostly by Teagasc.

Overall contribution of CAP I&M with effect on KE-I-A to the MS AKIS (JC1.3)	
<p>Estonia</p> <p><i>FAS supported and assimilated to M2 by MS</i></p>	<p>CAP I&M definitely contribute to Estonia's AKIS.</p> <p>Estonia increased its budget for M1, M2 and covered M16 reaching a share of 4.4% above the EU average; support to M1 was multiplied fourfold compared to 2007-2013, and it supports long term knowledge transfer programmes as well as single national and county level projects. Advisory services are supported as well as training of advisors. In addition, several RDP measures have been designed (and successfully implemented) to support the cooperation between the actors (although linkages are still considered weak by some stakeholders). The National Rural Network actively promotes KE (at local, national, EU level). Other Pillar 2 measures (M4.1, M6.1, M10.1) support KE-I-A.</p> <p>Measure 2 notably supports FAS obligation and scope. The Estonia Ministry assimilate RD Measure 2 and the FAS.</p>
<p>Italy</p> <p><i>FAS supported and assimilated to M2 by MS</i></p>	<p>Although Italy's AKIS is considered weak and fragmented, the situation in Umbria and Veneto deviate, they can be considered as intermediate in terms of strength and quite integrated both in Umbria and Veneto. In Umbria, interplays within the AKIS have significantly increased over the last decade. This is mostly due to the collaborative projects financed by the RDPs during the previous (under Measure 124) and the actual (under Measure 16) programming periods. The contribution of CAP I&M to Umbria's and Veneto's AKIS is important.</p> <p>In Veneto, M1 benefited from a strong budget (EUR 22 million) and large use. The implementation of M2 was seen as necessary to counterbalance the shrinking of regional resources (even if there are caveats in terms of implementation). Innovation and cooperation are promoted in a structured way supported by M16.1 and M16.2 (EUR 30 million). Similar considerations apply to the exchanges promoted by the setting-up funded under M16.1 which promoted cooperation in a structured way.</p> <p>Umbria experienced delays in the implementation of M1, which has in consequence not been largely implemented along with M2. Their effect on KE-I-A is therefore limited. M16 is considered successful. The farmers' unions and the University of Perugia played a fundamental role in the EIP-AGRI implementation.</p> <p>In both regions the RD M2.1 delivers the support for the FAS obligation.</p>
<p>Poland</p> <p><i>FAS not supported under M2</i></p>	<p>Poland's AKIS is considered strong and integrated. However, one of its weaknesses lies in the insufficient training of the majority of its advisors due to the lack of knowledge transfer between science and agriculture and the reduced attractiveness of the public advisory system for potential advisors leading to a dramatic decline in advisors</p> <p>Funds allocated to M1, M2 and M16 are important; a link between advice and innovation is made at least at a strategic level. This should lead to a significant impact through the increase of the advisors' and training programmes participants' level of knowledge once the implementation issues are resolved.</p>
<p>Greece</p> <p><i>FAS will be supported under M2 when it is launched</i></p>	<p>The contribution of I&M to the Greek AKIS is difficult to assess considering it was still not implemented in July 2020 (both the FAS and of relevant pillar 2 measures in the RDP). There is no structured advisory system in place. The measure 2 on advice is not implemented yet, and partly due to lack of resources, the Ministry still struggles in setting up the legal basis for the FAS (that should have been done by 2007). No advice has been delivered under the CAP yet.</p> <p>There is a redesigning process underway in order to integrate advisors within AKIS.</p> <p>The AKIS is weak and fragmented, the only advice provision takes place through private actors' initiatives (with fully commercial advice available to those who can afford it), TV, newspapers, and some internet. However, once M2 (training and certification of farm advisors) is launched, the farm advisors are expected to be integrated into a formal and state-controlled system, to ensure that the requirements of FAS will be met.</p>

Source: ADE, based on case studies

4.2 ESQ2: What are the drivers and reasons behind the implementation choices regarding the CAP instruments and measures directly or indirectly related to knowledge exchange, innovation and advisory activities?

4.2.1 Methodology

4.2.1.1 Rationale and coverage of the Evaluation Question

While the first ESQ describes how the architecture of CAP implementation is organised in relation to knowledge exchange, innovation and advisory activities in support to the whole CAP implementation, this ESQ2 explains why it is implemented in such a way. The drivers and reasons are analysed in each specific case study, according to possibilities available and used in the concerned MS.

Drivers (elements making other things progress, develop or grow stronger (Cambridge dictionary, 2020)) and *reasons* (the cause of a situation) for the implementation choices are considered at MS level and/or at the level of the Managing Authorities (RDP). In addition, at the level of beneficiaries the reasons for uptake /or non-uptake are identified. The investigation about the reasons why farmers participate in training/advice/workshops, etc. is done as far as possible (surveys (first or second hand); other).

4.2.1.2 Judgement Criteria (JC)

JC1: Drivers (specific challenges or constraints) and reasons of the architecture of CAP implementation directly/indirectly linked to KE-I-A (including the choice to use M2 to support the FAS obligation)

JC2: Uptake, and reasons for uptake at the level of beneficiaries (potential factors: relevance/irrelevance of the subject/topics for beneficiaries; competence of service providers (trainer, advisor, broker, moderator, etc.); timing and duration of the activities; cost; location; etc.)

4.2.1.3 Methodology

The methodology for answering the ESQ is mainly descriptive and qualitative. Drivers and reasons were captured based on literature review (at EU level and case study level), cross-checked with first-hand data, collected through the MA and beneficiaries' surveys, focus groups and interviews.

4.2.2 Summary answer

ESQ2: What are the drivers and reasons behind the implementation choices regarding the CAP instruments and measures directly or indirectly related to knowledge exchange, innovation and advisory activities?

- a) **at the level of the Member States and/or regional administrations in terms of CAP instruments and measures and their design in strategies/approaches/entities at national and regional levels, taking into account the range of possibilities for providing information flows and advice for farmers/foresters?**
- b) **at the level of the beneficiaries (farmers/foresters) when taking up (or not) these choices?**

In answering these questions, the evaluator should consider the degree of importance of the different drivers and should pay due attention to the articulation of the CAP instruments and measures with the existing national/regional measures and systems. Where relevant, information of local administration should be taken into account.

This ESQ describes the drivers and reasons behind MS implementation choices. This is addressed by the first judgement criteria. In addition, a sub-question specifically asks why final beneficiaries (farmers/foresters) do make use of the different KE, innovation or advisory activities (second judgement criteria).

JC1. Drivers and reasons for implementing measures with direct effect (the FAS, M1, M2, M16, etc.); and other RD measures indirectly related to KE-I-A:

The FAS is mandatory, yet the way of implementing it differs between MS and regions (see ESQ1). In this context, the use of RD measure 2 is also specific. **The reasons for having planned the advisory measure M2 under RD are notably historical linked to the advisory "landscape" (within the AKIS) in the respective MS and the initial setting up of the FAS in 2007. They are also linked to needs in terms of advice especially regarding environmental and societal topics.**

At EU level, almost all RDPs selected M16 (except Luxembourg), 87% planned to use M1 (all except Luxembourg and 14 regions in France, Germany, Italy and Spain) 60% did plan to use M2. The reason for not using M1 (LU, FR, DE) is mainly due to the administrative burden compared to the low level of expenditures, in comparison with other RDP measures.

Main drivers at the level of case study MS are a mix between a response to needs of different nature (notably reported in the RDPs linked to the SWOT analysis) and a continuation of support (successful) from the previous period with adaptations (BE-FL, DE-LS, IE,). Drivers are also an opportunity to discover a new cooperation measure (16) with which few MA were familiar when programming their RDPs (exception of Italy). The high cofunding rate was also a driver.

In terms of indirect effects, some MS like Italy, but also Flanders (BE), Estonia and Lower-Saxony (Germany) had integrated approaches, where training and advice is covering the implementation of other support measures (investments, starters-aid, agri-environment and climate measures, etc.). On contrary, in France, this support was always covered by national or regional funds. Nothing can be said about indirect effects for Greece due to the low level of implementation.

Training and advice on organic farming was covered outside the RDP by regional/national funds with some exceptions (EE, IT-VE).

Again, as for ESQ1, no link could be established between drivers and the AKIS characterisation.

JC2. Drivers and reasons for farmers to take up knowledge exchange/transfer and advice are mainly the following:

- Awareness of the beneficiaries on the services' offer;
- Accessibility (time (when in the season), duration, location, cost);
- Perceived interest and relevance (this includes topics but also the perspective on the future of the farm (farmers who do not see a future in their profession will not get involved in training and advice)
- Quality and attractiveness of the services

4.2.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

- [ESQ2 JC1 Drivers and reasons of the architecture of the CAP implementation directly/indirectly linked to KE, innovation and advice](#)

A) Farm advisory system, possibly supported with RD measure 2³⁸*At EU level*

The FAS is mandatory since 2007; in theory, all MS should have set up their FAS by 2007. However some still experience delays, such as Greece (not yet implemented) or Malta (recent since 2018).

At the level of case studies

The FAS implementation choices are exposed in detail by MS/region in Annex 3. The examples of Lower Saxony (DE), Flanders (BE), France and Estonia are developed below.

Lower Saxony originally started implementing the FAS in 2005, focusing on individual advice on cross-compliance with accredited advisors from the existing advisory services. The RD Measure m114³⁹ supported the FAS, which was mainly linked to cross-compliance, with in addition also advice on occupational safety and energy efficiency. Because the

³⁸ RD sub-measures 2 support the following: 2.1 aid for the use of advisory services; 2.2 aid for agricultural advisory, management and substitution services and forestry advisory services; 2.3 aid for training advisors

³⁹ Use by farmers and forest holders of advisory services (Commission Regulation (EC) No 1974/2006).

focus of supported advice on cross-compliance was felt too restrictive, the Managing authorities decided not to dedicate the RD advice support to FAS services for the 2014-2020 period. LS already had very comprehensive advisory services with a wide variety of advisory structures (Chamber of Agriculture, advisory rings, private engineering consultancies, land advisory services, etc.), so the requirement to set-up a farm advisory system (FAS) appeared as an artefact and was fulfilled by the Chamber of Agriculture (LWK), designated as FAS advisory body.

The use of advisory services (M2.1) is an important subject for the Managing Authorities. The decision to mobilise the M2 support was driven by the will to secure the State funds dedicated to advice over a period of seven years thanks to the EAFRD funding. Indeed, M2 is currently paid directly to advice providers to support the farmers (in 2007-2013 farmers were paid directly). Each of the 25 advisory bodies selected under M2 has a budget to implement advice. Advice covers several topics of public interest regarding notably the environment, climate change, animal welfare, etc. (see theme 2). Without support, these environmental and societal topics would not be taken up by farmers or to a much more limited extent.

In **Flanders**, in order to understand the implementation of the Farm Advisory System, a historical perspective of the previous RDP's has to be taken into account. During RDP I, the advice system consisted only of accountancy related advice. The advisory bodies involved were thus all bookkeeping companies. At the start of RDP II (2007-2013), the FAS was mandatory and Flanders chose to couple it to the advice system that was already installed in RDP I. When a farmer requested (economic) advice during RDP II, he was also given advice regarding cross-compliance. The advisory bodies were still bookkeeping companies, with a focus on agriculture. For RDP III (2014-2020), the FAS in Flanders was programmed under measure M2 "KRATOS – individual advice", which, apart from including economic themes (modules 1 and 2), info on cross-compliance (module 3) and info on greening (module 4), also covers advice on environmental themes, which makes the advice service more diverse than it was during RDP II and RDP I. The advisory service is completely free for the farmer as the advisory services are selected via a public procurement. KRATOS (M2-FAS package) is a very circumscribed supported "entity" within the AKIS, not at all linked to the other advisory services of Flanders.

Because of the history of the advice system, the MA on KRATOS anticipated a higher popularity of the economic modules. Therefore, they installed the obligation of requesting advice on one of the environmental themes or on the occupational safety module⁴⁰ in order to be able to request advice on business plan or management advice (modules 1 and 2). According to the MA on KRATOS, the farmers requesting advice via the KRATOS system are not merely the innovators or pioneers, all kinds of farmer request advice. KRATOS is used to fulfil the FAS obligation in Flanders. It is supported by RD Measure 2.1.

In **France**, the application of the FAS during the 2014-2020 period is in line with the previous programming period: the regional entities of the Ministry of Agriculture (DRAAF) remained in charge of the accreditation of FAS bodies, and the facilitation of the system (including informing advisors on the evolution of cross-compliance requirements, informing the beneficiaries on the FAS and monitoring the system). The scope of the FAS was enlarged to the new 2014 compulsory topics, with the view to align it to France's principles of agro-ecology, even if the list of topics was interpreted as restrictive. For both periods (2007-2013 and 2014-2020) the FAS was not supported by public funding; FAS advice is considered among the common tasks of the bodies. Although the FAS was successful especially in the 2007-2013 period regarding cross-compliance, it is currently almost not used. Indeed in 2013, to raise awareness of farmers on EU regulations and especially on cross-compliance was considered an accomplished task, and the Ministry (and its representatives in the Regions (DRAAF)) did not perceive any other potential benefit in this system for farmers, as France already has very comprehensive and diverse advisory services, both private and public for more independent advice.

In **Estonia**, State and private advisory services co-exist and evolved since the early 1990ies. Early 2000, centres of county level farmers' or producers' Unions were established (advisory centres). According to the 2014 PROAKIS study and the Estonian

⁴⁰ Modules: 5) Biodiversity, 6) Climate, 7) Water, 8) Soil, 9) Safety at work.

RDP, over the years, the activity of county level advisory centres has demonstrated a “chaotic” cooperation between them and with coordinating centres and research institutions. There was a need to establish a coherent advisory organisation for agriculture and the rural economy. Hence a call for tenders was launched under M2 in order to centralise advice and improve the efficiency of services. One single operator was selected, namely the Rural Development Foundation (RDF). This is the only organisation eligible for supported advisory services under M2.1 (exclusively responsible to fulfil the FAS obligation). Several positive but also negative outcomes are reported about the operation of the RDF and their advisors. Next to RDF advisors, there are several private non-RDF advisors. It appeared afterwards that the professional licence needed by RDF advisors is time-consuming. Hence the “mentoring programme” was created in 2016 as another possibility within M2.1. Lists of mentors are established by type of production. It is easier to become a mentor than an RDF advisor. Farmers looking for support (e.g. young farmers) may select a mentor in a list. If the YF for instance looks for advice in beef production, he can select a specialised “mentor” in this sector. This programme is currently gaining interest of farmers. Training of advisors under M2.3 is also opened to other advisors than those contracted by RDF.

As recalled in ESQ1, MS can choose to **use Measure 2 to support their FAS** (Table 10). Note that the RD advice measure, as introduced in 2005, was initially designed to support the obligation laid upon MS to set up the FAS. The possibility to support any other advisory service and to broaden the scope of advice came with the 2013 CAP reform.

Table 10: FAS and use of Measure 2 in case study Member States

Instrument		FR-LO	DE-LS	IE	BE-Flanders	PL	IT-Veneto	IT-Umbria	EE	GR
		Strong AKIS					Medium AKIS			Weak
M2	M2.1	Planned but closed	✓	✓	M2.1 supports the use of advisory services of FAS accredited bodies/advisors only					
	M2.2	Not implemented								
	M2.3		(✓)*	✓		✓			✓	✓
M2.1 used to support FAS					✓		✓	✓	✓	✓

* Training of advisors is supported in LS under M1.1 since 2020

Source: ADE, based on case studies

The drivers and reasons why MS decided to use Measure 2 to support their FAS are approached in ESQ11. Overall, for MS with medium to weak AKIS, facing budgetary constraints, the M2 support constitutes an essential complement to national resources. Some MS with strong AKIS also decided to mobilise M2, mainly to support the development and use of advice on new – more societal/sustainability-oriented – topics.

B) RD measures with direct effect on KE-I-A: M1, M2, M16, M10

At EU level

A very large majority of MS planned to implement **M16** (all except Luxembourg) and **M1** (87% of RDPs, i.e. all except Luxembourg and 14 regions in France, Germany, Italy and Spain). **M2** was less planned (60% of RDPs) and much less implemented. RDP MA did not reply to the specific questions on drivers and reasons for using the measures and sub-measures in the online survey. The reason for not using M1 as well as M2 (LU, FR, DE) is mainly the administrative burden, found high relatively to the low level of expenditures (see Theme 3: Efficiency), compared to other RDP measures.

At the level of the case studies

MS chose to implemented RD measures because of:

- Explicit response to needs expressed in the SWOT analysis and RDP. The needs are of different nature (agro-ecology, development of multifunctional activities, ever-changing conditions, legislature and demands from society etc.);

- Continuation of (successful) support implemented in previous periods, with adaptations (BE-FL, DE-LS, IE, etc.);
- Opportunity to implement a new measure for M16;
- Specific requirements for M10. In order to ensure the necessary expert-related advice or training at the level of farmers (beneficiaries) for the implementation of agri-environmental and climate measures (AECM), some MS linked M10 to either M1 or M2.1 (BE-FL, EE, DE-LS, IE, IT). In France (GE-Lorraine) facilitation is explicitly foreseen but funded by national/regional resources.

More specifically regarding M2, all case study MS planned to implement advisory services (M2.1). France (Lorraine – Grand Est) closed the measure in 2018 due to administrative burden linked to the public procurement rules. Other MS (Italy, Greece, Poland) also struggled with these rules. They did however maintain measure 2.1 and Italy and Poland started implementing it when the constraint was removed by the Omnibus regulation in December 2017 (see Theme 3 on efficiency). Training of trainers (M2.3) is included in five RDPs, however Lower-Saxony does it under M1.1 (as well as Ireland, at least partly). Drivers and reasons are presented by case study MS, taking into account the way these MS implemented the Farm advisory system.

C) RD measures with indirect effect on KE-I-A

Findings at the level of the eight case studies show the following situations.

As illustrated in Table 7 (ESQ1), some MS/RDPs like Italy, Flanders (BE), Estonia, Ireland and Lower-Saxony (DE) designed integrated approaches, with training and advice covering the implementation of other support measures (investments, starters-aid, agri-environmental and climate measures, etc.).

In Ireland for example, 'Targeted Agricultural Modernisation Schemes (TAMS)' is the scheme adopted under M4 for supporting farm investments. This scheme had no training requirement, but advice must be provided through 'accredited' TAMS advisors. In addition, training for M10 advisors has been provided under M1 and M20. The beneficial role that obligatory CPD for accredited agricultural advisors plays in areas such as agri-environmental and climate measures (AECM) actions was a recurring theme in the design phase of the new RDP. Up-skilling of advisors was seen as a measure to complement and support other intervention and ensure greater value for money (e.g. for the Green Low-Carbon Agri-Environment Scheme (GLAS)).

Support to organic farming is covered by RD training and advice in three CS MS (EE, DE, IT-VE) and covered by national/regional resources in three others (BE-FL, IT-UM, FR-Lorraine). Implementation of the organic farming measure in Greece and Poland is behind schedule and the information is not available.

In France (Lorraine) all RD measures are indirectly supported by training and advice which receive regional/national funding only.

➤ [ESQ2 JC2 Drivers and reasons for farmers to take up knowledge exchange/transfer and advice](#)

The main drivers and reasons for taking up (or not taking up) KE-I-A related CAP I&M reported in case study MS are summarised hereafter. The presentation order does not reflect a degree of importance.

Awareness

The awareness of the existence of supported training, advice or demonstration projects is a first reason. Little data is available on the overall degree of awareness of KE and advisory activities among the farmers and foresters. The share of farmers using training and advisory services among the farming population is not known. In several MS this share is estimated around 10-30% (40%) of the farmers by training and advice providers (DE-LO, FR-LO). A good communication is key, as underlined in Greece.

In Flanders, there is general awareness among farmers regarding training opportunities in the agricultural sector, notably as a result of obligations (see next paragraph). Farmers

are much less aware of advisory opportunities. Indeed, the Department of Agriculture and Fisheries held a survey about M2 individual advice. It appeared that a significant group of farmers is not aware of the advisory opportunities offered by the 2014-2020 RDP⁴¹.

Contrary to advice and training measures, already promoted in previous programming period, Operational Groups are a relatively new instrument. Awareness of farmers of the concept of Operational Groups is key for their initiative and participation. Interesting examples with strong involvement of farmers at the initiative of such Operational Groups exist in Estonia (innovation clusters) and Ireland. In Italy, because farmers were not aware of the existence of Operational Groups, many initiatives came from research institutions, based on farmers' ideas and requests. In this respect, the importance of a moderator (broker/facilitator) between these two "different worlds" was highlighted for a successful proposal and partnership. This enabled farmers to actively contribute to form the Operational Group and to handle the role of leading partner, more usually attributed to research partners.

Requirements for other support or activities

The attending of advisory or training activities is an eligibility criterion to access some supports (then having indirect effect on KE-I-A). Training/advice can for instance be associated to investment, installation aid, organic farming or agri-environmental and climate measures (see ESQ1 Table 7). In relation with the previous driver, it can be assumed that CAP Pillar 2 beneficiaries are in general more aware of training and advisory opportunities than other farmers due to those conditions.

Training can also be made mandatory apart from EAFRD measures. In France and Belgium, training for farmers to hold the specific licence to be allowed to use plant protection products ("phytolicence" in BE, "certiphyto" in FR) was supported by M1.1; this fact has led farmers who usually do not take up training/advice to follow training. Training providers saw people they never met, and some now participate in other activities (no exact figures available).

Moreover, some legal requirements (such as cross-compliance with SMRs) create a need among farmers to enhance their skills on specific topics and/or seek advice. Actually, in Italy, the need to comply with EU rules is the first reason to uptake training/advice for farmers, "and this factor strongly determines the farmers' interest and will to attend training and advice projects"

Accessibility (time, period, location, cost)

The concrete accessibility of KE-I-A activities is a major factor constraining beneficiaries' uptake. If the perceived effort to access a supported action is higher than the potential benefit, the use of those measures is limited. The *time, period, location and costs* are frequently mentioned as a factors affecting non-participation.

The lack of time is very commonly shared in the agricultural sector and attending a training session lasting more than 3 days can be impossible. It is particularly true for dairy farmers (DE-LS, FR-LO), who need farm relief services not necessarily available or familiar to the farm. As underlined in Italy, the different activities offered – training, advice and others – are often "in conflict with time available for these additional activities in farming and with limitations of costs imposed by EU rules (EUR 1 500 for advice intervention imposed by regulation)." The duration is then important, as well as the moment of the year to organise KE events – training, visits, demonstrations, agricultural fairs, etc. Farmers' availability to attend is generally higher during the winter season.

It is also appreciated when events are organised close to beneficiaries, in rural areas instead of centralised in urban hubs and administrative units (GR, IE).

In DE-LS and EE, it was mentioned that offering services at reduced cost or free of charge is an important incentive for farmers to participate in training events. However, in FR-LS the cost does not appear as a major factor since even when training/advice is free, there

⁴¹ Online survey held in July-September 2019. The survey was sent to all farmers who had requested investment support (M4.1) or support for setting-up a young farmer (M6.1) over the past 5 years.

is little participation in some types of training. The absence of cost can even be detrimental if it is associated with a lower quality of services, in beneficiaries' perception (and commercial providers of course have an incentive to persuade farmers of this view).

Perceived interest/relevance

In line with the constraints that beneficiaries face, the perceived utility of taking part in activities is a key driver for uptake. The content has to meet the needs "in the field": the topics covered must be relevant and respond to beneficiaries' concerns, and most of all must be field-oriented and easy to translate into practice.

Because of their limited availability, farmers cannot attend many activities and have to prioritise; they will more easily seek training/advice having a direct impact on their holding and income. This has been underlined in DE-LS: the interest appears limited when elements related to the productivity and viability of agricultural holdings are not covered; some topics are considered less relevant, such as biodiversity, agri-environmental and climate measures (AECM), or reduction of emissions (crop production and livestock). In contrast, topics of interest include animal welfare, antibiotics and nutrient cycles for instance. This was also pointed out in FR-LO and BE-FL. Hence training bodies try to include environmental modules within more "classic" programmes to reach more people.

The need for field-oriented KE-I-A explains the great interest showed for M16.1 and M16.2 support (setting up and operation of Operational Groups). In a number of case studies, MS authorities as well as stakeholders perceive a great potential of the EIP-AGRI, promoting bottom-up approaches to improve the relevance of innovation projects, experiments in real conditions and accelerated results dissemination. Even if those initiatives could be implemented outside CAP I&M, the financial support to Operational Groups is appreciated as it increases the range of potential pilot projects (with a larger budget) and reduces the risks inherent in innovation (which many farmers could not afford otherwise).

In DE-LS, it was also highlighted that negative **perspectives on the future of the farm** can be discouraging. Farmers who do not see a future in their profession will not get involved in training and advice.

Quality and attractiveness of the services

The quality of KE-I-A services is also a factor of perceived usefulness and contributes to the awareness regarding the services offered.

In Ireland, training advisors under CPD was seen as a key element for the success of Knowledge Transfer groups. The training of advisors and veterinarians under M2 was also seen as valuable in enabling them to provide a consistent message to farmers, to be more aware of animal health and welfare issues.

In Estonia, a lower uptake of M2.1 than expected is explained by the lack of need for beneficiaries (many large enterprises who have their own specialists) and strong competition (input suppliers give advice). But there is definitely added value perceived in supported advice. In Greece the issue is deeper as there is a widespread lack of trust in public services. Farmers who can afford it, prefer to seek advisory services provided by private bodies.

It was mentioned in FR-LO that farmers can perceive training as a "return to school" and are not necessarily aware of the participatory methods implemented and the usefulness of knowledge transfer activities. Follow-up of trainees, enabling progressive knowledge acquisition, appeared a good way to keep farmers interested. In the same vein, regarding demonstration projects in BE-FL, "a lot of farmers prefer being in the field or in a stable, rather than a classroom, which makes demonstration projects vital instruments". For interested farmers in DE-LS, one-to-one advice gives the opportunity to work on topics in detail (meaning taking time to deepen knowledge).

4.3 ESQ3: What are the critical factors for success concerning knowledge exchange and advisory activities, including those with a positive effect on knowledge infrastructure, advisory activities, networking actions and training criteria for farmers, foresters, advisors, consultants, trainers and communicators?

4.3.1 Methodology

4.3.1.1 Rationale and coverage of the Evaluation Question

This is an important part of building the theory of the evaluation (which is presented in the intervention logic), at its outset – setting out to identify key elements which are known to influence most positively the performance of measures and instruments which support (RDPs) or ensure the provision of training and advice to farmers and foresters. At the same time, it is a key part of the empirical findings of the study, which also is highly relevant to ESQ2. Therefore, for this ESQ, the presentation of specific CS evidence is limited to points not already made in the answer to ESQ2, and direct reference is made where ESQ2 provided relevant evidence.

4.3.1.2 Judgement Criteria and associated indicators

JC1: A particular factor can be shown to increase the effectiveness of advice or training relative to situations in which it is not present, by increasing uptake among target groups of end-users (farmers, foresters, other key rural actors)

JC2 A factor can be shown to increase the effectiveness of advice or training relative to situations that lack it, by increasing the share of those receiving training or advice and/or who implement beneficial changes as a result of training or advice

JC3: A factor can be shown to increase the net effectiveness of advice or training by improving actors' quality of implementation of changes in practice, over time (encouraging continuous learning and enhancement)

JC4: A factor can be shown to increase the net effectiveness of advice or training in respect of its furthering specific CAP goals for farming, forestry, or rural areas.

JC5: Identification of successful approaches

4.3.1.3 Methodology

An initial answer to the ESQ was obtained from literature review and helped structure the process of information gathering and analysis from the case studies and EU level work. Refinement and validation of factors of success was then based upon the evidence gathered. Indicators for the ESQ were derived from measures of effectiveness, analysed by context, design and delivery types in order to identify the main success factors from empirical observation. In theory, they could be applied in the evaluation of CAP measures at a global scale or just within the case studies, but in practice their application was significantly limited by gaps in data at both scales.

The method for answering the ESQ is thus mainly descriptive and qualitative. Literature review scopes the work, then comparative analysis of case study survey, interviews and workshops validates and refines the answers, based upon current and relevant evidence.

4.3.2 Summary answer

ESQ3: What are critical factors for the success concerning knowledge exchange and advisory activities including those with positive effect on knowledge infrastructure, advisory activities, networking actions, and training criteria for farmers, foresters, advisors, consultants, trainers and communicators? In this context which successful approaches concerning the implementation of the CAP instruments and measures on knowledge exchange and advisory activities can be identified?

Judgement criteria and indicators suggest that i) ease of implementation of measures affects outcomes but this is not in itself a sign of success (JC1); ii) measures are more likely to be impactful in Member States and regions where there is a broad and well-integrated AKIS (JC1, 2 and 3, based upon comparison of case studies), and iii) the measures have effectively targeted CAP Priorities, in many situations, but on its own this is not a critical factor of success (JC4).

Case studies analysing evidence and drawing lessons from good practice examples and discussions with Managing Authorities, advisory and training providers, independent experts and beneficiaries, provide evidence for JC5. A common theme emerges whereby **policies are moving towards more participatory, locally designed approaches which involve strong inter-institutional co-ordination and multiple actors working together. This trend is based upon widely shared experience across case study countries, suggesting that such approaches are the most successful.**

Factors of how training and advice are offered

Widespread beneficiary awareness of opportunities for training and advice is an essential factor for success – a strong emphasis upon effective promotion is demonstrated as important in BE-FI, FR-LO, IE, IT-UM and IT-VE.

Policies which recognise and work with existing providers/groups/networks can be more effective than those designed in isolation, particularly if established providers are well-known and trusted. However, it is important to ensure their quality and capacity. This is discussed with evidence in DE-LS, GR, BE-FI and EE.

As also covered in ESQ2, sources of KE and advice have to be easy to access / locally based close to farmers (i.e. less than one hour's travel away), seen as credible, and able to deal with a wide range of individual situations. Trainers need to offer courses in places and at times which suit beneficiary groups, and relief services may be needed to enable them to undertake training. Advisors need to be located close to where their client base is, and familiar with local practices and systems. Those delivering services must keep up to date with research and relevant practice. Evidence confirms these points in FR-LO, EE, PI, DE-LS, IT-UM and IT-VE.

Collective learning approaches can be particularly useful for new ideas, but there can be organisational or behavioural barriers to establishing groups (BE-FL). A group approach offers potential benefits over advice or information taken individually, in both efficiency and effectiveness due to group dynamics and interaction. However, where collective structures do not already exist or are viewed with suspicion, farmers need encouragement to get involved and develop trust and this takes time and effort (positive examples in IE, discussion of barriers in PO). Formal collective structures require people skilled in organisation and co-ordination (examples in IT).

It is important to give attention to the proper qualification of advisors and trainers – both initial/formative qualifications, and a commitment to CPD. Linking aid to qualifications and CPD can help to ensure advice is relevant and up to date (examples from IE, FR-LO, DE-LS).

Factors of RDP operational design

As noted in ESQ2, new legislation or making elements compulsory or key to accessing other measures can be a strong trigger for uptake (FR-LO, BE-FL, IE).

Bureaucratic obstacles and narrow focus can reduce effectiveness: setting "verifiable and controllable" requirements on innovation projects can be limiting (EE, IT), also restricting reallocation of funds to where uptake is most successful. CAP interventions may be fragmented, whereas experts suggested that a more systemic approach to KE for agricultural transformation could be more effective in achieving policy objectives (FR-LO).

Intermediary organisations and multi-actor initiatives/institutions can help to overcome administrative issues and increase efficiency – e.g. Setting up an intermediary body to handle

procedures and funding to simplify/accelerate access to training and advice, or enabling pre-existing collective institutions to play a key linking role to beneficiaries (IT, FR-LO, DE-LS).

Co-ordination and linkage between providers of knowledge (encouraging collaboration between training and consultancy/advisory operators) is necessary and valuable to enhance their efficiency and effectiveness. Farmers undertake training to learn new skills and then advisors help them to put these skills into practice, on their farms: this requires services to work together in a co-ordinated way (IT, PL, BE-FL). For example:

- Including EIP-AGRI intervention within the Local Development Strategy of LEADER Local Action Groups (LAGs) can ensure a stronger linkage between LDS and Operational Groups activities and innovation meeting local needs.
- Stimulating successful producer organisations and cooperatives acting as local bodies to ensure communication, advice, training and spread innovative solutions in their territories, can be highly effective.

4.3.3 Summary of findings

➤ [*ESQ3 JC1 increasing uptake among target groups of end-users*](#)

For this ESQ, the quantitative indicators 1.1-1.3 (as reported under the ESQ effectiveness answers – see the next section of this report) suggest that in many countries, measures 1 and then to a lesser extent, measure 16 have delivered better against output targets than measure 2. However, the reasons for this appear to be administrative – i.e. reflecting relative ease or familiarity in designing calls and systems that Managing Authorities can easily implement, rather than indicating that these measures are more valued by farmers and foresters. The generally low and/or slow implementation of Measure 2.1 in many countries has been linked to problems caused by the original requirement for this measure to operate via public procurement rules (which is difficult when there is only one state-funded service with no comparable competitors), which was subsequently amended by the Omnibus regulation. However, a quicker implementation of Measure 1 will not always mean that this measure has been more successful than Measures 2 and 16.

For example, in Veneto, it is noted that 'the implementation of M1 does not create specific issues to the MA, given its experience developed in the past programming periods, when the measure had always been planned. The same applies to the training bodies. They are very experienced and knowledgeable in the organization of this type of courses. This is a success factor for the functioning of the measure, but at the same time it represents a limit for its potential effectiveness, because no innovative elements have been included.' In Flanders (BE) M1 shows a significant reach.

➤ [*ESQ3 JC2 increasing the share of those receiving training or advice and/or who implement beneficial changes*](#)

Case study evidence from BE-FL, GR and PL suggests that the level of funded training, advice and Operational Groups within these RDPs is such that these activities will only reach a minority of those who could benefit from them. By contrast, in FR-LO, IT and IE the more established and integrated AKIS mean that most farmers are aware of and able to access the core training, advisory and innovation services, including those funded by the EAFRD.

In all Case Studies (CSs), it was reported that Managing Authorities are unable to say what proportion of those receiving training or advice actually implement changes as a result. However, it was universally perceived that these activities were a critical element in encouraging beneficial changes so their efficacy was assumed, based upon longstanding experience and/or other sources of evidence. See also ESQ5 for more evidence on this issue.

➤ [*ESQ3 JC3 improving actors' quality of implementation of changes in practice, over time \(encouraging continuous learning and enhancement\)*](#)

The answer to ESQ5 provides detailed evidence concerning this JC, which suggests that only a small share of farmers (less than 10%, perhaps) are yet engaged in continuous learning initiatives but that, where they are, they are also likely to better engage with CAP funded KE provision. While interviewees in all CSs acknowledge that at present, relatively

few farmers and foresters are involved in ongoing learning networks or communities of practice, most of the experts, also MAs and KE stakeholders are very supportive of moving more towards this style of knowledge exchange, in future, based upon good examples from current practice (e.g. FR-LO, IE, DE-LS, EE).

➤ [*ESQ3 JC4 furthering specific CAP goals for farming, forestry or rural areas.*](#)

According to case study interviewees in several MS (FR-LO, DE-LS, GR, IE), the Focus Areas most targeted for funding of training and advice include environmental awareness, linked to agri-environmental and climate measures (AECM), as well as business training and advice for young farmers -linked to M6.1. Environmental themes are also quite prevalent among reported cases of established EIP-AGRI Operational Groups, especially in Ireland. This indicates that the measures are often focused upon achieving important strategic priorities of the RDPs.

Success factors identified from literature and case studies

The literature emphasizes the importance of the source of the knowledge and the context in which it is conveyed, as critical factors of success in KE and advisory activities. These include:

- **Contextual factors** concerning the structures and socio-economic conditions of target groups, attitudinal and behavioural (psychological) factors, and thus actual and perceived attributes which favour the uptake and effectiveness of KE actions;
- CAP measure **design factors** (level of funding, topics covered and their relevance to needs – technical, economic etc.) and **delivery factors** (how their availability is promoted/disseminated, knowledge offered in a group or a one-to-one situation, choice of source of advice or training and level of trust and confidence in the source, practicality and accessibility of the delivery method for the beneficiary group – appropriate dates, times and venues, availability of relief support to enable attendance, targeted to the correct persons in the farm management structure, availability of follow-up and ongoing reinforcement of messages, etc.).

The linkages between these factors, e.g. the extent to which measure design and delivery are appropriately modified to take account of contextual factors, can also be an important success factor.

Success factors identified in case studies

Many of these confirm and extend the evidence presented from the literature review about the best ways to design effective KE and advice, but there are further points concerning the value of institutional co-operation, devolution and integration and their potential to enhance measures' efficiency and outcomes.

On quality and scope of the offer

- Widespread farmer / forester awareness of opportunities for training and advice is an essential factor for success: as reported in ESQ2, this was noted in BE-FL and GR.
- Policies which recognise and work with existing providers can be more effective.

In most CS countries/regions, commercial services play a part in advice for farmers, and suppliers and/or private sector advisors are often involved in demonstration projects and Operational Groups. Some suppliers have a relationship of trust with farmers, meaning that important training activities could also be oriented to include them. It was noted in BE-FL that farmers sometimes do not have the time to go to demonstration events themselves, so they rely on these people to gather the relevant information for them.

- Sources of KE and advice have to be easy to access / locally based close to farmers, seen as credible and up to date, and able to deal with a wide range of individual situations.

This message came from all Case Studies, as presented in the answer to ESQ2.

In some cases (e.g. PL), the fact that both training and advisory services are provided free of charge to the final beneficiaries, via a public-funded service, is seen as very important for their success. By contrast in FR-LO, beneficiaries and advisors alike said that it was not essential for advice to be free of charge, for it to be effective and successful⁴². These contrasting positions likely reflect the different status and income position of farmers and their different perceptions about what is sufficiently important for them to invest in, on a regular basis. In IT-UM, tutoring and advisory interventions in the field are particularly effective and requested by farmers who are more reluctant to participate in traditional training. With forestry training in FR-LO forest holders expressed a request to "communes forestières" to offer courses more tailored to their needs than to industrial-scale forest plantations. In DE-LS advisors develop a longstanding relationship with their clients: one advisor will generally support around 80 farm businesses in their local area. Interviewees noted that advisory support should be aimed not only at relevant farm owners or managers, but also employees, trainees and family members.

- Collective learning approaches can be particularly useful for new ideas, but there can be organisational or behavioural barriers to establishing groups

In BE-FL, EIP-AGRI groups are focussed on stimulating and facilitating innovation through cooperation, different actors are able to learn from each other, but a downside is the bureaucracy for farmers as they have to wait for a call, write a proposal, etc. In IT-UM, collaborative approaches have shown encouraging results for agricultural practice change and innovation. This is explained by a snowball effect, and the mutualisation of risk taking (it is easier to launch something new with several people). FR-FR-LO supports a diversity of farmers' collectives (through group facilitation, financial support for project implementation etc.) using both national and CAP funds, among which is cited the DEPHY farm network for pesticide reduction, Economic and environmental interest groups (GIEE) and EIP-AGRI Operational Groups. As an example of success, the DEPHY farms succeeded in reducing their Treatment Frequency Indicator and increasing the number of farms involved.

In IE, Knowledge Transfer discussion groups are identified as successful by advisors and beneficiaries. The number of Knowledge Transfer groups increased from c.800 in 2014 to 1 200 during the programme implementation, and numbers attending groups increased from approximately 12 000 to slightly over 20 000. CAP funding was critical in encouraging farmers to attend, particularly those from non-dairy sectors. Training the advisors is also identified as a key aspect of success. Advisors were supported by CAP funding to be trained up as facilitators of Knowledge Transfer groups. Training focused on building communications and facilitation skills, which are seen as critical elements of successful discussion group delivery.

Also, in IE, a bottom-up approach to creating EIP-AGRI Operational Groups has been highly successful. Over 187 applications were received to establish locally led and implemented regionally focused projects, indicating a high level of demand for such activity. Farmers are required to be part of Operational Groups, and both stakeholders and advisors receive training in project delivery, as well as engaging in peer-to-peer learning. The integration of stakeholders and the local leadership of projects has proved to be popular and successful. Those involved are more likely to engage with the project and change farm practices to achieve project goals.

In PL, it is reported that the basis for success in implementing this measure is the adoption of a model of comprehensive support for the functioning of Operational Groups for innovation and the implementation of projects by those groups that lead to the development and implementation of new solutions in practice in the field of new products, practices, processes, technologies, methods of organization and marketing in agricultural, food and forestry sectors.

⁴² Note that in France, advisory services appear quasi-free to farmers when they use public advice (from Chambers of Agriculture); this advice is co-financed by the State and the farmers (through parafiscal taxes). Some interviewees suggested that this advice is nowadays not so widely valued, whereas that which is promoted by private advisors and which must be paid for, is seen as more relevant.

Connecting advice and training to each other, and to the market, also helps to improve the attractiveness of activities. In BE-FL, the concept of high environmental value, for example, has been linked to improved market access, in order to motivate farmers to take up the approach. Advisors and trainers (in direct contact with beneficiaries) play a key role in identifying needs. The link between advice and training is crucial. It was suggested that advice could be more effective if linked to the consortium of producers' organisations that are familiar with producers' needs: this could create more flexible and responsive KE systems.

Enabling specification of farmer needs by farmers' associations, as well as the involvement of universities, were identified as important factors of success for innovation and training provision in GR. In IT-VE (Italy), farmers' involvement since the first phases of project definition in EIP-AGRI groups, resulted in higher level of participation from the same farmers and better final results.

- Qualifications of advisors and trainers

In both DE-LS and IE, recognised advisory service providers providing advice to individual enterprises within the scope of EAFRD funding must be able to prove that they have qualified and professionally experienced advisory staff. The training of advisors was identified as a key aspect of the successful delivery of the GLAS agri-environment programme in Ireland. Indeed, in order to be eligible to participate in other RDP focused training schemes and advise farmers on those (e.g. GLAS, KT groups, EIP-AGRI, Burren Programme, etc.) advisors need to be FAS registered.

In GR, the advice and training providers come largely from commercial sources at present, as Greece abolished its former state-funded extension services over a decade ago. Commercial advisors could be working in a situation of conflict of interest if they seek to provide advice in line with public priorities such as organic or lower-input farming, since some are paid by the input providers.

Factors of RDP operational design

- New legislation, or making elements compulsory or key to accessing other measures, can be a strong trigger for uptake
- According to the Member State authorities in BE-FL, GR and IE, these changes stimulate advice uptake, as discussed in ESQ2. Bureaucratic obstacles and narrow focus can reduce effectiveness

By nature, the innovation process is difficult to plan (schedule, budgets, etc.) and outputs are not defined. Setting a "verifiable and controllable" requirement on innovation projects is very limiting, as is the fact that the budget cannot be reallocated between expenditure items.

Several interviewees in FR-LO consider that CAP measures are too fragmented (agri-environment, energy, water, pesticides, etc.), and thus each impacts a limited number of stakeholders. To stimulate real change, it could be more interesting to have a measure, taking a systemic approach to transforming the farm and the agricultural sector, in order to support policy objectives.

- Intermediary organisations and multi-actor initiatives/institutions can help to overcome administrative issues in delivery and increase efficiency

Setting up an intermediary structure to handle administrative procedures and funding to simplify/accelerate access to training and advice. In FR-LO, for example, VIVEA insurance fund is in charge of selecting training bodies (through calls for tenders) and financing them. VIVEA processes subsidy applications to the EAFRD (through an automated procedure). VIVEA is therefore the direct beneficiary of the EAFRD training measure (M1.1), so operating bodies don't struggle with administrative burdens and possibly very long delays before payment. It theoretically allows smaller structures to use the aid (although this remains theoretical because the certification requirement limits the number of eligible beneficiaries).

In DE-LS, there is a complex AKIS including public, private and hybrid training and advisory services. *Advisory rings* function as registered associations for professional advisors and trainers, and some of them join together in larger working groups and do not work for profit. They are financed by farmers' membership fees. Among them are also special rings, e.g., for organic farming. The offer includes individual advisory services, working groups, farm and field tours and regular information. Farm businesses can be advised on questions of production technology, business administration, management and renewable energies. The Weser-Ems Working Group of Advisory Rings, e.V. (agb) had a total of 23 rings with 78 advisors at the end of 2013. This means that about 5 200 agricultural enterprises were reached. The Arbeitsgemeinschaft für Landberatung (Hanover) acts as an umbrella organisation for about 55 independent, regional land advice centres in Lower Saxony. These are organised as advisory rings or independent advice providers. At the end of 2017, the network of the AG comprised a total of more than 100 advisors and about 10 000 member companies. The advisors of *the advisory rings and land advisory services* usually come from the region of the farm to be advised. With longstanding knowledge of the farm situation, and also of the family relationships, the advisor forms a close bond and develops a starting point close to the farm.

Co-ordination and linkage between providers of knowledge

Under Measure 2, IE's Animal Health and Welfare training for advisors was identified as valuable due to the integration of veterinary practitioners with advisors as reported in ESQ2.

In IT-VE, all public bodies in charge of different tasks concerning the implementation of AKIS measures seem to be coordinated. The regional Paying Agency (AVEPA) coordinates its territorial offices according to guidelines and calls published by the MA. This enables the efficiency of the implementation process, even when procedures are complex and require the participation of multiple actors. Also there is co-ordination in a food-chain approach: the presence of numerous small size companies with an entrepreneurial culture not oriented towards strategic management, weakens the demand for innovations, consulting and training, so the MA decided to invest relevant resources in strategic Priority 3 in order to improve the demand for these actions. In GR a lack of openness between different providers is thought to reduce effectiveness in delivering public goals for KE.

IT-VE has gone further in co-ordinating the implementation of KE-I-A measures:

- Including EIP-AGRI intervention within the Local Development Strategy of Local Action Groups (LAGs), to ensure a stronger linkage between LDS and Operational Groups' activities and more coherent intervention with local needs.
- stimulating the role of producer organisations and cooperatives acting as a local body to ensure communication, advice, training and spreading innovative solutions.

In IT-UM, the new farmers' networks established to coordinate the Operational Groups have significantly increased integration among farmers; empowerment within the AKIS; and collaborative behaviour by all participants. In the Operational Groups, the farmers are put in a position of running a collaborative business, approaching common decisions, sitting on a management board and providing annual economic and financial reports. According to the interviewees, the experience has created willingness to continue such farmer networks beyond the innovation projects of EIP-AGRI.

B

Theme 2: Effectiveness

4.4 ESQ4: To what extent have CAP instruments and measures individually and taken together had an effect on fostering knowledge exchange, innovation and advisory activities in rural areas?

4.4.1 Methodology

4.4.1.1 Rationale and coverage of the Evaluation Question

This ESQ concerns especially the achievement of the specific cross-cutting objective of knowledge transfer and innovation in agriculture, forestry and rural areas. All CAP instruments and measures having an effect on knowledge exchange (KE), innovation and advisory activities (see Table 35) are considered, including the national framework without co-funding. Measures with a direct and indirect effect are covered (see theme 1).

In terms of coverage, this ESQ is based on the results of 2 ESQs of the same theme:

- ESQ5 (investigating especially the supported lifelong learning (in particular via the RDP measure 1)); and
- ESQ6 (focused on advisory activities, notably RD measure 2 and the FAS).

The current ESQ further includes innovation and especially RD measure 16 regarding cooperation and linked structures (EIP-AGRI and possibly National Rural Network). Indeed, **the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI)** was launched by the European Commission in 2012 and focuses on the agricultural and forestry sectors. Its overarching aim is to foster competitiveness and sustainability in these sectors while working in harmony with the environment.

In addition, KE and innovation promoted in the Local Action Groups (LAG, under LEADER) are covered, where relevant, in case studies.

4.4.1.2 Judgment Criteria (JC)

JC1: CAP instruments, measures and provisions have fostered innovation, training and advisory activities.

JC2: Measure 16 is implemented in accordance with the targets and objectives.

JC3: Implementation of the EIP-AGRI has been successful and will attain the expected results based on several indicators (the number of Operational Groups implemented, their budget, roles of ISS and National Rural Network, themes covered and actors mobilised, information flows, etc.)

JC4: Other CAP instruments, measures or provisions have fostered innovation (LEADER, CMO with innovation in the wine sector and other H2020 projects linked to the EIP-AGRI)

4.4.1.3 Methodology

The answer to the ESQ combines quantitative and qualitative data analysis. It is based on triangulated information from literature review (including 2018 AIR), financial data, case studies, EU-level interviews. Some findings of ESQ5 and 6 are used, plus a specific attention is given to the cooperation measure 16 (in particular M16.1 and M16.2) as well as the linked concepts, the EIP-AGRI at EU level and in MS.

The answer includes an assessment of the budgets (planned and spent) on KE-I-A in the current and previous programming period (detailed financial data to be found in Annex 4: ESQ4 – Financial Tables).

4.4.2 Summary answer

ESQ4: To what extent have CAP instruments and measures individually and taken together had an effect on fostering knowledge exchange, innovation and advisory activities in rural areas?

The evaluator needs to take into account the previous Rural Development programming period for the comparative and historical analysis as well as relevant Member States policies. The answers should be broken down by types of advisory/knowledge exchange activities (including cooperation activities) at national and/or regional levels.

The increased budget (compared to 2007-2013) allocated by Rural Development Programmes to knowledge transfer and information actions (M1), advisory services (M2) and innovation (M16) suggests a growing interest in using these means and activities, notably to achieve CAP objectives. The budget for these three measures has increased significantly, both in absolute (46% increase of the budgets) and relative amounts (57% increase in the share of planned budgets compared to the total budgets of the RDPs). However, this trend is due solely to the new cooperation measure (M16), widely taken up by Member States and regions. In addition, this combined planned budget remains a small share of RDPs' total budget (reaching only 3.63%⁴³).

Despite limited financial allocation and administrative burdens in implementation, each instrument and measure contributes individually to strengthening knowledge exchange, innovation and advisory activities in rural areas.

The mandatory **FAS** was introduced in parallel with cross-compliance in the 2003 CAP reform. Farm advice was largely privatised in the 1980's-1990's and not invested by the CAP before. In the 2007-2013 period the FAS brought the whole cross-compliance on the farms and fostered knowledge of legal requirements among farmers. This was largely done by working with checklist systems.

In the current period, several Member States link it to Rural Development support which has a more comprehensive coverage including both the economic and environmental performance of the farms. The sole effect of the FAS without Rural Development support is difficult to identify.

Several other MS with a strong pre-existing advisory landscape consider the FAS had little impact. The FAS is implemented within their existing advisory services, overall without additional tasks or funding (AT, BE-WL, DE, DK, FR, NL, PL, LU) (Agrilink)).

Support for lifelong learning (LLL) and vocational training (M1) was planned by a large majority of the RDPs (101/112, in 27 of the 28 MS). However, this support to lifelong learning and vocational training in the agricultural and forestry sectors has decreased in 2014-2020 compared to 2007-2013(-13.5%), from EUR 1.91 billion in 2007-2013 (m111 and m331) to EUR 1.69 billion in 2014-2020. The number of participants and of training hours in 2018 appear more satisfying than the expenditure spent for M1. Indeed, according to the figures reported in the 2018 Annual Implementation Report (AIR), 1.07 million participants (Belgium excluded) were trained across the 2014-2018 period, as a result of M1. This represents 37% of the target (Belgium excluded) and 20% of CAP beneficiaries. However, the interpretation of this achievement is not easy. First, methods of collecting the indicator applied in each MS are not homogenous. Secondly, the analysis shows a clear downward trend in the number (in annual average) of participants and training days in 2014-2020 compared to the achievements of 2007-2013 at EU level and in a large majority of Member States.

Despite those mixed results, the case studies (such as Estonia, Lower Saxony – Germany, Lorraine – France) and the 2018 AIR⁴⁴ showed that many participants considered trainings useful (see ESQ5).

The budget allocated to Measure 2 decreased by 20% compared to the previous period, mainly due to administrative constraints. By the end of 2018, less than a quarter of the planned amounts had been decided (23.1%) and less than 10% spent. It does not necessarily imply a decrease of public support for these services. In several Member States, these services are supported by national funds only (Wallonia in Belgium, Cyprus, Czechia, Denmark, France, Luxemburg, some German regions, Netherlands). Despite those spending limitations, there were 333 952 beneficiaries by the end of 2018, i.e. 27.8% of the target and almost twice the level achieved over the entire 2007-2013 period (178 500).

⁴³ In comparison, Rural Development Measure 4 on Investments represents 22.82% of the RDPs' total budget.

⁴⁴ The impacts reported in the 2018 AIRs (CEQ3) of M1 are generally positive, with 24 AIRs specifically stating that the final beneficiaries were satisfied with the training they received.

Rural Development 'Establishment of Operational Groups' and 'Pilot project' measures (M16.1/M16.2), are new measures which did not exist in the previous programming period. The implementation of the Operational Groups, linked to the European Innovation Partnership for Agricultural productivity and Sustainability (EIP-AGRI) network at EU and national level, is a success. Currently there are around 1 600 Operational Groups and the EU level target of 3 200 Operational Groups should be reached by the end of the programming period (2023) according to a recent forecast. This dynamic now covers virtually all Member States, with Eastern Member States catching up after a slower start in the early years of the programming period. The involvement of farmers in the partnership of Operational Groups is recognised as an added value of the measure by all stakeholders, as it promotes solutions adapted to farmers' needs. However, in practice this involvement is not so simple. Institutional structures often provide de facto leadership because they know the EAFRD procedures and have resources to allocate to them. For farmers, the main difficulties are the mobilisation of time to participate in these Operational Groups at the expense of time spent on the farm. The difficulty of integrating agricultural advisors was also noted in several Member States.

Case studies have demonstrated that often the success of the EIP-AGRI is linked to the efforts of individuals, notably within "innovation support services" whether or not they are carried out under a national rural network (NRN), regional rural networks (RRN) or by other actors. At the EU level, the EIP-AGRI network plays an important role in stimulating dynamic and fostering information exchange at all levels.

The cornerstone of AKIS and EIP-AGRI is the strengthening of information flow. The case studies illustrate that (1) making a link between research and farmers is a challenge in all Member States; (2) in some Member States, the information flow between researchers and advisors is weak; (3) the information flow between advisors and farmers is generally good but depends on the quality and number of impartial advisors, and in some Member States where advice is charged for, on the ability of farmers to pay for the service.

Many other CAP measures such as Measure 19 (LEADER) or Measure 20 (Technical assistance and Regional Rural Networks) contribute to influence knowledge exchange, innovation and advice to various degrees in each Member State, in some cases by funding innovation support services. Among the other European actions, the Horizon 2020 (H2020) research programme is directly related to the implementation and extension of the EIP-AGRI. To a much lesser extent, other programmes such as the LIFE programme, Interreg and the European Regional Development Fund (ERDF) also contribute to the strengthening of the AKIS.

Regarding the wine sector, the new innovation measure (Article 51 of Regulation (EU) No 1308/2013) was included by just three Member States in their National Support Programmes - NSP (Germany, Spain and Cyprus), with a very limited budget. In addition, measure implementation was very low within these Member States. The main reason is the combined requirement for "new products" that are strictly connected to wine products (defined explicitly in the annex of the regulation) and the fact that grape producers who do not own a processing facility cannot benefit from the innovation measure.

Taken together, all the CAP instruments and measures (M1, M2, M16, the FAS and other specific measures) contributed to strengthening knowledge exchange, innovation training and advisory activities in rural areas. The magnitude of this contribution is difficult to quantify but, as suggested by several case studies, varies from a significant to a limited contribution to Member States' AKIS.

4.4.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

- [ESQ4 JC1 CAP instruments, measures and provisions have fostered training and advisory activities](#)

As presented in Theme 1, CAP instruments and measures⁴⁵ having direct effect on knowledge exchange, innovation and advisory activities (according to the intervention logic) are **RD M1 and M2** by supporting knowledge transfer events and farm advice, **RD M16** notably through Operational Groups thus creating innovative solutions, enhancing information flows and the dissemination of results, as well as agro-environmental measures (M10) **but also the FAS** (see section 2.3.2). **The obligation to set up a FAS** aimed to raise awareness among farmers and understanding of at least the EU basic standards to be respected. In a historical perspective, the mandatory FAS in 2007 is a

⁴⁵ Support to innovation was foreseen in the NSP of the wine sector, but the measure was almost not implemented.

come-back after the privatisation of earlier publicly supported extension services in the 1980's-1990's. This fact is of importance for all MS. Having made a FAS mandatory shows the importance that the EU attaches to advice per se.

However, due to its initial scope as shown in the 2009 FAS evaluation, most MS focused advice on cross-compliance, and linked advice to checklists covering each cross-compliance standard (SMR and GAEC).

Overall, the 2007-2013 FAS focused on awareness raising about all cross-compliance requirements with success. Few MS had widened the scope to other topics and adapted it to the specific national context and needs. The 2009 FAS evaluation concluded that *"for a large number of MS and regions, the FAS does not address comprehensively the various needs of farmers except cross-compliance advice. However, other needs are usually covered by the existing advisory and/or extension services."*

In the 2014-2020 period the scope of the FAS was broadened⁴⁶ (section 2.3.2 and Annex 3). From case study MS this was addressed by either designated/selected existing bodies in particular in MS with stronger AKIS. Or by selected bodies especially supported by M2 of the EARDF. Indeed, 23 out of 28 MS used EARDF support through M2 (2.1 and 2.3). At the level of RDPs it is less with 50 out of 112 RPD who implemented M2. Administrative burden linked to the public procurement rules limited the use of M2.1.

Several Managing Authorities implement the FAS with support of the RDP, in particular the use of advisory services (M.2.1). This is shown by the CS but also by the H2020 AgriLink Research project (BE-FL, EE, IT, but also LT, MT, PT, SK, RU-Scotland). In this latter case, effectiveness cannot be attributed only to the FAS but also to the RDP support measures, having notably a broader approach. M2.1 looks for the improvement of the "economic and environmental performance of their holding" (Article 15.1a).

Several other MS with a strong pre-existing advisory landscape consider that the FAS had little impact. It was implemented within their existing advisory services, overall without additional tasks or funding (AT, BE-WL, DE, DK, FR, NL, PL, LU) (case studies and AgriLink)).

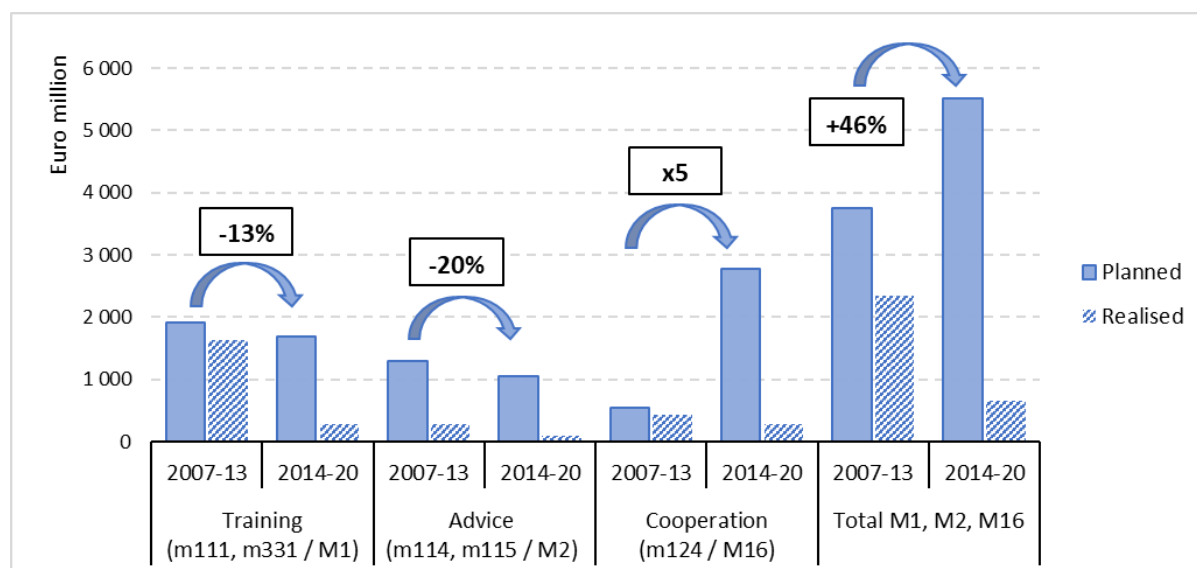
The **National/Regional Rural Networks (NRN/RRN) funded by M20.2** (under technical assistance for setting-up and running NRN) offers a strong indirect effect to foster knowledge exchange, innovation and advisory activities. As already mentioned, innovation support services (possibly funded under M20.2), EIP-AGRI service points at national and at EU level, play a key role for co-creation of innovation and dissemination of results at national and European levels.

As noted in Annex 2 (Table 35), **many other measures may have an indirect effect** at different levels. These are mainly RD measures, like M3 quality schemes, M4 investment, M6 farm and business development (including start-up for young farmers), M8.6 investment in forestry technologies, M11 organic farming and M19 LEADER.

Figure 11 compares the budgets for the KE, innovation and advisory measures of the period 2007-2013 with the 2014-2020 period. Data are presented at EU level.

⁴⁶ The list of issues on which Member States have to offer advice to farmers has been enlarged to cover, beyond cross compliance, the green direct payments, the conditions for maintenance of land eligible for direct payments, the Water Framework and Sustainable Use of Pesticides Directives, as well as certain rural development measures.

Figure 11: Total public budget planned and spending (end 2018) for RD measures 1, 2 and 16 (16.1 to 16.9) and evolution between the 2007-2013 and 2014-2020 periods at EU-28 level



Source: ADE based on ESI Funds (situation: 31/12/2018)

In the previous period, Measure 16.1 and 16.2 had no equivalent since the EIP-AGRI concept was introduced in 2013. There was, however, a specific measure for the support of cooperation for innovation (Measure 124⁴⁷).

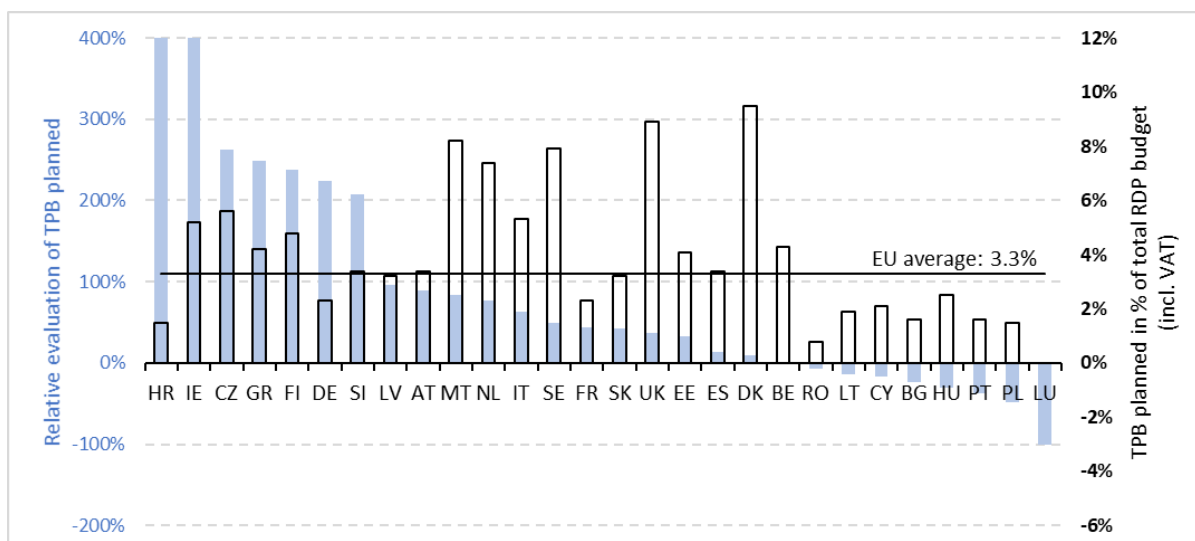
The increased budget (compared to 2007-2013) allocated by Rural Development Programmes to knowledge transfer and information actions (M1), advisory services (M2) and innovation (M16) suggests a growing interest in using these means and activities, notably to achieve CAP objectives. The budget for these three measures has increased significantly, both in absolute (46% increase of the budgets) and relative amounts (57% increase in the share of planned budgets compared to the total budgets of the RDPs).

But this increase is only due to the introduction of Measure 16. For Measure 1 and even more for Measure 2, there is a decrease in the overall budget across the EU and in the share of the budget for these measures in the total public budget allocated to the RDP. For cooperation, Measure 124 was implemented to a very limited extent in 2007-2013 (with the exception of Italy), whereas today almost all MS have budgeted for Measure 16 (except Luxembourg).

However, this global positive trend is not true in all MS. Indeed, as illustrated in Figure 12 in a few MS, the budget allocation decreased (drastically in LU where no budget is planned anymore in 2014-20, quite importantly in PL, PT, HU, and to a lesser extent in BG, CY, LT, RO). These MS have generally not retained Measure 16 and have reduced budgets for M1 and M2.

⁴⁷ Cooperation for development of new products, processes and technologies in the agricultural and food sector (Commission Regulation (EC) No 1974/2006).

Figure 12: Relative evolution of total public budget (TPB) planned for KE-I-A between 2007-2013 and 2014-2020, and TPB planned for KE-I-A in % of total RDP in 2014-2020



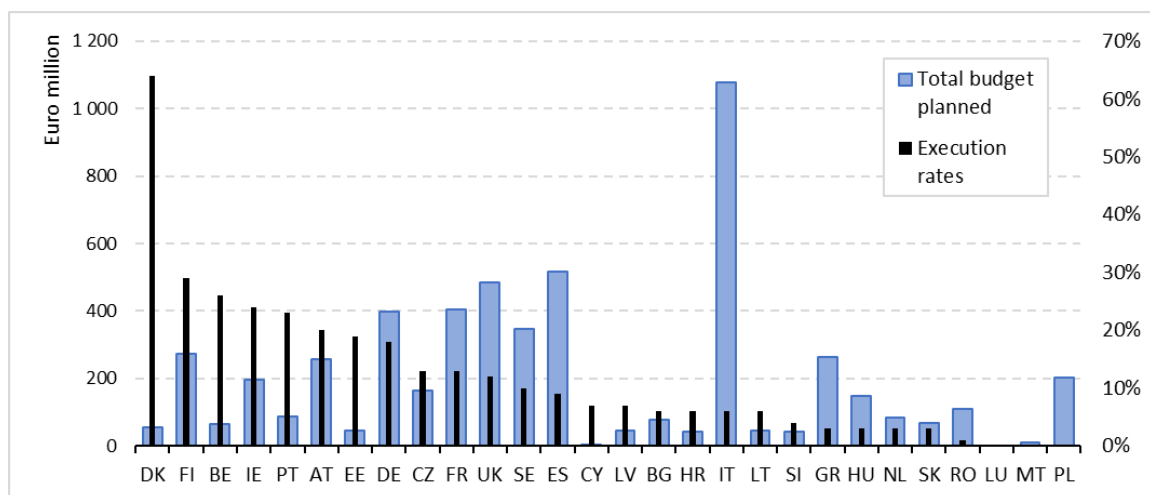
NOTE: The relative evolution of TPB planned between 2007-2013 and 2014-2020 is infinite in Croatia (no budget planned in 2007-2013) and reaches 1 300% in Ireland, but the axis was limited for presentation purposes.

Source: ADE based on ESI Funds (situation: 31/12/2018)

The Figure 13 shows the implementation progress of the three measures (M1, M2 and M16) at the end of 2018. A more detailed analysis is presented in ESQ5 for M1, in ESQ6 for M2 and under this ESQ4 JC2 for Measure 16.

Overall, expenditures realised⁴⁸ for these 3 measures is relatively limited with an average EU execution rate of 12%. Only 6 MS exceed 20% and 15 MS are below 10%.

Figure 13: Execution rates and Total budget planned for RD measures M1, M2 and M16 (M16.1 to M16.9) for the programming period 2014-2020



Source: ADE based on ESI Funds (situation: 31/12/2018)

➤ [*ESQ4 JC2 Measure 16 is implemented in accordance with the targets and objectives*](#)

Measure 16 includes 9 sub-measures, with a set of 6 different sub-measures that explicitly promote several types of cooperation between actors. The first two sub-measures 16.1 and 16.2 are mainly used to implement the Operational Groups. The Operational Groups are in some specific cases financed by other sub-measures such as the M16.4.

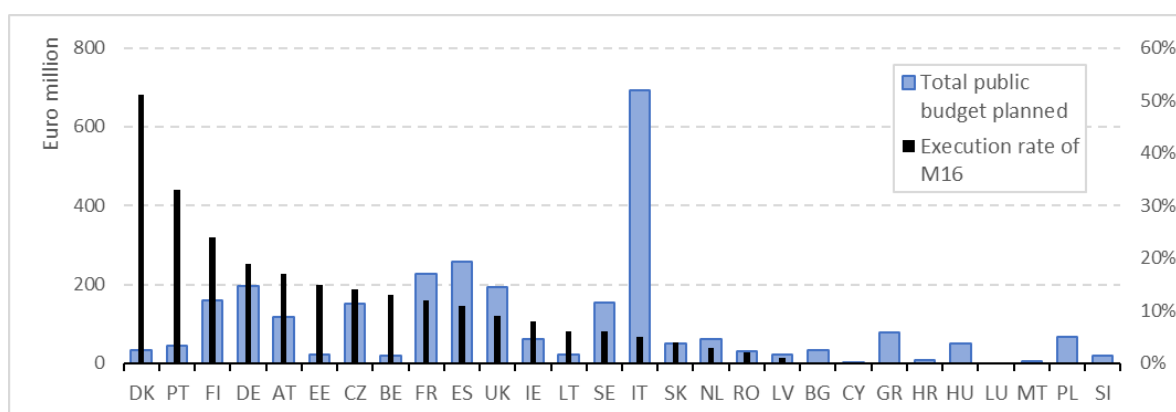
For monitoring purposes, all types of operations supporting the EIP-AGRI should always be linked to sub-measure M16.1 (see section 8.2 of the Article 35 guidance document on

⁴⁸ Amount of expenditures for completed operations.

the Cooperation Measure). In practice however, the interpretation across MS⁴⁹ have given rise to a **multitude of implementations and possibly some double heading**⁵⁰. In Grand-Est (France) for example, the Operational Groups are recorded both under M16.1 (the "setting up" of the Operational Group) and M16.2 (the implementation of their project). In Normandie (France), all Operational Group call for applications refer only to M16.2. In Cyprus, they are even reported under cooperation projects instead of Operational Groups. In Germany, both the setting-up of the Operational Group and the implementation of the project are recorded under M16.1 only.

Figure 14 shows the execution rate of Measure 16. On average, it amounts to 10%. A few MS exceed this average (DK, PT, FI, DE, AT, EE, CZ, BE, FR, ES). In 14 MS the execution rate does not exceed 5%. This is a new measure supporting cooperation projects and a learning process (for its implementation) is ongoing (see ESQ10).

Figure 14: Execution rates of RD measure and total public budget planned M16 (M16.1 to M16.9) in % for the programming period 2014-2020



Source: ADE based on ESI Funds (situation: 31/12/2018)

Measure 124 had been used by a limited number of MS (10/28) in 2007-2013. Measure 16, introduced in the current 2014-2020 period, has been a success with more than 80 out of 95 regions and 27/28 MS adopting this measure. Although not entirely comparable, the comparison between Measure 124 and Measure 16 shows broader coverage (more RDPs have taken this measure) with larger financial amounts and a less restrictive framework.

- [ESQ4 JC3 Implementation of the EIP-AGRI has been successful and will attain the expected results](#)

13.1 The number of Operational Groups implemented is in line with forecasts

With 1 646 EIP-AGRI Operational Groups reported, 51% of the targeted number has been reached⁵¹ (see Table 11), with still 5 years⁵² to go before the period is closed. However, as the table shows, the results vary from one RDP to another. Some MS have already exceeded their targets (AT, NL, DE, EE, IE, SI, LV), while others have not yet recorded any Operational Group (BG, CY, CZ, GR, HR, HU, MT, RO, SK). It should be noted, however, that the Operational Groups are only registered when they are completed, which gives a limited picture of the implementation of this measure.

According to declaration made by MS at the end of 2019, the targeted number of EIP-AGRI Operational Groups will be achieved at the end of 2014-2020 period. The MS that

⁴⁹ The initial guidance on CMEF output indicator "number of EIP-AGRI Operational Groups supported" (O16) also misled some MS as it was mentioned, very much in a similar understanding as for the LEADER projects, that 'some EIP-AGRI may implement more than one operation/project'. One Operational Group is actually equivalent to one project.

⁵⁰ In DG-AGRI's analysis in February 2020 (based on the latest updated RDPs), double heading with Measure 16.1 was identified in 33 out of 107 RDPs.

⁵¹ The number of Operational Group submitted to the EC recording reached 1495 on 11 May 2020, with 1264 Operational Groups available on the EIP-AGRI website. The 1 500th Operational Groups submitted was reached later on in May 2020.

⁵² 2 transitional years and n+3 years to finish the commitments.

had recorded very little Operational Groups so far, are catching up and this is where the number of Operational Groups increases the most in 2019.

Table 11: Number of EIP-AGRI Operational Groups reported versus targeted

Country	EIP-AGRI Operational Group target (beginning of 2014 period) ⁽ⁱ⁾	EIP-AGRI Operational Group target (December 2019) ⁽ⁱⁱ⁾	Net change of target	EIP-AGRI Operational Groups reported ⁽ⁱⁱⁱ⁾	% reported/targeted
AT	50	25	-25	○ 30	120%
BE	33	33		■ 26	79%
BG	20	20			
CY	40	20	-20		
CZ	20	20		○ 6	30%
DE	203	212	9	■ 217	102%
EE	0	2	2	■ 28	1400%
ES	849	823	-26	○ 259	31%
FI	10	10		○ 10	100%
FR	305	276	-29	■ 209	76%
GR	435	285	-150	■ 0	
HR	3	33	30		
HU	70	70			
IE	10	22	12	○ 23	105%
IT	625	661	36	○ 331	50%
LT	7	25	18	○ 5	20%
LV	0	15	15	○ 30	200%
MT	15	4	-11		0%
NL	60	65	5	○ 201	309%
PL	90	136	46	■ 30	22%
PT	72	161	89	○ 115	71%
RO	24	24			
SE	80	80		○ 40	50%
SI	9	9		○ 27	300%
SK	25	25			
UK	120	174	54	○ 59	34%
TOTAL	3 175	3 230		1 646	51%

Source: ADE based on: (i) EC (2016d); (ii) DG-AGRI expected number of M16 cooperation projects per country based on latest adopted RDP version; and (iii) the EIP-AGRI website, DG-AGRI figures on submitted Operational Groups (○) and National Rural Network websites (■)

13.2 The budget of Operational Groups varies widely from one RDP to another

The Coffey *et al.* (2016) study created a typology of EIP-AGRI Operational Groups according to their average budgets and the prescriptiveness in the approach. Indeed, the case studies showed that the average budget per Operational Group varies significantly from one RDP to another, ranging from EUR 86 000 in Grand-Est (France) to EUR 2.5 million in Ireland. It shows that there is a range of interpretation of what an Operational Group can be. According to the Coffey study, small average budgets (less than EUR 100 000) show that the projects are aimed at answering practical questions and benefit from a more bottom-up approach whereas larger budgets (more than EUR 300 000) imply projects that address broader topics at a regional or national level. For example, in Flanders (Belgium), the EUR 30 000 mainly fund the facilitation of the Operational Group, while in Lower Saxony (Germany) or Ireland pilot research projects were funded with the Operational Groups.

Across the case studies, the MA also determined different strategies, aligned with their needs, translated in the call for applications. With a minimum threshold set, the Grand-Est (France) MA intended to encourage larger innovation projects. On the opposite, other MA set a maximum threshold, to be able to support a larger number of Operational Groups.

In Lower Saxony for example, a 500 000 threshold was set as a lesson learnt from the first call which had no maximum. As a result of these strategies, the budget of the existing Operational Groups varies greatly between MS but also among the same MS/region (see Table 12 below).

Table 12: Budget characteristics of Operational Groups in the case studies (in EUR)

Case study MS/regions	Operational Groups recorded under	Existing Operational Groups			
		Min Budget	Max Budget	Average	Median
BE-FL*			30 000		
DE-LS	M16.1	125 000	802 900	474 578	485700
EE***					
FR-GE	M16.1	54 000	138 847	85 841	80000
GR**					
IE	M16.1	400 000	25 000 000	2 471 644	1000000
IT-UM	M16.1	199 988	692 666	551 340	611480
IT-VE	M16.1	38 500	1 042 100	402 690	358450
PL*					

* Budget per existing Operational Group not available.

** No existing Operational Groups confirmed yet (selection process ongoing).

*** Estonia have no existing Operational Groups confirmed yet. They have innovation clusters, a sort of applied research with a strong stakeholders' board, with a budget of EUR 800 000.

Source: ADE, based on the case studies

This diversity shows the ability of the EIP-AGRI model to adapt to projects of a different nature.

13.3 Roles of Innovation Services and Rural Networks in the Dynamics of RDPs

Fostering innovation in agriculture, food production and rural areas is one of the tasks assigned to National Rural Networks. Regarding innovation, National Rural Networks (and Regional Rural Network s) are especially supposed to:

- raise awareness of and involvement in EIP-AGRI of relevant stakeholders,
- facilitate the search for Operational Group partners,
- network for advisors and innovation support services,
- collect and disseminate examples of Operational Group projects.

The role of the national networks in the implementation of the EIP-AGRI and the promotion of EIP-AGRI Operational Groups **varies greatly from one MS to another**. In some cases, the National Rural Network with a specific EIP-AGRI unit has been at the heart of the implementation of the EIP-AGRI as it is the case in France or in Italy, but in the other countries visited the National Rural Network has mainly played a main role in disseminating information.

Examples from case studies

France-Lorraine:

France has a 'Specific National Rural Network (NRN) programme' for the 2014-2020 period. This programme includes a specific section on the EIP-AGRI, sort of national EIP-AGRI Service Point. The French EIP-AGRI notably supported the link with H2020 through different workshops in France, as well as the organization of the innovation summit in June 2019 (Normandie, Lisieux). Both (France/Germany) link up with the EU EIP-AGRI Service Point.

The role is to ensure support to setting-up and implementation of the EIP-AGRI and Operational Groups in the 30 French regions. At national level, support is provided to link the Operational Groups to H2020. At the regional level of Lorraine (Grand Est), an important facilitation work was

carried out together by the MA and the Regional Rural Network with the support of the National Rural Network.

Germany-Lower Saxony:

In Germany, there is only one National Rural Network (German Networking Agency DVS). The National Support Units within the National Rural Network provide support to regional innovation brokers with several meetings a year.

In Lower-Saxony, it is the innovation service provider which support Operational Groups with handouts and advice for the preparation of final reports and the dissemination of their results through practice sheets or articles in trade journals and agricultural weekly papers.

Belgium-Flanders:

The Flemish rural network does not play the role of innovation broker. Currently, it is the independent organisation Innovatiesteunpunt which acts as an innovation broker. This organisation is not supported by the RDP.

Greece:

The Greek Rural Network has contributed to knowledge and innovation transfer by technical meetings organized in every one of the seven Regions of Greece, in 2017, addressed to collective rural and scientific organisations (An. Implementation Report 2019, p 266). In addition, a platform of potential members of Operational Groups was hosted in the Rural Network internet page.

Italy:

The Italian Rural Network intervenes through methodological and practical support concerning M16.1 and M16.2 for MA, OFs and other actors concerned, disseminates innovation projects and best practices and does networking related to Operational Groups.

Estonia:

The tasks of the Estonian National Rural Network (ENRN) are executed by the Department of Rural Network of the Agricultural Research Centre (ARC). Dedicated networking activities of the EIP-AGRI / National Rural networks, have been very useful, e.g. translating relevant info about Operational Groups, H2020 MA projects, other relevant EU or national (research) projects.

Ireland:

The National Rural Network (NRN) are involved in raising awareness, training, and educational support, particularly in relation to the 23 Operational Groups delivering the EIP-AGRI projects.

It has been highlighted in the 2016 Coffey evaluation study, although NRNs and MA are very helpful during the application procedure and for the start of Operational Groups, they could play a more active role during the following steps (e.g. for networking and during the dissemination phase).

The positive assessment of the support received by Operational Group is not shared by all Operational Groups. Among the 601 Operational Groups studied by the IDEA report, 9 were presented in more details. When questioned on the exchange of information and support given by the NRN to the Operational Groups, two groups emerged. 3 Operational Groups stated they had received no or very little help from the NRN (Flanders, France, Italy) while the 6 remaining Operational Groups considered the NRN had offered valuable support. The support was mostly given at early stages of the projects through communication around the projects (flyers, events organized but mostly through information on procedures, guidance through application process, general information (access to newsletters, databases), feedbacks and enabling networking through the organisation of events.

13.4 Themes addressed by Operational Groups

The EIP-AGRI Operational Groups are a tool for stakeholders (farmers, advisors, researchers etc.) allowing regions to tackle practical problems depending on the national/regional context. As such, the themes addressed by the Operational Groups are very diverse but revolve around the CAP's objectives of competitiveness and sustainable development. This had already been shown in the IDEA study (2019).

In the case study MS, there are three types of EIP-AGRI portfolio: portfolios focused on competitiveness and value chain development, portfolios focused on more environmental concerns and portfolios that show a balance between the two objectives. However, it must be kept in mind that the themes tackled by Operational Groups also depend on whether Managing Authorities favour an open approach or a more prescriptive approach (which tends to be more top-down). Besides, it should be noted that in many German regions, the restriction of Operational Groups to Annex I products constitutes a major limit

excluding many needs and opportunities (manure management, value chain for instance in Germany).

Based on Coffey's typology for EIP-AGRI Operational Groups, the following matrix shows a classification of the CS regions and MS regarding their approach to the EIP-AGRI Operational Groups.

Table 13: Classification of the case study MS/regions based on the Coffey's typology for EIP-AGRI Operational Groups

		Average budget for individual Operational Groups			
		Small (<€100 000)	Medium (between €100 000 and €300 000)	Large (between €300 000 and €500 000)	Very large (>€500 000€)
Prescriptiveness of approach to selecting Operational Groups	Open approach (MAs do not define the topics that should be tackled by the Operational Groups)	Flanders (BE)	Greece	Veneto (IT) Poland	Umbria (IT)
	Prescriptive approach (MAs define the topics that should be tackled by the Operational Groups)	Lorraine (FR)		Lower-Saxony (DE)	<i>Estonia</i> Ireland

Source: ADE, based on the case studies

In Flanders, the Operational Groups have a strong economic orientation. Indeed, half of the projects are about finding solutions to technological problems or to diseases, or about optimising agricultural processes. Some examples of such projects are "adjusting the planting distance of potatoes to increase the yields potentials in different areas in a parcel", or "controlling forest bugs in stone fruit orchards to improve the yield of fruit cultivating businesses". Alternative agricultural solutions, like using natural plant protection in pear cultivation, are also a strong theme in Flanders.

In Lorraine (Grand Est), the facilitation of Operational Groups is done together with Champagne Ardennes and the RRN⁵³. The MA really started facilitating the setting-up of Operational Groups end of 2017. In 2018 a first call for proposal was launched to select Operational Groups. According to the RDP, general topics are established for each call for proposal. An important facilitation work was carried out together by the MA, the RRN (notably supported by the EIP-AGRI unit of the French National Rural Network). Various themes are addressed by the Operational Groups in Champagne Ardennes and Lorraine. Two Operational Groups are specific to the forestry sector (test varieties mitigating climate change). Several other are around the cattle sector, which is facing severe constraints (decreasing demand, climate change (droughts), etc.) but which also has assets if extensive. One Operational Group is also focusing on the agricultural sector in a more holistic approach by promoting short circuits and organic farming.

In Lower-Saxony, as in Flanders, the economic approach is very strong. The RDP states that the following priority themes should be considered: competitive, resource-efficient, and species-appropriate production systems in conventional and organic farming, with a need for action on animal welfare and health issues. Therefore, German Operational Groups focus on the search for technological improvements, like the use of sensors for animal health or for irrigation, or on the use of alternative more sustainable agricultural practices, like the cultivation of rapeseed with companion plants. When about animal husbandry, the focus on animal health and welfare is a constant for all Operational Groups, which is linked to the choice of Lower-Saxony to reduce the use of antibiotics in livestock farming.

⁵³ Lorraine is included in the Grand Est Region since January 2016, together with Champagne Ardennes and Alsace. The regions maintained their initial RDPs, but some measures are jointly managed, notably the Operational Groups and facilitation of the EIP-AGRI as well as training.

In Ireland on the contrary, a lot of Operational Groups have a high environmental purpose. Indeed, in the RDP, the EIP-AGRI measure is divided into several measures, some of which are specifically focused on certain themes such as the Hen Harrier, or locally led environmental and climate projects. As a result, some Operational Groups have been developed with National Parks and Wildlife Services, like the Hen Harrier Project or the Pearl Mussel Project. These two projects of five and six years encourage farmers to adapt their practices to improve the hen harrier and the pearl mussel habitats and reward the positive role of farming on these habitats by providing them with a financial support⁵⁴.

In Estonia, there are no Operational Groups yet, but innovation clusters. The later also fall under prescriptive approach and have been selected based on given themes. Under each theme there has been competition of action plans to get funding. Themes given include horticulture; milk; meat; arable crops; organic farming; environmental protection (with soil protection).

In Veneto, three fourths of the budget dedicated to Operational Groups was committed for process innovation in key sectors such as quality wine, horticulture (experimenting continued seasonalizing for some horticultural products), field crops (innovative cereal food chains) and specialist dairy. **In Umbria**, projects are diverse. They have an economic aspect (precision agriculture, new and improved food products, sales platform) and an environmental aspect (biodiversity, waste reuse, pollution prevention and mitigation).

In Poland, the Operational Groups are very often focused on improving the quality of agri-food products by implementing innovations for agricultural or agribusiness processes (technology extending the storage life of pork products, innovative methods of breeding cattle to obtain the best quality beef).

The measure has thus fostered the emergence of a variety of projects in many areas reflecting the needs of farmers.

The EIP-AGRI has a sectorial as well as a cross-sector approach. The objective of territorial development is not present as such **although when it comes to local partnerships, they participate in local development**. In DE-LS, the link is very strong between Operational Groups and LAGs Leader for the development of value chain. This is also the case in Veneto (Italy), where Operational Groups are integrated into the LAGs strategies and are funded through LEADER. However, these are exceptional cases.

13.5 Operational Groups involve a diversity of actors

The involvement of farmers is seen by all as an added value that allows better targeting of needs and solutions. The EIP-AGRI approach leads to fostering the dynamics of interactivity and equality between actors. They were built on mutual respect (researcher/advisor/farmer). The need to have all the players around the table (farmers, researchers, advisors) and the principle of proportion are now well established and understood. The basic structure in the EIP-AGRI is the Operational Group. It brings together different stakeholders: farmers, research centres, advisors, etc.

The graph below shows by MS, the number of stakeholders in each category. Farmers are generally well represented, 25 % on average and most often above 25%. Spain, France and Portugal are the exception. In these countries, public actors (research institutes and other public bodies) account for at least 40%. The involvement of the advisors is more contrasting with 8 % on average. It remains quite low in Germany, Spain, Finland, Italy and Latvia with less than 5%.

⁵⁴ These are the two most significant projects in terms of funding. They are much larger in terms of scope and budget than the rest. The other 21 projects fall into 2 streams A General EIPs and B Locally Led Environmental and Climate Projects.

Table 14: First indicative figures on OG's Partners by category (2018)

	Nb of EIP-AGRI groups supported	Total number of partners in EIP-AGRI groups	Percentage of total partners depending on occupation					
			Advisors	Farm holders	NGOs	Others (other public bodies, etc.)	Research institutes	SMEs
AT	30	206	21%	39%	6%	5%	23%	6%
BE	18	181	6%	51%	-	10%	23%	9%
DE	184	846	14%	38%	1%	27%	14%	6%
ES	270	1 316	2%	10%	3%	41%	19%	25%
FI	10	70	9%	43%	-	7%	24%	17%
FR	115	552	28%	5%	3%	38%	20%	6%
IE	23	133	26%	18%	5%	29%	16%	5%
IT	321	2 495	3%	37%	-	28%	25%	6%
LT	5	48	10%	58%	10%	6%	15%	-
LV	30	250	6%	41%	11%	2%	24%	17%
NL	202	533	21%	28%	13%	16%	12%	11%
PL	8	67	12%	51%	4%	4%	12%	16%
PT	115	982	-	9%	0%	23%	25%	43%
SE	52	158	21%	22%	5%	3%	15%	35%
SI	32	328	17%	48%	-	5%	18%	10%
UK	56	325	22%	53%	5%	7%	7%	6%

Source: ADE based on the official submissions via SFC (update of 25/08/2020)⁵⁵

The involvement of farmers is not always so easy to put in practice. Institutional operators provide leadership for Operational Groups. For example, in Germany (DE-LS) the first calls for projects were mainly carried out by research institutes. In Ireland, there is a wide variety of groups and organisation leading the EIP-AGRI partnerships, with farmers being an integral part of all Operational Groups and managing a majority of projects. Several projects are led by Local Development Companies as well. Most of the projects are bottom-up, led by farmers. Institutional structures have the experience and time to prepare and manage this type of project. For farmers, the time spent participating in the Operational Groups is at the expense of time spent on the farm. Another constraint mentioned for farmers is the administrative burden that this type of project requires. A very specific practice has been identified in Estonia. A specific M16.0 supports the emergence of "innovation clusters". A cluster is a group of farmers who associate, discuss their needs and then contact the (applied) research to work on an issue. It is run directly and only by farmers, as a sort of stakeholders' board. This approach fosters the link between farmers and researcher. In several MS (ES, DE-LS), it was noted that advisors were not or not enough associated while they represent an important bridge between farmers and research structures.

13.6 EIP-AGRI

The concept of EIP-AGRI and its implementation

The European Innovation Partnership for Agricultural Sustainability and Productivity (EIP AGRI) focuses on the agricultural and forestry sectors. Its objective is to interlink innovation actors who generally do not work together in order to combine their knowledge and develop and diffuse innovative solutions that can be used in the field. The overarching concept of the EIP-AGRI is that of interactive innovation, where the knowledge does not only come from science, but from a multiplicity of stakeholders (farmers, advisors, SMEs,

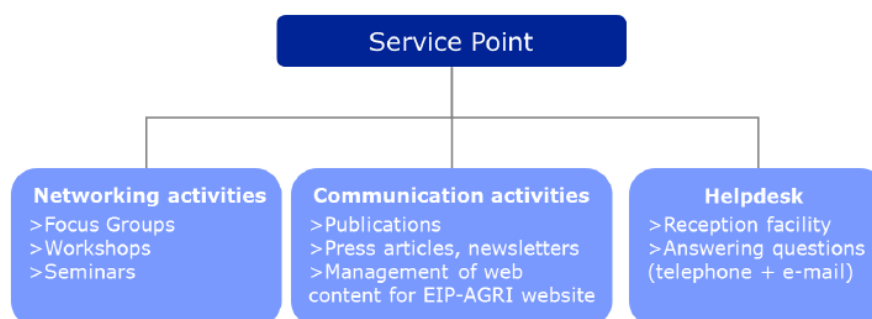
⁵⁵ In the SFC, only the information about the lead partner is mandatory but the MA can individually decide to introduce information also on the other partners. Therefore, these figures are not perfectly homogeneous and only indicative.

scientists, etc.) who collaborate. The EIP-AGRI is also about creating synergies between existing EU policies, like Horizon 2020.

At the European level, EIP-AGRI network is run by the European Commission and is supported by the EIP-AGRI Service Point. It is an EU-wide network which supports EIP-AgRI activities by fostering exchange of information and interaction and by facilitating the inclusion of the different stakeholders. The EIP-AGRI Service Point acts as a facilitator in enhancing communication and cooperation between agricultural innovation actors. Through various actions and services, it promotes the setting between agricultural innovation actors, the setting up of OG's and manages the sharing of experience and knowledge.

The EIP-AGRI network is part of the European rural networking structures which are expected to be mutually supportive (Coffey *et al.*, 2016). The EIP-AGRI Network and the ENRD work independently with two separate teams and two websites. The division of the tasks is clear and there does not appear to be any redundancy. On the other hand, this set up does not necessarily promote synergies.

Figure 15: Main functions of the EIP-AGRI Service Point



Source: Coffey *et al.* (2016)

A self-evaluation carried out by the EIP-AGRI team gives a global picture of the main achievements. The EIP-AGRI Network has promoted the objective of diffusing innovations, projects and practices through collecting and disseminating 388 **innovation good practices and by organising events** (18 workshops and 7 seminars up until October 2017⁵⁶). The **translation** and diffusion of EIP-AGRI materials plays an important role in the diffusion of innovation. A total of 577 items have been translated, out of which 533 were articles, 1 magazine, 18 different brochures, 19 infographics, 22 factsheets and 1 video. The newsletter is distributed in English and French, but also in Estonian and for some in Romanian and Slovakian.

Based on the 2018 communication survey (EC, 2018c) (**392 respondents**) performed by the EIP-AGRI Service Point:

- The **website and the newsletter are considered the most important communication tools** (with almost 30 000 visits to the EIP-AGRI website in January 2020).
- Innovative projects, EIP-AGRI activities, funding opportunities and events related to innovation in agriculture and forestry are considered to be the most interesting content that **users look up on the EIP-AGRI website**.
- Generally, the EIP-AGRI website is used to search and **find solutions or inspiring ideas** but is used less to share own problems, ideas, etc.

Some outputs of the EIP-AGRI network are presented hereafter: Internet platform, focus-group, workshops, agri-innovation summit.

⁵⁶ Upon reception of the activity reports, requested to the Commission, these figures will be updated with the most recent achievements.

Internet platform

The EIP-AGRI website is an interactive web platform allowing the collection and dissemination of ideas for new projects or information on ongoing and completed projects. The website informs the visitors on EIP-AGRI past and upcoming events, on EIP-AGRI related projects (it draws up an inventory of every completed Operational Groups carried out in MS) but also on H2020 related projects, like Thematic Networks and other Multi-actor Projects. It offers the possibility to share or find project ideas and research needs thanks to dedicated options on the homepage. EIP-AGRI Service Point's newsletter already has more than 6000 subscribers, and the half-yearly report published on the website reaches up to 15000 searches.

Focus Groups

One of EIP-AGRI Service Point's tasks is to organise Focus Groups on specific agricultural topics to share knowledge and experience. **Focus Groups are temporary groups** of 20 selected experts with different competencies (e.g. farmers, advisors, agribusiness representatives, researchers...). The EIP-AGRI Service Point makes sure that the different types of experts taking part in the Focus Group are balanced. Each group studies innovative solutions to field problems or opportunities and draws on experience derived from related projects. These groups meet twice over a period of about a year and produce a recommendations and outcomes report. This report is made of a state of play on the subject of the Focus Group, an inventory of the needs in terms of practical research and suggests several innovative ideas that can be tested. In March 2020, 43 Focus Groups have been or are being carried out. Some of the most recent are about non-chemical weed management, bee health and sustainable beekeeping, soil salinization or wildlife and agricultural production.

Workshops

The Service Point also organises workshops and seminars that can gather respectively up to 80 and 150 participants. These events are focusing on specific topics and aim to facilitate discussions among rural innovation stakeholders. They can be linked to Operational Groups (in 2014 and 2016 there were 7 workshops organised about the Operational Groups, their possibilities, first experiences and the links with H2020), serve as follow-ups to Focus Groups or tackle dedicated subjects (e.g. "how to make protein crops profitable in the EU?" in 2014 or "new value chains from multifunctional forests" in 2016). Workshops and seminars bring together a vast diversity of stakeholders from the agricultural innovation landscape. A report is produced after each workshop. It summarises the outcomes of the event and the documents that were presented during the event.

Agri-Innovation Summit

Agri-Innovation Summits are events organised each year by the EIP-AGRI Service Point and a Member State. They bring together representatives from EIP-AGRI projects throughout Europe as well as local actors and experts. Last summit (of 2019) was co-organised by the French Ministry of Agriculture and Food and the French regions network. The subject was the transition to agroecology, and in particular the autonomy of European farms, the sustainable management of natural resources, the integration of agroecology in the value chain and knowledge sharing, creation and dissemination. It brought together 450 participants. A report summarises the discussions about each of the themes of the summit.

13.7 Dissemination of results

The dissemination of results is a major challenge in the EIP-AGRI approach. It is mandatory for all Operational Groups to publish results at the end of the project, mainly through a written report and a project fiche. Each Operational Group therefore produces the results of its work (publication, project fiche). Dissemination of results is supported by the EIP-AGRI Service Point.

However, there is no evidence at this stage whether this work has been well disseminated and if it was the case that it was the magnitude of the audience affected. A good practice

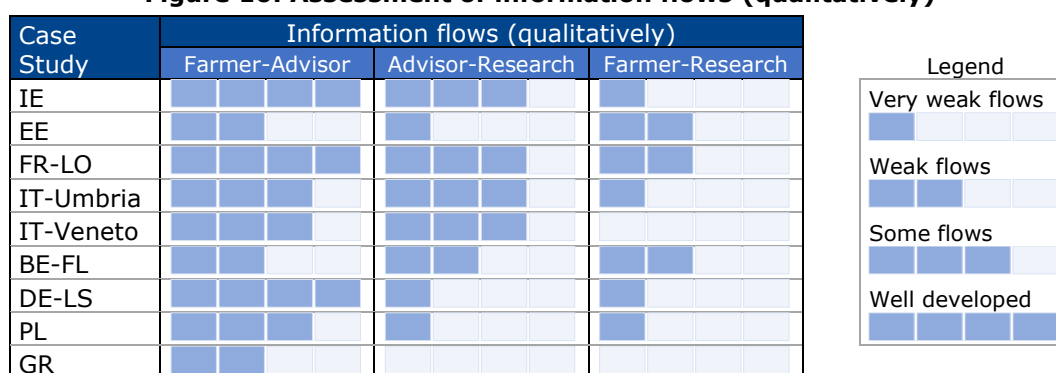
for dissemination has been mentioned in Germany at this level is the presentation of the results in the form of small video capsules. Cheap, easy to produce, they are very accessible to farmers. LAG's are also identified in some MS as a good way for dissemination of results.

It should be noted that little information is provided on the topic by the ENRD which is a main information channel for many rural actors.

13.8 EIP-AGRI and information flows

Information exchanges between actors are at the heart of EIP-AGRI. The aim is to spread knowledge among all stakeholders. At European level, the key role played by EIP-AGRI network has been shown below. The mutual recognition of knowledge is a crucial achievement. On the ground, the multi-actor approach that is stimulated by the EIP-AGRI aims to encourage information flows in various context. The case studies shed light on this point.

Figure 16: Assessment of information flows (qualitatively)



Source: ADE based on case studies

Farmer-researcher

The link between research and farmers is a challenge in all MS. It is however essential that researchers understand the problems faced by farmers, to ensure that they work on solutions to concrete problems. Farmers possess real knowledge from the field, which should therefore be shared with researchers (see section 2.1.1).

In Ireland, the case study has highlighted the difficulties in technology transfer and the translation of research outputs to end users. The need for stronger linkages between research and on-farm implementation emerged as an issue during the public consultation process and also during the work on the SWOT analysis.

In Estonia, several stakeholders interviewed have an opinion that scientific information is not available for producers in easily readable and understandable form. The measure 16.0 introduced by Estonia which supports "Innovation clusters" exclusively composed of farmers allows to respond to this concern insofar as it is the farmers that have the leadership of the request for advice and innovation.

In France, Measure 16 and the EIP-AGRI Operational Groups offer an interesting new response to reinforce the awareness on innovation and to promote links between research institutes and field actors in the territories. It is complementary to the French national approach on agro-ecology and GIEE.

In Italy, the information flow goes through the farmers unions. They are fundamental in connecting the farmers to other relevant trans-regional knowledge and service providers which are lacking at Regional level. The farmers' unions have good connections with the University, and this helps them running the role of innovation broker.

In Flanders (Belgium), a bridge between research and farmers exists through experimental stations. Experimental stations are publicly supported farms which are used by research to apply/try its findings.

"The experimental stations (proefcentra) form a key element in the Flemish AKIS. They act as a link between applied research and the production sector by translating existing knowledge in practical solutions. In total there are 12 experimental stations for plant production and 5 for animal production. The experimental stations for plant have existed for years and form a vital link between applied research and the production sector as they translate existing knowledge in feasible solutions in a neutral manner. For this, they are supported by the Flemish Government by an operating grant. Some experimental stations for plant production also function as an advisory service.

The experimental stations for animal production have existed since 2007 and are collaborations rather than physical institutions. Their goal is to form a point of contact for practical knowledge and the implementation of this knowledge in the animal sector.

Researcher-advisor

Case studies show in some cases information flow between researcher and advisor is weak.

In France, according to an interview conducted with the ACTA⁵⁷, the links between the Chambers of Agriculture and the technical institutes and the INRA are very strong. There are several networks that bring together chambers of agriculture and the INRA on topics such as glyphosate. There is also a Research-Innovation-Transfer unit in which chambers of agriculture and technical institutes work together.

The roles of the chambers of agriculture and the technical institutes are complementary: the latter works on experimentation and knowledge production, while the former is more about facilitating farmers' networks and advising, even if these roles are not exclusive. The advisors of the chambers of agriculture very often act as a bridge between the technical institutes and the farmers.

In Italy, the role of farmers' unions is clearly defined as intermediators of farmers and it is quite large and relevant within the regional farming system for the provision of vocational training and advisory services. Also, as part of a national system of association, they are fundamental in connecting the farmers to other relevant transregional knowledge and service providers which are lacking at Regional level. The farmers' unions have good connections with the University, and this helps them running the role of innovation broker.

In Ireland, Teagasc, undertakes significant levels of research and this feeds directly into training and advice provided by Teagasc advisors to farmers (and as a result those in the Knowledge Transfer discussion groups facilitated by Teagasc advisors also benefitted from this link). The main flow of information regarding research is passed on to farmers through local advisors who have access to specialists within the organisation and also receive regular training to keep them abreast of current developments. However, outside of the Teagasc area of activity the ACA (Agricultural Consultants Association) represents private sector consultants who provide a range of advisory services for farmers, mainly specialised in RD supported measures and applications. Teagasc to this effect also trains non-Teagasc advisors. However, links between the ACA and Teagasc are perceived as sensitive. The ACA views the situation as uneven as they have less close access to all the research findings produced by Teagasc.

In Germany, the interview staff in charge of EIP-AGRI insist that **the role of advisors is key in Operational Groups**. Each advisor is in contact with many farmers. They are aware of the real concrete constraints at the level of farmers. According to the interviewees, the "classical" advisor has no time and he does not know the concept of the Operational Groups. There should be an incentive for advisors to get involved with the EIP-AGRI. It is not their priority. The interviewees consider from an assessment of the first 80 Operational Groups that in around 80% of them an advisor was involved. But it is very different from one region to another. Germany made the participation of a farmer compulsory. The participation of an advisor could be compulsory in the future.

In Estonia, concerning integration of advisors within AKIS several stakeholders had an opinion that better linkage of advisors and research/applied research/universities is

⁵⁷ Association for the Technical Coordination of Agriculture.

needed in order to guarantee that advisors have the recent knowledge about new techniques/research and that researchers are aware of the producers' expectations. Several stakeholders consider the cooperation between researchers with agricultural advisors and agricultural producers to be rather weak. According to RDP SWOT analysis one of the weaknesses of Estonian agricultural sector is limited cooperation and coordination in knowledge exchange between scientists, trainers, advisors and producers.

Advisor-farmer

The flow of information between the advisor and the farmer is generally good but depends on the quality and number of competent advisors and the ability of farmers to pay for the service if it is charged for.

In France, farm advice and training are well developed and diversified. The service is mainly private. However, these services are largely financed by mutualised funds, supplied by taxes and compulsory contributions paid by farmers. They are provided by public or private organisations:

- Public organisations: the chambers of agriculture and its advisors (commodity specialised, business administration, environment...)
- Private organisations: farmers' unions (cooperatives: 7 500 advisors, most being commercials and around 1 500 having an advisory mission) and producers' organisations; management centres; associations (ONVAR and some ITA); input suppliers; independent advisors; bank and insurance companies

Advisors and trainers are in contact with the farmers on their territory. According to a series of interviews conducted with 8 trainers, trainers are in constant dialog with farmers during the trainings and to create new training or to pick new topics.

The training programme is constantly evolving based on requests from the field or field observations and research, which feed and update the training content. However, trainers also noticed that the farmers who participate to trainings are often the same and that it is difficult to mobilise a new population of farmers. Farmers often lack time and training does not always directly address farmers' interests, who are more motivated by technical training or training aimed at improving their income rather than training geared to sustainable development.

In Estonia, the relatively small community of advisors is divided into two parts, and the information exchange between the advisors operating at RDF and outside is not working well. Indeed, a number of competent and good advisors work as purely market-based independent entrepreneurs, because this is more profitable for them. In addition, there is also lack of advisors on some topics. For farmers, it is not easy to find where to find advice.

In Ireland, according to Kinsella (2018) approximately 2/3 of farmers engage with the AKIS through some kind of formal contract. For those who engage with Teagasc, the level of one-to-one advice depends on which package of support is purchased.

In Italy-Veneto, according to MA, the role of private organisations (producers' organisations and cooperatives' system) is quite large and relevant. In this context advisory services provided by farmers' unions are mostly of bureaucratic nature, due to the increasing administrative burden required by EU and national legislation. But also, advisory services provided by producers' organisations and cooperatives are more and more losing independence due to the increasing activities of input provider, that many private organisations have recently developed to increase turnover and survive economically.

Link Advisory activities – EIP-AGRI

It was observed, in the 2009 FAS evaluation, that linkages to other extension or research institutions had not been very developed even though a series of ad hoc contacts were being promoted (ADE et al., 2009).

From the 2017 FAS questionnaire to MS (pursuant to Article 102(2) of Regulation (EU) No 1306/2013), 10 MS claim to promote a link between FAS/advisory

activities⁵⁸ and the EIP-AGRI implemented in the MS/region (CY, CZ, DE, ES, HU, LT, PL, PT MAINLAND, SI, SK).

➤ [ESQ4 JC4 Other CAP instruments, measures or provisions have fostered innovation](#)

I4.1 LEADER

LEADER with Measure 19 supports the innovative actions of LAGs in the territories. Innovation is one of the 7 LEADER principles. LAG projects also include training activities.

In BE-FL, 16 completed LEADER-projects (M19) have contributed to Focus Area 1C. They organised trainings in which they reached **8 656 participants**.

In EE, M19 activities include training components as well as co-operation and information exchange and sharing experiences among actors. The Rural Network activities involve the collection, aggregation and dissemination of best practice and innovative approaches, including the implementation of LEADER; the support of cooperative activities; acting as a LEADER information centre; organising various events related to rural development; administering a website detailing the network's functions and introducing different cooperative actions and innovation linked projects and information. They are actively involved in innovation transfer and in the framework of their activities the Innovation Network was established in 2014.

In IE, the National Rural Network has focused on training a broader group of rural stakeholders, particularly in relation to delivery of the EIP-AGRI Operational Groups. It has worked with LAGs and other bodies to provide more tailored training to those involved in Operational Groups, and more widely. The National Rural Network also operates more closely with LAGs to help deliver training, and with industry bodies to develop links and train industry professionals (e.g. banks, mental health institutes) who have not already been linked into the AKIS. Training is delivered out of the National Rural Network budget (or shared if running activities with Teagasc), adding to the existing level of CAP funded support in Ireland.

In two cases study, a clear and strong synergies between the EIP-AGRI and LEADER has been developed.

In IT-VE, there is an integration between innovation measures and LEADER approach. In fact, funding for Operational Groups was used by the Local Development strategies of LAGs. There are now five Operational Groups initiated by two LAGs and their projects are considered as strictly linked to the LAGs territories specificities. This novelty ensures some interesting interplays between sectoral issues and the broadest rural context. Management authority in Veneto outlined in the focus group that the integration between Leader and EIP-AGRI is in some respects beneficial for targeting more territorially based interventions, linked to specific features of the broader territory.

In DE, the EIP-AGRI support with the National Rural Network (DVS) considers the link with LEADER as very relevant. LEADER is connected to the territory, and here local agricultural projects are tested for the territory. For instance: Soya has been introduced in the crop rotation, it has been locally processed through soya roasting; same approach for linseed, flax, nettle all introduced in the crop rotation and to be processed locally (Rocha, 2020).

However, conceptually EIP-AGRI Operation Groups can work within or beyond territories and in this regard have all flexibility with or without LEADER linkages. They were conceived to have a stronger focus on innovation than was currently the case in LEADER, and explicitly not linked to the borders of a territory to get expertise to solve farmers problems or develop innovative opportunities. They can work on any subject, be it sectoral, environmental or social.

I4.2 CMO - Innovation in wine sector (Regulation (EU) No 1308/2013)

Under Regulation (EU) No 1308/2013 regarding CMO, MS have the possibility to implement five-year national programmes with several measures supporting their wine sector. The

⁵⁸ Many MS (except CY and CZ) use M2 and might assimilate the FAS and advisory services supported under Measure 2.1 of the RDP.

following specific innovation measure was introduced under article 51: "the development of new products, processes and technologies concerning wine products"

As compared to the previous 2007-2013 programming period, one of the main changes brought by the 2013 Regulation about the CMO is the new measure 'innovation in the wine sector' (Article 51) for **the development of new products, processes and technologies** concerning wine products⁵⁹. A specific measure was created while it was previously supported under the investment measure. The wine products are strictly defined and enumerated in the Annex of the Regulation. Support may be granted for tangible or intangible investments. It shall be intended to increase the marketability and competitiveness of Union grapevine products and **may include an element of knowledge transfer** (Regulation (EU) No 1308/2013).

The innovation measure has been included by 3 Member States in their National Support Programmes (Germany, Spain and Cyprus), however with the lowest budget compared to the other new measures/sub-measures. The mobilisation represented a total of EUR 400 000 and 12 operations, only used in Spain (Agrosynergie, 2018a, p.28 and 74).

It must be noted that the measure was hardly implemented by the 3 Member States which had included it in their NSP. Based on interviews with the German authorities, the very strict definition (limited to the wine products where new products, processes or technologies should be developed) was a strong limitation to the implementation of the innovation measure within the CMO framework.

Based on an interview with DG AGRI's Unit G2 Wine coordination unit, the limitation to wine products (excluding grape production) is possibly a MS decision. The EC guidelines on the NSP in the Wine sector clearly identify the grape production as a potential area for innovation operations. Upon confirmation by a legal expert, the regulation could therefore offer the possibility to introduce production support either under the RDP or the Wine CMO but there must be a clear demarcation between the two funds. An additional restraint does however exist in the scope of eligible beneficiaries. As for the investment measure, the grape producers who don't own an activity with regard to wine transformation cannot benefit from the innovation measure.

14.3 Other programmes involved in EIP-AGRI

Other EU programmes are involving directly or indirectly the EIP-AGRI.

Horizon 2020 - Thematic networks⁶⁰

Thematic networks are multi-actor projects which collect existing knowledge and best practices on a given theme to make it available in easily understandable formats for end users such as farmers, foresters, advisors and others. 34 thematic networks are already ongoing (EC, 2020c).

Multi-actor Projects are projects in which end users and multipliers of research results such as farmers and farmers' groups, advisors, enterprises and others, are closely cooperating throughout the whole research project period. Below are examples of multi-actor projects: AgriLink, I2connect and FAIRshare.

AgriLink is a H2020 multi-actor project, formed by consortium led by the French National Institute of Agronomical Research (INRAE) and composed of 16 partners from 13 different countries among which researchers from various disciplines (institutional economics, innovation studies, AKIS studies, sociology of networks), and advisors (from public, private and farmer-based organisations).

⁵⁹ Wine products are referred to in Part II of Annex VII. They include wine, wine still in fermentation, liqueur wine, various categories of sparkling wine, various categories of grape must, wine from raisined grapes, wine from overripe grapes, wine vinegar.

⁶⁰ Multi-actor projects are projects in which end users and multipliers of research results such as farmers and farmers' groups, advisors, enterprises and others, are closely cooperating throughout the whole research project period.

The EU has allocated around one billion euros to fund around 180 multi-actor projects of interest to agriculture, forestry and rural development in the seven years of Horizon 2020 (2014-2020). Over 120 of these projects have already started.

The project “seeks to stimulate sustainability transitions in European agriculture through better understanding the roles played by farm advice in farmer decision-making” (AgriLink, 2018, p.6). To this end, it seeks to further the understanding of the roles played by a wide range of advisory organisations in farmer decision-making while at the same time enhancing their contribution to learning and innovation.

Two approaches have thus been taken. In order to assess the effectiveness of farm-advice-research interactions across Europe and to grasp the roles played by advisory organisations in farmer decision-making, the project analyses 26 focus regions in terms of farmers’ micro-AKIS, advisory suppliers’ business models, and regional farm advisory systems. On a more experimental level, AgriLink has set to test and further develop new advisory methods and new forms of research-practice interaction in Living Laboratories.

Early results show a widespread lack of holistic and evidence-based advice while there are still gaps in the ability to meet the needs of specific populations. Concerning the identity of advice suppliers, it was found the range of actors playing a role in the AKIS is greater than that of the traditional range targeted by public policies. The project “acknowledges that there is no straightforward relationship between innovation and sustainability” and “that there is a risk for farmers’ decision-making to be more driven by path dependency mechanisms than by a thorough assessment of innovations” (AgriLink, 2018).

The **I2connect project**, recently started and led by the French Permanent Assembly of Agricultural Chambers (APCA), aims at promoting bottom-up innovation to advisors who will then support and facilitate interactive innovation processes. As this facilitation requires awareness, new tools and methods, motivational and organisational approaches for advisors, I2connect created an online platform, dedicated to mutual mentoring and sharing of experiences between advisors. The project will create an inventory of advisors in EU, among which the best practices will be reviewed and studied as part of a training programme. I2connect’s goal is to build a wider network from an already existing network of over 40 000 advisors and critical stakeholders.

FAIRshare gathers an evidence base of the digital tools and services used internationally. “Farming digitization (electronic data generation, communication technologies...) offers a better and easier decision making on farms, with the considerable possibility to improve sustainability of the sector. It is a very important and current topic in the European Union. However, to avoid barriers to this digitization, there is a need to mobilize the farm advisor community to enable them to manage digital tools and advocate about their uses.

FAIRshare aims at permitting this role of farm advisor about farming digitization, thanks to tools sharing and expertise. The project will deliver an inventory of digital tools and services internationally used, considering social networks used by EU and non-EU partners. This inventory will be available for end-users, with a simplified and attractive ergonomics. Then, they will be able to exchange, adapt, apply those digital tools. This method will demonstrate advisors how to use those tools in European contexts of advising and farming. The project strongly considers communication, both of the project and of advisors, to largely and efficiently disseminate digital tools and obtain a better use of those tools” (Acta, 2018). In Ireland, Teagasc is a partner in the FAIRshare project.

Other EU/national instruments involved

Other policies, such as the EU Regional Policy through the European Regional Development Fund (ERDF) and the Cohesion Fund as well as Education Policy may offer additional opportunities. A large share of the ERDF budget concentrates on measures for innovative projects related to agriculture and forestry, the competitiveness of SMEs and the shift towards a low carbon economy, while one of the strategic objectives of EU education and training policies is to enhance innovation, including entrepreneurship, at all levels of education and training.

Other European programmes have also been identified in relation to EIP-AGRI. As for example at the last EIP-AGRI workshop in Romania, Interreg and LIFE projects were associated as they were deemed relevant considering the theme on small farms.

4.5 ESQ5: To what extent have CAP instruments and measures fostered lifelong learning and vocational training in the agriculture and forestry sectors?

4.5.1 Methodology

4.5.1.1 Rationale and coverage of the Evaluation Question

This ESQ concerns both the agricultural and forestry sectors. It covers all relevant CAP instruments and measures with direct or indirect effects on Lifelong Learning (LLL) and vocational training, with a particular focus on:

- Focus Area 1C under Priority 2 (Article 5 of Regulation (EU) 1305/2013; FA1C), with reference to “*fostering lifelong learning and vocational training in the agricultural and forestry sectors*”
- and in particular the Rural Development measure supporting *knowledge transfer and information actions* (M1 - Article 14 of Regulation (EU) 1305/2013), with three sub-measures:
 - M1.1 - support for vocational training and skills acquisition actions
 - M1.2 - support for demonstration activities and information actions
 - M1.3 - support for short-term farm and forest management exchange as well as farm and forest visits

The FAS obligation and the Rural Development measures supporting advisory services (M2) and cooperation (M16) are analysed in more detail respectively under ESQ6 and ESQ4.

Other Pillar 2 measures also have an indirect effect on skills and training. For example, in order to benefit from certain RDP measures (e.g.: M6 Young farmers, M4 Investment aid, etc.) specific professional qualifications (or professional skills) are required. It encourages farmers to attain the required level of training.

In addition, other CAP instruments and measures that fostered farmers’ participation in lifelong learning and vocational training actions (co-financed or not) have been considered in the case studies.

Regarding RDP support, a dynamic vision was adopted, focusing on progress or improvement over time (by comparing the 2014-2020 programming period with the 2007-2013 one).

4.5.1.2 Judgement Criteria (JC)

JC1: CAP Pillar 2 has supported Lifelong Learning and vocational training actions in the agricultural and forestry sectors.

JC2: CAP Pillar 2 support to the Lifelong Learning and vocational training actions in the agricultural and forestry sectors has increased during the 2014-2020 programming period.

JC3: The number of participants (farmers and foresters) and the number of training hours are significant and correspond to the initial expectations.

JC4: The number of participants (farmers and foresters) and the number of training hours have increased during the 2014-2020 programming period.

JC5: Other CAP instruments and measures fostered farmers to participate in Lifelong Learning and vocational training actions (co-financed or not).

JC6: Proportion of participants who consider trainings useful and implement changes as results.

4.5.1.3 Methodology

The answer to this ESQ is based on both quantitative and qualitative data. It is principally based on the Common Monitoring and Evaluation Framework (CMEF) indicators, the

synthesis of answers to the RDP common evaluation questions (CEQ3 in particular, from the 2018 enhanced AIR), the synthesis of ex-ante and ex-post evaluations and relevant elements from case studies, as well as the generational renewal study (CCRI *et al*, 2019).

4.5.2 Summary answer

ESQ5: To what extent have CAP instruments and measures fostered lifelong learning and vocational training in the agriculture and forestry sectors?

This evaluation question concerns CAP Pillar 1 and Pillar 2, with a special focus on Pillar 2 since it directly refers to the cross-cutting Focus Area 1C ("fostering lifelong learning and vocational training in the agricultural and forestry sector").

CAP instruments and measures promote and encourage lifelong learning and training in the agricultural sectors in two ways: (i) directly by funding lifelong learning and vocational training actions (supported by Rural Development knowledge transfer measure - M1) as well as advisory services (supported by the equivalent Rural Development advisory services measure - M2) and (ii) indirectly through requirements or conditions related to the use of certain CAP measures or instruments (making a FAS mandatory, Pillar 1 and Pillar 2).

Support for lifelong learning and vocational training, by the mean of the Rural Development knowledge transfer measure (M1), was planned by a large majority of the 2014-2020 Rural Development Programmes (101/112, in 27 out of the 28 Member States). The total public budget dedicated to this measure represents EUR 1.69 billion, of which EUR 1.01 billion is dedicated to the training sub-measure (M1.1) alone.

The majority of the budget planned is linked to Priorities 2 ("enhancing farm viability and competitiveness") and 4 ("restoring, preserving and enhancing ecosystems related to agriculture and forestry"). Some Member States (such as France, Belgium and Poland) gave more weight to the economic component (with more than 70% of total public planned expenditure linked to Priorities 2 and 3) and others (e.g. Greece, Germany and Ireland) to the environmental and climatic component.

CAP Pillar 2 support to lifelong learning and vocational training in the agricultural and forestry sectors **has however decreased in 2014-2020 compared to 2007-2013 (-13.5%)**. From EUR 1.91 billion in 2007-2013 (m111 and m331) to EUR 1.69 billion in 2014-2020 (M1), the amount planned for the 2014-2020 period corresponds to the amount spent during the 2007-2013 period. The share of the training measures' budgets also decreased from 1.7% to 1.3%. The situation is however very variable from one Member State to another.

The total public budget dedicated to the knowledge transfer measure (M1) in 2014-2020 represents on average only 1.1% of the public expenditure planned under CAP Pillar 2.

In addition, its spending rate end of 2018 is inferior to 20%) mainly because its implementation suffered a delay, especially compared to other Rural Development measures. **It is likely that the initial planned budget will not be met**, even if the exact amounts to be spent cannot yet be estimated.

By the end of the 2007-2013 period, only 76% (EUR 1.63 billion) of the initially planned budget (EUR 1.91 billion) for the equivalent measures (m111 and m331) had been spent. Nevertheless, the *ex-post* evaluation of CAP 2007-2013 (Ecorys and IfLS, 2018) concluded that m111 did contribute, but to a medium extent, to an improved competitiveness of agricultural and forestry sectors.

The analysis of the case studies and the 2018 Annual Implementation Reports provided insights into the issues encountered by Member States during the implementation of the 2014-2020 Rural Development knowledge transfer measure (M1). **The biggest difficulty was administrative**, as many Member States found the application procedure to be very complex (see ESQ9).

The number of participants and of training hours in 2018 **appears more satisfying than the expenditure spent for** the 2014-2020 Rural Development knowledge transfer measure (M1). Indeed, according to the figures reported in the 2018 AIR, 1.07 million participants (Belgium excluded) were trained across the 2014-2018 period as a result of this measure (M1). It represents 37% of the target (Belgium excluded) and 20% of all CAP beneficiaries.

However, the interpretation of these aggregated figures at European level remains complex. Indeed, the reliability of the figures is marred by the possibility of **multiple counting and underestimation of the initial target values**.

In this respect, the Rural Development knowledge transfer measure (M1) ambitions for 2014-2020 are **almost half the achievements of 2007-2013** in terms of number of participants (- 4% and -46% excluding Belgium), while the budget dedicated to training has only decreased by -13.5%. The analysis shows **a clear downward trend, also in terms of annual averages of participants and training days**, at EU level and in a large majority of Member States. However, end of 2018, the number of participants and of training hours was comparatively higher (for the 2014-2020 period compared to 2007-2013) **per relative unit spent** under the Rural Development knowledge transfer measure (M1).

Other CAP instruments and measure have been identified in case studies and AIRs, as encouraging farmers and foresters to participate in lifelong learning and vocational training actions : the mandatory FAS but also other Rural Development measures such as investment support (M4), setting-up of young farmers (M6.1), cooperation (M16) and LEADER (M19). Advisory services, and thus the obligation to set-up a FAS offering advice to farmers contribute to lifelong learning among farmers. Access to advisory services by the FAS is open to all farmers of all ages. The FAS increased farmers' awareness of the available advisory services. In the case of the Rural Development investment (M4) and young farmer (M6) measures, they mainly encourage farmers and foresters to undertake training as a condition of accessing these CAP supports. However, it appears that often such training or advice is funded by national/regional funds, with the Rural Development Programmes, and potential synergies between the various measures remain little exploited. The cooperation (M16) and LEADER (M19) measures can foster lifelong learning and vocational training in a more direct way by setting up training or demonstrations. However, these occurrences remain rare.

The case studies (such as Estonia, Lower Saxony – Germany, Lorraine – France) and 2018 AIRs⁶¹ showed that **most participants considered trainings useful** and were satisfied by the training quality . The perception varies however when it comes to those who do not participate to knowledge transfer activities, with remarks issued on the limited number of subjects available and the perceived quality of training.

The case studies were not able to report effectively on the number or share of farmers and foresters involved in ongoing learning networks or communities of practice. In Flanders and Estonia, circles of farmers organised farm visits and met several times a year. However, **the issue remains the low proportion of farmers participating in training**, with a large majority not receiving adequate training (see JC1 under ESQ6).

4.5.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

- [ESQ5 JC1 CAP Pillar 2 has supported lifelong learning and vocational training actions in the agricultural and forestry sectors](#)

Out of 112 national or regional RDPs, 101 programmed M1 and 78 reported first achievements in the 2018 AIR. Luxembourg is the only MS which did not programme any action under M1, but there are also some regional RDPs in Spain (2), France (3) or Germany (4). Bulgaria, Malta and Slovakia did not yet report any amounts decided or spent under M1.

The **breakdown of expenditure by Priority and Focus Areas** shows that the majority of M1 expenditure is associated with the economic component (42% and 10% respectively linked to Priorities 2 and 3) or the environment component (28% linked to Priority 4). The strategies differ among the Member States (see Table in Annex 8: ESQ5-6 – Supporting). Across the case studies, France (82%), Poland (80%) and Belgium (69%) have given greater weight to economic aspects, while Germany, Ireland or Greece have focused their funding more on training actions relating to environmental (P4) or climatic (P5) aspects.

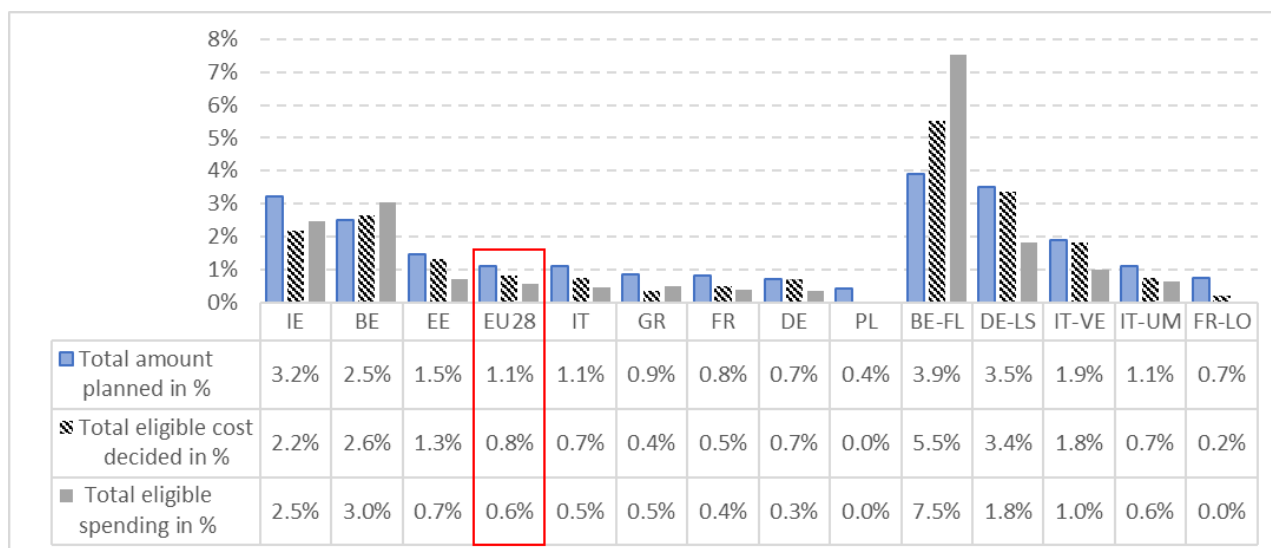
However, it is necessary to remain cautious on the interpretation of these ratios since the case study in France illustrated that training actions were associated with Focus area 2A (about the economic performance of all farms) because they concern the overall performance of the farms, associating economic performance but also agro-ecology and the environmental performance of the farms. According to the 2018 AIR, for the next CAP period, MS would like to finance more courses about environmental and climate topics

⁶¹ The impacts reported in the 2018 AIRs (CEQ3) of M1 are generally positive, with 24 AIRs specifically stating that the final beneficiaries were satisfied with the training they received.

(current Priorities 4 and 5). They also noticed that the current trainings are not dealing enough with innovation or innovative issues.

The total public budget planned under M1 for the 2014-2020 period amounts to EUR 1.69 billion, with EUR 1.01 billion dedicated to the sub-measure M1.1 alone. This budget represents on average 1.1% of the public expenditure planned under the CAP pillar 2. In some MS (BE, IE, MT, SE, UK), it represents more than 2.5%.

Figure 17: Share of RD measure 1 in total RDP public spending for CS MS and regions in 2014-2020



Source: ADE based on ESI Funds (situation: 31/12/2018)

According to the 2018 AIR, almost half of the planned amounts had been decided (47.9%, i.e. EUR 807.3 million) while the spending rate was only of 19.7% (i.e. EUR 331.7 million). These decision and spending rates are lower than the averages for the other RDP measures (respectively 66% and 29%). This is due to a delay in the implementation of the knowledge transfer measure. In this respect some case studies (FR-LO) have illustrated that certain MS have given priority to the launch of the most important measures (financially speaking), which delayed the launch of the smallest ones. Expenditure at the end of 2018 is however broadly in line with the balances initially planned (see Table 43 in Annex 5: Financial Tables for M1).

The discrepancies noted with regard to this judgement criteria can be explained through the 2018 AIRs and the case studies:

- In addition to the delays in the implementation of M1, French regions have struggled with the recent decentralisation and regional restructuring;
- AIRs (France, Italy and Romania) as well as four case studies (France, Germany, Ireland and Poland) wrote about administrative difficulties, especially with regard to the complex application procedure. The measure was very effort-consuming to implement;
- The German case study highlighted that the EAFRD measures are not attractive enough for stakeholders, who prefer taking other opportunities better funded outside the EAFRD;
- The training formats are not always well adapted to the participants' needs, according to four case studies (Flanders, Lower-Saxony, Greece, Poland). Case studies pointed out the low flexibility, the lack of continuity, training courses being too lengthy and too far away from the farms; and
- Two French AIRs mentioned financial issues such as lack of payments or difficulties for the beneficiaries to advance the funds to carry out the training, information and dissemination activities that they planned.

Overall, these difficulties were the reason for the frequent low levels of implementation. For the MS which struggled, the main difficulty was administrative (length of the application procedure, restrictive selection criteria, delays in payments, etc.). Finland also mentioned an insufficient communication, which prevented the increasing demand for training and advice to be met.

In terms of success factors, AIRs and case studies have noted that:

- Synergies between different measures that contribute directly or indirectly to life-long learning and vocational training were critical to achieve the objectives and have properly trained farmers;
 - Trainings that were well-adapted and flexible in terms of content, formats (shorter, more practical formats, or group-oriented for example) and teaching methods were more successful;
 - When the stakeholders involved (for example managing authorities and training bodies) have experience, it allows for a smoother run of the measure; and
 - Doing follow-ups of the learnings was also a success factor mentioned in the French case study.
- [*ESQ5 JC2 CAP Pillar 2 support to the above-mentioned actions has increased in the course of the 2014-2020 programming period*](#)

Measures m111 and m331 covered training and information actions in the agricultural, food and forestry sectors, under the 2007-2013 programming period, which corresponds to measure 1 (knowledge transfer and information actions) of the 2014-2020 programme under Regulation (EU) 1305/2013.

Measure 1 has overall the same objectives than in the 2007-2013 programme. In addition to the actions already supported under Measures m111 and m331, Measure 1 also supports demonstrations and agricultural and forestry management exchanges and visits (sub-measures 1.2 and 1.3). Another major change is that training providers are now the beneficiaries of the measure, not the participants to the trainings.

Regarding the **qualitative evolution of the measure**, two 2018 AIRs explicitly mentioned that the subjects and the formats of trainings have evolved, following the context and CAP changes. French and Belgium case studies noted that in the 2014-2020 programming period the tools under M1.1 were targeted on specific themes related to the CAP Priorities.

The German case study did a thorough comparison of the 2007-2013 and 2014-2020 programming periods. What emerges is that:

- The subsidy decreased from a support of 60 - 80% to a maximum of 60%. The consequences are that the measure is less attractive for training providers, as they take a greater economic risk and could access other better-funded opportunities,
- The cost framework is more complicated with many new cost items that need to be differentiated, which leads to a very complex verification process, whereas before cost verification was easy thanks to the cost plausibility check, and
- The number of quality requirements has increased.

Besides, demonstration and information actions (M1.2) have been identified across many AIRs and case studies as valuable tools of knowledge and update for farmers. Where it has been implemented and covered in the case studies⁶², the ways in which the RDPs have used this sub-measure are very diverse:

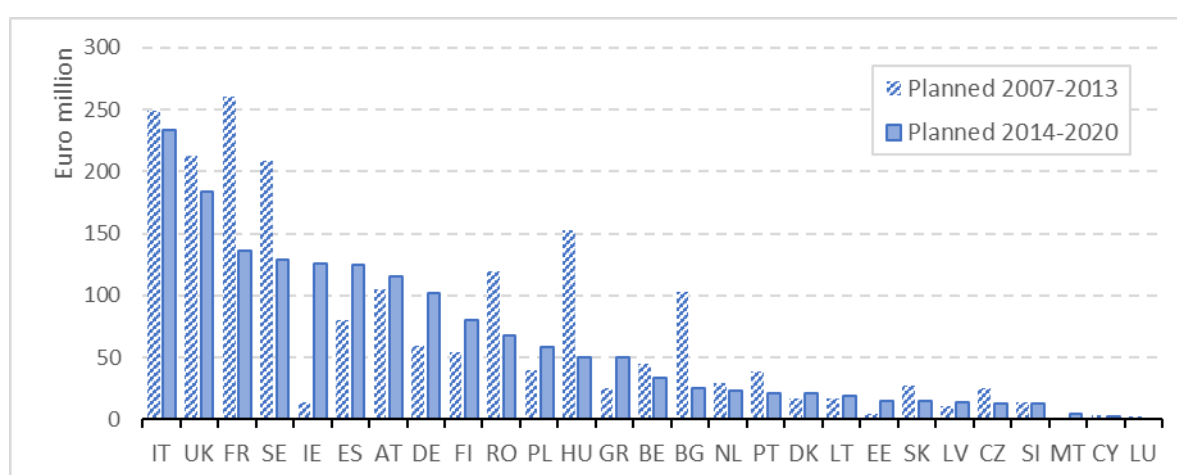
- In Flanders, demonstration activities focused on economic and environmental matters, or they tried to respond to current events, such as changes in legislature or crisis situations;

⁶² For the rest of the case studies, it was either not implemented (Germany, Ireland), not mobilized (Grand-Est) or not reported on (Veneto, Greece, Poland).

- In Estonia, they were used as part of the long-term programmes, as well as the trainings and on-site visits. These programmes have been implemented during the current programming period;
- In Umbria, demonstration projects contribute to the training requirements related to measures 6, 10, 11 and 14 and to the Natura 2 000 network; and
- In Lower Saxony, M1.2 especially focused on water protection advice, which is very specific and strongly endowed (budget of EUR 75 million). It is organised over five years and is targeted on 820 000 ha of UAA in the area of the water agencies or water protection cooperation. The use of antibiotics was also an important topic, and there is evidence that it has been successfully reduced over the past few years with alternative cures now being used for dairy cattle.

Regarding the **quantitative evolution of the measure**, the variation (between the 2007-2013 and 2014-2020 periods) of the total planned public budget (EU contribution and national funding) is presented hereunder for each Member State⁶³. All Member States planned a budget under Measures m111 and m331, but not under Measure 1 (LU).

Figure 18: Total public budget planned for training measures between the 2007-2013 (m111-m331) and 2014-2020 (M1) periods, at EU-level



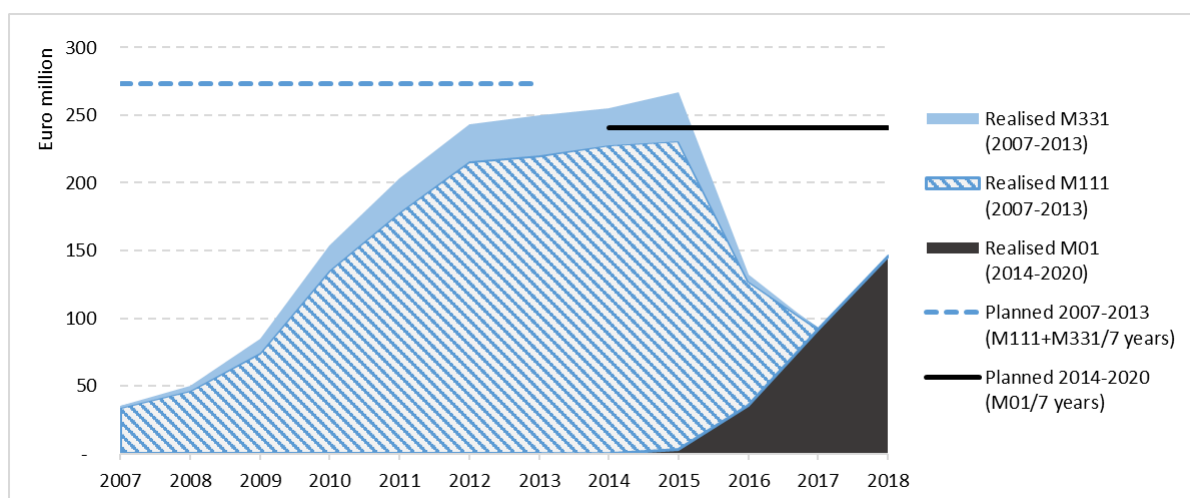
Note : Excluding Croatia, which was not part of the EU before 2013

Source: ADE based on the synthesis of the *ex ante* evaluation of CAP 2007-2013 (Metis and AEIDL, 2008) and RDP section 11 for 2014-2020 (situation: 31/12/2018, data retrieval on the 28/08/2019)

The total budget planned (for all RDPs) decreased from EUR 1.91 billion in 2007-2013 (Metis and AEIDL, 2008) to EUR 1.69 billion (RDP section 11), i.e. a -13.5% decrease. The share of the training measures budgets also decreased from 1.7% to 1.3%. However, the situation is highly variable from one MS to another. For instance, planned expenditure for measure 1 increased between the two periods in Ireland (multiplied by 9), Estonia (multiplied by 4), Greece (multiplied by 2), Germany (+72%) and Poland (+45%), while it fell significantly in Belgium (-26%) and in France (-48%).

⁶³ The conclusions drawn from this analysis should be taken with caution, as they are based on two distinct sources.

Figure 19: EU28 - Total public spending (EU and national) for m111 and m331 (2007-2013) and M11 to M13 (2014-2020) at EU level



Source: ADE calculations based on DG-Agri dataset

At the end of the 2007-2013 period, the total public budget spent on training actions (m111 and m331) amounted to EUR 1.63 billion, which represents 76% of the initial budget. The ex-post evaluation of 2007-2013 CAP (Ecorys and IfLS, 2018) concluded that m111 contributed, to a medium extent, to an improved competitiveness of agricultural and forestry sectors. The first expenditure related to 2014-2020 M1 was recorded at the end of 2015. By the end of 2018, almost half (47.9%) of the planned budget had been decided and the spending rate stood at 19.7% (EUR 331.7 Million).

With the measure experiencing a slight delay in its start-up, **it is likely that the initial planned budget will not be met**, even if the exact amounts to be spent cannot yet be estimated. .

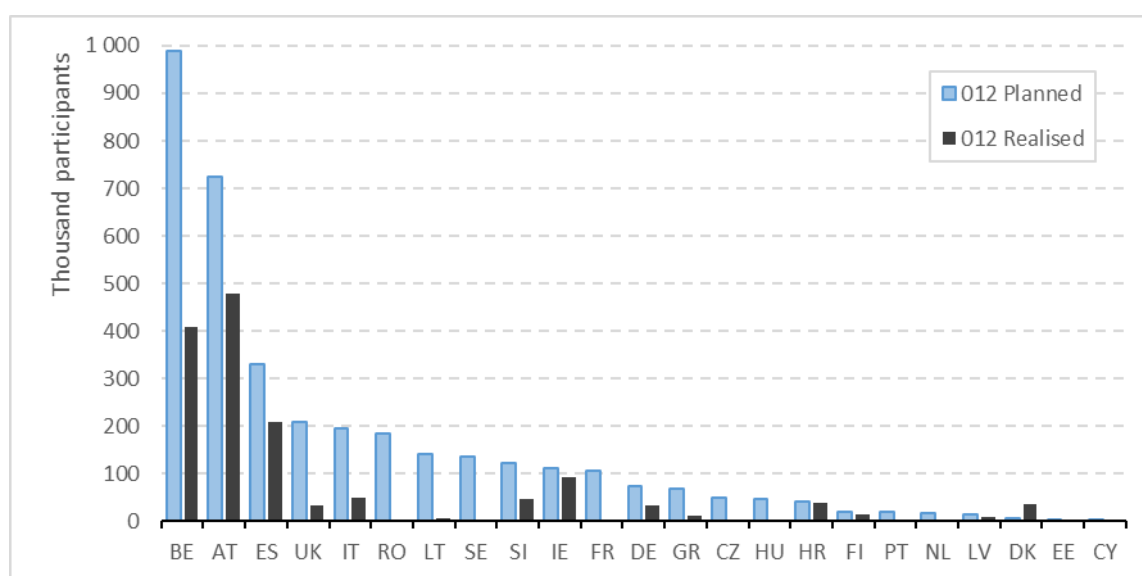
- [*ESQ5 JC3 The number of participants \(farmers and foresters\) and the number of training hours are significant and correspond to the initial expectations*](#)

The indicators are grouped at the measure level.

Number of participants in trainings (CMEF output indicator O12)

According to the 2018 AIRs, the overall demographics of the participants to the trainings are male farmers under the age of 40.

For all 2014-2020 RDPs, the **target** is to train **3.9 million participants** under Measure 1 (Focus Area 1C) (EC, 2016a). These initial expectations are objectively low compared to the 2007-2013 achievements (i.e. -46% compared to the 7 million participants trained under Measures m111 and m331 in the previous period, see ESQ5 JC4). This is especially as the budget (EUR 1.69 billion) is slightly higher than the expenditure for the whole 2007-2013 period (see ESQ5 JC2). By the end of 2018, 38% of the planned figure has been achieved (see Table 15). Predictably, the planned and realised numbers of participants vary greatly among the different MS, as presented in the following figure (for all Member States with training actions conducted).

Figure 20: Comparison of numbers of participants (planned and realised) in trainings under M1 in 2014-2020 for EU-28

Source: ADE based on RDP section 11 and 2018 AIR dataset

The aggregate analysis for all EU-28 MS further accentuates the wide range of differences among the different MS.

Table 15: Output indicator 12 for M1.1 – Achievements (31/12/2018)

Value	Number of participants in trainings (including Belgium)	Number of participants in trainings (excluding Belgium)
Range	Min 102 – Max 479 191⁶⁴	Min 102 – Max 479 191
Median	10 456	9 280
Average	64 363	48 775
Total	1.48 million	1.07 million
Planned	3.89 million	2.90 million

Source: ADE based on 2018 AIR dataset

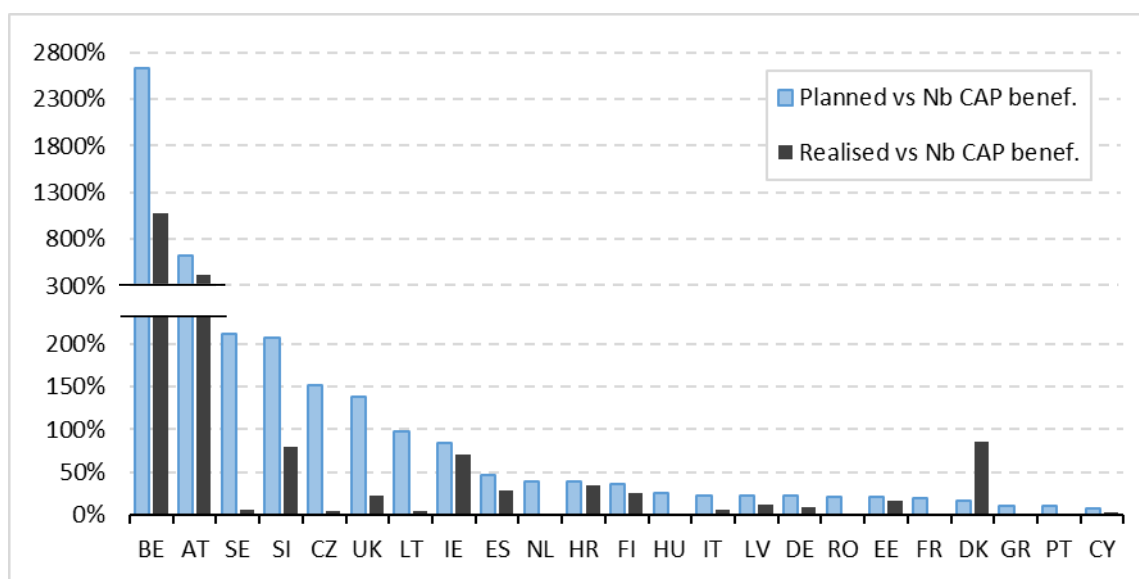
It is important to recall that the figures communicated under the CMEF output indicator “number of participants trained” (O12) can include multiple counting of a same participant⁶⁵. Individual participants cannot be identified separately. Even when taking this limit into consideration, the figures communicated in Flanders (Belgium) are very high. Indeed, in BE-FL, every participant is counted for every session (even if regrouped under a common workshop). For instance, if there is a seminar with 50 participants and 4 speakers, 200 participants to the training are recorded. Hence why two results are presented in Table 15, including, or excluding the Belgian figures. Besides, Member States may have applied different counting methods, which creates a very heterogenous indicator. It remains unclear what has been counted in the number of training days, as some numbers appear extremely high or uncorrelated to the number of participants.

The ratio of participants planned and realised compared to the total number of agricultural holding⁶⁶ is presented in the following figure (for all Member States who started implementing M1).

⁶⁴ The maximum number is for Austria.

⁶⁵ “It is not necessary to register the identity of participants; the same participant could be counted as many times he/she participates in different trainings.” Rural Development Monitoring (2014-2020) (August 2015).

⁶⁶ Based on DG Agri figures, there were 6.9 million CAP beneficiary agricultural holdings in the EU in 2018. It is this comparative basis which has been used for the analysis.

Figure 21: Ratio between the number of participants planned/realised and the total number of CAP beneficiaries (in %)

Source: ADE based on 2018 AIR dataset

France, Germany, Greece and Umbria mentioned that measure 1 has reached only a limited number of farmers/foresters so far. Some of the reasons why the mobilisation of farmers/foresters has been so difficult are:

- The current economic situation which is difficult and does not encourage farmers/foresters to pursue lifelong learning and vocational training,
- In Greece, the strong links of measure 1 to measures 4 and 6 apparently limited the reach of the measure,

In France, the VIVEA⁶⁷ fund estimates that an average of 15 to 20% of French farmers are trained each year, with a renewal rate of around 40% per year. This means that 60% of training participants (i.e. 9 to 12% of French farmers) had already participated in at least one training action the previous year. The majority of participants are therefore regular participants, and the renewal rate is relatively limited. It remains difficult to involve a large majority of French farmers in training activities, whether co-financed or not. Among the farmers/foresters who do not participate in trainings, according to the French case study, there are the following categories:

- Those who seek information elsewhere or belong to groups or collectives that enable them to stay informed and up to date,
- Those who encounter organisational difficulties (difficult to make themselves available, especially for several-day courses), and
- Those who are isolated and vulnerable. They are the most difficult to reach because they are outside the information channels and might have a misconception about training.

Number of training days given (O11) and of actions/operations supported (O3)

As for the "number of participants trained" indicator (O12), the figures communicated in the Flanders RDP for the "number of training days given" (O11) and "number of training actions/operations supported" (O3) indicators are extremely high and they have therefore been excluded from the results presented in Table 16.

⁶⁷ VIVEA is a mutualised insurance fund for non-paid farmers' training. VIVEA assists farm holders (and farmers' spouse female or male) in the agricultural sector in developing their skills and financing their vocational training.

Table 16: Output indicators 11 and 3 for M1 - Achievements (31/12/2018)

Value	O11: Number of training days given (excluding Belgium)	O3: Number of actions/operations supported (excluding Belgium)
Range	Min 44 – Max 196 050	Min 4 – Max 14 842
Median	3 338	135
Average	29 687	1 511
Total	653 116	33 244

Source: ADE based on 2018 AIR dataset

A total of 33 244 actions or operations were supported as a result of M1; more than 653 000 training days were recorded.

The two output indicators considered together indicate that:

- The Member States which supported the largest number of training days (superior to 125 000 days) are Greece, Ireland and Italy.
- Certain Member States have adapted a strategy focusing on a limited number of actions or operations but with a very important number of training days given. It is the case for Greece and Ireland, with respectively 4 and 10 actions supported but a number of training days both exceeding 125 000 days.
- On the opposite, 2 Member States (Estonia and France) supported a very large number of actions or operations (respectively 669 and 960), hence representing a ratio lower than 1 day of training given per action/operation supported.
- Greece and Hungary are the only 2 Member States with a ratio of number of training days given compared to the confirmed number of participants which is very important (respectively 18.75 and 29.92).

The interpretation of the important differences among the MS is rather complex due to the fact that there is no differentiation (in the dataset of the O11 and O3 indicators) between the training (sub-measure 1.1) and information/demonstration (sub-measure 1.2) activities. Also, the indicators O11 and O3 are actually covering different things, so they cannot always be linked to each other. The Estonian example is particularly illustrative.

Estonia counting of participants in training

“The number of participants in advanced training (and other knowledge transfer activities) is significant and the target number of participants is likely to be exceeded by 2023. By the end of 2018 dissemination events were attended on 31 371 occasions.”

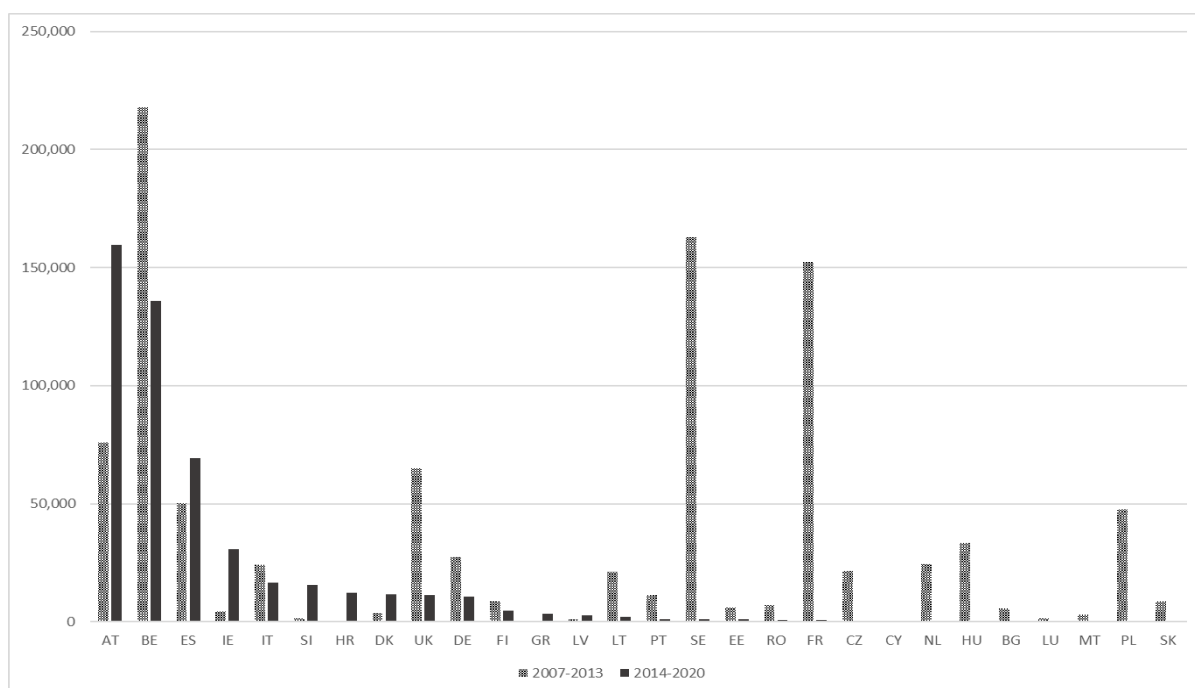
Knowledge transfer activities are promoted well and every farmer who would like to get some information can find suitable activities supported by RDP M1 to participate. The official indicator is related to trainings and the word training can be only used for the activities that meet the requirements of the Adult Education Act in Estonia. This is very confusing as from all participations only ca 10% is fulfilling this requirement. All information days, conferences, demonstration activities, study trips, study circles, etc. are not counted under this indicator.

- [*ESQ5 JC4 The number of participants \(farmers and foresters\) and the number of training hours have increased in the course of the 2014-2020 programming period*](#)

The number of training days given and the number of participants in training have been compared between the two programming periods 2007-2013 and 2014-2020⁶⁸ (see Figure 22 and Figure 23). As detailed under ESQ5 JC3, it is important to recall that the figures communicated for the number of participants can include multiple counting and that Member States may have applied different counting methods.

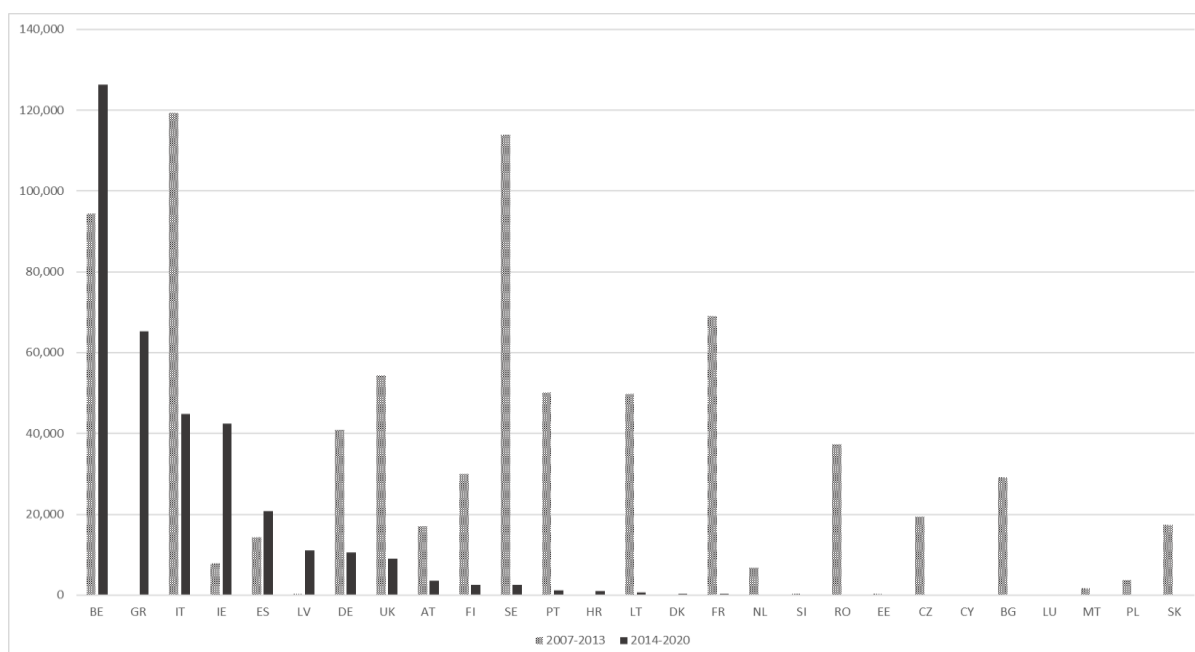
⁶⁸ As for the expenditure analysis (see ESQ5 JC2), two different sources have been used (Synthesis of the ex-post evaluation of CAP 2007-2013 (Ecorys and IfLS, 2018) and the 2018 Annual Implementation Report of DG-Agri) so the conclusions drawn from this analysis should be taken with caution. Besides, the 2014-2020 CAP period is not finished yet, so the figures will still change.

Figure 22: Evolution of the number of participants (annual average) in training between 2007-2013 (7 years) and 2014-2020 (3 years)



Source: ADE based on ex-post evaluation of CAP 2007-2013 and AIR 2018

Figure 23: Evolution of the number of days of training (annual average) between 2007-2013 (7 years) and 2014-2020 (3 years) (without Hungary)



Note: Hungary reported an extremely high number for 2007-2013 (more than 2 000 000 training days). This number was considered as an outlier and was taken off the chart.

Source: ADE based on ex-post evaluation of CAP 2007-2013 and AIR 2018

The number of training participants and the number of training days given have decreased by 79% and 86% respectively between 2007-2013 and 2014-2020. Indeed, in 2007-2013, across the EU, almost 7 000 000 people were trained, and 7 600 000 training days were given (under Measures m111 and m331). In terms of participants, it represents more than a third of the active farm workers in the EU (without considering multiple counting). In 2014-2020, there were 1 500 000 participants in training, for slightly more than 1 000 000 training days.

This drop could be partly due to:

- a different way of counting the numbers of participants (less multiple counting?) and of training days during the latest CAP period; and/or
- the fact that Measure 1 began with a slight delay and that current data stops at the end of 2018.

However, the general trend still seems to be that there are less training days and less participants in training in 2014-2020.

There still are some Member States that have seen their number of participants in training and/or of training days given increase during the 2014-2020 programme. It is the case for Ireland, Denmark and Slovenia, with a respective increase of 32%, 206% and 354% for their number of training participants. Ireland also doubled its number of training days given, which means that in 2014-2020 there have been more days of training with an equivalent number of participants per training. On the contrary, Slovenia and Denmark have a small number of training days, so there have been more participants per training in 2014-2020. The last interesting case is Latvia, which has given 18 times more training days to an equivalent number of participants in 2014-2020, meaning that participants assisted to more than one training.

It is difficult to draw definite conclusions from the charts hereinabove. Indeed, one cannot say what role the method of counting plays in the evolutions observed. It is therefore hard to compare one Member State to another.

- [*ESQ5 JC5 Other CAP instruments and measures fostered farmers to participate in lifelong learning and vocational training actions \(co-financed or not\)*](#)

Other CAP measures (detailed in this sections), as well as the FAS obligation, contribute to lifelong learning and vocational training in an indirect way, by encouraging farmers and foresters to take part in training through measure M1 or the national unsupported offer.

Advisory services, and thus the obligation to set-up a FAS offering advice to farmers, do contribute, to a certain extent, to this objective. The survey to national FAS coordinators (performed by ADE in 2020) mentioned the increased awareness of farmers about the offer of advisory services as one of the benefits of the FAS. No common figures are available about the use of the FAS independently of M2. Indeed, the figures provided as answers to the FAS questionnaire to MS pursuant to Article 102.2 (JRC, 2017) are too approximative. They cover all advices given in various forms (one-to-one on the farm, one-to-one outside the farm (consultations, etc.), telephone helpdesk, Small group advice on the farm, Small group advice out of the farm, Internet, Publications, etc.).

The link between advice and other training activities could not be identified. It was not possible to see if farmers taking part in training also requested one-to-one advice before or after the training, or vice-versa. Participants are not identified with a unique code.

The **other relevant RD measures** are summarised in Table 17.

Table 17: Summary of the different measures mentioned in AIRs of 2018 and in the CS that foster LLL and vocational training actions

Measure	Details	Number of times mentioned	Mentioned in Case Studies
M2(.1; .3)	Advisory services	11	Flanders, Lorraine
M16(.1)	Co-operation	8	Ireland, Lorraine and Veneto
M19(.1; .2; .3)	LEADER	7	Flanders and Estonia
M6(.1)	Farm and business development (business start-up aid)	6	Estonia, Greece, Veneto and Umbria
M4(.1)	Investments in physical assets (improve the overall performance and sustainability of the farm)	2	Estonia, Greece and Veneto

Measure	Details	Number of times mentioned	Mentioned in Case Studies
M10	Agri-environment-climate	2	Estonia and Umbria
M11	Organic farming	2	Estonia and Umbria
M9	Setting-up of producer groups and organisations	1	Not mentioned
M14	Animal welfare	1	Estonia and Umbria
M8	Investments in forest area development and improvement of the viability of forests	1	Not mentioned

Source: ADE based on AIR 2018 and case studies

The measures most frequently mentioned in the 2018 AIRs and the case studies are M2, M6.1 and M16. Measure 19 was very often mentioned in the AIRs but not as much in the case studies, whereas it is the opposite for Measure 4.

The link between the above measures and Measure 1 is often that training on themes relevant for the other measures is a precondition for being able to apply (it is the case for M4 and M6). When training is not a requirement for application, it can allow the applicants to obtain a higher score.

- It is the case in Umbria (Italy) for M10, M11 and M14, which can address digitisation, quality systems, sustainable plant protection, improving production techniques, biodiversity, conservative farming, etc.
- In Estonia, the environmental topics are addressed in training related to M10, M11 which include mandatory training requirement. M14 includes voluntary supported training requirement related to animal welfare. Otherwise, the level of interest of farmers for these topics would be rather low. A few examples of the environmental topics are: soil protection, organic matter and Corg in soils; calculation of humus balance; preventing leakage of nutrients; catch crops, cover crops, green manure; importance and protection of pollinators.
- In Ireland, CAP training and advice services support some precise initiative such as the M10 Green Low-Carbon Agri-Environment Scheme (GLAS), the Beef Data and Genomics Programme (BDGP) and the animal health and welfare (AHW). Indeed, targeted and prioritised services for farmers in relation to specific animal disease areas such as somatic cell count reduction, Johnes disease and Bovine Viral Diarrhoea (BVD) emerged as a priority.
- According to Flanders, measure M19 is contributing to FA1C by organising trainings. In Flanders these trainings reached 8 656 participants. Operational Groups under M16 can also organise trainings and demonstration actions in order to advertise their project and disseminate their results.

Member States stated that strong integration of Measure 1 with other measures (often quoted: measure 19 and measure 6) is a very important success factor.

- [*ESQ5 JC6 Proportion of participants who consider trainings useful and implement changes as results \(see also ESQ1 I3.2\)*](#)

In the case studies, **trainings under M1 have covered first and foremost the topics of farm competitiveness and viability as well as environment.**

In Greece, there is too much advisory input related to pesticide use, because this serves the commercial interests of the advisors/consultants. The producers who take this advice mentioned that they are satisfied, but they feel that more information should be given in an unbiased way.

Some other more specific issues were addressed as well, such as the Water Framework Directive in Lower-Saxony. A considerable effort has been made through measure 1.2, which is very specific and strongly endowed (budget of EUR 75 million). It is organised over five years and is targeted on 292 000ha of UAA in the area of the water

agencies. The use of antibiotics was also an important topic in Lower-Saxony, and there is evidence that it has been successfully reduced over the past few years and that alternative cures are now used for dairy cattle.

In France, the training and advisory services are part of a strong national policy on agro-ecology based mainly on national funding. The training actions financed by the CAP have focused in particular on (i) practices based on conservation agriculture, hedge planting and agroforestry or crop management, (ii) use of alternative treatment methods that save on the use of antibiotics (Ecoantibio 2017 plan); (iii) Run farms with good environmental practices (food autonomy animal welfare and health, feed monitoring, livestock management in organic systems, watercourse maintenance, photovoltaics...).

Estonia and Ireland implemented over the current programming period specific programmes supported by Measure 1. In Estonia, they are called "long term knowledge transfer (KT) programmes" and target certain topics (like plant production, animal husbandry, organic farming) using a wide set of activities (trainings, demonstrations, visits...). In Ireland, the establishment of knowledge transfer groups enabled farmers to meet with qualified advisors, for exchange of information and best practice in areas involving animal health and management, profitability and financial management, grassland management, sustainability, farm health and safety, farm progression, and breeding planning. These knowledge transfer groups have raised awareness of farmers around a wide range of issues including climate change and carbon management, water pollution, animal health and welfare, new technologies, and to a lesser extent farm business management.

In the agricultural sector, the **Measure 1 has a positive effect on knowledge exchange and transfer**, with 13 AIRs reporting that the measure's implementation was sufficient and 24 declaring that the final beneficiaries were satisfied with the training they received (AIR, 2018).

In Estonia, 60% of the food processors and 36% of the producers found that trainings or advisory services helped them to find new ideas or activity areas and implement new technologies. Besides, 59% of the food processors and 41% of the producers got confidence and courage to make decisions. Only 10% of the food processors and 8% of the producers told that participating in trainings/using advice did not influence their activities at all. However, this does not only concern training/advice supported by EAFRD but also market-based training/advice.

In Veneto, regarding Focus Area 2A (about the economic performance of all farms) and 2B (about the entry of adequately skilled farmers), respectively 45% and 68% of the participants declared using the knowledge acquired in training to develop their farm. Regarding Focus Area 4 (restoring, preserving and enhancing Ecosystems), it concerns only 29% of the participants. Higher percentages of the participants said that they used the knowledge acquired in training to introduce sustainable management practices (Focus Area 2A: 74.4%; Focus Area 2B: 78.4%; Focus Area 4: 65.2%).

In Lorraine, regarding agricultural training, respondents to the surveys conducted by VIVEA or the Chambers of Agriculture Assembly were very satisfied with the training they received (average score of 8.1/10 according to the VIVEA survey, 95% of respondents satisfied according to the CAA survey).

- 84% of the respondents to the VIVEA survey declared that they had initiated change of practices,
- 79% of the respondents to the CAA survey were satisfied with the transferability of the training knowledge,
- Respondents to both surveys were satisfied by the quality of the trainers,
- 40% of the respondents to the VIVEA survey still said that they would need additional individual training to put what they learnt into practice.

Regarding forestry training, participants were very satisfied too (99% of the respondents).

- 85% of the participants judged that the different aspects (practical, economic, legal, administrative, technical) were approached in an appropriate manner.

- Participants requested to go into administrative and legal aspects in greater depth.

Portugal however deplored that training concentrated on compliance with regulations rather than actions on agricultural or forestry matters. It resulted in the measure having only a limited contribution to the knowledge level of agricultural and forestry producers (AIR, 2018).

Three case studies (Estonia, Lorraine and Veneto) specifically reported that the participants were satisfied with the **quality of the training**.

4.6 ESQ6: To what extent have CAP instruments and measures supported the entry and maintenance of adequately skilled farmers into the agricultural sector with a focus on meeting the standards of modern, high quality agriculture and on sustainable and environmentally friendly farming systems?

4.6.1 Methodology

4.6.1.1 Rationale and coverage of the Evaluation Question

This evaluation question concerns only the agricultural sector. It covers all relevant CAP instruments and measures, with a particular focus on:

- (1) the objectives of Rural Development knowledge transfer (M1) and advisory services (M2) measures;
- (2) support to the setting-up of young farmers within the EAFRD (Rural Development Regulation); and
- (3) the obligation of the Farm Advisory System (FAS).

Effectiveness of the Rural Development knowledge transfer measure (M1) is analysed in detail under ESQ5.

The rationale of the Rural Development "Advisory services, farm management and farm relief services" measure (M2) is defined in "Omnibus" measure fiches as follows: *"The use of advisory services as well as the setting up of advisory, farm management and farm relief services should be promoted in order to improve the sustainable management and the economic and environmental performance of farms and forest holdings and SMEs operating in rural areas. This measure also promotes the training of advisors in order to enhance the quality and effectiveness of the advice offered and ensures the updated capacity of advisors. This measure complements the Farm Advisory System (FAS) established in Articles 12 to 14 of Regulation (EU) No 1306/2013 [HR] and goes beyond providing advice covering a broader scope of elements."*

4.6.1.2 Judgement Criteria (JC)

JC1: The agricultural training level of farm managers has increased.

JC2: The CAP enabled the maintenance of adequately skilled farmers into the agricultural sector.

JC3: The CAP enabled the entry of adequately skilled farmers into the agricultural sector.

JC4: The advisory services and trainings meet requirements with regard to the standards of modern, high quality agriculture and sustainable and environmental friendly farming systems.

4.6.1.3 Methodology

The answer to this ESQ is based on both quantitative and qualitative data. It is principally based on the Common Monitoring and Evaluation Framework (CMEF) indicators, the analysis of the evaluations performed in this context and relevant elements from case studies, as well as the generational renewal study (CCRI *et al*, 2019).

4.6.2 Summary Answer

ESQ6: To what extent have CAP instruments and measures supported the entry and maintenance of adequately skilled farmers into the agricultural sector with a focus on meeting the standards of modern, high quality agriculture and on sustainable and environmentally friendly farming systems?

CAP instruments and measures have supported the entry and maintenance of adequately skilled farmers into the agricultural sector mainly in four ways: directly (i) by funding knowledge transfer (supported by the equivalent Rural Development knowledge transfer measure - M1) (ii) by funding advisory services (supported by the Rural Development advisory services measure - M2), (iii) by the obligation to implement a FAS offering advice to farmers in each Member State, and directly or indirectly through (iv) specific requirements notably in terms of skills, related to CAP Priority 2 'Farm Viability and Competitiveness' and Focus area 2B (designed specifically to facilitate the entry of young adequately skilled farmers into the agricultural sectors). In several Member States the implementation of services under the FAS is partly financed by the Rural Development advisory services measure (M2).

Agricultural advice remains an important lever to achieve change in farming practices, as highlighted in a recent survey (performed for the 2018 AIR) of over 150 advisors in Lower Saxony⁶⁹.

The budget planned under the 2014-2020 Rural Development advisory services measure (M2) amounts to EUR 1.05 billion (0.7% of the Rural Development Programmes' total budget). It implies **a decrease of 20% compared to the previous programming period (2007-2013), mainly due to administrative constraints**. By the end of 2018, less than a quarter of the planned amounts had been decided (23.1%) and less than 10% spent (due to the public procurement rules applicable until end of 2017 whose constraint was relieved by the Omnibus regulation - see Theme 3). The 2007-2013 period had also shown a strong under-achievement. Nevertheless, there were 333 952 beneficiaries advised by the end of 2018, i.e. 27.8% of the target and almost twice the level achieved over the entire 2007-2013 period (178 500).

Even if the budget planned for advisory services (M2) decreased, it does not necessarily imply a decrease of public support for these services. In several Member States, they are supported by national funds only. Agricultural advice remains an important lever to change farming practices, as highlighted in a recent survey (performed for the 2018 AIR 2018) of over 150 advisors in Lower Saxony (Germany) (Eberhardt, 2018) .

The topics covered by the training and advice actions are broad. Those supported by the CAP or national funds not only aim at meeting the needs expressed by farmers, but also especially integrate environmental, climatic or societal requirements, to a rather large extent, as illustrated by the case studies. This public support for training and advice enables independent advice. It covers more broadly topics such as agroecology, alternative to use of pesticides or chemical inputs, animal health and welfare, security at work, organic farming, water, biodiversity, soil and climate measures.

In most case studies, there are however no specific training or advice provided related to the management of seasonal workers, the relevant labour standards or working conditions.

The Rural Development Programme advice measure (M2) supported the mandatory FAS in several Member States, and in this way together they have fostered maintenance of adequately skilled farmers in various ways.

The FAS on its own increased the awareness of farmers on the offer of advisory services and also the specific mandatory topics, in addition to cross-compliance (such as greening, maintenance of agricultural area, the Water Framework Directive, Integrated Pest Management, etc.). In several Member States, support by the Rural Development advisory services measure (M2) is instrumental for the implementation of the FAS. Together, they contributed to the improvement of the quality of advice proposed (survey of FAS coordinators and AgriLink project).

Regarding new entrants, the conditions set both by the EU and Member States on the Rural Development start-up-aid (M6.1) are the CAP's main lever for improving the level of qualification of young farmers. The requirements in terms of a minimum initial level of qualification or compulsory vocational training and advice during the first years of installation

⁶⁹ Each advisor covers between 20-100 farmers in average with Rural Development one to one advice (M2).

increase the initial qualifications among young farmers. The associated mandatory business plans also stimulate uptake of training and advice.

Some training or advisory measures are targeted more specifically to young farmers and are included under the CAP Priority 2 'Farm Viability and Competitiveness' and Focus Area 2B. It represents 6.8% and 4.4% of planned expenditure under respectively Rural Development knowledge transfer (M1) and advisory services (M2) measures.

Between 2010 and 2016, **there has been a small progress**, for all age groups, **in the number of farm managers having a basic training** (22.1% to 22.5%, +2%) **and** a significant progress in terms of **full agricultural training** (6.9% to 9.1%, +32%). This increase is notably linked to the entry of young farmers with higher education levels than their elders. The Rural Development young-farmer measure (M6.1) has contributed to this improvement. Despite this progress, **the level of trainings remains an issue**. An analysis shows that in 2016 less than a third (31.6%) of farm managers had at least a basic agricultural training. Less than one farmer in 10 has a full agricultural training.

The case studies have illustrated that other measures or provisions taken at national or European level under the CAP also encourage farmers, directly or indirectly, to seek training or advice, such as: cross compliance, greening, the FAS obligation, the obligatory certification to use plant protection products, requirements linked to certain investments (Rural Development Measure M4.1), agri-environmental and climate measures (Rural Development Measure M10), organic farming (Rural Development Measure M11), etc.

4.6.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

➤ [ESQ6 JC1 The agricultural training level of farm managers has increased](#)

This judgement criteria is based on the analysis of Context indicator C24 (*agricultural training of farm managers*). It measures the share of farm managers who have attained basic and full education levels in agriculture. The different categories of agricultural training are defined as follows:

- **Only practical agricultural experience:** experience acquired through practical work on an agricultural holding.
- **Basic agricultural training:** any training courses completed at a general agricultural college and/or an institution specialising in certain subjects (including horticulture, viticulture, silviculture, pisciculture, veterinary science, agricultural technology and associated subjects). A completed agricultural apprenticeship is regarded as basic training.
- **Full agricultural training:** any training course continuing for the equivalent of at least two years full time training after the end of compulsory education and completed at an agricultural college, university or other institute of higher education in agriculture, horticulture, viticulture, silviculture, pisciculture, veterinary science, agricultural technology or an associated subject.

31.6% of EU farm managers stated that they had followed some kind of agricultural training, but **only 9.1% had completed a full cycle** of agricultural training (EC, 2018c). Farm managers who learned their profession through practical experience remain a majority (68% in 2016), all age groups combined but in particular for the eldest (73% of farm managers over 55 years old only have practical experience in 2016 versus 55% of farm manager less than 35 years old).

At Member State level, Luxembourg (52.8%), Czechia (38.7%), France (34.9%), Latvia (31.3%), Estonia (28.6%) and Poland (27.4%) registered the highest shares of farm managers who followed a full cycle of agricultural training. Practical experience as the only basis for managing an agricultural holding is particularly prevalent in Romania, Greece and Bulgaria, where over 90% of farmers have not followed any agricultural training. Furthermore, in 2016, 55.5% of young farmers in the EU-28 still relied only on practical experience, particularly in Romania (89.6%), Latvia (77.7%) and Bulgaria (77.3%).

Table 18: Share of farm managers who have attained basic and full education levels in agriculture

	Practical experience only			Basic Training			Full agricultural training		
	2010	2013	2016	2010	2013	2016	2010	2013	2016
Total EU									
Total Farm Manager	71.0	69.8	68.3	22.1	20.2	22.5	6.9	8.5	9.1
< 35 years old	68.7	61.5	55.5	17.4	18.6	21.3	13.9	19.9	21.7
35 to 54 years old	65.3	64.5	63.3	24.1	22.7	23.3	10.5	12.8	13.3
> 55 years old	75.6	76.2	72.6	21.2	19.2	22.2	3.2	4.5	5.2
Evolution - total EU	2010-2013	2013-2016	2010-2016	2010-2013	2013-2016	2010-2016	2010-2013	2013-2016	2010-2016
Total Farm Manager	-2%	-2%	-4%	-9%	12%	2%	24%	7%	32%
< 35 years old	-11%	-10%	-19%	7%	14%	22%	43%	9%	56%
35 to 54 years old	-1%	-2%	-3%	-6%	3%	-3%	22%	4%	27%
> 55 years old	1%	-5%	-4%	-10%	16%	4%	42%	16%	65%
Total Farm Manager	2010	2013	2016	2010	2013	2016	2010	2013	2016
Belgium	52.2	59.1	51.8	21.4	19.7	26.9	26.4	21.2	21.3
Germany	31.4	31.9	34.6	55.2	53.2	48.4	13.3	14.9	17.0
Estonia	63.5	60.4	60.2	14.0	13.9	11.2	22.5	25.7	28.6
France	49.7	38.4	36.5	28.7	32.2	28.3	21.6	29.3	34.9
Greece	96.5	93.9	93.2	3.2	5.5	6.2	0.3	0.6	0.6
Ireland	69.0	50.4	50.3	15.1	25.5	24.6	15.9	24.1	25.2
Italy (*)	5.0	3.1	2.4	90.8	90.8	91.5	4.2	6.1	6.1
Poland	54.1	52.2	55.2	21.3	20.2	17.3	24.6	27.6	27.4

(*) In the case of Italy, the definition of "training in agriculture" does not correspond to the one described above. It rather refers to the general education level of the farmer. According to the Italian definition: practical experience means that the farmer has completed no type of education (primary school, secondary education, higher education); basic training means that the farmer completed at least primary education, but did not complete agricultural higher education; and full training means that the farmer has completed higher or tertiary education at an agricultural college/university/college-level institute/vocational school.

Source: Eurostat (2020b)

However, **between 2010 and 2016, a progression is noted, for all age groups**, in the number of farm managers having a basic training (+2%) or a full agricultural training (+32%). In 2016 (compared to 2010), there were less farm managers (-4%) having only practical experience.

This increase is notably linked to the entry of young farmers who have higher education level than their elders. Indeed, in 2016, 21.7% of farm managers under 35 years old had a complete full agricultural training, compared to only 5.2% of those over 55 years old.

The 2010 structure⁷⁰ survey shows that **only 6% of operators reported having undergone vocational training in the last 12 months**. These data also show that the propensity to take training is correlated with the level of basic agricultural training. Indeed, only 3% of the farmers with only practical training have attended to vocational trainings in the last 12 months. This compares to 18% and 27% of the farmers who have basic and full agricultural training respectively. Several case studies (Germany, Poland, Greece, Umbria and Ireland) confirm the difficulty of reaching/mobilising a significant proportion of farmers, especially the least trained, some of whom see the training as a return to school. Indeed, the Irish case study highlighted that the lower tier of the farms (least profitable, poorly connected with the AKIS) was still very hard to reach.

In Germany, Umbria and Poland, the difficulty to mobilise farmers is mainly due to the measures' lack of attractiveness (e.g. the advice given does not meet the needs of all

⁷⁰ These are not recent figures, but this kind of data is no longer included in subsequent surveys.

Polish farmers). The German and Irish case studies also showed that farmers don't necessarily have time to put in trainings. In Greece, the problem is internal, as the advisory services are mainly private (conflict of interest) and perceived to be of poor quality. Besides, Greek culture highly respects the views and decisions of older farmers, which does not encourage the uptake of training.

- [ESQ6 JC2 The CAP enabled the maintain of adequately skilled farmers into the agricultural sector](#)

The different requirements of the CAP and their evolution generate increasingly knowledge needs, evolving over time and needing to be adapted to different contexts. The CAP as a whole encourages young people to acquire the skills needed to implement these requirements and established farmers to inform themselves, review their skills and acquire new ones in order to respond to these new challenges and adapt their practices.

The case studies identified several CAP measures and provisions that more specifically lead farmers to training and advice:

- Greening under the first pillar and the evolution of cross-compliance,
- M4.1 investments. In some cases, training or advice is required (e.g. GR, IT-VE) or valued at the time of selection (e.g. DE),
- Support for the installation of YF (M6.1) is often associated with qualification requirements that encourage young people to complete their studies, (see JC6.3)
- Training can also be mandatory or valued during the selection for agri-environmental and climate (M10) and organic farming (M11) measures (e.g. demonstration and information actions are set up as a mean to contribute to the training requirements for these measures in Umbria),
- The German measure "Water protection advice", which provide comprehensive farm-adapted advice to farmers in sensitive areas,
- The requirement of a certificate for the use of plant protection products has led farmers to engage in training and advice (e.g. BE-FL, DE), and
- Irish GLAS is effective to access harder to reach farmers, which is a key issue in Ireland.

The acquisition of skills is directly supported by M1 (training and information actions) and M2 (advisory services).

Measure M1 effectiveness has already been discussed in ESQ5. Support for measure 1 was widely planned across EU's MS, but it was much less implemented (the rate of spending was under 20%). It is likely that the planned target will not be met at the end of the programming period. However, the rate of implementation in terms of participants seems to be much better (37% of the planned number of participants has been reached), even though there the risk of multiple counting must be considered.

Measure M2 promotes advisory services in order to improve the sustainable management and the economic and environmental performance of farms. It supports the use of advisory services (M2.1), the setting up of farm management, farm relief and farm advisory services (M2.2) and also the training of advisors (M2.3) in order to enhance the quality and effectiveness of the advice offered and ensure the updated capacity of advisors. This last point is new compared to 2007-2013 programming period (m114 and m115). Another difference is that in the current programming period, users are not limited in the frequency they use advisory services anymore. It allows users to get a service adapted to their needs.

Advisory services of Measure 2 aim to improve the sustainable management of the farm and the "economic and environmental performance of farms". Thus, they foster a **holistic approach** of the farm and may cover a very large range of topics integrated in a broader economic and environmental approach of the farm. The FAS (established in Articles 12 to 14 of Regulation (EU) No 1306/2013) rests on a specified list of topics⁷¹, especially topics of common public interest.

⁷¹ Cross-compliance; greening; definition of maintenance of agricultural area, advice related to several other Rural Development supported measures at farm level like farm modernisation, innovation; requirements of

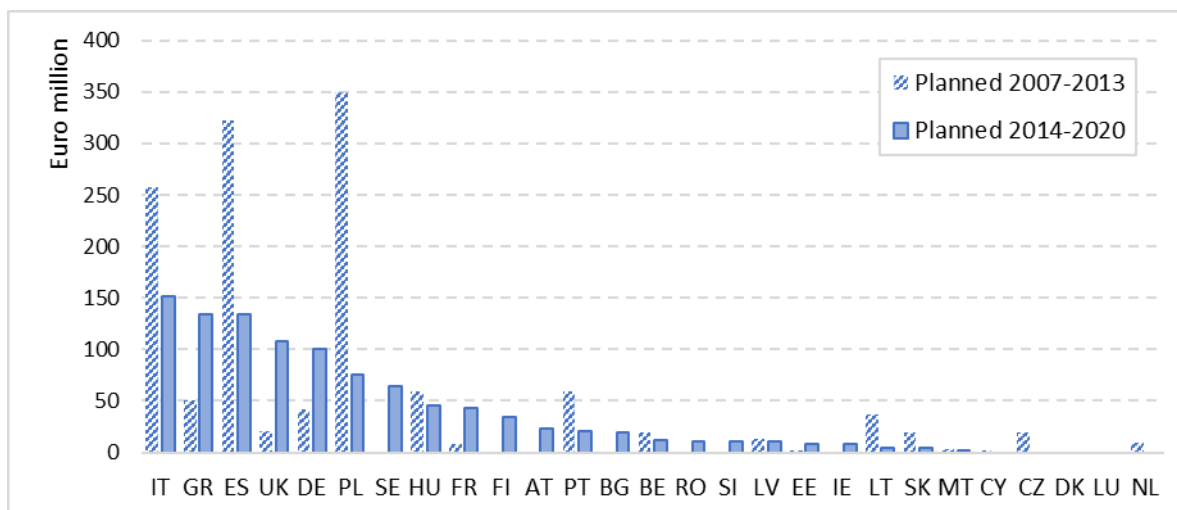
Comparison 2007-2013/2014-2020

In 2014-2020, out of 112 national or regional RDPs, 70 RDPs have programmed the M2, of which 40 justified first achievements in AIR2018. M2 was not scheduled in 5 MS (CY, CZ, DK, LU, NL) and in some regional RDPs in Belgium (1), Germany (5), Spain (7), France (19) and Italy (5). Greece, Hungary, Malta, Romania and Slovakia have not reported any decided or realized budgets on M2 yet.

The number of countries which planned the measure for advisory services raised slightly in 2014-2020. **However, the amounts foreseen for this measure have decreased** from EUR 1.30 billion in 2007-2013 (m114 and m115) to less than EUR 1.05 billion in 2014-2020, which amounts to a 20% decrease. The share of advice measures budgets also decreased from 0.9% to 0.7% between 2007-2013 and 2014-2020.

The situation remains very variable from one MS to another. Among the case study countries, Ireland, which did not plan Measures m114 and m115, is now providing a budget in 2014-2020. Some countries greatly increased their budget like Greece (+168%), Germany (+140%), France (+437%) or Estonia (+350%). Others decreased it like Poland (-79%) or Italy (-41%).

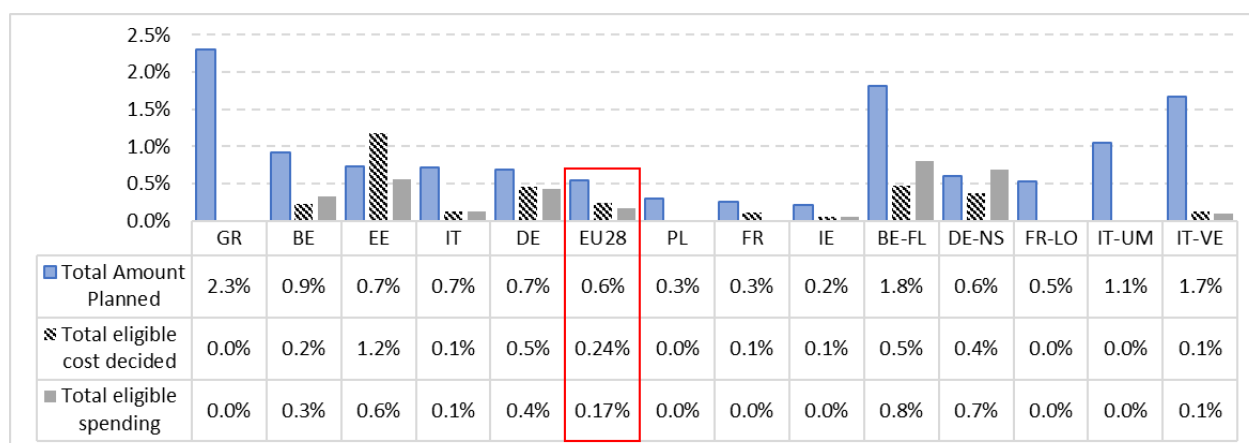
Figure 24: Total public budget planned for advisory services measures between the 2007-2013 (m114-m115) and 2014-2020 (M2) periods, at EU-level



Source: ADE based on ex-ante evaluation of CAP 2007-2013 and RDP section 11 for 2014-2020 (Metis and AEIDL, 2008) (situation: 31/12/2018, data retrieval on the 28/08/2019)

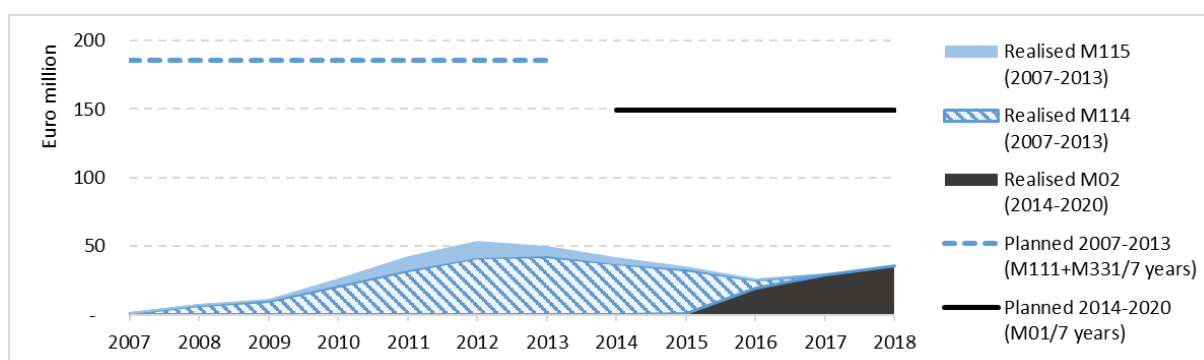
Implementation

At the end of 2018, the **implementation of M2 is definitely behind RDP's average**, even if the situation varies depending on the MS. According to AIR 2018, less than a quarter of the amounts planned for 2014-2020 had been decided by the end of 2018 (23.1%, EUR 242 million) and the rate of expenditure was 9.5% (EUR 99.9 million). These decision and expenditure rates are well below the average for other RDP measures (66% and 29%). As a result, measure M2 represents on average only 0.2% of the amounts decided or spent on the RDPs, whereas it accounted for 0.7% of the initial budget.

Figure 25: Share of M2 in total RDPs public spending

Source: ADE based on ESI

In 2007-2013, the implementation of the m114 and m115 Measures also showed a strong under-achievement. At the end of the programming period, expenditure amounted to EUR 277 million, i.e. 21% of the budget initially programmed for these two measures. Measures m114 and m115 had a very mixed review at the end of 2013 according to the synthesis of 2007-2013 ex-post evaluation (Ecorys and IfLS, 2018). It is however hard to say what were the difficulties encountered, as the evaluation did not detail them, and to assess whether CAP 2014-2020 was successful in solving these difficulties. It should be noted, however, that while the budget allocated to advisory services has been revised downwards slightly, it is still significantly higher than the expenditure recorded in 2007-2013.

Figure 26: EU28 - Total public spending m114 and m115 (2007-2013) - M2 (2014-2020)

Source: ADE calculations based on DG-Agri dataset

The breakdown of expenditure by Priority and Focus Areas shows that half of M2 expenditure is associated with the economic component, including the economic performance of farms (Focus Area 2A, 41%), generation renewal (Focus Area 2B, 4%), and the integration of farmers into the value chain (Focus Area 3A, 5%). Advice given in relation to environmental (Focus Area 4, 37%) and climatic (Focus Area 5, 7%) Priorities also accounts for a significant share of expenditure (37%).⁷²

As the other KE-I-A measures, the implementation of M2 suffered from a delay. The MS first gave priority to the launch of the most financially important measures, delaying the launch of the smaller measures.

French and Italian case studies highlighted the difficulty of implementing measure M2 because of the initial obligation to choose beneficiaries through call of tenders following the public procurement rule. The Omnibus decree has solved this problem. In Veneto and Umbria, this resulted in a big delay in implementation. In France the implementation of measure M2 has been abandoned in the 4 French metropolitan regions which had planned

⁷² These ratios must be interpreted with caution, since the advice associated with Focus Area 2A, for example, may be related to the overall performance of farms combining economic, agroecological and environmental farm performance.

it (including Lorraine). The funds dedicated to measure M2 were reallocated to other measures and French regions created parallel measures using regional funds.

The Irish knowledge transfer discussion groups require a lot of administrative work on the part of the farmers (e.g. breeding plans, health and safety plans, monitoring profits, etc.). This paperwork is generally passed on to the advisors, which results in a heavy administrative burden and less time spent with farmers to advise them.

In Greece, due to financial constraints, the advisory services have been privatised, which degraded the quality and impartiality of the advice given.

The Belgian case study highlighted that the framework of KRATOS was too rigid and prevented advisors to tailor their advice to the needs of the farmers. Indeed, for each theme of advice, advisors must include all elements described in the specification of the themes, even if those elements aren't relevant for the farmer.

In Lower Saxony, the public funding of agricultural advisory services allows to tackle subjects with lower economic benefits like biodiversity and sustainability, which would not be taken up otherwise.

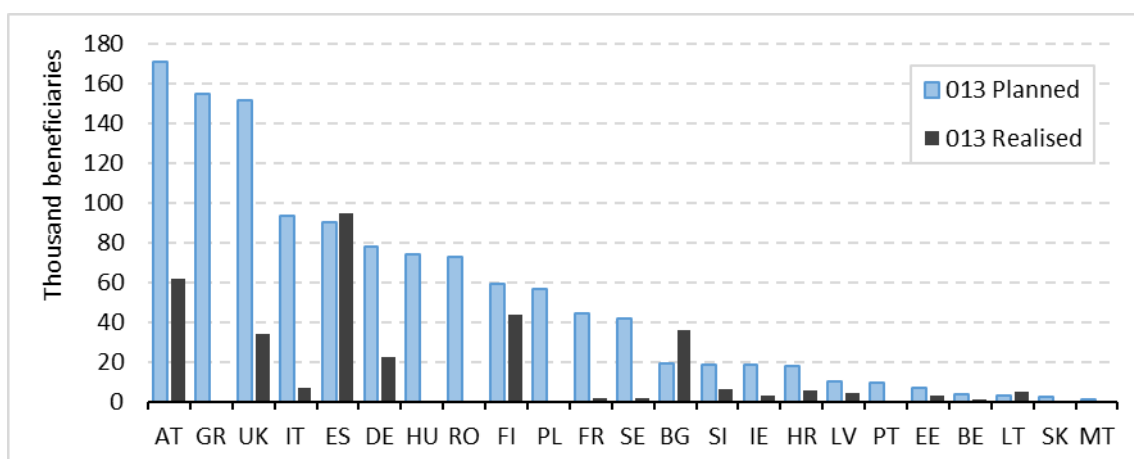
Number of beneficiaries advised (O13)

The CMEF output indicator "number of beneficiaries advised" (O13) is directly linked to the sub-measure 2.1. For all 2014-2020 RDPs, the total planned number is 1.2 million final beneficiaries advised under Measure 2. According to AIR 2018, 333 959 beneficiaries were advised under M2.1 by the end of 2018, which represents 27.8% of the target. Without considering the different categories of beneficiaries advised and the eventuality of some multiple counting, it sums to 4.9% of the total number of CAP beneficiaries⁷³.

This level of achievement by the end of 2018 is already well above the 178 500 farmers who received advice under m114 over the whole period 2007-2014. At the end of 2018, the number of advice beneficiaries exceeded the level achieved over the whole period in 14 of the 23 MS.

Predictably, the planned and realised numbers of final beneficiaries advised vary greatly among the different MS, as presented in the following figure (for all Member States with a realisation).

Figure 27: Number of beneficiaries advised planned/realised under M2.1



Source: ADE based on 2018 AIR dataset

Five Member States (namely Greece, Malta, Poland, Romania and Slovakia) planned to have beneficiaries advised but did not mention any achievements (until 31/12/2018).

Number of advisors trained

With regard to the CMEF output indicator "number of advisors trained" (O14), no planned figures were determined. In addition, only eight MS reported a realisation by the

⁷³ Based on 6.73 M CAP beneficiaries.

31/12/2018: Denmark, **Estonia**, Spain, Croatia, **Ireland**, **Poland**, Sweden and the United Kingdom.

A total of **5 031 advisors** were trained across the 2014-2018 period as a result of Measure 2.3, with still the possibility of double counting. The aggregate analysis for these 8 MS highlights the wide range of differences among the different MS. The MS with the greatest number of advisors trained are Ireland, Croatia and UK (with 2 259, 1 071 and 907 and advisors trained respectively) across the 2014-2018 period. Respectively 123 and 101 advisors were trained in Estonia and in Poland.

The total number of advisors trained compared to the total number of beneficiaries advised gives a ratio of **0.02 advisors trained/final beneficiary advised**. Predictably, it varies among the different MS. Ireland has the highest ratio reaching 0.7 advisors trained/beneficiary advised. Estonia and Croatia follow but at distance since their ratios are only slightly above 0.1 advisors trained/beneficiary advised.

Requirements for advisory training

The case studies showed a diversity of views regarding the training of advisors.

In Flanders, there are no obligations for advisors to engage in training activities in order to be selected for M2 KRATOS. Besides, the training for advisors is not organised by the Flemish government. Advisors have to assist to trainings organised in-house or to look for training opportunities themselves. In Germany, advisory services must participate in an approved event at least once during their period of approval (2 years). In Ireland, training requirements for FAS advisors are very high: they must have FETAC level 8 qualification in agricultural science (or an equivalent) and comply with Continuous Professional Development courses run by the DAFM. In Estonia, there is a public procurement for each training, which is a very heavy procedure and might lead to choosing the cheapest offers. Besides, the current eligibility requirements prevent organisations with highly specific competence from being selected. Another problem is the apparent lack of interest on the part of advisors, and several trainings have been cancelled due to a lack of participants. All FAS advisors have an obligation to participate in different trainings for at least 25 h per year, and trainings are listed in a personal training plan. The eligible trainings have to be officially organised by licenced training institutions.

➤ [ESQ6 JC3 The CAP enabled the entry of adequately skilled farmers into the agricultural sector](#)

The study on generational renewal (CCRI *et al.*, 2019) stated that **Pillar 2 measures only have a limited positive effect on fostering knowledge transfer** and innovation among young farmers.

Indeed, **the CAP does not directly support initial training of farmers** and does not have high effect on educational level of farmers. CS France shows also that **applicants for installations are not eligible for training co-financed by the EAFRD before their installation** because they do not yet have the farmer status.

However, most case studies (FR, EE, GR, IT) showed that the conditions associated with the starting-up-aid (M6.1) are CAP's main tool for improving the level of qualification of new entrants. These conditions are defined at the level of each Member State and may be of two types:

- **A minimum level of agricultural qualification:** For instance, in Ireland, a level-6 agricultural certificate called "Green Cert" is mandatory in order to access CAP measures related to YF in Pillar 1 and 2. According to the generational renewal study, this requirement has positive effects on competitiveness since trained new farmers are producing 12% more than untrained ones. In France, the minimum qualification level to access YF aid (M6.1) is the professional baccalaureate. This condition is an incentive for young people to complete their agricultural education before their installation, especially as YF status allows for higher intervention rates in other EAFRD measures.
- **Requirements for training and advice in installation period:** in France, beside the minimum qualification requirement, every young farmer has also to validate a Personalised Professionalisation Plan in order to complete their qualifications and

guarantee that their agricultural project will be successful. In Veneto, young farmers must participate to training activities, specifically in relation to agri-environmental practices. They also are obliged to apply for advice foreseen by M2. Even if they met already the requirements in terms of capacities (degree on agricultural related topics), they have the obligation to follow the training related to professional updates. In Umbria, the access of young farmers to M6.1 is under the precondition of being trained in one of themes of M1. While, one of the themes tendered under M2 is the renewal of farmers.

The EU legal provisions require a business plan driving the development of the holding after the young farmer's setting-up. These provisions allow considerable flexibility to Member States as regards the type of actions required for the development of the activities of the agricultural holding to be included in the **business plan**, which **can also include training and advice**.

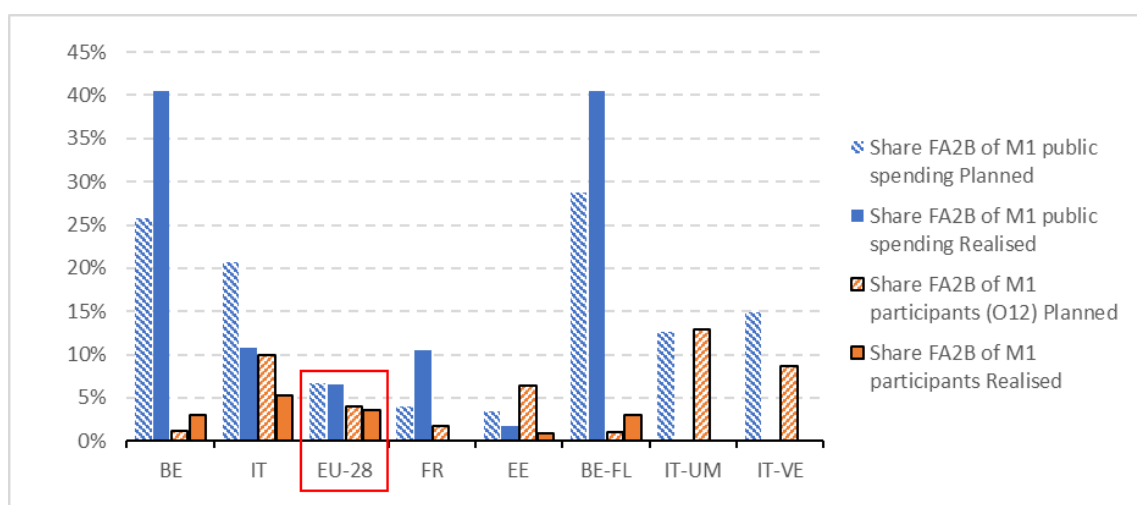
The generational renewal study had indeed shown that **EAFRD support is a lot more effective in supporting the entry of adequately skilled farmers when CAP measures are delivered in packages**, meaning that there are synergies between the measures.

An important source of KE and best practices for new entrants is also informal peer support. However, it is not always easy for young farmers to access informal farmer networks. In Ireland, the main impact in KE is from the support for farm partnerships which deliberately focuses on linking young farmers with older farmers which provides encouragement for older farmers to step back and younger, and usually more highly educated, farmers to take over farm management over a period of time.

Young farmers benefit from all training measures in the same way as other farmers. Nevertheless, **some training or advisory measures are targeted more specifically to young farmers and are included under the Focus Area 2B**. Indeed, the FA is designed to facilitate the entry of adequately skilled farmers into the agricultural sectors and in particular young people.

Hence at EU level, **6.8% of M1 planned expenditures is allocated to the Focus Area 2B** which correspond to 4% of planned training participants. This concern 17 of the 28 MS. At CS level, no M1 expenditure is directly associated with the FA2B in Germany, Ireland or Poland. The share of FA2B is significant in Belgium (Flanders 28.8%) and Italy (Umbria 12.6% and Veneto 14.9%).

Figure 28: Share of Focus Area 2B "facilitating the entry of adequately skilled farmers in the agricultural sector" in knowledge transfer (Measure 1)



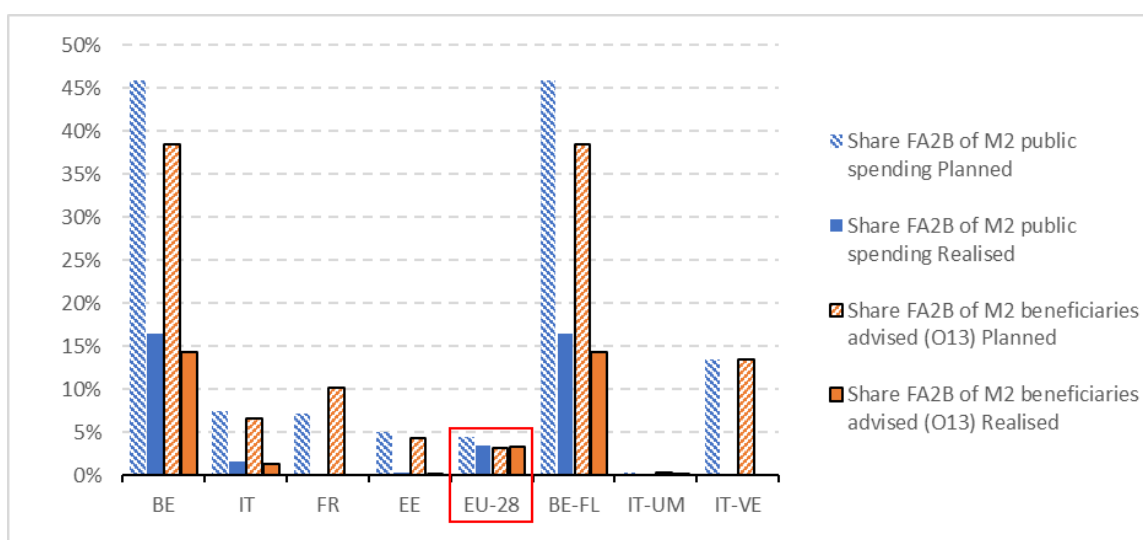
Source: ADE based on 2018 AIR dataset

Flanders has developed a comprehensive set of starters courses which provide training on (A) general business management and legislation regarding agriculture, (B) business management, legislation and certain important technical aspects with regard to an agricultural subsector, (C) technical knowledge needed for the establishment of a first

holding and training on handling plant protection products (fytolientie). The full course comprises 160 hours: 100 hours on general agricultural knowledge and 60 hours on sector specific knowledge. In Italy, there is an obligation of training and advice for young farmers associated M6.1.

For measure M2, 4.4% of the M2 expenditure planned at EU level is allocated under FA2B which represents 3.2% of planned farm advise beneficiaries. The share of M2 directly associated with the renewal of generations therefore remains fairly limited. It concerns 16 of the 28 MS (and only 10 already justifying expenditure under Focus Area 2B). At CS level, no M2 expenditure is directly associated with the Focus Area 2B in Germany, Ireland, Greece or Poland. The share of the Focus Area 2B is significant in Belgium (Flanders, 45.9%), Italy (Umbria 13.6%), and initially in France (7.6%). But in all the countries concerned by the case studies, the share of the Focus Area 2B is much lower than expected (or even nil) at this stage of implementation (2018), mainly due to administrative burdens.

Figure 29: Share of Focus Area 2B "facilitating the entry of adequately skilled farmers into the agricultural sector" in advisory services (Measure 2)



Source: ADE based on 2018 AIR dataset

Nevertheless, 56% of young farmers (under 35 years-old) in the EU-28 still relied on practical experience only in 2016 (see JC6.1)

- [ESQ6 JC4 The advisory services and trainings meet the requirements with regard to the standards of modern, high quality agriculture and sustainable and environmentally friendly farming systems](#)

The question of addressing the needs, particularly of farmers, is the subject of the ESQ14 (Theme 5) and will be further developed and consolidated in the next report.

As mentioned previously, the whole CAP framework defines requirements with regard to the standards of « modern and high quality » and « sustainable and environmentally friendly » agriculture (cf. introduction). These standards are broad. In particular, they include the question of agricultural production respecting strict conditions in terms of environment, animal welfare and food safety. They also refer to the set of rules aimed at enhancing sustainability (in particular cross-compliance, greening under Pillar 1 and several Pillar 2 measures) and adoption of environmentally friendly practices or strict compliance with specific production methods. These concerns more broadly agroecology with topics such as alternative to use of pesticides or chemical inputs, integrated pest management, organic farming, water, biodiversity, soil and climate measures.

According to EU legislation, advice to farmers under **M2 must cover at least one of the following elements**: Statutory management requirements (SMRs) and/or standards for good agricultural and environmental conditions (GAEC); greening; measures at farm level provided for in the RDP aiming at farm modernization, competitiveness, sectoral integration, innovation and promotion of entrepreneurship; requirements of the Water Framework Directive (2000/60/EC); principles of integrated pest management (Article 14

Directive 2009/128/EC) and where relevant, occupational safety standards or safety standards linked to the farm or specific advice for farmers setting up for the first time.

The case studies show that the training and advice measures under the CAP help to foster the adoption by farmers of these standards and to improve their practices.

The topics covered by the training and advice actions are broad. The needs expressed by farmers often relate to management, technical aspects or in line with other CAP measures or requirements. These needs are significant and are generally covered well by the AKIS, whether financed by the CAP, by national funds or by the private sector (see ESQ14).

The training and advisory actions supported by the CAP or national funds are not only aimed at meeting the needs expressed by farmers, but integrate environmental, climatic or societal requirements to a rather large extent, as illustrated by case studies below. These topics may be the subject of specific thematic actions or may be addressed indirectly through other modules in order to reach a wider audience. In several cases, training or advice is provided in support of environmental, climate or investment measures.

In **Flanders**, the demonstration projects (M1.2) includes themes such as data and digitalization, preventive healthcare in view of a reduced use of medicinal products and Integrated Pest Management (IPM). The KRATOS advisory services contributes at first to Priority 4. Possible subject of advice includes in particular the (1) business plan, management and safety at work (44% of advice for nonstarters), (2) eligibility and greening criteria for direct payments (22%), (3) Energy (15%) (4) Agri-environment action regarding biodiversity, conservation targets, integrated approach to nitrogen (PAS, 9%), (4) Water, Integrated Pest Management (IPM) and Water Framework Directive (5%), soil (2%).

In **Lower Saxony**, the current range of advice offer meets generally farmers' demand. Most of the advisory services were related to greening (mandatory, 26% of the total), Agri-environmental measure (15%), animal welfare (13,3%) and minimizing the use of antibiotics (8%). This last point has been dealt with to a large extent by the region over the past few years and there is evidence that use of antibiotics has been successfully reduced and alternative cures are mainly used for dairy cattle. The other themes are the reduction of emissions of GHG (crop and animal production, 10,5%), biodiversity, nutriment cycle 5,9%, and material flows (5,9%). The interviews suggest that the annual contacts at the time of the CAP declarations enable advisors to make farmers aware of the need to take these advices. A considerable effort has also been made within the framework of M1.2 (EUR 75 million) on "Water protection" linked to the WFD (Water Framework Directive) (see ESQ5).

In **Estonia**, the environmentally friendly farming practices aspect is part of other advisory fields (e.g. plant production, animal husbandry). Indeed, the interest of farmers to get advice on these specific topics is considered as rather low. Nevertheless, several AEC measures (M10) - as well as OF (M11) measure - include mandatory training requirement which contributes to the increase of farmers knowledge and awareness in environmental issues (incl. elements of agroecology). Total uptake of these measures (such as Environmentally Friendly Management, Semi-natural Habitats, Regional Water Protection or OF) is high. The area managed by these farms covers more than 70% of Estonian agricultural land. For example, training of Environmentally Friendly Management measure includes soil protection, organic matter and Corg in soils; calculation of humus balance; preventing leakage of nutrients; catch crops, cover crops, green manure; importance and protection of pollinators.

In **Umbria**, training is also mandatory for applying to M10, M11 and M14, concerning organic and integrated agriculture and animal welfare. The topics addressed by advisory concern in particular quality systems, sustainable plant protection, improvement of production techniques, energy efficiency, improvement of animal farm management control, biodiversity, conservative farming, organic farming.

In **Veneto**, most of participants were trained on topics related to P4. About 60% of training courses were about the use of pesticides, followed by cross-compliance, organic agriculture, diversification into non-agricultural activities and security standards as well as

animal welfare. The course related to the use of pesticides is the only to propose final exam to assess the competences and skills acquired. The areas of advice give relevance to the knowledge that will support the transition to more sustainable farming systems and the better capacity to meet security and quality standards. The CS state that KE-I-A measures gave a clear impulse to diffusion of agro-ecology in the Veneto farming system, as well as promoting adaptation to climate change, and more sustainable practices.

In **France**, the training and advisory systems are part of a strong national policy on agro-ecology based mainly on national funding. The training actions financed by the CAP in Lorraine focused in particular on (1) practices based on conservation agriculture, hedge planting and agroforestry or crop management, (2) use of alternative treatment methods that save on the use of antibiotics (Ecoantibio 2017 plan); (3) Run farms with good environmental practices (food autonomy animal welfare and health, feed monitoring, livestock management in organic systems, watercourse maintenance, photovoltaics)

In **Ireland**, the Knowledge Transfer groups have raised awareness of farmers around a wide range of issues including climate change and carbon management, water pollution, animal health and welfare, new technologies, and to a lesser extent farm business management. Agro-ecological approaches to farming may have been discussed in Knowledge Transfer groups, but there was no formal requirement to address this directly. The CAP training and advice services also support some precise initiative such as the Green Low-Carbon Agri-Environment Scheme (GLAS under M10), the Beef Data and Genomics Programme (BDGP) and the animal health and welfare (AHW) in relation to specific animal disease areas, as well as the Burren programme⁷⁴.

In **Greece**, the training actions funded have met the needs of those producers. However, there is too much advisory input related to pesticide use, because this serves the commercial interests of the advisors/consultants. The producers who take this advice say they are satisfied, but more information should be given in an unbiased way. The example of Greece shows the importance of public support to ensure independent advice.

In **Poland**, the most frequent services given by agricultural advisors are related to the CAP measures. Over 81% of the advisors stated that they very often offer advice related to direct payment applications.

The subject of **seasonal workers** is usually not addressed in the training courses or advisory services supported by the EARDF, based on the case study findings. In Flanders (Belgium), there is a section regarding the regulation for working with seasonal workers in the module on occupational safety (M2.1). There are also several language courses for farmers provided under M1.1 training and refresher courses, in order for them to be able to communicate with their migrant or seasonal workers. However, there is still a difficulty when migrant workers wish to handle plant protection products, as the course is only provided in Dutch. In Germany, there is no advisory service for agricultural contractors. In this case, it is the responsibility of the farmer to control the proper execution of the commissioned activities (i.e. use of pesticides), which is difficult with ever-larger farms. In Estonia, CAP measures (knowledge/advice) do not provide information to farmers about the use of seasonal worker and the relevant labour standard and their working conditions. In France, vocational training (and the advice) supported by the CAP in the agricultural sector is only for farm managers and their families (VIVEA fund principle). But in Italy, the training course is also accessible for hired workers and not only for farm managers.

With the help of the **financial instruments**, the EU Commission wants to make the use of funds more effective and efficient in the Structural and Investment Funds. The case studies do not show any specific training or advisory actions on this topic beyond the general business and investment co-skills. In Germany, financial instruments are only used in the federal state and are not used in Lower Saxony, so no advice is given on this. In Greece and probably other MS, advice on financial possibilities is given by commercial banks specialized in the agricultural sector. In Ireland, a recent Teagasc survey of 500 farmers indicated that financial management was an area of concern. The lack of support

⁷⁴ The Barren programme is a farmer led and results-based agri-environmental programme designed to support the heritage, environment and communities of the Burren while addressing water quality issues.

financial management training or advisory in terms of alternative financial instruments is an issue.

4.7 ESQ7: To what extent have the CAP instruments and measures relevant for knowledge exchange and advisory activities impacted the creation or maintenance of jobs in rural areas?

4.7.1 Methodology

4.7.1.1 Rationale and coverage of the Evaluation Question

CAP instruments and measures relevant for knowledge exchange and advisory activities can create or maintain rural jobs **directly**, by funding the working time of advisors and trainers and facilitators of EIP-AGRI Operational Groups. In addition, they can **indirectly** promote the retention or expansion or reduction of labour use in those target groups who receive advice, training or knowledge exchange from CAP-funded or CAP-required (FAS) providers. These two types of impact upon labour define and enable the distinction referred to in the ESQ.

No output indicators are directly associated to rural jobs linked to advisory activities. These could be estimated indirectly by dividing the number of training hours by the number of trainers and advisors. These data do however include multiple counting (see ESQ 5). In case studies, an assessment based upon this data, extended and triangulated with information from MS-level data and interviews with relevant policy officials, could be made. Data is evaluated qualitatively in case studies, against a constructed counterfactual – i.e. by considering likely deadweight and displacement – to assess the net impact on rural jobs of the direct funding of trainers and advisors.

To assess the second type of labour impact is less straightforward due to the difficulties of establishing clear causal linkage between CAP measures and instruments, and employment impacts among beneficiary groups. A mixed methods approach is therefore adopted which combines triangulated informed opinion and partial evidence from local officials, stakeholders, experts and beneficiaries (farmers and foresters), with a data-based analysis looking for potential relationships between appropriate indicators across the EU territory, from a regionally-granulated approach. Relevant findings from the extensive research literature on advice and upon employment and the CAP, are also included in this process.

4.7.1.2 Judgement Criteria (JC)

JC1: the funded relevant measures and instruments led to an increase in the Annual Work Unit (AWU) in rural areas for those providing training and advisory services to farmers and foresters, which was significant / modest / insignificant relative to total rural employment at national / local level.

I1.1 – direct impact: estimated number of AWU supported by the relevant CAP measures, based upon numbers of hours of training or advice provided (output indicator), divided by average trainer/advisor workloads (sourced from survey of providers).

JC2: the relevant CAP measures have led to the sustaining or creation of additional employment among farmers and foresters as a result of knowledge obtained through the KE and advisory activities funded.

I2.1 – indirect impact: Multivariate analysis estimation of relationships between CAP spend on relevant measures and agricultural and rural jobs, for different clusters of Nomenclature of Territorial Units for Statistics (NUTS) 3 regions

I2.2 – indirect impact: any good practice examples of evaluation studies which provide data on jobs stimulated or maintained as a result of specific advisory or training initiatives in the CS.

4.7.1.3 Methodology

For the indirect impact, a Multivariate analysis was performed using data obtained from the European Commission and disaggregated at NUTS3 level. The multivariate analysis aimed to contribute to the overall evaluation of the impact of CAP on jobs in rural areas. The main aim of this analysis was to explore correlations that might suggest the potential impact of Pillar 2 measures related to innovation, training and knowledge exchange on a number of rural employment indicators. Given the consideration that rural employment is context-specific, this is combined with a number of key context indicators.

The analysis included:

- A Principal Component Analysis (PCA), to identify patterns in the data and uncorrelated composite indicators for characterising the NUTS3 regions
- A two-step cluster analysis: hierarchical cluster analysis and K-mean cluster analysis of the NUTS3 regions based on the composite indicators to find patterns of differentiation among regions of the EU
- An econometric analysis, to explore the impact of these indicators on employment indicators, namely general employment rate (%), youth employment rate (%) and agricultural employment rate (%). The results were explained, and their implications interpreted with the help of the findings from literature review and information from case studies.

Principal Component Analysis

All NUTS3 regions⁷⁵ that are characterized as predominantly urban were excluded from the analysis and only data from predominantly rural and intermediate NUTS3 were used. The indicators used in this analysis were variables at NUTS 3 level and are presented in Table 19.

Table 19: Indicators used in the multivariate analysis, measurements units and description

Variable	Indicator type	Unit type	Description
Multimodal access	Context	Index	Multimodal accessibility
Net migration	Context	%	Crude rate of net migration in the region
GVC quality account	Context	Index	Quality + accountability of government services
Tertiary education	Context	Number	The number of people with tertiary education
GVA/c primary	Context	%	Gross Value Added per capita in primary sector
GVA/c secondary	Context	%	Gross Value Added per capita in secondary sector
GVA/c Tertiary	Context	%	Gross Value Added per capita in tertiary sector
Population	Context	Number	Total population
Broadband access	Context	Index	Broadband access
Pillar 1 total expend.	Input	€ value	Total Pillar 1 expenditure for 2016?

Source: CCRI, 2020

The Kaiser-Meyer-Olkin (KMO) and Bartlett's Tests were used for sampling adequacy, and the Principal Components were Varimax Rotated to ensure robustness of the result. Each principal component with an Eigen-value higher than 1 is considered a composite indicator, comprised of the initial indicators that are highly correlated to it. The composite indicators that derived from the PCA and their correlation with the original indicators is presented in Table 20.

⁷⁵ The following NUTS3 regions were excluded for the analysis: CZ010, ES431, ES630, ES640, ES703, ES704, ES705, ES706, ES707, ES708, ES709, FI200, FR20, FR30, FR40, FR50, PT200, PT300, LU000, MT001, MT002, UKK30m UKK43, UKL11, UKL12, UKL13, UKL14, UKL24, UKM24, UKM27, UKM32, UKM33, UKM37, UKM50, UKM61, UKM62, UKM63, UKM64, UKM65, UKM66, UKN03, UKN04, UKN05 due to lack of essential data and/or because of extreme values on certain variables that were distorting the results.

Table 20: Results of the PCA and correlation strength of the indicators for each component

Context indicators	Composite indicator (CI) 1	Composite indicator (CI) 2	Composite indicator (CI) 3
Broadband access	0.738		
Government quality	0.831		
GVA primary	-0.734		
Multimodal accessibility	0.800		
Net migration	0.921		
Population		0.941	
Tertiary education		0.899	
Total pillar 1 expenditure		0.613	
GVA secondary			-0.901
GVA tertiary			0.927

Source: CCRI, 2020

Clustering

The clustering exercise involved a two-step cluster analysis of the composite indicators, including hierarchical and K-mean clustering. The purpose of the hierarchical clustering was to identify the number of clusters and the K-mean clustering, to assign each NUTS3 area to its cluster. The clusters were compared to each other and their main characteristics described. The description of the clusters is based on comparison of the average values of these indicators, per cluster.

Ordinary Least Squares regressions

For each of the clusters an ordinary least squares (OLS) regression analysis with robust standard errors was performed to identify the correlations of the expenditure on M1⁷⁶ and M16 and of the composite indicators (CI) with the employment indicators. Thus, the independent variables used in the regressions are the following.

Table 21: Independent variables used in the regressions

Variable	Unit	Description
Expenditure on M1	EUR (thousand)	Total expenditure in a region on measure 1
Expenditure on M16	EUR (thousand)	Total expenditure in a region on measure 16
CI1	-	PCA result - 1 st component
CI2	-	PCA result - 2 nd component
CI3	-	PCA result - 3 rd component

Source: CCRI, 2020

These regressions were run under the assumption that a region has expenditure for at least one of the measures. The purpose of the OLS was to test the hypothesis that 'expenditure on these measures is correlated with rural employment, rural youth employment and agricultural employment in specific contexts'. Before use in the regression, the expenditure data was normalized using the standardization process, to ensure that all variables contribute evenly to a scale, and to avoid interpretation errors due to the different measurement units of the variables.

⁷⁶ The expenditure on M2 was not included in the analysis because it was found to be highly correlated with the expenditure on M1 (corr = 0.78).

Results

The PCA produced three robust composite indicators (CI). The combination of variables for the PCA, is an indication that the components associated to each composite indicator are likely to increase or decrease in combination with that indicator. The first CI is positively associated with the index of broadband access, the index of government quality, the multimodal accessibility index and net migration, and negatively associated with the GVA from the primary sector. The second CI is related to population, tertiary education and total Pillar 1 YF expenditure. The third CI is associated with increasing GVA per capita from the tertiary sector and negatively associated with the GVA from the secondary sector (Table 20). The hierarchical cluster analysis of all predominantly rural and intermediate NUTS3 regions using these composite indicators as variables indicated that they can be divided into 3 distinct clusters and the K mean clusters analysis helped assign a cluster membership to each of the NUTS3 regions. Table 22, Table 23 and Table 24 provide a description of the three clusters in terms of context, employment rates and budget for M1/M2 and M16. The results of OLS regressions are presented in Table 25, Table 26 and Table 27. To interpret the results and consider their implications for answering the question, evidence from the literature review and case study findings were also considered.

4.7.2 Summary answer

ESQ7: To what extent have the CAP instruments and measures relevant for knowledge exchange and advisory activities impacted the creation or maintenance of jobs in rural areas ?

In answering this question, the contractor should make a distinction between the services providing/supporting knowledge exchange and advice and the farmers/foresters profiting from these services/activities.

As Direct impact: The direct impact of the measures related to knowledge exchange, including the FAS, was mainly investigated through the case studies in selected representative Member States. In principle, according to the results of this investigation these measures appear to be positively related to employment in the advisory sector. As these measures aim at assisting with both the design and implementation of advisory and training programmes, there was a clear perception in the investigated Member States that they contribute to the creation of actual working hours for advisory and training specialists. More specifically, across the investigated areas interviewees reported that these measures and the FAS obligation are successful in maintaining jobs in the sector, not only due to the workload created, but also because in the long term these jobs are essential for transferring knowledge to farmers regarding the sustainable development of their farms. On the other hand, the impact of these measures on the creation of new jobs in the sector was less clear, although in no Member State was it reported as negative.

Indirect impact: A multivariate analysis of context and funding indicators at NUTS3 level suggested variability in the potential impact of measures on youth, agricultural and overall rural employment. The multivariate analysis divided NUTS3 areas into three distinct clusters based on their context characteristics (Table 22, Table 23, Table 24), and investigated the correlation of measures M1, M2 and M16 with rural, agricultural and youth employment in each cluster, in combination with these characteristics and the direct support payments. The results are presented in Table 25, Table 26, Table 27 and clarify that the suggested effect of the measures depends on the characteristics of the area and is interrelated with other context and payment indicators, such as infrastructure, the scale of Pillar 1 payments, and local demographic factors. Areas with numerous small farms and poor infrastructure (areas in Finland, Estonia, Latvia, Hungary, Bulgaria, Romania, Croatia, Greece, Italy and some regions in Poland, Spain and France) seem to have traditional employment models but challenges with youth employment. In these areas the analysis suggests CAP measures may be positively related to the number of jobs, particularly for the young population, as well as the improvement of infrastructure and development of the tertiary sector. In more developed, scarcely populated areas with large subsidized farms (areas mainly in Czech Republic, Denmark, Spain, France, Ireland, Poland, Slovakia, Cyprus and the UK), the analysis finds no clear evidence to suggest that CAP measures relate to employment, however, rural and particularly agricultural jobs are higher where Pillar 1 payments, combined with an increase in population and education level, are higher. Here, the suggestion is that infrastructure may play a negative role in relation to youth employment, for reasons perhaps related to population scarcity and life-style requirements. Finally, in areas with high revenues from the

tertiary sector, good infrastructure and minimal agricultural activity (areas in Austria, Belgium, Germany, the Netherlands, Sweden, Slovenia and the UK), the analysis suggests a potential positive relation of measures with the overall employment rates and agricultural employment. To some extent, any subsidy related to the primary sector would be expected to be beneficial for agricultural jobs; however, on the analysis identified no apparent connection to youth employment. The evidence from the case studies regarding "indirect impact" is very limited but overall it supports the suggested patterns from the multivariate work that there should be some minor, positive impacts of CAP KE-I-A measures on the maintenance of rural employment. No evidence specifically links the FAS obligation to any indirect impact of the CAP upon rural employment.

These results should be regarded as only providing an indication of the potential impact of the measures; because rural employment is subject to a variety of factors, which are also context specific but go beyond the scope of this study and beyond the scope and purposes of the Common Agricultural Policy.

4.7.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

- [ESQ7 JC1 The funded relevant measures and instruments led to an increase in the Annual Work Unit \(AWU\) in rural areas for those providing training and advisory services to farmers and foresters, which was significant / modest / insignificant relative to total rural employment at national / local level.](#)

JC1.1 Direct impact: estimated number of AWU supported by the relevant CAP measures, based upon numbers of hours of training or advice provided (output indicator), divided by average trainer/advisor workloads

Below is a depiction of the situation in the Case Studies, based on the evidence gathered and analysed. In general, the interviewees in the case studies were not in a position to provide adequate or accurate numbers, as the direct impact of these measures on jobs is not directly monitored; in some cases, however, interviewees were able to estimate based on their knowledge of the sector.

- Ireland reported that although both Pillar 1 and 2 measures and instruments provide support (measures) and an expectation (FAS) for advisor training, there is no evidence that they create new jobs. Usually advisors have an increased workload when they are expected to deal with CAP-funded schemes. It was noted that having to deal with CAP-funded schemes (particularly Pillar 1) payments, increases the need for engagement between farmers and advisors, assisting this way in the maintenance of advisory jobs. There is no indication that the numbers of consultants and advisors increase because of this, but it is probably helping to maintain the current number of advisors.
- For Flanders the authorities stated in interviews that there are no data on the impact of these measures on job creation. The study concludes that there is no information on the direct impact on job creation of measures M1, M2 and M16 or the FAS. For M1.1 training and refresher courses, the Member State authority explained that most people giving training are not in permanent employment of the training centres. In that sense, when training centres receive a budget from M1.1, they have the ability to hire people for certain events. Particularly for M1.2 demonstration projects, 60% to 70% of the budget goes to personnel costs, which means that it assists the maintenance of jobs. Similarly, for M2, the Member State authorities indicated that that the support goes almost entirely to the salary of the advisors. All the above are indication that the measures assist in the maintenance of jobs but provide vague proof of the creation of new jobs. According to the results, advisory services currently do not hire more advisors to work because of future uncertainty about the continuation of the measures. However, despite the lack of concrete data, there was a general consensus that if the RDP did not exist, there would be fewer training and advisory opportunities, whereas no views were expressed in respect of the potential impact of the FAS upon advisor employment.

- In Greece there could be a very important direct impact of CAP measure provision. The 3 calls of M1 offer each one 18.7 man-days of training per beneficiary. Greece highlighted that there is a need for training of consultants in order to be able to access and attract more farmers to the training and advisory programmes. A better system for dissemination of information regarding training and advisory opportunities for farmers would also help in the maintenance or creation of jobs. There is also an expectation in Greece that the FAS could help to ensure provision of resources to encourage employment in advisory and training roles, but no concrete evidence on this point, as yet.
 - In Estonia it was reported that there is no concrete evidence on the impact of KE-I-A measures or the FAS on maintenance of jobs in rural areas but considering the hours of training and advice provided, it clearly has an effect on maintenance of jobs. For example, advisors provided RDP-supported advice in total of more than 26 000 hours in 2019. Considering that advisors use part of their time for preparation in addition to time spent training, this was estimated to equal at least 20-30 full time jobs.
 - In France the direct impact on employment was viewed as limited, to the advisory and training sector. The French case study in the region of Lorraine provided some estimated data: authorities reported that in 2017-2018, 58 training actions were supported for a total EAFRD expenditure (co-financing at 90%) of EUR 123 700. Training is usually given by one or two trainers and demands 3 to 4 days of preparation time. The country correspondents thus estimate it represents 2 to 3 Full-time equivalents (FTEs), for this region. Regarding the forestry sector, training activities involve 2 to 3 FTEs for trainers and monitoring actions at the level of the main beneficiary (the training provider). No interviewees saw the FAS as having any relationship to employment creation among advisory services.
- [ESQ7 JC2 The relevant CAP measures have led to the sustaining or creation of additional employment among farmers and foresters as a result of knowledge obtained through the KE and advisory activities funded.](#)

JC2.1 Indirect impact: any good practice examples of evaluation studies which provide data on jobs stimulated or maintained as a result of specific advisory or training initiatives

No good practice examples were identified from previous evaluation studies⁷⁷ in the literature review, or from case studies, in this respect. However, the potential linkages were explored through multivariate analysis. The results are presented in the tables below. Table 22, Table 23, Table 24 present the descriptive values of the context (including Pillar 1 payments) and employment indicators and the average planned expenditure per cluster. Table 25, Table 26, Table 27 present the OLS regression results, showing the correlations between the expenditure on M1 and M16 and the composite indicators (Table 21) on the one hand, and the employment indicators on the other hand.

⁷⁷ 2007-2013 RDP ex-post evaluations and scientific studies focused on EAFRD measure impacts.

Table 22: Descriptive values of context indicators for each cluster

Variable	Cluster 1				Cluster 2				Cluster 3			
	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
Population	249.27	136.52	19.50	714.40	649.85	226.37	114.11	1 477.42	166.71	88.05	20.50	477.16
GVA Primary	0.17	0.04	0.00	0.22	0.13	0.01	0.00	0.09	0.02	0.01	0.00	0.08
GVA Secondary	0.28	0.10	0.07	0.60	0.31	0.09	0.14	0.57	0.32	0.10	0.07	0.70
GVA Tertiary	0.65	0.11	0.35	0.90	0.66	0.10	0.40	0.89	0.66	0.10	0.30	0.93
Total pillar 1 exp	41.85	31.70	0.38	165.85	79.27	59.81	4.17	455.76	15.55	12.65	0.06	76.19
Net migration	-0.19	4.29	-1.69	1.28	0.14	4.24	-0.87	1.32	0.11	7.51	-0.79	0.58
Number of farms	15 536.32	21 014.14	106.99	167 156.3	10 626.15	12 046.31	38.27	69 964	4 129.84	15 956.65	6.00	137 493
Farms larger than 50ha	652.51	746.09	0.00	4 391.96	1 441.98	1 306.03	11.22	6 783.98	292.61	280.03	0.00	2 182.72
Broadband access	74.32	7.21	57.00	94.00	81.43	6.12	68.00	99.00	90.31	4.39	72.00	100.00
Tertiary education	8 187.07	5 164.06	344.61	39 299.98	23 676.88	11 292	5 424.62	72 666.92	5 398.26	3 683.81	690.36	22 198.21
Multimodal accessibility	56.46	20.37	21.38	125.74	83.06	26.52	26.04	170.31	103.95	24.36	28.83	172.05
Governance quality	39.50	18.69	2.65	82.47	59.04	15.22	16.67	92.40	78.80	12.80	28.86	97.70

Source: CCRI, 2020

Table 23: Descriptive values of agricultural employment, overall employment and youth employment rates in the three clusters

Variable ⁷⁸	Cluster 1				Cluster 2				Cluster 3			
	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
Agricultural employment	0.14	0.19	0.00	0.17	0.10	0.08	0.00	0.57	0.03	0.08	0.00	0.08
Total employment	0.91	0.06	0.73	0.98	0.94	0.04	0.77	0.99	0.96	0.02	0.89	0.98
Youth employment	0.59	0.10	0.21	0.82	0.51	0.10	0.22	0.82	0.41	0.08	0.25	0.67

Source: CCRI, 2020

Table 24: Descriptive values of planned expenditure on key Pillar 2 measures, 2014-2020 by cluster (in EUR millions)

Variable	Cluster 1				Cluster 2				Cluster 3			
	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
Expenditure on M1	0.66	1.60	0.00	20.00	1.25	2.53	0.00	16.57	0.70	1.13	0.00	5.78
Expenditure on M2	0.52	1.57	0.00	22.00	0.60	1.01	0.00	6.53	0.58	0.98	0.00	5.72
Expenditure on M16	1.14	2.63	0.00	25.28	1.89	3.01	0.00	18.00	0.66	1.09	0.00	8.42

Source: CCRI, 2020

⁷⁸ These variables are ratios: Agricultural employment= population employed in agriculture/total employed population. Total employment = population 20-64 with a job/total population 20-64. Youth employment = people 20-29 with a job/total population 20-29.

Table 25: OLS results by cluster, correlation impact of CIs and planned expenditure on M1, M2 and M16 within agricultural employment rate

Indicator	Impact on agricultural employment rate		
	Cluster 1	Cluster 2	Cluster 3
<i>Number of observations</i>	309	200	455
Expenditure on M1	N/S ^a	N/S	0.058***
Expenditure on M16	N/S	N/S	N/S
CI1	-0.111***	-0.073***	N/S
CI2	0.100***	0.055***	0.027***
CI3	-0.038***	N/S	N/S

^a Not significant

Source: CCRI, 2020

Table 26: OLS results by cluster, impact of CIs and planned expenditure on M1, M2 and M16 on employment rate

Indicator	Impact on employment rate		
	Cluster 1	Cluster 2	Cluster 3
<i>Number of observations</i>	309	200	455
Expenditure on M1	N/S ^a	N/S	0.017***
Expenditure on M16	N/S	-0.005*	-0.016**
CI1	N/S	0.024***	0.027***
CI2	N/S	0.014***	- 0.012***
CI3	-0.032*	N/S	N/S

^a Not significant

Source: CCRI, 2020

Table 27: OLS results by cluster, impact of CIs and planned expenditure on M1, M2 and M16 on youth employment rate

Indicator	Impact on youth employment rate		
	Cluster 1	Cluster 2	Cluster 3
<i>Number of observations</i>	309	200	455
Expenditure on M1	0.018**	N/S ^a	N/S
Expenditure on M16	N/S	N/S	N/S
CI1	0.12***	-0.071*	-0.072**
CI2	N/S	N/S	0.030*
CI3	0.06***	N/S	N/S

^a Not significant

Source: CCRI, 2020

Cluster 1: developing agricultural areas

This cluster includes 101 predominantly rural and 208 intermediate areas in *Finland, Estonia, Latvia, Hungary, Bulgaria, Romania, Croatia, Greece, Italy and some regions in Poland, Spain and France*. They are moderately populated areas with negative average net migration rate. Infrastructure is the poorest among the three clusters. The employment rate is high⁷⁹, while the youth employment rate is the highest among the three clusters. The agricultural employment rate is also relatively high, as is the GVA from the primary sector. GVA from secondary and tertiary sectors are lower than the other two clusters. The average total Pillar 1 expenditure is close to EUR 40 million. Broadband access rate is low, as well as the government quality and multimodal accessibility rates.

⁷⁹ Each cluster in this analysis is described based on how it compares to the other two clusters.

These areas have many average sized farms. Finally, in terms of tertiary education the clusters rank second among the three. The average expenditure on M1, M2 and M16 is presented in Table 24.

As seen in Table 25, Table 26 and Table 27, spending on the CAP measures (M1 and M16) is not significantly correlated with rural and agricultural employment, but M1 have a positive relationship to youth employment (0.02%). However, the analysis suggested that if these relationships were causal, an improvement of infrastructure would reduce the agricultural employment rate (-0.11%) and would increase youth employment (0.12%). This can be considered an indication of potential infrastructure-related job creation in these areas, or of the improvement of infrastructure providing young people with easier access to more preferable employment opportunities. This idea is enhanced by the finding that these areas have a high rate of negative net migration and reinforced by the fact that an increase in the indicator including GVA from the tertiary sector (C3), matches increases in youth employment (0.06%), but decreases in agricultural (-0.03%) and overall employment (0.03%). Finally, the indicator including Pillar 1 payments (with population and tertiary education), is positively correlated with agricultural (0.1%) but slightly negatively correlated with overall employment (-0.009%). The possible interpretation of these patterns would be that as these aspects increase in an area, more employment opportunities arise for agricultural employment, through CAP funding but also through the need for knowledge and expertise. However, the literature review found that in previous studies, CAP pillar 1 payments may decrease the level of overall employment as they provide income security particularly to the farming population, and impede land mobility as well as the seeking of new employment opportunities.

Cluster 2: developed agricultural areas, with high levels of subsidized agricultural activity

This cluster includes NUTS3 areas mainly in *Czech Republic, Denmark, Spain, France, Ireland, Poland, Slovakia, Cyprus and the UK*. In total, it includes 59 predominantly rural and 141 intermediate regions. They are highly populated areas with positive but very low net migration rate. The employment rate is high, but youth employment is close to 50%. Agricultural employment is also relatively high, but the GVA from the primary sector is moderate. GVA from the secondary sector is moderate, as well, and GVA from the tertiary sector is high. The average total Pillar 1 expenditure is approx. 82 million euros. The cluster ranks second in terms of broadband access and multimodal accessibility rates, as well as in quality of governance, which however is low. These areas have a high number of large farms. Finally, these are areas with high rates of tertiary education. The average expenditure on M1, M2 and M16 is presented in Table 24.

As seen in Table 25, Table 26 and Table 27 any suggested impact of M1, M2 and M16 is generally insignificant on all employment indicators, with only M16 having a slight negative correlation with rural employment (-0.005%). An explanation for this result could be that farm systems in these areas consist of small numbers of large farms that are supported through the Pillar 1 payments, as the analysis shows that although there is high agricultural activity, the GVA from the primary sector is not high. Consequently, this could indicate fewer job offers in these areas – particularly farm and agriculture-related. However, the employment rates, particularly agricultural and youth employment, are correlated with infrastructure levels in these areas. Infrastructure has a positive correlation with overall employment (0.02%) but as spending on infrastructure increases this has a negative link to agricultural (-0.07%) and youth employment (-0.07%). Here, one possible interpretation would be that improvement of infrastructure could have an impact on youth mobility, as well as a reduction of youth jobs as the older population may be enabled to maintain their jobs for longer. Finally, the indicator including Pillar 1 payments (combined with high education and high population rates) has a positive correlation to employment (0.01) and agricultural employment (0.05%). Nevertheless in this cluster, which consists of areas with large farms that are maintaining their income through Pillar 1 subsidies, combined with an increase in population and in education levels, the Measures 1,2 and 16 are expected to have a role in creating or maintaining jobs in the areas and in the sector, and this is supported via case study evidence (see below).

Cluster 3: non-agricultural, developed areas

This cluster includes areas in *Austria, Belgium, Germany, the Netherlands, Sweden, Slovenia and the UK*. In total, it includes 174 predominantly rural and 281 intermediate regions. They are sparsely populated areas with high net migration. The employment rate is very high, but youth and agricultural employment are low. Most of the GVA comes from the tertiary sector, while the GVA from the primary sector is low. They are characterized by low indices of tertiary education, but high multimodal accessibility, broadband access and governance quality. These areas have small numbers of small farms. The average total Pillar 1 expenditure is 15 million euros. The average expenditure on M1, M2 and M16 is presented in Table 24.

As shown in Table 25, Table 26 and Table 27, here, M1 and M2 are positively correlated with overall employment (0.01%) and agricultural employment (0.06%). These areas, regardless of the fact that they have little agricultural activity, have the highest budget dedicated to these measures (compared to the other two clusters, see Table 22). The areas also extract their GVA/capita mainly from the tertiary sector, which could also include farm advisory and training services that avail of the funding opportunities and have the ability to create jobs. M16, on the other hand, has a small negative relationship with overall employment levels (-0.02%). Similarly, to cluster 2, this could be due to the small number of farms in these areas, which anyway offer few job opportunities, and co-operation actions may reduce them even more (e.g. if the co-operation enables economies of scale). The infrastructure indicator had a positive correlation with overall employment (0.03%) but, as in the previous cluster, had a negative one with youth employment (-0.07%). This again could suggest that better infrastructure may be offering the opportunity to young people to leave their areas or allow the older population with already established jobs to continue their businesses without hiring new young employees. Here, the indicator including Pillar 1 payments has a positive correlation with agricultural (0.03%) and youth employment (0.03%). Contrary to the other two clusters, as there is little agricultural activity in these areas, subsidies related to agricultural activities would be expected to increase employment mobility in the sector. Here it may be that the cluster includes areas with few farms that operate as businesses and use the support for investments, including investments in human capital.

Supplementary evidence from the case studies

The evidence from the case studies on indirect impact on rural jobs is very scarce and is described below:

- In Flanders there are no exact numbers indicating job creation related to measures M1, M2 and M16. But all interviewees agreed that these three RDP measures overall have a positive indirect effect on job creation
- In Greece the CAP instruments and measures, according to the interviewees have a positive impact on the maintenance of non-farming jobs, as a number of clerical assistants and informatics experts are also necessary for implementing the existing advisory/consultant system, training and sustainability certification systems.

Limitations encountered during the study

Job creation and maintenance in rural areas is a complex issue that depends on a variety of factors that could be specific to an area, or clusters of areas. For example, these could include *inter alia* population demographics, national or regional poverty levels, access to basic services, geographical limitations and socio-economic needs, as well as local cultural norms, perceptions and beliefs. Therefore, changes in employment rates could be subject to factors that are not examined in this study mainly due to data limitations: as the study is based on secondary databases, it was not possible to acquire data depicting needs, norms etc. Also, there were some notable data limitations on existing variables that could be useful (for example, access to a hospital) but there were also severe gaps in those datasets that would have distorted these results. Nevertheless, the indications from this initial and indicative analysis are suggesting that CAP measures promoting KE, advice and innovation are likely to have a mainly positive, but quite modest, impact upon rural employment in most situations.

C

Theme 3: Efficiency

4.8 ESQ8: To what extent have the CAP measures/instruments and corresponding concepts, strategies and systems (e.g. EIP-AGRI network at EU level, EIP networks in Member States and regions, AKIS, etc.) been efficient in fostering knowledge exchange and innovation, by improving the information flows and advisory activities in rural areas?

4.8.1 Methodology

4.8.1.1 Rationale and coverage of the Evaluation Question

The question addresses the extent to which the CAP measures/instruments and corresponding concepts, strategies and systems (e.g. EIP-AGRI network at EU level, EIP networks in Member States and regions, AKIS, etc.):

- have been efficient in fostering knowledge exchange and innovation?
- have improved the information flows and advisory activities in rural areas?

ESQ8 explores the costs of delivery of KE/support across a range of target populations. The question essentially consists of two questions, which require an initial understanding of the whole AKIS framework within a region or Member State and how it operates. Assessment of efficiency relates to several issues, including:

- delivery costs of different forms of KE (e.g. skills training, knowledge transfer, level of training; level and type of advice)
- outputs and outcomes of the KE and advisory support in relation to overall spending by type of activity (see ESQ5 and ESQ6).

Understanding the extent to which information flows and advisory activities might have improved under the AKIS as a result of CAP measures requires a deep understanding of how the different elements satisfy the needs of the relevant sectors in each MS. Relatively little information exists in the literature, the majority of the evidence was therefore provided through the seven case studies carried out as part of this project. In each case study area evidence was collected from beneficiaries and programme delivery personnel through face-to-face interviews and focus groups. Beneficiaries (and potential beneficiaries) in the case study areas were asked about the following:

- their awareness of provision and its accessibility,
- how far their needs are being met,
- outcomes as a result of KE and advisory support, and
- comparison with previous periods.

Programme delivery personnel were interviewed in individual and group settings to explore a range of issues including:

- Administrative burdens and the nature of delivery challenges;
- Costs of programme delivery, time frames and personnel requirements for design and delivery;
- Perceptions of efficiency and effectiveness of programme delivery; and
- Actual and proposed programme changes.

Identifying costs of programme delivery proved to be the most difficult part of the project. Due to the nature of administrative actions interviewees found it very difficult to isolate a specific element of a programme and quantify the resource allocation. Some aspects were easier than others but in many cases interviewees only had a partial understanding of programme delivery, compounded by isolation as a result of departmental and geographic boundaries.

4.8.1.2 Judgement Criteria (JC)

JC1: Costs of delivery of the CAP measures/instruments and corresponding concepts, strategies and systems (e.g. EIP-AGRI network at EU level, EIP networks in Member States and regions, FAS, etc.) are reasonable

JC2: Extent to which CAP measures/instruments and corresponding concepts, strategies and systems (e.g. EIP-AGRI network at EU level, EIP networks in Member States and regions, FAS, etc.) improve efficiency, adding value to farm operations and production processes.

JC3: Awareness of programmes, support, and access is high across actual and potential beneficiaries.

JC4: Information and advice is well-targeted and addresses stakeholder needs.

4.8.2 Summary answer

ESQ8: To what extent have the CAP measures/instruments and corresponding concepts, strategies and systems (e.g. EIP-AGRI network at EU level, EIP networks in Member States and regions, AKIS, etc.) been efficient in fostering knowledge exchange and innovation, by improving the information flows and advisory activities in rural areas?

At EU Level there is no reliable data covering actual and planned costs of delivery. Overall, the budget allocated to measures 1, 2 and 16 is a relatively low share of total RDP budget. In some MS, advisory and training bodies consider the budget for these measures insufficient. Around 10% of farm holdings and around 20% of CAP beneficiaries are reported as benefiting from CAP Pillar 2 measures. These figures include multiple counting, so they are likely an over-estimate. In addition, a wide variation in reach is noted between MS/regions and instruments and measures.

In respect of the FAS obligation, no information on costs of meeting this obligation could be provided by interviewees in case studies. In those cases (FR-LO, DE-LS) where it was widely agreed that the FAS had not made any difference to the extent or operations of previously-existing provision, both administrative costs and benefits were considered negligible. In other MS, the FAS obligation is linked to RD support through M2, thus comments relating to administrative efficiency apply to the delivery of the funded measure(s) via which the FAS obligation is ensured. It has not been possible to make a generalised assessment of the cost-efficiency of the FAS obligation because its implementation varies considerably between Member States, and the implementation costs are not separately monitored or acknowledged by the public administration.

There is reported to be a reasonable level of cost-effectiveness particularly for measures M1 and M2. For M1, beneficiaries (KE providers) confirm their ability to achieve good results with limited budget, although in some cases they report struggling with covering the cost of delivery, using own resources to fulfil financial requirements (e.g. BE-FL, FR-LO, PL). In some MS the budget is viewed as sufficient by some stakeholders (e.g. BE-FL, DE-LS), who argue that perceived cost efficiency depends on the complexity of the projects funded. Where administrative costs of delivery are estimated, they vary considerably in both estimation methods and results: some are presented as relatively low e.g. under 1% of the total value of (investment) projects on which advice is given, in IT-VE; whereas in DE-LS, delivery costs are estimated around 13-47% of the spend on these measures⁸⁰.

The cost for farmers entails any financial outlay to receive training and advice (which varies between case studies from free to 100% of direct cost), also the time spent on these activities, which may be perceived as too high. For example, in GR, stakeholders and experts report that farmers often consider participating in training activities a 'waste of time' with courses not tailored to their needs.

Another barrier for farmers is distance from the location of activities, with evidence for this issue in data from IT and IE. Distance may be overcome using online learning technology (e.g. DE-LS, but non-EAFRD-funded), which saves farmers time and money.

⁸⁰ High costs are explained by the fact that beneficiaries of training are now the training providers, and the IT system has not been adapted. All applications are registered manually.

The relative reach of instruments and measures is not explicit in all cases. No case studies identified data on the reach of FAS. In many RDPs the targeted population is the entire farming community or all trainers and advisors. However, the actual target population may be significantly lower (e.g. excluding non-active farmers in GR, who make up a large proportion of those registered). In many cases stakeholders suggest uptake rates would be higher if measures responded more fully to farmers' needs, but in some cases a majority is already covered (IE).

Some case studies (PL, GR) reported farmers' opinion that it is hard to find an interesting activity in which to participate. However, expert interviewees say this may be because there is low appreciation by farmers of the value of expert advice. Training advisors to deliver information in a way that is understood and valued by farmers was highlighted as a way to enhance cost-effectiveness of advice.

For advisory and training bodies, although the process has been simplified since the last period, making it easier for beneficiaries to apply brought difficulties in estimating and covering emerging costs (e.g. DE-LS). This results in some advisors losing interest in participating in the activities because the rewards are insufficient compared to the 'paperwork' and time spent calculating implementation costs.

Case study evidence reveals both under-recognised needs for training and advice among large numbers of conventional farmers but also small, part-time, or less-educated farmers; and demand among younger and more 'professional' farmers for more advanced training and advice. CS evidence suggests incomplete awareness of training and advisory opportunities in many cases, especially cooperation M16 (BE-FL, GR, EE).

Evidence suggests measure funding does not cover the costs of outreach and promotion activities. There is very limited connection with "hard to reach" farmers. Farmers in some cases complain it is not easy to find out about available activities, largely because of inconsistent and fragmented information (e.g. GR, PL). This can cause reduced efficiency in measure performance.

The promotion of advisor training is essential to meet the key CAP objectives, as required both by the FAS and the Rural Development advisory services (M2). Together, they have been beneficial for advisors to enhance their understanding of best practice (e.g. animal welfare in IE). They have also assisted the maintenance of jobs in advisory services, and advisors' ability to deliver flexibly to meet the needs of their recipients. Thus, requiring and funding training for advisors can enhance their efficiency. Conversely, strict administrative rules (e.g. standard assumptions on costs as imposed in BE-FL) impede the ability of advisors to be flexible in designing attractive courses or consultations, decreasing efficiency.

CAP funding appears to be an efficient way to enhance AKIS functions, and EIP-AGRI is widely anticipated to be efficient. THE EIP-AGRI Service Point is perceived by case study interviewees in Managing Authorities and stakeholder organisations to have substantially assisted cross-border communication by national networks and to play an important role in dissemination of information and knowledge exchange between stakeholders at EU level.

4.8.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

Delivery Costs, EU information

There is limited data at EU level on delivery costs and efficiency of implementation. According to the literature review, limited data is available covering the costs of both public and private advisory services, and the cost to farmers is not monitored in many Member States. By way of benchmarking, financial costs are seen by farmers not just in terms of paying for advisors, but also the cost of farmers' time spent gaining advice or training. The 2009 FAS survey found variation between farmers in different Member States in the financial savings – i.e. the monetary benefits - attributed to FAS (EC, 2009), just as there were differences in the cost to farmers of one-to-one advice in different Member States in 2009: from free of charge in many countries to nearly EUR 1 000 per year in the Netherlands. Cost of one-to-one advice in 2009 represented on average between 0-2.02% of farm net income, depending on the country and type of advice.

In relation to EIP-AGRI, the running of the EIP-AGRI network was contracted to the EIP-AGRI Service Point, which handles day-to-day operational matters and is mainly occupied with facilitating networking activities under coordination of the European Commission. The Service Point's Annual Work Programmes are decided and supervised by DG AGRI and

executed by the contractor. The Annual Work Programmes specify the activities and services that will be provided throughout the year, in particular the number and content of Focus Groups, workshops, seminars, and missions to Member States, and activities linking and seeking synergies with the ENRD, National Rural Networks and other relevant organisations. The total maximum budget for this contract is EUR 2.5 million per contract year, and the contract can be renewed seven times (2014-2020). According to data provided by DG AGRI, the budget spent annually (since the EIP-AGRI network was established in April 2013) has been EUR 2 million. This covers all EU-level networking activities included in the Annual Work Programmes (Coffey *et al.*, 2016). Nevertheless, with this budget, the EIP-AGRI Service Point cannot cover more tasks despite numerous requests (activity, publication). It is also sometimes insufficient to cover all the costs per event (search for correspondents, travel budget for these correspondents, search for existing work, literature review, etc.). According to the contract, the EIP-AGRI Service Point should have a staff of 10 FTE but it is currently at 15 FTE.

➤ [Case study findings](#)

Data on costs

Case studies throw some light on the cost-effectiveness of national and regional delivery of CAP measures, but with a wide range of variability. No information could be provided concerning the cost-effectiveness of the FAS obligation: no previous analysis of the issue was identified, and interviewees were unable to comment separately on this topic. However some comments on efficiency using M2 to establish new advisory services included situations linked to the delivery of FAS obligations, and in those cases where FAS had no connection to M2, interviewees⁸¹ identified no significant costs or administrative burdens but also few additional benefits from the obligation (see ESQ 11, Table 29).

In BE-FL interviews with the local managing authorities reported a surprising cost-effectiveness of measure implementation, particularly for demonstration projects (M1.2) and Operational Groups (M16), as they achieve a lot with limited budgets. On the other hand, it was identified that cost-efficiency is more challenging for the KRATOS advice (M2), mainly because advisory services were paid a flat-rate, therefore simple tasks were overcompensated, while more complex advisory support has been undercompensated.

In IE, after the 2008 financial crisis, small local (public) advisory services stopped offering agricultural training courses in order to reduce expenditure, and training was provided only at knowledge exchange centres to large numbers of students. Also, individual advisory services were limited to fewer strategic locations, increasing thus the cost of access for farmers and for advisors (transportation and time), while reducing the costs of delivery for the public authorities. In terms of the actual value of benefits, agri-environment and climate measures' scheme training was the most popular and successful scheme among farmers and had the largest budget expenditure. This training entails a payment of EUR 238 per participant, of which EUR 158 supports the farmers' own costs of attending. For trainers, the payment is EUR 80 per validated attendee (Indecon AIR, 2019).

In DE-LS, according to the data provided by the authorities the shares of these measures in total RDP implementation costs are low. More specifically, For M1.1 Implementation costs can be divided into business as usual costs, organisational costs and impact costs, which can be assessed very differently with regard to their justification and changeability. To simplify the processes the regional authority applied, in 2017, an administrative flat rate for indirect costs of a maximum of 15% of personnel costs, intended to reduce ad hoc administrative expenditure. Private advice providers usually calculate hourly rates of about 50 euros/hour for administrative work, 64 euros for advisory services and 80 euros for specialised advice. For farmers receiving individual advice the cost depends on the support rate (80 or 100%). In any case, the farm pays the VAT and, in case of an 80 % subsidy, the difference. So if the advice lasts 19 hours at EUR 70 per hour, the farm would pay

⁸¹ Interviewees from Germany, Ireland and France – both in public administrations and farmers organisations. In France, there are almost no costs at national level. There are however some costs at regional level to take part in the call for proposal to be FAS accredited.

around EUR 250 VAT and a net fee of EUR 1 330 of which EUR 1 060 is covered by CAP support.

In DE-LS, data is available to assess the cost-effectiveness of funding for the GSB (water protection linked to the WFD) measure by comparing the cost of advice to the scale of benefit delivered. The GSB is integrated into a system of special advice with its own monitoring. Reiter (2019) shows a nitrogen reduction effect of 611 000 kg, or 0.7 kg N/ha. There is also water protection advice in drinking water production areas - on 182 500 ha a reduction of the N balance surplus of 6.4 kg N/ha/year can be roughly assumed (Grajewski *et al.*, 2019). This reduction effect could be additionally influenced by participation in area-related water protection measures: the pure advisory effect is likely to be somewhat lower. Nevertheless, if one relates these nitrogen reduction effects to the costs of advice, the result is a cost of about EUR 3.00 per kilogram of N saved. The GSB can thus be classified as having a very high cost-effectiveness ratio for the public authorities (Fährmann *et al* 2016).

Additional data from a separate evaluation⁸² of costs of delivery has indicated implementation costs for different advisory and training measures of the RDP in DE-LS that vary from just over 13% to as much as 47% of measure spend, in the current programme (2014-2020), depending on the type of measure. The highest implementation costs are for training courses leading to professional qualification of beneficiaries, where additional administration is needed, whereas the lower costs are for simple advisory provision by established farm advisors. The FAS obligation entails a requirement for the regular attendance of advisors at recognised training events, which is not regarded as costly to implement by the public administrators interviewed.

For FR-LO, the case study reported that the cost-efficiency of the FAS is limited as both expenditure and outcomes are extremely limited, according to the Ministry of Agriculture.

In PL running costs data for advisory services are available. Both AASC (central agricultural advisory centre) and local agricultural advisory centres (ODRs) are financed from a special-purpose fund sourced from the national budget, local budgets and other sources. In 2018, 3 980 people were employed in agricultural advisory units (in full-time equivalent), including 199 people in CDR, and 3 781 in ODRs. The total amount of the budget subsidy for running costs and property expenses in 2019 was PLN 220.9 million (and was higher than the subsidy for 2018 by PLN 33.9 million), indicating an average cost per fulltime employee of 55.5 thousand PLN/year (c. EUR 12 200).

In IT-VE the spend on M1-M2-M16 (for innovation projects) is about EUR 72 million, 6% of the total planned public expenditure of the RDP. M1 has generally shown a low administrative cost per project approved (not more than EUR 800). M2 presents one of the highest administrative costs per project (about EUR 1 900), but its share of the total project cost is quite negligible (under 1%). The administrative cost of M16.1-M16.2 will be higher in the second call (something more than EUR 2 000), since it required more preparation. But even in this case, the share of total project cost is negligible (0.4 %). The first call was slightly less efficient because it needed long times for projects of small average financial size. This indicates that efficiency level varies with the call and the amount of administrative work required by each call.

In IT-UM, no figures are given for the cost of administration of these measures.

⁸² Quantitative data on the implementation costs of the Lower Saxony (and Bremen) administration were collected in various evaluation studies for the funding period 2000 to 2006, 2007 to 2013 and 2014 to 2020 (Fährmann, Grajewski 2008; Fährmann *et al.* 2016; Fährmann, Grajewski 2018a). (For methodological aspects see Fährmann, Grajewski 2013, 2018b). In these studies, the implementation costs were first collected in the context of a full survey of implementing units. In a second step, reasons for the quantitative findings were investigated in qualitative interviews with selected experts. Furthermore, diverse reports are available from the ongoing evaluation of PFEIL, in which implementation issues are examined and discussed (Fährmann *et al.* 2018; Reiter 2018; Eberhardt 2018; Reiter 2019). Additional qualitative surveys were conducted within the framework of this case study.

Efficiency issues raised in case studies

Measuring efficiency of training and advisory programme delivery is notoriously difficult. Effects of training programmes can vary greatly across beneficiaries depending on individual context, willingness and financial capacity to change, and on prior levels of knowledge. In addition, farmers often take advice from a wide range of sources, seldom depending on a single source of information, and behavioural and management effects can be delayed.

Overall, case study authors report that both Measures 1 and 2 are seen as relatively efficient for farmers because the administrative and procedural costs of applying for and securing funding are now with the training and advisory bodies, rather than with those whom they train or advise. Thus, most of the factors of administrative burden are emphasised at the level of public administrations (national or regional) and training/advisory bodies. Even in the case of individual advice, the procedural set up for farmers is quite simple. The burdens experienced by training and advice providers are discussed in much more depth in ESQ9 and ESQ10 answers, respectively.

Nevertheless, the case studies identify a wide range of issues associated with the 'efficiency' of delivery programmes. These can be summarised under four broad headings.

- Training/advice programmes not meeting perceived needs;
- Complexity of administrative requirements; administrative burdens associated with delivery;
- Lack of trust and low perceived need for expert advice; and
- Administrative capacity.

Low levels of uptake and/or training programmes not meeting needs were identified in several case studies (low uptake in BE-FL and to a lesser extent in IE, both low uptake and perceived ineffective training in PL and GR). This may occur where there has been a lack of cooperation or collaboration with stakeholder groups and potential beneficiaries (or their representatives). Lack of communication between delivery bodies and potential beneficiaries tends to result in training programmes that do not meet perceived needs of beneficiaries. Different perceptions on the type of training and advice needed, between delivery bodies and beneficiaries, is not unusual across Member States but where there is a lack of consultation uptake tends to be lower and programmes less efficient in changing behaviour (e.g. GR). An associated problem in some areas was the lack of trust or perceived need for additional expert input and advice (PL, and among older and more marginal farmers in IE). In areas where the farm population is older and education levels lower there can be a tendency to rely on familiar sources of information such as neighbours, friends, and retailers/salesmen, especially if application procedures are viewed as difficult or burdensome.

Complexity of administrative requirements was identified as reducing programme effectiveness in several case studies (DE-LS, FR-LO, IT-VE, IT-UM, PL, GR). In some cases, administrative requirements increase costs and/or prevent potential beneficiaries from accessing programmes (examples include making the application process too complex, or the requirements too onerous). Another example identified as one of the reasons why Knowledge Transfer discussion groups in IE did not attract more participants: strict requirements in respect of attendance and limited flexibility regarding design were regarded by some farmers as too demanding in relation to the financial and knowledge benefits to be gained. Administrative burdens on delivery bodies were also identified as an issue, particularly for some of the advisory programmes in Ireland, where advisors were not only expected to deliver advice, but also to recruit clients, administer delivery of groups, and pay beneficiaries. Advisors in DE-LS, PL, and FR-LO also noted that the administrative burden increased their delivery costs.

In FR-LO, many actors and National Agricultural and Rural Organisation (ONVAR) do not participate in EAFRD training or advice, mainly due to administrative constraints from successive interpretations of the "good management practices" promoted by the EU, which are interpreted at national and regional level in a more restrictive manner to facilitate

control: accreditation, reasonable cost, public procurement and other administrative burdens. Therefore, only the views of the EAFRD beneficiary organisations (Chambres d'Agriculture and VIVEA) are available, on administrative issues with respect to measures 1 and 2, in France.

For M1: According to VIVEA, EAFRD can only support services provided by "certified" training organisations. This requirement proved restrictive in Lorraine as few agricultural training organisations were "certified". The call for projects issued by the MA mentions the European requirement and specifies that labels, certifications, or standards established by the National Employment Council can be used to justify the qualification of trainers. Calls for tenders issued under M1.1 require as eligibility criteria that the training actions have a "reasonable cost". In its proposal, VIVEA estimated (on a historical basis) the average cost of the services at EUR 30/trainee-hour. Due to a lack of clarification on this point when the convention was drawn up, this average cost was interpreted for reasons of prudence as an upper limit, excluding from co-financing any action exceeding this threshold. However, it is regularly exceeded for more specialised training courses mobilising for example digital methods (more expensive).

The implementation of measure M2 was abandoned due to the public procurement rule, understood as an obligation by the MA. The MA were informed later that the Region could have applied to be the advisory services provider itself. However, this solution was not desirable because the Region would have been both manager of the measure and the main beneficiary. The Omnibus decree might have solved the public procurement issue, but it came out after the M2 closure.

This example from FR-LO highlights the significant challenge to efficiency which has been experienced by the public administrations in most of the case study countries and regions, arising from their response to addressing EU requirements in respect of basic principles including public procurement and ex-ante definitions and verifications of eligibility for funding. These requirements proved particularly onerous in respect of implementing Measure 2 (this is discussed in more detail in the answer to ESQ10), but were also experienced in preparing and issuing calls for Measure 1 (see ESQ9).

In sum, the problem arises because of the juxtaposition of general conditions that have been designed to ensure financial probity in situations where public bodies are purchasing quantities of standard goods from a potentially large range of providers; into systems where public bodies are commissioning quite complex and varied services from a rather limited range of skilled providers, where no single offer is identical to that of another provider, and it is not possible to predict and standardise requirements in advance. Hence, when the public administrations attempt to make predictions and standardisations, they frequently oversimplify or constrain the offers of potential providers which leads to unforeseen problems of extra costs or reduced quality of provision.

In terms of positive efficiency aspects of programme delivery, IT-VE noted the importance of administrative capacity in terms of ability to communicate and cooperate with stakeholders, and having sufficient human capital to learn from previous or initial delivery experience to improve administrative and application procedures. A capacity for learning improved administrative efficiency and led to better targeted and more accessible programmes. In Ireland, administrators interviewed also noted that institutional learning had taken place over successive calls for projects, in particular in relation to EIP-AGRI Operational Groups where application and selection procedures were streamlined and improved. EE also identified institutional learning as a key issue in reducing administrative delivery costs and burdens. In relation to training and advice it was suggested costs could be reduced through issuing fewer calls and making calls for larger packages of programme delivery, and in relation to M16, to creating a two-stage application process to reduce costs to both applicants and administrative bodies. Public procurement issues were identified as a particular problem in EE relating to the legal implications of letting contracts.

The EIP-AGRI Service Point and EU network's role in enhancing efficiency

The evidence suggests that despite a limited budget (i.e. estimated at 3% of total spending on the EIP-AGRI measures across the EU), the EIP-AGRI service point network supports the efficiency and effectiveness of the measures. The network's ability to facilitate contacts and information exchange between stakeholders in different countries/regions is judged its most important feature, which also has considerable potential to grow further. The EIP-AGRI network is seen to play a complementary role to National and Regional Rural Networks, facilitating cross-border networking and knowledge exchange which can lead to future collaborations.

Up to 2016, the EIP-AGRI network was independently evaluated, and judged positively (Coffey *et al.*, 2016). It had generated a large amount of information and established contacts with stakeholders at national and regional level via activities, dissemination materials and networking tools. The network aided promotion of best practice, with examples where sharing information helped the design of support tools and learning materials for improved farming practices in the regions (Coffey *et al.*, 2016).

According to the Self-assessment of European Rural Networks (consolidated report, 2018) the EU Networks' activities led to greater involvement of various stakeholders in rural development, addressed needs (74%), and increased the capacity of RDP implementation (72% for ENRD activities, 63% for EIP-AGRI activities). Overall, the surveyed stakeholders in this self-assessment agreed that the EIP-AGRI network helps the exchange of ideas among researchers across the EU, that may lead to successful research outcomes based on practical farming issues. In addition, stakeholders said that the EIP-AGRI network contributed to the use of good farming practices through its communication and knowledge exchange tools.

Inefficiency due to lack of reach of KE-I-A opportunities

Case study evidence suggests wide variability in levels of awareness and/or reach of KE opportunities among Member States. These can be grouped under the following broad themes:

- A reliance by providers of KE on existing methods of communication (newsletters, websites, social media) that do not always reach the wider target population
- Lack of appreciation of factors influencing the take up of training and advice
- Farmer attitudes to the need for additional knowledge and advice

Several case studies (BE-FL, IE, GR) note that significant proportions of the target populations for KE are not aware of training and advisory opportunities or not confident of their potential to benefit from these. In IE for example it is estimated that around one third of the farm population are not linked into any formal sources of advisory support, and another third only make partial use of opportunities. In general terms, the less-connected farms, tend to be the poorer farmers, either younger part-time farmers with off-farm incomes, or older (often dry-livestock) farmers on more marginal land. The differences between the groups are significant. Part of the problem has been the focus of the "advisory system" on the most productive third of the agricultural sector, where the larger and more profitable farms (mainly dairy) tend to make greatest use of the advisory and information support opportunities. In BE-FL the M2-funded KRATOS advisory services established to ensure FAS obligations are met, are not well-utilised and level of awareness was reported as low, while in PO it is suggested that larger farms make less use of advisory support than smaller professional or more specialised farms. The IE case cited a wide range of information being utilised by farmers, which included: radio, local newspapers, neighbours, merchants, veterinarians, salesmen, and family and friends. These are more important sources of knowledge and advice for around 1/3 of farmers who do not engage with the formal KE-I-A system.

In some MS there appears to be a contrast between the proportion of farmers aware of and undertaking training, and those aware of and accessing advice. In IE large numbers of farmers undertook basic training under GLAS, because it was compulsory, but relatively few made use of other formal advisory support, possibly due to the financial cost but also

because many farmers utilise a range of other trusted sources (as noted above). In both BE-FL and EE, it was suggested that a large proportion of farmers were aware of the training programme, but fewer knew how to contact advisors or made use of advisory services. In DE-LS by contrast, it was noted that formal advice under M2.1 was widely accepted, and advisors found it a useful 'door opener' to tackle a wider range of issues on farms. The evidence suggests that advice often alters farmer awareness of an issue and may result in long-term behavioural change. In IE it was reported farmers seldom make changes based on one source of advice but build up knowledge and understanding from a variety of sources before making management decisions. Assessing the impact of advisory support is thus a complex area that cannot be captured through basic output indicators.

In GR only a very small proportion of farmers access training and advisory support, one reason given is lack of trust in advisors⁸³ and the perception that new knowledge is not required, while another is the age structure and scale of farming. It was noted that younger and more educated and entrepreneurial farmers were keen to utilise CAP-funded training and commercial advisory support services. A similar pattern is found in IE, with low uptake also where farm income only forms a small proportion of household income. There are a number of reasons including lack of interest in changing behaviour and belief in personal experience (among older and less educated farmers), and lack of time to engage for those who are also undertaking off-farm work – many farms in some regions are part-time. In GR it was also suggested that institutional arrangements may partially underlie low awareness, as advisors lack incentives to inform farmers about training opportunities (possibly due to fear of losing their clients).

Much better awareness is reported in EE and IT. EE revealed a significant increase in spending on training and advice and a large proportion of farmers were aware of training opportunities and had made use of advisory support, although the nature and extent of that support is unknown. The evidence also suggests long-term knowledge transfer programmes are being successfully implemented but the uptake of advisory support is much lower than anticipated, perhaps due to lack of trust in the quality of advice provided. Interviewees also indicated low awareness of the FAS, whereas surveys show satisfaction with advice.

In IT-VE the evidence indicates a high level of awareness of training and advisory opportunities, with high levels of demand. A focus group indicated a high level of training and advisory needs, in particular among the more professional farm sector (similar to IE and PO). Small farms are more interested in basic compliance training and advice but the need for training often conflicts with time and financial constraints.

Overall, the case study evidence reveals both under-recognised needs for training and advice among large numbers of small, part-time, or less-educated farmers; and demand among younger and more 'professional' farmers for more advanced training and advice. CS evidence suggests incomplete awareness of training and advisory opportunities, or of the benefits of pursuing these opportunities, in many cases.

- [ESQ8 JC4 Information and advice is well-targeted and addresses stakeholder needs.](#)

Uptake of measures

EU level data

Measure 1: across all 2014-2020 RDPs the target was to train 3.9 million participants, but there are wide variations in the planned target numbers among Member states (see Figure 20). In reality, across the EU a minimum of 1.07 million participants (Belgium excluded – see Table 15) were trained in the period 2014-2018. This represents 37% of the planned target (Belgium excluded) and⁸⁴ 10.3% of the total number of agricultural holdings⁸⁵ (Belgium excluded as the reported numbers for Belgium exceed the number of farms).

⁸³ Greece has de-invested in advice and training. There is no longer any public advice available (advice services have been completely privatised), only private advisors who are therefore linked to 'commercial' interests.

⁸⁴ Without taking into account the different categories of participants trained and the possible double-counting

⁸⁵ Based on 10.5M agricultural holdings

A total of 33 244 actions or operations were supported as a result of M1, representing more than 653 000 training days. GR, IE and IT supported the largest number of training days (greater than 125 000 days). GR and IE adopted a strategy focusing on a few actions (respectively 4 and 10) with a large number of training days. EE and FR-LO supported a very large number of actions or operations (respectively 669 and 960)

Measure 2: Only 52 MS/regions realised expenditure on Measure 2. Five countries did not plan to use this measure (namely Cyprus, Czech Republic, Denmark, Luxembourg, and the Netherlands) as well as 40 RDPs (20 in France, 6 in Germany, 6 in Italy, 7 in Spain and 1 in Belgium). This represents a 39% non-adoption rate for this measure. Greece, Malta and Slovakia planned to use this measure but have not yet done so (as in 16 other regions, which represents 16% of the total).

For the FAS, the database (based on 2017 FAS questionnaire to Member States, pursuant to Article 102(2) of Regulation (EU) No 1306/2013) is subject to a number of issues which reduce the reliability of the figures therein (see limitations section 3.3 in this report). Nevertheless, this indicates that the FAS reaches a minority of farmers in most MS – only Denmark and Slovenia report a number of farmers reached under the FAS which is very close to the total number of farm holdings in their country. In aggregate, considering only those 20 MS where the data appears similar⁸⁶, 'FAS stimulated' advice reaches, at most, about 22% of farm holdings and around 26% of CAP beneficiaries, for the period 2015-2019.

Number of beneficiaries advised (indicator O13)

For all the 2014-2020 RDPs, the total planned is 1.2 million beneficiaries advised under Measure 2. Predictably, the planned and realised number of final beneficiaries varies greatly among the different MS. A total of 333 959 beneficiaries were advised across the 2014-2018 period as a result of Measure 2: 28% of the planned target. This covers⁸⁷ up to 3.2% of the total number of agricultural holdings⁸⁸. The countries with the greatest number of beneficiaries advised, according to the existing data so far, are Austria, Spain and Finland, who have each reported more than 40 000 beneficiaries.

In addition:

- Greece, Malta, Poland, Romania and Slovakia reported no achievements
- Austria and Finland have a planned number of beneficiaries advised exceeding their 2016 total number of agricultural holdings: this implies some holdings get repeat visits. Austria and Finland are also the countries with the highest percentage of beneficiaries actually advised (46.7% and 88.5% respectively).

Number of advisors trained (indicator O14)

With regard to the CMEF output indicator "number of advisors trained" (O14), no planned figures were determined. In addition, only eight MS reported results by 31/12/2018: Denmark, Estonia, Spain, Croatia, Ireland, Poland, Sweden and the United Kingdom. Based on available data at EU level (AIR 2018), a total of 5 031 advisors were trained across the 2014-2018 period as a result of Measure 2. The MS with the greatest number of advisors trained are Croatia and Ireland (1 071 and 2 259 trained respectively).

The total number of advisors trained compared to the total number of beneficiaries advised gives a ratio of 66 beneficiaries advised per advisor trained. Predictably, it varies among the different MS.

Number of EIP-AGRI Operational Groups supported (indicator O16)

For all 2014-2020 RDPs, the target is to implement 15 235 cooperation operations under Measure 16 (Focus Area 1B). Out of these, a second target is to have 3 230 EIP-AGRI Operational Groups supported across the EU-28. As detailed in ESQ4 JC3, in total across the EU-28, 1 646 EIP-AGRI Operational Groups were supported: 51% of the target figures.

⁸⁶ Member states not included: Belgium, Cyprus, Czechia, France, Greece, Hungary, Ireland and Romania.

⁸⁷ Without taking into account the different categories of participants trained and the possible double-counting

⁸⁸ Based on 10.5M agricultural holdings

In case study areas

Overall, the data suggest that uptake of training in most case study areas is relatively high, or has increased since the previous programming period (except for DE-LS where it has declined), whereas for advisory support the numbers are much lower than anticipated in many cases, with a lack of awareness cited as a reason in several Member States. One common thread through case study areas is that the enhanced uptake and provision of services is mostly by farmers that are already engaged with the AKIS and there has been relatively little improvement in accessing the 'hard to reach' farmers via the application of relevant CAP instruments and measures.

In DE-LS Measure M2.1 has achieved a considerable share of the set objectives. Approximately 14 700 advisory activities were attended by around 4 200 agricultural enterprises. In particular, topics with high social and lower economic benefits for the farm, such as the advisory topics "sustainability systems" and "biodiversity" would not be taken up without funding. A total of 65 accredited training events were conducted in the period 2016-2018 for the recognised providers on M2.1. These events were also available to all other interested advisors. The average number of advice hours per year on M2.1 will be around 25 000 in 2016-2018. This is higher than the average figure for the previous programming period 2007-2013, of about 22 700 hours.

The BE-FL case study indicated that for M2 between 2014-2018, almost 20% of farms in Flanders benefited, which the authorities characterized as "extremely low".

IE has seen a large increase in training, and it has been reported in the literature Kinsella (2018) that two thirds of farmers choose to formally engage with advisors through contracts. In 2015 approximately 43 500 farmers were clients of national public agency Teagasc and a similar number contracted the services of private sector agricultural consultants. Less is known about services purchased from private consultants but Kinsella estimates that 58% of all farmers have either no engagement or the lowest level of engagement with advisory services. The case study revealed that CAP instruments and measures have resulted in a larger number of advisors becoming involved in providing advisory support (e.g. through FAS for new advisors, GLAS, and running Knowledge Transfer groups), and a higher level of training for advisors. Farmers have thus benefitted from greater access to advisory support and better trained advisors. A key drawback in the approach has been the limited focus on hard-to-reach farmers. Most of those benefitting from the enhanced information flows tend to be the more profitable farms who are already well connected, and those farmers who have engaged with advisors in order to help prepare applications for funding under various CAP schemes.

In PL actual impact is limited due to late start of the implementation of the measures. The demand for advisory support is small, as it was in the previous RDP 2007-2013. Reasons for low uptake of support for using advisory services were identified in 2013 as: the requirement to cover the entire cost of the service; the psychological barrier related to farmers' fear of being found to be in non-compliance and fear of disclosing this information; complicated application procedures; too narrow range of services and low funding limit per farm; unprofitability of production in small farms; and too low expenditure on promotion and poor flow of information.

In relation to measure M2 (based on 2018 data), 101 agricultural advisors from 6 different companies / entities were trained (no trained forest advisors). In total, 13 training days were carried out, which translates into 1 480 person-days of training received. This is viewed as a good basis to intensify the implementation of Sub-measure 2.1 in the future, which involves reaching farmers and forest owners with professional knowledge.

For IT-VE the rate of achievement for M2 is very low, due to the delay in implementation, starting only after the OMNIBUS revision of rules.

Flexibility of advisors

BE-FL Regarding flexibility of advisors, KRATOS advisors indicated that the KRATOS advice system is too rigid to allow much flexibility, since advice has to comply with the specifications of the module it falls under.

IE: Training the advisors was identified as a key aspect of success. Advisors were supported by CAP funding to be trained up as facilitators of Knowledge Transfer groups. Training focused on building communications and facilitation skills, which are seen as critical elements of successful discussion group delivery: without CAP instruments and measures this would not have occurred. However, advisors noted they were not consulted by DAFM on the design of the Knowledge Transfer groups prior to launch and the approach did not fit with established groups or take account of the dynamics of family farms. Some farmers who had been previously involved in groups refused to join the scheme as they felt it would be restrictive for them, and the payment was not sufficient (given the amount of work required in preparing plans, for example).

GR: Advice is not influenced by CAP instruments and measures due to delays in implementation of FAS and Measure 2. Commercial advisors are reported as quite flexible and adaptable to the needs of producers, although concerns were raised by some interviewees over issues of independence, bias and the quality of advice provided. However, providing information on upcoming training courses does not guarantee farmers' participation and is therefore not profitable, so they are reluctant to do it.

PO: various Programme stakeholders quite unanimously indicated that farmers are moderately willing to take on challenges or experiment. However, it was noticed that their readiness to do so increases significantly if they expect improvements in running a farm, which will translate into a better financial result (reducing costs or increasing revenues). This may indicate that the current stage of farm development means farmers put economic motivations over cognitive satisfaction, willingness to undertake new tasks, etc.

IT-VE reports that beneficiaries' needs are strongly influenced by the regional administration providing guidelines to access M2. From this point of view, advisory organisations were available and ready to adapt to it.

To conclude on this judgement criteria, little data directly addresses this criterion but the uptake information suggests that when these measures are launched, uptake is in line with expectations, so to an extent they must be appropriate to needs and targets. However other information suggests that they are under-utilised by reference to their potential, with low budgetary allocations and low awareness of the offer, in many MS and regions, as well as poor implementation in several MS due to delays in preparing and issuing calls. As discussed in the previous section, administrative issues have been a significant obstacle to ensuring that funding provision or FAS obligations delivered by M2 are in line with needs, in a number of cases (FR-LO, IT and PL).

4.9 ESQ9: What is the administrative burden of the relevant CAP measures/instruments linked to knowledge exchange (including training and information on innovation projects)?

4.9.1 Methodology

4.9.1.1 Rationale and coverage of the Evaluation Question

The question concerns the relevant types of administrative burden that characterise the implementation of **Measure 1** (M1) and **Measure 16** (M16.1 and 16.2), and both addressed to the setting up and actions under the Operational Groups.

Understanding the extent to which there was a real administrative burden which has affected the implementation of these measures requires to gather information among public authorities and beneficiaries. Relatively little information exists in the literature; the only evidence is provided through the case studies.

4.9.1.2 Methodology

The methodology relies on interviews face-to-face and focus groups with:

- Public officials (managing authorities); and
- Representatives of training bodies, advisory bodies, Operational Groups and individual partners, research institutes, single advisors, farmers' associations, producers' groups, individual farmers).

Before each focus group, the country correspondents showed a map of the entire implementation process for each measure (M1, M2, M16.1 or 16.2). The map served as a broad frame to verify the institutional context, the role of the different actors and the ways in which they have put in place the process in the case study. The country correspondents were asked to discuss and validate the map in a focus group only with public officials, mainly those responsible for the M1, M2 and M16 management (there can be different responsible managers per measure), plus the general management authority of RDP. The country correspondents revised the map after the focus group, following amendments asked for by the public officials.

The country correspondents surveyed the working times needed to complete each phase of the process, for each measure (M1, M2 and innovation projects-16.1-16.2). Focus groups allowed to gather relevant information on the modalities of implementation for M1, M2 and M16. Moreover, through a series of structured questions different actors were asked to identify the main factors of administrative burden and score them in order of importance (scores 0=no influence; 1= very low influence; 2= low influence; 3= medium influence; 4= heavy influence; 5= very heavy influence). Scores were collected separately for:

- Managing authorities;
- Training bodies;
- Advisory bodies;
- Single operators (e.g. farmers are participating to Operational Groups).

Identifying the stakeholders' evaluation of administrative burden and its peculiarities according to measures and phases of the process was an uneasy task. Due to partial knowledge of the process by interviewees or lack of availability to answer, it was hard to cover all cases studies/countries and measures with the same precision.

4.9.2 Summary answer

ESQ9: What is the administrative burden of the relevant CAP measures/instruments linked to knowledge exchange (including training and information on innovation projects)?

- At the level of the beneficiaries (farmers, foresters, other land managers and rural SMEs)**
- At the level of MS's administrations (including advisory entities)**
- At EU level**

In answering this question, evaluators should make a distinction between administrative burden, which is linked to the EU policy design, and the burden linked to the implementation and design choices made by the Member States. Where appropriate, evaluation findings should identify areas where there is potential to reduce inefficiencies, particularly unnecessary regulatory and administrative costs.

The main results presented here rely on interviews face-to-face and focus groups with public officials (managing authorities) and representatives of training bodies, advisory bodies, Operational Groups and individual partners, research institutes, single advisors, farmers' associations, producers' groups as well as individual farmers.

Administrative burdens for the beneficiaries (farmers, etc.) proved to be quite negligible for M1, since most of the burden for private beneficiaries has been charged to training bodies.

The burden for beneficiaries in an Operational Group is variable according to the case study and the distribution of roles within the Operational Group. The burden is noticeable in coordinating and managing the Operational Group, especially when the lead partner is a farmer, who are reportedly not accustomed to managing innovation projects.

The following points are related to the **administrative burden at the level of Member States' administrations**.

- M1 and M16: the process phases with the more critical issues are the projects' implementation and the preparation of the call for applications
- For both measures, the different kinds of factors of burden can be summarised in three categories: a) related to EU Regulations; b) related to measures design and public administration procedures; c) related to characteristics of the delivery structure.

M1: a) burden related to EU regulations, includes:

- the definition of eligible expenditures and the related control and payment system (Umbria (IT), Flanders (BE), Lower Saxony (DE), Estonia);
- the rigid allocation of EAFRD support by priorities and focus areas (Umbria);
- finally, the lack of advance payments (Lorraine (FR)), mentioned by beneficiaries (training bodies) who find hard to start projects only with their own financial resources.

M1: b) burden related to measures design and public administration procedures, includes:

- the complexity of selection criteria in the phase of the selection process (Veneto (IT), Umbria (IT), and Flanders (BE));
- standard costs or "reasonable costs", which are adopted to facilitate the approval and administrative management of the projects (Veneto (IT), Umbria (IT), Lorraine (FR) and Estonia);
- the difficulties and hard process of accrediting and certifying training bodies (Lorraine (FR) and Estonia); and
- finally, the already burdensome EU rules regarding controls were more constraining for training bodies (Umbria (IT), Flanders (BE)).

M1: c) burden related to characteristics of the delivery structure, concerns the number of staff involved in the instruction of project applications (lack of regional staff) and the organisation of personnel employed in the selection process. In some cases, a more general problem of governance between national and regional institutions arose.

M1 opportunities to decrease administrative burden can be identified in solutions for revising the internal organisation and the governance of public action, using more widely simplified costs' approach and applying a greater flexibility of rules defining beneficiaries.

As regards **M16: a) the burden related to EU regulations** includes the early difficulty of interpreting the logic and the novelty of the EIP-AGRI approach; the allocation of the resources per focus areas; the lack of advance payments.

M16: b) burden related to measures design and public administration procedures for M16, deals with:

- the complex management of selection criteria;
- the short deadline given to potential Operational Groups to prepare and submit their project proposal;
- the coordination and financial management of the Operational Group, especially when the lead partner is a farmer;
- the rigidity of the partnership structure; the public procurement rules for external services;
- the non-adoption of standard costs;
- finally, administrative controls not proportionate to the budget and duration of the projects.

M16: c) burden related to the characteristics of the delivery structure concerns the organisation of a two-stages procedure for selecting innovation projects: more in detail the setting

up of Operational Group + innovation project versus expression of interest + full project proposal (like in Ireland case).

M16 opportunities to decrease the administrative burden: more widely use of simplified/standard costs; streamlining and making more efficient controls and payment functions (see Umbria); allowing intermediate payments and/or advance payments; more involvement of farmer as lead of Operational Groups (controversial).

There are evidences of **the use of information and advice to support innovation** according to an integrated use of instruments. In the Veneto case study, the use of the package of measures as the implementation procedure for Operational Groups enabled to create connections between the measures involved. In Umbria, the linkage between M1, M2 and M16 is thematic.

Administrative burdens at the EU level. There was no significant administrative burden related to M1. As regards innovation projects, the novelty of the EIP-AGRI approach has created the need for a learning process both in the public administration and in Operational Groups. It required a strong initial effort in EC services in coordination, training, technical support and communication.

4.9.3 Detailed analysis based on the Judgement Criteria (JC)

4.9.3.1 Administrative burden and importance of main critical factors for M1

- [ESQ9 JC1 and JC2 Intensity of administrative burden at EU, national/regional level perceived by different stakeholders and importance of main critical factors in implementation that increase the administrative burden](#)

The present discussion of results includes the three types of burden (at the level of the beneficiaries, Member States' administration and EU level).

The level of implementation of M1, taken as a whole (including all sub-measures), is rather low according to annual implementation reports (AIR)⁸⁹. In terms of committed expenditures, 28 Member States show a decision rate of about 48%. The rate of actual spending is about 20% (AIR 2018). These data suggest that it is essential to understand the reasons of administrative burden and the effects of burden on the rate of implementation and the quality of the interventions that have taken place in different case studies. More detailed information on implementation of M1 and M16 are discussed in ESQ4-5.

A) Burden at the level of the beneficiaries (farmers, foresters, other land managers and rural SMEs

The introduction of the training body as intermediate organism between farmers and the managing authority of the measure has meant a simplification for farmers, both in terms of procedures to access funds and management of project, monitoring, controls and payments. In all focus groups at the study area level, most of the factors of administrative burden are emphasised at the level of public administrations (national or regional) and training bodies. Only the Greek report mentions as a burden the presentation of participation certificates by farmers in the context of training course. No other specific issues is raised by other case studies.

In IE, according to the CS interviewees the administrative burden was significant for both groups- facilitators as well as farmers. But mostly facilitators. The requirements for the meetings were quite stringent. It was down to advisors to produce FIP, Integrated Pest Management, etc. Facilitators were inspected on those. Facilitators were also responsible for payments to farmers, as the facilitator was the beneficiary and was responsible for reimbursing successful participants for each successful year of the programme. List of themes/topics to be covered during knowledge transfer management was suggested by DAFM, but there was some level of flexibility. Several topics were compulsory.

⁸⁹ This is mainly due to the burden for implementation (as illustrated by the spending rates). These 'small' measures with specific requirements (such as M1) are often the last ones for which the Managing Authorities prepare the funding scheme. They mostly start with the financially bigger measures.

B) Burden at the level of the Member States' administrations (including training entities)

Table 52 (see Annex 9: ESQ9-10 – Tables on critical factors of burden) shows, for each case study and for the relevant phases of the process, those critical factors obtaining a score higher than 3 (= intermediate burden) or strongly emphasised in the case study report. Table also indicates for which types of stakeholders these factors are critical: managing authorities (MA) or training bodies (TB). The phase of the process with more critical issues is that of training projects' implementation, and this seems to indicate that the complex of implementation rules is too constraining a quick completion of the training projects. Another rather delicate phase is the preparation of the call for applications, in particular for aspects like selection criteria and related scores, definition and operationalisation of standard costs, rules for accrediting and certifying training bodies, etc.

Looking at the diversity of factors (external/internal to national public authorities, related to EU/national rules, etc.), it seems reasonable to identify more general categories, allowing an easier and more effective reading of them.

Different kinds of factors of burden can be summarised in three categories:

1. related to EU Regulations;
2. related to measures design and public administration procedures;
3. related to characteristics of the delivery structure.

Burden related to EU Regulations

This category of burden emerged in interviews with public authorities (national and regional) and also with DG-Agri officials, who were asked about the most relevant factors of the burden arising from EU regulations on Rural Development Plans. This category is mainly stressed by Managing authorities in the phase of training projects implementation.

The first type of burden lies in **the definition of eligible expenditures and the related control and payment system**, is perceived as a considerable burden, especially for small applications both in terms of duration and financial sizes. The amount of documents and checks for these projects is deemed as disproportionate with regard the financial expenditures and perceived benefits. This problem has been signalled in several case studies (Umbria (IT), Flanders (BE), Lower Saxony (DE), Estonia). In Lower Saxony, beneficiaries stated that *"the procedure and in particular our formal expenditure for the funding measure BMQ [training] are disproportionate to the project duration and the amount of funding"*.

As a second issue, **the allocation of EAFRD support by priorities and focus areas** is creating more burden to the financial monitoring and reallocation during the programming period, more relevant than in the previous programming period (Umbria (IT)).

Another factor of burden is related to **the lack of advance payments** (FR-LO, EE, IT-VE and IT-UM), mentioned by beneficiaries (training bodies) who find it hard to start projects only with their own financial resources. In Flanders (Belgium), the payment of the training budget is an administrative burden as the payments for each training activity is done separately.

Finally, the change of EU regulations causes often problems of interpretation (Estonia).

Burden related to measures design and public administration procedures

A further component of the administrative burden lies in measures/instruments design by public authorities at national/regional level. Private actors (individual farmers, cooperatives, other collective agricultural actors like producer organisations, etc.) particularly perceive this problem. Sometimes it gives rise to 'gold-plating'⁹⁰, when choices

⁹⁰ «transposition of EU legislation, which goes beyond what is required by that legislation, while staying within legality. Member States have large discretion when implementing EC directives. They may increase reporting obligations, add procedural requirements, or apply more rigorous penalty regimes. If not illegal, 'gold-plating'

of public administrations cause additional and potentially unnecessary requirements. There are several features, which can affect the administrative burden:

- the scope and the complexity of the scheme;
- the degree of monitoring and control needed.

As regards **the scope and the complexity of the scheme**, five case studies point out the **complexity of selection criteria** in the phase of the selection process: Veneto (IT), Umbria (IT), Flanders (BE), Poland and Greece. Veneto and Umbria mention this critical aspect, while Flanders highlights the lack of IT in the collection of applications and scores' calculation. In Veneto, according to the beneficiaries, the time required to approve the projects was quite long due to the administrative procedures that treated the applications for financing the courses in the same way as the applications for financing investments.

In four cases (Veneto (IT), Umbria (IT), Lorraine (FR) and Estonia) there is the issue of **standard costs or "reasonable costs"**, which are adopted to facilitate the approval and administrative management of the projects. These costs are inadequate (for the amount set by RDP) for training bodies or the same managing authority in case of specialised courses.

A third relevant point concerns the fact that beneficiaries, in some case (Lorraine (FR) and Estonia) complain about the challenging **process of accrediting and certifying training bodies**. According to these interviews, in these situations, eligibility is evaluated through selective and severe criteria.

As regards **the degree of monitoring and control needed**, in Umbria (IT) the financial constraints imposed by the National Paying Agency, anchored to the focus areas, introduced rigidity in the phase of adoption of financing decrees and notification to training organisms, reducing the flexibility of public action. In Flanders (BE), the already burdensome EU rules were more constraining for training bodies since the auditors proved to be intensely accurate, interpreting European regulations to the extreme. According to the Member State authority on M1.1, this makes the process unreasonable and unworkable, adding to the administrative burden. In Umbria, beneficiaries highlighted the low flexibility of the regional reporting system of the expenses for courses and the constraint of electronic invoicing recently imposed by national tax rules.

Burden related to characteristics of the delivery structure

This kind of burden deals with the administrative capacity of the delivery structure, and two issues appear relevant here: a) if the personnel involved in the assessment and approval of application is quantitatively adequate at national/local level; b) which experiences and skills are involved in the administrative process.

The number of staff involved in the instruction of project applications, and the number of applications received is deemed a critical variable in Estonia. In other case studies, there is a problem of **organisation of personnel** employed in the selection process, due to inadequate skills in the selection activities (Lorraine) or to the complex organisation of a selection commission (finding experts, communication with experts, resolving technical issues, timing and keeping the schedule, etc.) (Estonia, Greece). In most cases, the delays in projects' assessment are due to the inefficiency of the delivery structure in facing these problems. In Umbria, the lack of regional staff has slowed down the procedures of phase P (controls and delivery of final payment).

A more general problem of **governance between national and regional institutions** arose in the Italian case, where the indications provided by the national authorities for the management of the procedures were considered insufficient and unclear. This information gap resulted in uncertainties and delays during phases A (preparation and issuing of the call) and B (guidelines for training Organisms).

is usually presented as a bad practice because it imposes costs that could have been avoided» (EC, 2014a p.27).

C) Burden at the EU level

Burden at the EU level was discussed in interviews with DG-Agri officials, who were asked about the burden arising from EU regulations on Rural Development Plans concerning knowledge exchange.

In general, the prevailing opinion is that there is no significant administrative burden related to M1. Desk officers usually verify the consistency of the measures with the legal framework and the needs of the country/region and monitor their implementation, based on the information received from the Managing Authorities. These tasks are common to the other measures of rural development framework, and no specific difficulties arise.

Even in case of amendments/modifications of M1, the procedure is regarded as business as usual at the EU level.

As regards the regrouping of all knowledge exchange and information activities under M1, it is generally deemed as an efficient way to clarify and unify the legal base as well as the implementing rules and eligibility conditions

- [ESQ9 JC3 and JC4 Presence of opportunities of decreasing the administrative burden and opportunities used to reduce the administrative burden and success/failures](#)

There are several opportunities for decreasing the administrative burden, and some occur in the context of case studies.

A first type of opportunity is revising **the internal organisation and the governance of public action**. It was the case of Flanders (BE), in the sense of rethinking the internal organisation of the measures within the Flemish government and automating some critical part of the administrative process to facilitate its implementation for M1.1 and M2. There is currently an online portal 'e-loket' tool under development which would automate a part of the administrative process (now everything is done via e-mail), both for beneficiaries and the administration.

In France, an original system and a national institution, called VIVEA⁹¹, are providing training to farmers. VIVEA acts as an intermediary structure to handle administrative procedures and funding to simplify/accelerate access to aid. VIVEA is in charge of selecting training bodies (through calls for tenders) and financing them. VIVEA is, therefore, the direct beneficiary of the EAFRD training measure. It implies less administrative burden for operating bodies and more quick delivery of EAFRD payments.

A second relevant issue concerns **the use of information and advice to support innovation** according to an integrated use of instruments. There is some evidence, in this regard, in the Veneto case study. The use of the measure package as the implementation procedure for Operational Groups enabled to create connections between the measures involved. A strong connection exists with M1, M4 and M16.2, being them the most relevant measures for the implementation of Operational Groups. Relevant is also the link existing between M1 and M4, with almost 2 000 beneficiaries on M4 also involved in training. In Umbria case study, the region sought for some form of integration as well, but in weaker forms than Veneto.

In Umbria, the linkage between M1, M2 and M16 is thematic. The themes tendered for vocational training (M1) and advisory services (M2) are strongly linked to each other and to M16, to mutually nourish, as they all respond to the needs presented in the RDP of Region Umbria. For example, the themes, among others, digitization, marketing strategies and organic farming are common to M1 and M2, and they address directly other specific measures (e.g. M16, M4, M6, M10, M14). The themes tendered for M1 are listed and rated to accompany the applications on measures M6, M10, M11 and M14. Besides, the young farmers access to measure 6 is under the precondition of being trained through the support

⁹¹ The participation of farmers to the agricultural social security system in France includes a compulsory and automatic contribution to the mutualised insurance fund for non-paid farmers' training (VIVEA). This fund was set up by the agricultural profession and authorised by the State in November 2001.

of M1. While one of the themes tendered under M2 is the renewal of farmers. Moreover, the selection criteria reward the incidence, within the business plan of the investment targeting the cross-cutting objectives of the RDP (innovation and climate change) on the supported investments (M6; M4).

A third option consists of **using simplified costs' approach**, currently not used in Lorraine (France). In general, the French regions have chosen not to use simplified costs because these were not planned in their RDPs and also for control perspectives in the scope of the M16 innovative projects. Beneficiaries find it hard to justify some expenses such as salary expenses, stamps, etc. In Umbria, the application of the simplified costs, excepting for some adjustments in the parameters applied, is generally considered as a good factor of efficiency because it facilitates the accounting of the projects' expenses and allows valuing the commitment of the farmers to the project activities. Region Umbria has chosen to use simplified costs for farmers and their personnel and of other private and public bodies participating in Operational Groups, including advisors. Beneficiaries reported favourable opinions on the use of simplified costs, except for the limited ceilings for salaries. At the same time there are positive examples of reduced administrative burden compared to the earlier programming period from Estonia - organisations managing long-term knowledge transfer programmes reported that a simplified method used in long-term programmes has reduced their administrative costs remarkably. Previously there were often situations where it was not financially reasonable to apply for a small training project as the time spent reporting was completely out of proportion to the time spent implementing the training. So using a simplified cost method is highly appreciated by the project managers.

It would be opportune to implement **other types of simplifications**, such as those concerning the requirements for participants to training courses (Umbria) and more flexibility for access to non-farmers trainees (Veneto). In Veneto, the management authority emphasised the need for a greater flexibility of rules defining beneficiaries of M1, compared with ESF rules which admit a broader range of interventions.

4.9.3.2 Administrative burden and importance of main critical factors for EIP-AGRI project

- [*ESQ9 JC1 and JC2 Intensity of administrative burden at EU, national/regional level perceived by different stakeholders and importance of main critical factors in implementation that increase the administrative burden*](#)

A) Burden at the level of the beneficiaries (farmers, foresters, other land managers and rural SMEs

Burden for beneficiaries within Operational Groups is variable according to the case study and the distribution of roles in the Operational Group.

The burden is noticeable in coordinating and managing the Operational Group, especially when the lead partner is a farmer. This issue is rather controversial, indeed. In Flanders (BE), farmers participant to focus groups point out that research institutions are more used to the procedures and thus, it makes more sense for them to submit the proposal and manage the project.

In Veneto (IT), the preference given for Operational Groups to appoint as lead partner a farmer/enterprise is a strong factor of significant involvement of producers, but at the same time, this caused the relevant increase of administrative and management burden for farmers, who are not familiar with coordinating this kind of projects.

In Lorraine, the MA strongly influences the type of financial management. In Grand-Est programme, the MA imposed to designate a unique interlocutor in the Operational Group, who receives the convention and redistributes payments to all partners. It forced the authority to get more involved in the setting up of the partners agreement.

In Normandie, payments are directed to all partners individually. The managing authority, therefore, encouraged private partners (farmers or entrepreneurs) to register themselves as a service provider, for questions of administrative simplification.

In Poland, some Operational Groups' leader stated that the burden of responsibility for the correctness of conducting the project is too high and that the administrative burden should be split more equally among the Operational Group members, which would also ensure their commitment and activity in conducting the project.

In Veneto (IT), the MA emphasised that a system of payment to individual partners is preferable to a system based on payments only to the lead partner. This second system seemed not to ensure rapidity of spending and payment delivery, being linked to the coordination and intermediation of the lead partner. The payment to individual partner seemed coherent with the usual working rules of EAFRD. On the other side, this system presents the disadvantage of reducing the capacity of coordination of the lead. In Ireland, the most challenging aspects were the administration of the Operational Group and the financial aspects.

B) Burden at the level of the Member States' administrations (including training entities)

The level of implementation of M16, taken as a whole (including all sub-measures), is lower than M1, according to annual implementation reports (AIR). In terms of committed expenditures, 28 Member States show a decision rate of about 40% and a spending rate of 10%.

For M16, a similar synthetic Table 53 (see Annex 9: ESQ9-10 – Tables on critical factors of burden) shows, for each case study and for the relevant phases of the process, those critical factors obtaining a score higher than 3 (= intermediate burden) or strongly emphasised in the case study report. Table 53 also indicates for which types of stakeholders these factors are critical: managing authorities (MA) or Operational Groups. The phases of the process with more critical issues are that of training projects' implementation, and the preparation of the call for applications.

Burden related to EU Regulations

This category of burden emerged in interviews with public authorities (national and regional) and also with DG-Agri officials.

The novelty of the EIP-AGRI approach, relying on mixed partnerships, has created the need for a learning process both in the public administration and in Operational Groups. The need to understand the logic and the characteristics of EIP-AGRI strongly affected the preparation of the design of the sub-measures 16.1 and 16.2 in the RDP and then in the more operational phase, when MA have to design calls for potential beneficiaries.

In Veneto (IT), the preparation for the call turned out to be slightly more burdensome for public bodies than for Operational Groups' partners. The practice of innovation brokering projects is deemed more demanding than the innovation projects. This difference is probably due to the significant novelty and the relatively recent introduction of innovation brokering in the EIP-AGRI experience. The complexity of EU regulation and the need for interpreting the logic can explain the burden perceived by public bodies in the preparation of the call.

In Estonia, the Paying Agency said that administrative burden is related to preparation and issuing of the call and the assessment of projects, mainly because the projects submitted are complex and at the same time not always as complete as needed (missing or incorrect documents etc.). Clarifications and required guidelines for ownership of the intellectual rights of the innovation project versus requirement of spreading the information and exchanging the knowledge (private vs public interests). The same happened in Umbria, Veneto and Lorraine.

In Umbria, **the resource allocation by focus areas** caused some constrains in project design because of the limitations on the budget available for the proposals. In some cases, it implied the revision of their activities to fit consistency with other focus areas. The programming of the financial resources by focus areas is too restrictive and caused some slowdowns during the commitment and payment phases of the projects' costs. In fact, under the regulation, the financial resources of the RDP must be planned by focus areas

and committed accordingly. However, this requirement does not fit the bottom-up approach inherent of the EIP-AGRI implementation as it may happen that the needs of innovation expressed by the Operational Groups address differently the focus areas. To follow-up these needs, the managing authority needs to initiate a procedure of revision of the RDP with the EC and get its approval. This process, indeed, took some months. These adjustments were quite time-consuming, through causing some delays in presenting the final applications.

Another factor of burden is related to **the lack of advance payments** (IT-UM, FR-LO, DE-LS and EE), mentioned by Operational Groups. The latter find hard to start projects only with their financial resources. This issue is crucial for small structures that do not necessarily have the resources to finance their activities from 1.5 to 2 years before the 1st EAFRD payment. Under the next programming period, the possibility to provide advances will be open. Still, Normandie has already confirmed that it will not be allowed due to the financial risk of these innovative projects.

In Lower Saxony (Germany), pre-financing was a problem for partners who are not so financially strong: this problem is still worse when the partners' shares in a project are unequal.

In Umbria (Italy), the advance payment is eligible in case of investments in depreciable assets and on presentation of a bank guarantee equal to 100% of the investment. It caused problems among the small farms due to the reluctance on banks to grant the guarantee. Secondly, the lack of advance payments may have discouraged small farms from investing in non-depreciable assets.

Burden related to measures design and public administration procedures

Even in the case of M16, there are two categories of burden:

- the scope and the complexity of the scheme;
- the degree of monitoring and control needed.

As regards **the scope and the complexity of the scheme**, Operational Groups in Umbria (IT) and Poland pointed out **the complexity of selection criteria** in the phase of the selection process, and in Umbria and Estonia the quantity and the quality of documents supporting the candidate eligibility. In Umbria, the assessment of Operational Group projects is one of the most critical steps in the procedure. The quality assessment of the projects was affected by the lack of a clear identification of the expected results of the proposed innovations, and this made difficult assessing their potentials. Moreover, the entire approval procedure lasted 483 days from the date of publication of the call until the final acknowledgement of subsidy approval; a duration longer than that set in the all (330 days).

The short deadline given to potential Operational Groups to prepare and submit their project proposal was deemed a relevant burden by the same Operational Groups, affecting the project quality and capacity to respond correctly to the call requisites. In Flanders, Operational Groups state that the period open for the call is too short for farmers to react, and that it would be better a continuous call. In Lorraine, the limited time before the launch of phase 2 (M16.2 call for proposals) may have created difficulties for certain Operational Groups to reach the minimum eligible expenditures of phase 1 (whose minimum threshold was quite high, EUR 50 000, for these kinds of projects).

The rigidity of the partnership structure was a factor mentioned in Lorraine (FR): associating a new partner or leaving the Operational Group during the project's life is greatly discouraged by the managing authorities. These changes would currently add administrative complexity to the project management, but it could be easier under the next programming period. As regards the partnership composition, in Veneto MA argued that processing and marketing firms are not eligible as partners of Operational Groups, preventing the possibility to involve the entire supply chain; this factor limited the creation of certain groups and the potential exploitation of opportunities instead of problems.

The public procurement rules for external services turn out to be burdensome for Operational Groups in most of the case studies. In Flanders, some Operational Groups found it hard to provide estimates or comparative analysis of eligible expenditures because of their innovative nature. The managing authority also encountered difficulties in assessing the innovative function and allowing exceptions to the comparative procedure. In Lower Saxony, it was uneasy for the lead partner to sensitise the participating farms to comply with public procurement rules for each purchase and service. In Umbria, the procurement of services/products by beneficiaries must be the most economical and supported by a three (five in the case of research/university entities) quotation procedure. It is considered time-consuming and rather inadequate to fulfil the specificities of the innovation processes.

Even **the non-adoption of simplified costs** option created an administrative burden in several case studies. It happened in Flanders (BE), where Operational Groups argue that the high diversity of costs (peculiar to this kind of projects) makes the control complex and that simplified costs could strongly contribute to reduce this problem. This diversity of costs brings Operational Groups in French regions to an opposite conclusion. In Normandie, for example, the reasons for non-adoption of simplified costs are just inherent to the vast differences of the Operational Group project and expenses (including experimentation or not, different studies, different experts, etc.) as well as their annual call for proposals. Beneficiaries might meet difficulties in justifying some expenses.

As regards **the degree of monitoring and control needed**, in some cases, administrative controls are not proportionate to the budget and duration of the projects. In Flanders, Operational Groups argue that high administrative burden (deriving from the above factors) is disproportionate to the size of the financial aid (only max. EUR 30 000 per project of maximum 2 years). Moreover, they and Operational Groups in Poland complain that monitoring is exclusively focused on financial issues and compliance with eligibility rules, while attention to results is weak or absent.

Burden related to characteristics of the delivery structure

A two-stages procedure for selecting innovation projects (in the first stage innovation brokering for the setting up of the Operational Group and in the second stage the approval of innovation project) was deemed too burdensome and time-consuming for the available technical resources of the public administration. This solution was implemented in Veneto (IT) (only for the first call) and Lorraine (FR).

In Ireland, the EIP-AGRI selection process by DAFM and respective committees was a two-stage process, with an Expression of Interest followed by a full project proposal. A two-stage approach might be introduced in Estonia: in stage 1 applicant would submit only a simple proposal describing the main idea and the objectives, and only successful applicants of the phase 1 can submit the full project in stage 2. It would substantially decrease not only the administrative burden of the applicants, but also of the Paying Agency.

C) Burden at the EU level

As regards innovation projects, the novelty of the EIP-AGRI approach, relying on multi-actor partnerships, has created the need for a learning process both in the public administration and in Operational Groups.

In the preparation of the present programming period, the work to be done was intense. It required, since the beginning of measure design, a strong effort by the European Commission services to enabling policy design at national and regional levels. It required the preparation of specific guidelines. It also needed a continuous coordination between the DG AGRI horizontal unit and the desk officers, to interpret the objectives of EIP-AGRI correctly and ensure a sufficient degree of flexibility in implementing regulation at the national level.

- [ESQ9 JC3 and JC4 Presence of opportunities of decreasing the administrative burden and opportunities used to reduce the administrative burden and success/failures](#)

Umbria Region has chosen to use **simplified costs** for farmers and their personnel and of other private and public bodies participating in Operational Groups, including advisors. Beneficiaries reported favourable opinions on the use of simplified costs, except for the limited ceilings for salaries.

Even in Lower Saxony (DE), **the application of standard unit costs** has led to a significant reduction in the amount of time and effort required to settle personnel costs. In particular, the application of a flat administrative rate for indirect costs of a maximum of 15% of personnel costs is to reduce ad hoc administrative expenditure. Flat rates also apply to business trips (travel costs and daily flat rates). A negative aspect is the elimination of flat rates for catering, that must now be paid by the participants themselves, since the meetings are too short to get a per diem.

Like M1, another opportunity is the revision of **the internal organisation and the governance of public action**. In Umbria (IT), the MA decided to streamline the bureaucratic steps through maintaining the responsibility of the bulk of the crucial administrative activities, such the controls check on the applications and the requests of intermediate payments of the Operational Groups. These are not delegated to the paying agency, as usual for the Italian RDPs, since an intermediate body does them, the technological park, which gained some relevant experience on the matter during the coordination of several Measure 124⁹² projects (RDP 2007-2013). According to the MA and interviewees, this approach allows smoothing the payment procedures. Also, the MA can work closely with the beneficiaries, and this helps increasing mutual understanding and on-going adjustments of the procedures/requested documentation along with capacity building of both parties.

In Veneto (IT), the preference given for Operational Groups to appoint as lead partner a farmer/enterprise is a strong factor of significant involvement of producers, but at the same time, this caused the relevant increase of administrative and management burden for farmers, who are not familiar with coordinating this kind of projects.

Better solutions have been proposed (e.g. loan guarantees by the state through Estonian Rural Development Funds) in Estonia to sort out the lack of advance payments for Operational Groups. An alternative approach was splitting the activities into different stages and allowing intermediate payments in the course of projects. Some beneficiaries mentioned that it would be better if (similarly to some EU-level projects) some of the costs are pre-funded at the beginning of the project.

4.10 ESQ10: What is the administrative burden of the relevant CAP measures/instruments linked to advisory activities (one-on-one advice or setting up of advisory services?)

4.10.1 Methodology

4.10.1.1 Rationale and coverage of the Evaluation Question

The question regards the relevant types of administrative burden that characterise the implementation of **measure 2** (M2) and the use of the **Farm Advisory System** (FAS) in different institutional settings.

Understanding the extent to which there was a real administrative burden which has affected the implementation of these I&M requires to gather information among public authorities and beneficiaries. Relatively little information exists in the literature; the only evidence is provided through the case studies.

⁹² Cooperation for development of new products, processes and technologies in the agricultural and food sector (Commission Regulation (EC) No 1974/2006).

4.10.1.2 Methodology

The methodology followed to gather data is the same as for M1 and M16 (see ESQ9, above).

4.10.2 Summary answer

ESQ10: What is the administrative burden of the relevant CAP measures/instruments linked to advisory activities (one-on-one advice or setting up of advisory services?)

- a) At the level of the beneficiaries (farmers, foresters, other land managers and rural SMEs)**
- b) At the level of MS's administrations (including advisory entities)**
- c) At EU level**

In answering this question, evaluators should make a distinction between administrative burden, which is linked to the EU policy design, and the burden linked to the implementation and design choices made by the Member States. Where appropriate, evaluation findings should identify areas where there is potential to reduce inefficiencies, particularly unnecessary regulatory and administrative costs.

The main results presented here rely on interviews face-to-face and focus groups with public officials (managing authorities) and representatives of training bodies, advisory bodies, Operational Groups and individual partners, research institutes, single advisors, farmers' associations, producers' groups, individual farmers.

Administrative burdens for the beneficiaries (farmers, etc.) proved to be quite negligible for M2, since most of the burden for private beneficiaries has been charged to training bodies. Even in case of individual advice, the procedure set up for farmers is quite simple.

The following points are related to the administrative burden **at the level of Member States' administrations**:

- The phases of the process with more critical issues are projects' implementation and preparation of the call for applications
- There are three different categories of burden: a) related to EU Regulations; b) related to measures design and public administration procedures; c) related to characteristics of the delivery structure. This latter factor did not find any evidence for the Measure 2.

a) burden related to EU regulations, there was a very general problem with public procurement rules. In some Member States, the Managing Authorities dropped the Rural Development advice measure (M2) due to this obligation. In other Member States, the 'Omnibus' regulation (Regulation (EU) No 2017/2393) solved this problem at the end of 2017, meaning much-delayed implementation. In a few Member States where a call for tenders was launched (in 2016 or in late 2019), its preparation and issuing **required a substantial effort from public officials** (e.g. Lower Saxony in Germany, Veneto in Italy). Furthermore, the maximum level of support and the rigidity in allocating the resources to the different Focus Areas were mentioned in Italian cases.

b) burden related to measures design and public administration procedures, that includes the short deadline given to potential administrative burdens to prepare and submit their project proposal; use/non-use of simplified costs; requirements and accreditation procedure for beneficiaries; changes of implementing rules over time; workload for advice projects' management; and finally, burdensome control and payment system.

Opportunities to decrease administrative burden might be in the advantages of having an advisory body as the intermediary body (coming from the last rural development reform); streamlining training of advisors and eliminating upper thresholds for advice services.

As regards administrative burden **at EU level**, most of the conclusions drawn for M1, can be extended to M2.

Concerning the **FAS**:

i) in Member States and regions where the advisory system is financed directly through RDP measures (M2), there EARDF administrative burden applies; while

- ii) in Member States and regions where the advisory system was already pre-existent and supported by national legislations and financial provisions (Germany, France and Ireland):
- a. the administrative burden was very limited in cases of a simple designation of operating bodies;
 - b. the burden was higher in cases of application of an accreditation process, however no data was available to specifically assess this burden.

4.10.3 Detailed analysis based on the Judgement Criteria (JC)

4.10.3.1 Administrative burden and importance of main critical factors for the Farm Advisory System

Costs and administrative burden related to the establishment and application of the Farm Advisory System are further developed in ESQ11, specifically focused on the FAS.

Concerning the **FAS system**, two types of situations can be distinguished:

- i) Member States and regions where the advisory system is financed directly through RDP measures (M2). In this case administrative burdens are the same as described in the following section (see ESQ10 JC1 and JC2).
- ii) Member States and regions where the advisory system was already pre-existent and supported by national legislations and financial provisions (Germany, France and Ireland).

In the case of simple designation of operating bodies, the setting up of the FAS implied very limited administrative processes. If a selection procedure was established, there was of course some burden. First, the accreditation process includes a selection through a call for proposals. Second, the system of certification of organisms that are recognised by the public authorities as competent to provide farm advice relies on selection criteria, a strong and proved expertise, up-to-date competencies, the training of advisories, and other aspects. However, no specific data was available to assess this burden.

In Ireland, the training of FAS advisors (organised and financially covered by DAFM) was perceived by many attendees as a source of peculiar administrative burden, due to the stringent attendance checks and repetition of topics. DAFM is the body responsible for FAS training provision in all aspects (from invitations, set up to execution of the training) and therefore they carry the bulk of administrative burden.

4.10.3.2 Administrative burden and importance of main critical factors for M2

- [ESQ10 JC1 and JC2 Intensity of administrative burden at EU, national/regional level perceived by different stakeholders and importance of main critical factors in implementation that increase the administrative burden](#)

The level of implementation of M2, taken as a whole (including all sub-measures), is lower than the other two measures, according to annual implementation reports (AIR). In terms of committed expenditures, 28 Member States show a decision rate of about 23% and a rate of spending of 9,5%. More detailed information on implementation of M1 and M16 are discussed in ESQ4-5.

The present discussion of results includes two types of burden (at the level of the beneficiaries and Member States' administration).

A) Burden at the level of the beneficiaries (farmers, foresters, other land managers and rural SMEs)

The introduction of the advisory body as intermediate organism between farmers and the managing authority of the measure has meant a simplification for farmers, both in terms of procedures to access funds and management of project, monitoring, controls and payments. In all focus groups at the study area level, most of the factors of administrative burden are emphasised at the level of public administrations (national or regional) and training bodies.

Even in case of individual advice, the procedure set up for farmers is quite simple. In the Lower Saxony case study, a farmer has to request advice from an approved advice provider selected by him/her. All that is required is to fill in an application form with his/her name and address. The cost of the advice to the farmer depends on the support rate (80 or 100%). Once received the advice, the farmer must confirm the correctness of the information (time spent, advisory topics and recommendations received) by signing the proof of use. The advice protocol is confidential and remains on the farm, a duplicate usually remains with the advisor.

In the Flanders (BE) case study, the electronic portal is very user friendly, and the service is free to agri- and horticulturists which allows for a low administrative burden on the level of the farmer.

B) Burden at the level of the Member States' administrations (including advisory entities)

Table 54 (see Annex 9: ESQ9-10 – Tables on critical factors of burden) shows, for each case study and for the relevant phases of the process, those critical factors obtaining a score higher than 3 (= intermediate burden) or strongly emphasised in the case study report. Table also indicates for which types of stakeholders these factors are critical: managing authorities (MA) or advisory bodies (AB). The phase of the process with more critical issues is that of training projects' implementation, and this seems to indicate that the complex of implementation rules is too constraining a quick completion of the training projects. Another rather delicate phase is the preparation of the call for applications, in particular for aspects like selection criteria and related scores, definition and operationalisation of standard costs, rules for accrediting and certifying training bodies, etc.

Burden related to EU Regulations

This category of burden emerged in interviews with public authorities (national and regional).

Public procurement rules. In Lorraine (France), MA dropped the advisory measure (M2.1) due to the initial obligation to choose beneficiaries through a call for tender procedure⁹³. MA realised later that the Region could have applied to be the advisory services provider itself. However, this solution was not desirable because the Region would have been both manager of the measure and the main beneficiary. The Omnibus regulation might have solved the public procurement issue but came out after the MA decided to close the support measure.

In Umbria and Veneto (IT), MA issued the call for M2 after the Omnibus regulation, and implementation started once the EU has solved the main procedural problems. Management authority explains the high burden with the complexity of EU regulation and the lack of adequate/clear national guidelines. MA delayed the implementation of measure M2 due to the initial obligation to choose beneficiaries through the public procurement. The Omnibus regulation solved this problem, but the call for tenders only was launched in September 2019. In Veneto, the preparation and issuing of the call needed a heavy effort for public officials. This evaluation is coherent with relatively high administrative costs of M2 that emerges from the analysis of ESQ9.

In Lower Saxony (DE), the procurement procedure for selecting suitable advisory bodies was very burdensome. This new tendering system covered four years and took much time at the beginning of the funding period.

In Estonia, the Ministry of Agriculture issued a call for tender to find one single coordinator/manager of the FAS. Rural Development Foundation (RDF) won the tender and signed the contract in July 2015. This organisation is the only one eligible for Measure

⁹³ See the Fiche of measure M2: "...For the 2014-2020 programming period, it is foreseen in the regulation that the beneficiaries shall be chosen through calls for tenders, governed by public procurement law, open to public and private bodies. The procedure shall be objective and shall exclude candidates with conflicts of interest."

2.1 support, and all advisors were employed or contracted by RDF. Most of the administrative burden was at the beginning of the new system where the public procurement was prepared and implemented. An entirely different situation shows the measure 2.3 (aid for training advisors). All M2.3 activities (e.g. development of training programmes, organising of trainings) foresee public procurement procedure. Public procurement procedure is heavily regulated, involves different stages and has a rigid timeframe, thus having a heavy influence on increasing the administrative burden. Every change in the procurement contract is again time-consuming and burdensome.

Eligible expenditures and maximum level of support. In Veneto, responsible officials say that upper threshold (maximum amount) of EUR 1 500 per single advice is quite constraining the opportunities to provide high level and specialised advice, which is usually more expensive in the market of specialist advisors. The threshold is considered insufficient for a certain type of advice (animal welfare, conversion from conventional to organic farming) and Operational Groups' projects; in these cases, it might require overcoming this financial limit. This sum can be acceptable for general and general type of advice, but not for specialised one.

More or less the same arguments have been raised for the maximum amount of budget (EUR 200 000) admitted for three years programmes of training of advisors, whose rationale is not clear and unjustifiable for programmes that need to have a significant impact on the regional territory.

The rigidity in allocating the resources to the different Focus Areas. In Umbria, according to the Managing Authority, the impossibility of adjusting the financial allocation over the programming period, forced some choices, hindering the possibility of complying the interventions with different emerging needs.

Burden related to measures design and public administration procedures

Even in this case, there might be two categories of burden:

- the scope and the complexity of the scheme;
- the degree of monitoring and control needed.

As for **the scope and complexity of the scheme**, some burdens are already present in the previous analysis of M1-M16.

Use/non-use of simplified costs. In general, the French regions have chosen not to use simplified costs because these are not planned in the RDP. Beneficiaries meet difficulties in justifying some expenses such as salary expenses, stamps, etc.

In Veneto, however, advisory bodies find burdensome the criteria for standard costs, which RDP set at too low levels. In Umbria, advisory bodies deemed as critical some parameters applied for the implementation of the simplified costs, which are considered not realistic and have to be revised.

Requirements and accreditation procedure for beneficiaries. In Umbria, the whole set of requirements and accreditation procedure to comply with access to M2 is considered critical by the applicants. It includes the compliance with the professional and training standards, the coverage of a certain number of topics of advice and the submission of an advisory plan already agreed with the farmers.

Changes of implementing rules over time. In Lower Saxony, MA has developed specific instructions and forms for the implementation of AE for the granting bodies. In doing so, the framework requirements must be observed, including the EAFRD Regulation, the paying agency instructions and the instructions for investment EAFRD measures. These framework regulations have only gradually come into force and are subject to constant changes. It means that there is a constant need to adapt the M2.1-specific regulations and forms.

Workload for advice projects' management. In Lower Saxony, what takes time is the reporting on each advised farm (preparation of the advisory protocol with topic-related recommendations) and the documentation on an advised topic. Some advisory service

providers deliberately no longer participate in the measure AE because the workload is too heavy for them (awarding procedure, application, regular participation in training courses). Also in Poland advisors mentioned the workload as a significant burden.

Burdensome control and payment system. In Estonia, MA argues that the on-site control of the payment claims and concerned advice is inappropriate, since this makes sense for investments. In fact, for advisory services, everything is already checked through administration. It makes that both parties are running the same check, which is very inefficient. In particular, for the training of advisors (M2.3), a factor influencing administrative burden is the number of payment's claims to be processed. In Poland controls are also seen as burdensome by advisory bodies.

C) Burden at the EU level

As regards the administrative burden for EU level, most of the conclusions drawn for M1, can be extended to M2.

In particular, the main difficulty for implementing M2 was related to the pre-omnibus legal base, and the need to select the advice providers via public procurement law. Once the rule was amended by Omnibus regulation, some Member States/regions submitted the revision of the measure and introduced the new selection procedure in their RPDs.

- [ESQ10 JC3 and JC4 Presence of opportunities of decreasing the administrative burden and opportunities used to reduce the administrative burden and success/failures](#)

Advantages of having advisory body as intermediary body. In Lower Saxony, since the advisory body is the applicant, the number of funding applications for an approval period of well over 1 000 in the old funding period has been significantly reduced to a maximum of 25 in the period 2016-2018. It also reduces the sources of error. MA said that in 2016, a funding application and a payment need an average of about 50 hours. It also includes distributing the grant application over time and checking the subsequent disbursement requested.

Streamlining training of advisors. In Estonia, the possibility of reducing the administrative burden would be giving the organisation of trainings to RDF⁹⁴(Rural development Foundation), so they can choose the trainers and adjust the topics based on advisors interest. At the same time, these trainings should be open also to other advisors, not just advisors having contract with RDF. This option could potentially take more into account the needs/interests of advisors. Veneto adopted this solution, where an in-house training and research institute of the region provided advisors' training.

Eliminating upper thresholds for advice. Another opportunity of reducing administrative burden arises from the need of dropping upper threshold (maximum amount) of EUR 1 500 per single advice, and the maximum amount of budget (EUR 200 000) admitted for three years programmes of training of advisors.

Easing the process of public procurement (more information and simplifying documents to access). An opportunity to reduce the administrative burden might be to stop working via a public procurement to select advisors. The public procurement also proves to be an administrative burden for advisors, however, once in the system, the administrative process is not out of proportion. In terms of information, for example, following the request of Regions, the French Agriculture Ministry produced a tutorial on the difficulty of appropriating an EAFRD dossier. This tutorial was part of the Rural Network's activities with various partners and several Regions.

Learning process is a crucial factor easing the speed of the administrative burden. In the Estonian case study, for example, most of the administrative burden was at the beginning

⁹⁴ Rural Development Foundation (RDF) is a state founded (in 1993) organisation which operates in private law. The foundation issues guarantee to banks for credits granted to farmers and other entrepreneurs in Estonian rural areas and is responsible for RDP financial instruments. This organisation is coordinator/manager of FAS and is the only eligible organisation to offer Measure 2.1 supported advice since 2015.

of the new system where the public procurement was prepared and implemented. Now all the procedures are developed and put in practice.

4.11 ESQ11: How are the costs and administrative burden deriving from the establishment and application of the FAS instrument in the Member States proportionate to the secured benefits?

4.11.1 Methodology

4.11.1.1 Rationale and coverage of the Evaluation Question

As specified in Regulation (EU) No 1306/2013 Articles 12-14, MS have to **establish** a system, offering advice to farmers on "farm and land management". That farm advisory system (FAS) shall be operated by designated public bodies and/or selected private bodies. This includes the **designation and notification of public bodies and/or selected private bodies** which are in a position to provide advice on the list of topics defined in the scope of the FAS (see Table 2 section 2.3.2, and Annex 3 for more details). The scope covers at least cross-compliance (a set of requirements that farmers must comply with independently from (SMRs) or in the context of (GAEC standards) the CAP) and other requirements as green direct payments, maintenance of agricultural area, the water framework directive, integrated pest management and beneficiaries of some supported RD measures (farm modernisation, innovation, etc.) (as specified in Regulation (EU) No 1306/2013 - articles 12-14, Annex 1 and 3).

The **application** of the FAS instrument relates to the way MS FAS operates, and covers the following aspects: the scope of the FAS (in terms of covering all mandatory requirements), the type of operating bodies which may be providing advice and the communication of these bodies by topic to the farmers, the requirement to have advisors that are suitably qualified and regularly trained. MS also have the obligation to inform the Commission of details of the FAS (Regulation (EU) No 1306/2013, Article 102(2)), including about the number of farmers advised (see CMEF Pillar 1 output indicator O58).

The establishment and application of the FAS instrument is mandatory and covers all MS, independently if they co-fund the use of FAS advisory services or training of FAS trainers with the EAFRD or not. The exact legal requirements are mentioned above.

The **secured benefits** of the FAS instrument cover all benefits resulting from the above described establishment and application of the FAS in MS. They are at least targeted to EU farmers and CAP beneficiaries, and may include: making advice available on all listed topics, ensure quality of advice and independency of advisors, provide visibility of advice within the CAP, etc. The term "secured" indicates a focus on what is guaranteed and ensured solely by the establishment and application of the FAS, excluding what is related to effects from the financial support under RD for advisory services to the farmers.

4.11.1.2 Methodology and limitations

Quantitative judgment criteria and indicators were initially defined in order to answer the question about 'How' costs are proportionate to benefits. The idea was to identify the costs/burden and benefits of the FAS in the current situation compared to a simulated situation without FAS (counterfactual analysis).

This quantitative analysis finally appeared not feasible for two reasons.

- A limitation in terms of monitoring data and assimilation of EAFRD measure 2 to the FAS by several MS although this is not written in the Regulation. Monitoring data should rest on the FAS questionnaire answered by MS (referred hereafter as the "2017 FAS questionnaire to MS"), pursuant to Article 102(2) of Regulation (EU) No 1306/2013. However, data are incomplete and in some cases approximative. As detailed in section 3.3 there are two main reasons: data are collected at national level while the FAS is implemented diversely in each region of regionalised and devolved MS; in addition, the way data may be collected for some key indicators (e.g. CMEF P1 indicator O58 "number of farmers advised") is too

broad thus data provided are too approximative and not comparable⁹⁵. In addition to this questionnaire, specific FAS documentation on workshops shared by the JRC only covers the 2007-2013 period.

- In addition, comparing situations "with and without FAS" in order to capture the costs/benefits of this instrument only, independently of any other, including EAFRD co-financing was not possible in all CS. Indeed, representatives of several case study MS found it very difficult to differentiate between the FAS on the one hand and the co-financed advisory services under RD measure 2. A hypothetical situation of a FAS without RD M2 has been considered as far as possible, but the counterfactual "with/without FAS" comparison could not be implemented as such.

Therefore, the ESQ is answered qualitatively based on triangulation of information between different sources of information:

- data collected at case study level (mainly interviews and focus groups with national authorities);
- part of the data considered as sufficiently accurate from the JRC database, based on the 2017 FAS questionnaire to MS pursuant to article 102(2) of Regulation (EU) No 1306/2013;
- a specific survey launched by ADE in February 2020 to FAS coordination units in Member States.

4.11.2 Summary answer

ESQ11: How are the costs and administrative burden deriving from the establishment and application of the FAS instrument in the Member States proportionate to the secured benefits?

The Farm advisory system (FAS) is a mandatory instrument, referenced to in the Regulation (EU) No 1306/2013, articles 12-14 for the establishment and application of the Farm advisory system and article 102.2 for the communication of information. This obligation illustrates the importance given to agricultural advice by the EC.

The FAS and the associated requirements as conceived by the legislator should not generate substantial administrative burden – provided that the needed resources pre-existed. Establishing the FAS does nevertheless generate **costs and burden**, especially:

- for the drafting of specific decrees,
- for the definition and application of procedures to select/designate/accredit operating bodies,
- to ensure the "suitable qualification and regular training of FAS advisors" is respected (either through checks and/or organisation of training activities).

Also, the use of RD measure 2 to support the FAS (M2.1 for the use of services, M2.3 for the training of advisors, or to a lesser extent M2.2 for the setting up of the FAS), adds administrative constraints linked to EAFRD requirements, e.g. the public procurement rule applying to the selection of bodies. Of course, those constraints are not of the FAS, but the 'FAS-M2 package', as are the benefits.

Looking at the **benefits**, the setting up of the FAS during the *2007-2013 programming period* helped to raise awareness of farmers on cross-compliance topics (SMRs and GAEC) and introduce good practices for farm management. Focusing on the *2014-2020 period*, the FAS was found beneficial for the agricultural sector mostly:

- to raise awareness of beneficiaries on the offer of advice,
- to ensure the existence of advice on specific topics (in particular environmental standards), and

⁹⁵ The following question of the EC FAS questionnaire was actually too broad "How many farmers received advice in the last available year⁹⁵? A foot-note did specify that this number "does not need to be precise but only aims at giving an idea of the functioning of the system. The figure may compile all advices given in various forms". This means for example that BE-WL counted all (including telephone helpdesk, internet, publications etc.). Other MS counted mainly individual or small group (without being specified).

- thanks to EAFRD support for training of advisors, to enhance the quality of advice, with well qualified and updated advisors.

These **benefits and how they are proportionate to costs** are heterogeneous between MS/regions.

From case studies, benefits appeared rather limited in Member States where the offer of farm advisory services is already comprehensive and embedded in a **strong and integrated AKIS**. This is the case for instance in Germany and France, where the FAS obligation is not considered of added value. In Ireland, a general improvement and homogenisation of advisor's skills was encouraged through training schemes (supported by M2.3 of the EAFRD) and these are linked to the FAS⁹⁶. In those three MS (DE, FR, IE), tasks related to FAS are part of the usual tasks of the concerned advisory bodies. Hence the establishment and application of the FAS had overall limited costs but also with very limited secured benefits (FR, DE). In Flanders, M2.1 supported the FAS and together they led to the integration of new topics, especially on environment linked to advisory modules of interest to farmers but more focused on economic issues.

Other Member States characterised by an **intermediate AKIS** (e.g. Estonia, Italy-Umbria and Veneto), with a weaker advice offer and more budgetary constraints, chose to use Rural Development advisory services (M2) to support the FAS. In those Member States, representatives appeared to strongly assimilate the two instruments, and could not differentiate the respective contribution of each. Hence, they considered the 'FAS-M2 package': costs arose mainly from the accreditation procedures (public procurement rule), and the advisors' training requirement; the benefits regard the structuring of AKIS (improved integration of advisors), the improved services' offer (topics and quality) and the increased farmers' awareness. Overall, the benefits outweigh the costs, the CAP FAS-M2 contributing to a better functioning of the AKIS and providing a helpful financial support.

Finally, in Member States with a **weak and fragmented AKIS** such as Greece (*and Malta*), RD Measure 2 and the FAS are expected to have a substantial contribution to the development of advisory services, in terms of topics and quality (potentially the case for Greece – still under development, and *already functioning in Malta*). Historically, the FAS obligation exists since 2007, but Greece had not mobilised the Rural Development advice measure (m114) across 2007-2013. In the current period, the Rural Development advice measure (M2) was well selected and, while its implementation is delayed, it is slightly ahead of the FAS setup. Overall, the Rural Development advice measure (M2) appears an essential tool to support the establishment and operation of the FAS in Member States/Regions facing strong financial and institutional capacity constraints.

4.11.3 Detailed analysis

The findings are structured below as follows: (i) costs and administrative burdens of the FAS, (ii) secured benefits of the FAS, and (iii) how the costs are proportionate to benefits. The costs and benefits are generally described, at EU-level based on the 2020 ADE FAS survey and JRC database based on the 2017 FAS questionnaire to MS pursuant to article 102(2) of Regulation (EU) No 1306/2013; (completed with practical information from case studies). The FAS cost/benefit balance is analysed for the case study MS based on the information provided in CS reports and the AgriLink study (AgriLink, 2020), reported in Annex 3.

➤ Costs and administrative burden

As recalled in section 2.3.2 and in Annex 3, the FAS instrument refers to the **obligation** for MS to establish a farm advisory system operated by advisory bodies providing farm advice. The FAS instrument does not provide in itself any financial support (unlike the RD measures). All farmers and CAP beneficiaries may use the FAS on a voluntary basis. This FAS needs to meet a list of requirements (articles 12-14 of Regulation (EU) No 1306/2013) namely:

- Public and or private operating bodies are accredited through a designation or selection process;
- The set of accredited advisory bodies must be able to provide advice on a number of mandatory topics, and possibly others (see Table 36 of Annex 3);

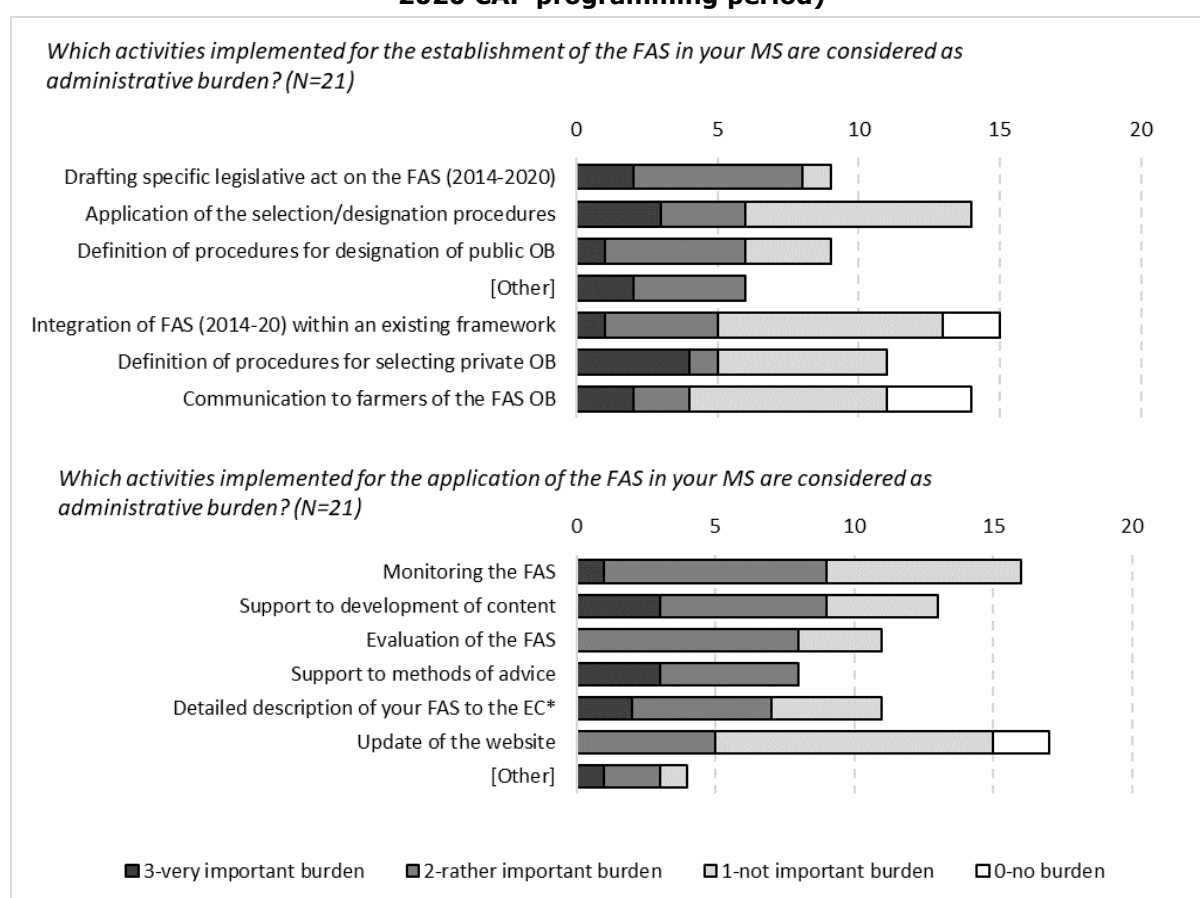
⁹⁶ In order to be eligible to participate in other RDP focused training schemes and advise farmers on those (e.g. GLAS, KT groups, EIP-AGRI, Burren Programme, etc.) advisors need to be FAS registered.

- Advisors must be suitably qualified and regularly trained;
- The list of the designated/selected bodies must be communicated to potential beneficiaries (farmers/foresters);
- MS should monitor and inform the EC on details of the FAS (article 102(2))

According to the EC, **the FAS instrument was meant to be very simple to implement**, arising no special administrative burden strictly linked to the above requirements provided that the needed resources pre-existed, and MS were given a wide latitude to design the FAS according to their own needs and priorities, in terms of scope and contents as well as the choice of operating bodies, the definition and verification process for suitable qualification and training, and the potential financing scheme.

Yet, surveyed FAS coordinators (ADE survey, 2020) reported a number of costs and burdens linked to the establishment and application of the FAS (Figure 30).

Figure 30: Administrative burdens related to FAS establishment and application (2014-2020 CAP programming period)



* Article 102.2 Regulation (EU) No 1306/2013.

Source: ADE FAS Coordinating units survey, 2020

Firstly, most MS implemented the FAS officially through a specific law, decree or publication that required time for preparation. Indeed, **drafting the specific legislative act** is the activity that is the most often considered a burden (8 respondents out of the 9 concerned by this activity). It seems this activity is all the more constraining as the AKIS is fragmented (BE-WL) and weak (e.g. Portugal, Malta, Slovakia). Greece is still drafting its legislative framework for the FAS. The EC considers this finding unexpected considering that drafting legislation is a routine work for any administration.

Secondly, the accreditation procedure to **select/designate advisory bodies** had to be created, then applied. The selection of private bodies typically implies a selection process, while designated (public) authorities are chosen based on the fulfilment of criteria. The costs differ according to the chosen procedure. According to surveyed FAS coordinators

the designation of public bodies was found more constraining both for the definition and the application of procedures (Figure 30). This finding is confirmed by the results on estimated costs in FTE⁹⁷ (Table 28).

Table 28: Estimated costs of designation/selection of operating bodies in Full Time Equivalents according to MS FAS coordinators

	Procedures' definition	Procedures' application
Designation of public bodies (N=6)	1,85 FTE	0,68 FTE
Selection of private bodies (N=7)	0,40 FTE	0,44 FTE

Source: ADE FAS Coordinating units survey, 2020

According to the FAS questionnaire to MS (under article 102.2, see Table 38 of Annex 3), 12 MS/regions chose to exclusively designate operating bodies (OB), and 10 set up a selection process (selection committee and/or call for tender). Mixed systems (designated and accredited bodies with different duties) are also found.

MS can also choose to support the use of advisory services from FAS OB through RDP measure 2.1. These MS had initially to go through a call for tender for the selection of OBs (obligation removed by the Omnibus regulation, see section 2.3.1). Based on the EU questionnaire to MS pursuant to Article 102 (2), among the 10 MS that launched calls for tender, Czechia is the only exception where a call is used although the M2 is not mobilised (Table 38 of Annex 3). The tenders' process presumably increases the administrative burden, both for managing authorities / coordinators and for advisory bodies seeking to be FAS-accredited, with the call issuing, proposal preparation and examination, monitoring, payment claims and controls. However those burden could not be attributed to the FAS itself but to the "package FAS/M2". Also, data from the ADE FAS survey do not show significant discrepancies allowing a definitive conclusion.

Besides, MS must conduct **monitoring activities** to capture the application of the FAS. This includes the degree to which CAP beneficiaries (and farmers not receiving support under the CAP) have been reached and ensuring that the level of competencies of advisors remain adequate. However, as emphasised in the methodological limits to the ESQ, information on beneficiaries appears inconsistent⁹⁸. Indeed, there is an overall absence of accurate monitoring of farm advice provided by the FAS in a number of MS notably due to the fact that key concepts include too many different aspects. And data are collected at national level while the FAS is implemented diversely in each region of regionalised and devolved MS.

Hence accurate data on FAS advice and beneficiaries are only available when CAP funding is used through Measure 2. When public co-funding is involved, the data must be cleared by financial certification. Also, as underlined in Flanders but this is true for many other MS, there is no **evaluation system** in place, to assess the impact of advice. Consequently, the government has no insight in the secured benefits resulting from the FAS instrument – as seen hereafter.

Regarding the advisors' skills, selected/designated bodies must provide evidences of **suitable qualification and regular training** to MS, responsible to check those to ensure the efficiency of the system. Several MS also offer **training** to new advisors as well as already registered ones to maintain them up-to-date (see Annex 3). Training schemes were set-up in this framework i.e. in Ireland (supported by M2.3). This burden is exactly the same for the majority of MS using the EARDF to support the FAS as the requirements are the same. And it is inherent to any certification.

⁹⁷ Definition indicated in the ADE survey (2020): A full-time person is counted as one FTE - ex. 1 FTE / 220 days (40 hours a week) per year. A part-time worker is counted in proportion to the days he or she works - ex. a part-time worker employed for 110 days (20 hours a week) is counted as 0.5 FTE.

⁹⁸ The following question of the EC FAS questionnaire was actually too broad "How many farmers received advice in the last available year⁹⁸? A foot-note did specify that this number "does not need to be precise but only aims at giving an idea of the functioning of the system. The figure may compile all advices given in various forms". This means for example that BE-WL counted all (including telephone helpdesk, internet, publications etc.). Other MS counted mainly individual or small group (without being specified).

Finally, **information to beneficiaries** of CAP payments on the FAS and **update of the lists** is, in general, not generating significant burden, the major part being available on the internet, either on "official" government agency/ministry of agriculture websites, or on dedicated webpages. Farmers are also informed by mail/emails, and as part of the application form. Other communication channels include rural networks, flyers, journals and newspapers, radio and television, information events, and direct contact with advisors/FAS bodies FAS questionnaire to MS pursuant to Article 102.2 - JRC, 2017.

Thus, **all costs and administrative burden are actually related to MS practical choices**⁹⁹ for establishment and application of the FAS, and are somewhat not directly induced by the EU Regulation requirements. Constraints first arise from the establishment of the FAS: drawing up a legislative framework (most burdensome), defining procedures for the selection/designation of operating bodies and applying procedures represent important to very important burdens according to the MS FAS coordinators surveyed for the present study (ADE FAS survey, 2020). For the application of the System, the most costly activities are the monitoring-evaluation of the system, as well as support for the development of advice (including training of advisors), both in terms of content to cover all the mandatory topics of the FAS, and in terms of methods.

➤ Secured benefits

Historically, the FAS instrument was designed and implemented *at least*¹⁰⁰ to raise CAP beneficiaries' awareness on cross-compliance in the 2007-2013 programming period. The availability of advice on cross-compliance had to be insured by MS so that all farmers could find the necessary information to comply with the minimum requirements that should be met by the beneficiaries of CAP support; in this respect farmers are controlled on a regular bases, and might lose part of their support (to the income) if shortcomings are found.

In a nutshell, the secured benefit as identified in the FAS evaluation of 2009 (ADE et al., 2009) was the creation/increase of farmers' awareness on all SMRs and GAEC issues. To give some examples, in Germany as well as Luxembourg and Flanders, MS authorities implemented a check-list system in which advisors had to come along all cross-compliance requirements (SMR and GAEC) with each farmer advised.

"The core FAS approach, on-farm one-to-one advice linked to the major tool (checklists) that was used in most MS (foreseen in 23 MS and operational in 18 MS), supported the implementation of cross-compliance requirements through its comprehensive coverage of all regulatory aspects, their translation into understandable questions for the farmers, and the induced discussions with advisors on the rationale of the different requirements. Improving the capacity to respect cross-compliance requirements was also the main motivation from farmers of making use of this advice." This overall led to more rigorous farm management and the introduction of guides/checklists and good practices, with parallel certification systems (ADE et al., 2009).

For the current **2014-2020 period**, the formal expected benefits of the system are to "help beneficiaries to become more aware of the relationship between agricultural practices and management of farms on the one hand, and standards relating to the environment, climate change, good agricultural condition of land, food safety, public health, animal health, plant health and animal welfare on the other" (Recital 10 of Regulation (EU) No 1306/2013). No impact assessment on the FAS has been conducted since 2009; therefore the FAS survey and case study data are the only source of information regarding FAS benefits (by contrast with RD measures which are systematically monitored and assessed in annual implementation reports). With this regard, it should be noted that, compared to costs and administrative burdens, that are direct realities especially for administrations, benefits of a policy instrument can be much

⁹⁹ It should be noted that, in addition to flexibility provided by the Regulation without cofunding, the heterogeneity of pre-existent advisory services, national decrees and programmes related to farm advice, holdings structures and productions in the agricultural and forestry sectors across EU, and the various administrative frameworks also contribute to the large variation of FAS establishment-implementation schemes between regions/MS.

¹⁰⁰ Cross-compliance was a minimum topic to cover; MS could also choose to extend the FAS to any other topics.

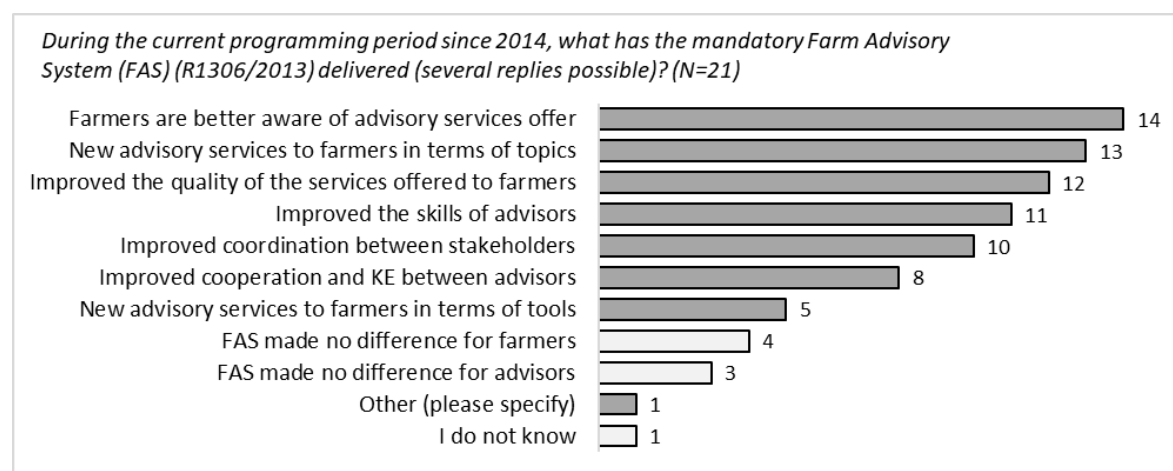
broader both in scope and in time laps, and are relevant the assess at the level of final beneficiaries (targeted by the instrument).

However, the question could not be asked directly to the final beneficiaries as a prominent part of them are not aware of the existence of the System (they have knowledge of the services, but where they come from, in terms of CAP instruments and measures, is generally very abstract. Note that, even for supported services, farmers might not know the instruments behind activities, which funds do intervene, etc.). The benefits of the system were then asked to national/regional authorities as representatives of the agricultural sector, and to advisory bodies; making the answers overall quite general¹⁰¹. The elements listed below are perceived benefits for the sector so, inherently, for the farmers and CAP beneficiaries.

According the results from the FAS survey (Figure 31), the most recurrent benefits of the FAS instrument include a better awareness of farmers regarding the availability of advice, the integration of new topics (mainly environmental) into the service offer, the higher quality of advice and higher skills of providers. In MS with weaker AKIS, advisory services of the EAFRD (M2) supporting the FAS, together, may also have contributed to a better coordination of farm advice.

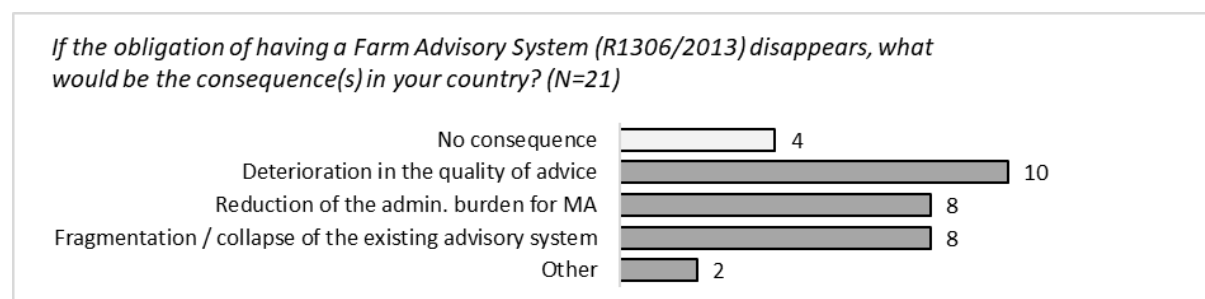
47% of the respondents considered that, if the FAS obligation would disappear (Figure 32), the quality of advice may deteriorate (10/21). And 38% that the existing advisory system may be weakened (fragmentation or collapse of the system (8/21)). This must be understood as the combination with M2 which is financing the FAS in many cases. The same proportion of respondents (38% - 8/21) considered it would lead to a reduction of administrative burden.

Figure 31: FAS benefits



Source: ADE FAS Coordinating units survey, 2020

Figure 32: If the obligation of having a Farm Advisory System disappears, what would be the consequence in your country?



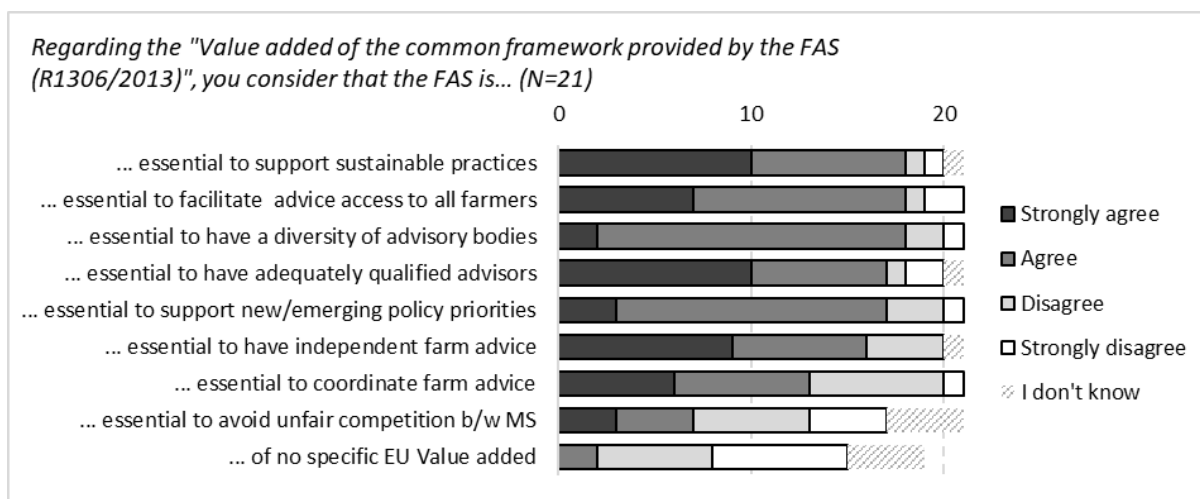
Source: ADE based on the FAS Coordinating unit survey, 2020

¹⁰¹ An in-depth assessment focused on the FAS would be needed to capture the whole causal chain from the policy to the ground and collect complete and relevant feedbacks from all stakeholders.

A majority of respondents agreed that the **common framework of the FAS-M2 package** brings an added value (as summarised in Figure 33).

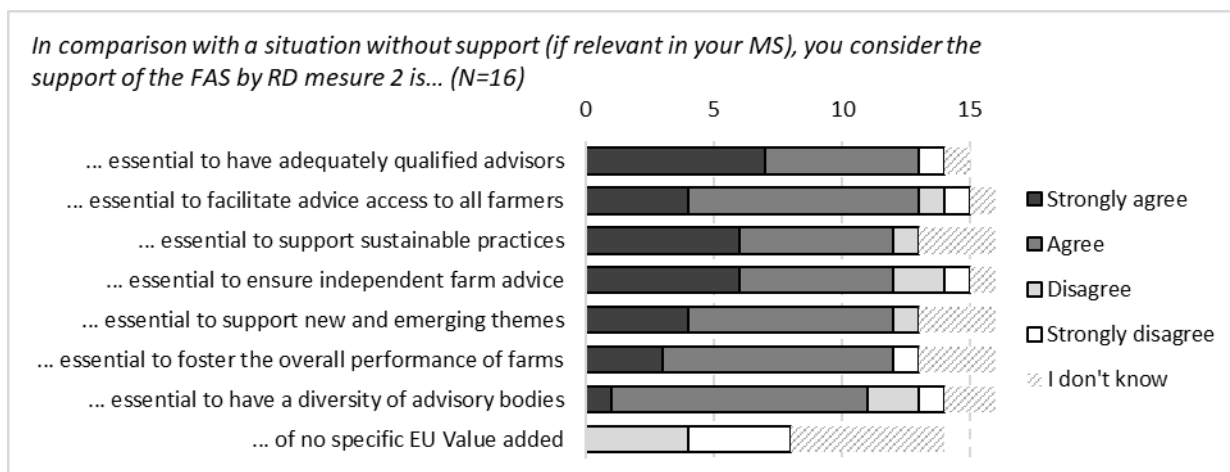
RD M2 support of FAS (Figure 34) contributes to develop skills of advisors, to promote independent advice and enlarge the diversity of providers, and to sustain the emergence of topics including on environmental practices. In addition, M2 is considered essential to foster the overall performance of farms (economic, environmental and social performances).

Figure 33: Added value of the common framework provided by the FAS instrument and EAFRD supported advisory services



Source: ADE based on the FAS Coordinating unit survey, 2020

Figure 34: Added value of the support of RD Measure 2 to the FAS instrument



Source: ADE based on the FAS Coordinating unit survey, 2020

➤ Costs / benefits balance

Case studies are used as examples and a detailed analysis of the costs / benefits balance for each is presented in Annex 3. Focusing on the 2014-2020 programming period, Table 29 summarises the costs and benefits of the FAS for each CS MS.

Table 29. FAS- Summary of costs, administrative burden and perceived benefits from the case studies

Main burdens and benefits perceived for the FAS		Case studies								
		France	Germany - LS	Ireland	BE-Flanders	Poland	Italy - Veneto	Italy - Umbria	Estonia	Greece
AKIS strength		Strong					Medium			Weak
FAS bodies	Simple designation		X							
	Public procurement				X		X	X	X	
	Selection (call for proposals)	X		X		X				
FAS supported under M2					X		X	X	X	X
Costs and administrative burden (strictly from the FAS)										
Draw legislative act / integrate in existing framework		○	○	○	○	●	○	○	○	●
Select / designate bodies		●	○	○	○	●	●	●	○	●
M&E		○	○	○	○	○	○	○	○	
"suitably qualified and regularly trained"		○	○	●	○	●	●	○	●	●
Inform beneficiaries		○	○	○	○	○	○	○	○	
Perceived benefits of the FAS										
Integration of advice offer		●	○	○	○	●	●	●	●	●
Awareness of advice offer		○	○	○	○	●	●	●	●	●
Topics		○	○	●	●	●	●	●	●	●
Quality of advice / training of advisors		○	○	● ¹	○	○	●	●	●	●
Independence of advice		○	○	○	○	○	○	○	○	○

Legend: ● Yes, ● Limited, ○ No/not mentioned by interviewees, ● Presumably yes

¹ Training of advisors is supported under M2.3 (training of advisors).

Source: ADE, based on CS reports, the AgriLink study (2020) and ADE survey to FAS coordination units (2020)

Two main groups of MS are distinguished for the following analysis, based on the strength of their AKIS.

A first group includes MS characterised by a strong AKIS, with a pre-existing comprehensive and multiple advisory landscape (FR, DE-LS, IE, BE-FL, PL). Those MS responded to the EU legal requirement with overall limited efforts (at least at national level regarding France) and the national authorities overall consider the benefits are rather limited. Indeed the offer of advice was already covering the FAS scope, and the work of the MS authorities then essentially consisted in the selection (if private) or designation (if public) of a number of bodies, in order to draft a list of accredited organisms and meet the legal provision. Ireland for instance also set-up trainings for new and existing FAS advisors but would most probably have implemented some sort of training anyway. MS with a strong AKIS have the necessary resources and a high consideration regarding the importance of elaborating an effective advisory system. They do not necessarily need a mandatory legal provision have comprehensive advisory landscape.

Some of these MS decided to support FAS services under RD M2 (i.e. BE-FL). Flanders' representatives proved to have difficulties to separate the two instruments (FAS and RD support) and considered the costs/benefits strictly resulting from the FAS as a purely hypothetical question.

A second group includes MS characterised by an intermediate AKIS (IT Veneto and Umbria, EE), with a weaker advice offer and more budgetary constraints. Those MS chose to mobilise the M2 to support the FAS. In those MS, representatives appeared to strongly assimilate the two instruments, and could not differentiate the respective contribution of each. Hence, they considered the 'FAS-M2 package'. Hence the overall contribution of "advice instruments and measures of the CAP" proved to have significant benefits, in terms both of structuration of the AKIS (integration of actors), improvement of the services' offer (with new topics and an enhanced quality), and improvement of the farmers' awareness

of the advisory services, possibly leading to an increased uptake. The costs are mainly related to the selection/designation of bodies, especially with regard to the call for tender process, and the need to ensure the suitable qualification of advisors.

Greece appeared to be a **separate case** where costs and benefits could not be assessed as the FAS is not implemented yet. Indeed because of the financial and economic crisis of 2009, the State resources were dramatically constrained, making Greece's AKIS one of the weakest in the EU. This lack of resources limited the administrations' capacities, and severe delays are experienced in the implementation both of the FAS and of RD measures (including M2). Considering the Greek context where advice is only provided by private commercially advisors, M2 supporting the FAS, together, should have a substantial contribution to the development of advisory services, in terms of topics as well as quality (also the case for Malta, similar to Greece, where no independent advice was available before the implementation of the FAS supported by M2; the latter is known by farmers and functioning since end of 2018). M2 support appears vital to develop the advice offer due to a lack of public resources to allocate to knowledge exchange and advice. The FAS provides a guiding framework to allow MS authorities to focus on the farm advice offer.

D

Theme 4: Coherence

4.12 ESQ12: To what extent have the CAP instruments and measures, within the entire CAP architecture, been coherent related to fostering knowledge exchange, innovation and advisory activities?

4.12.1 Methodology

4.12.1.1 Rationale and coverage of the Evaluation Question

This question focuses on the internal coherence of the CAP (both Pillar 1 and 2). According to the Better Regulations Toolbox #47 'Evaluation Criteria and Questions' of the EC Tool, 'checking "internal" coherence means looking at how the various components of the same EU intervention operate together to achieve its objectives e.g. the different articles of a piece of legislation, different actions under an action plan'.

With this approach in mind, the way in which the relevant CAP instruments and measures operate together, within the entire CAP architecture, to achieve the cross-cutting objective 'fostering knowledge exchange, innovation and advisory activities' was investigated. This objective is directly supported by certain specific measures, but also indirectly by other CAP provisions which may foster the different stakeholders to look for advice, to get trained and to collaborate in order to find innovative solutions to address challenges or problems.

This question mainly addresses the analysis of internal coherence in various Member State specific context. Indeed, these aspects are sensitive to the national/regional, agricultural and territorial context.

The architecture of the CAP implementation in Member States, in relation to all CAP instruments and measures which have effects on KE-I-A activities, has been described under ESQ1. The contribution of certain measures or arrangements under Pillars 1 and 2 was also examined under Theme 2.

4.12.1.2 Judgement Criteria (JC)

JC1: There is / there is no evidence of coherence between **pillar 1 and pillar 2** of the CAP in relation to fostering knowledge exchange, innovation and advisory activities.

JC2: There is / there is no evidence of coherence **within pillar 2** of the CAP in relation to fostering knowledge exchange, innovation and advisory activities.

JC3: There is evidence / there is no evidence of an increasing level of integration and co-ordination between the CAP measures/instruments with regard to fostering knowledge exchange, innovation and advisory activities.

4.12.1.3 Methodology

The answer to the evaluation question is based on a three-phase qualitative approach.

1. **The preliminary analysis of regulation and the literature review:** Starting with the identification of the CAP instruments, measures or provisions which participate (in direct or indirectly) to fostering knowledge exchange, innovation and advisory services, this approach also covers the analysis of the objectives, intervention logic and regulation.
2. **Case studies and stakeholder interviews:** The coherence may be territorially sensitive and dependent of the context, the needs and the specific architecture of CAP implementation in each Member State.
3. **The triangulation and contextualisation of information**

4.12.2 Summary answer

ESQ12: To what extent have the CAP instruments and measures, within the entire CAP architecture, been coherent related to fostering knowledge exchange, innovation and advisory activities?

Regarding the EU legal framework, the legislator had demonstrated a certain willingness to strengthen the links between Pillar 1 and Pillar 2, to reinforce the CAP's internal coherence. In this perspective, with the CAP 2013 reform, common objectives were explicitly assigned to the CAP as a whole, hence directed together towards its two pillars, and a single monitoring and evaluation framework (CMEF) was set. However, in contrast to the European Structural and Investment Funds, no such common programming was carried out for Pillar 1 (funded by the European Agricultural Guarantee Fund - EAGF) and Pillar 2 (funded by the EAFRD) of the CAP. Pillar 1 and 2 are mostly managed by different competent authorities, often based in different locations, particularly in regionalised or devolved Member States. The resulting approach, intended at EU level as more comprehensive and integrated, remained in the strategic documents without materialising in the case study Member States.

Still regarding the CAP's internal coherence, the mandatory topics of the FAS fall under the regulation on financing, management and monitoring of the CAP, while support for advisory services (M2) falls under the Rural Development Regulation. As a result, FAS and Rural Development supported advisory services (M2) are managed by authorities from different departments and, in regional Member States, by authorities with different jurisdictional powers.

The **successive CAP reforms** (2007-2013 and 2014-2020) have also sought to **strengthen internal coherence withing Pillar 2 (and its different measures)**. In the context of the 2014-2020 period, Priority 1 is a cross-cutting priority, and funds for **Measures 1, 2 and 16 are allocated within the thematic Priorities 2 to 6. Jointly with the introduction of primary and secondary contributions, they have strengthened the coherence between these support measures and the other RDP measures** (at least in the design phase). Measures 1, 2 and 16 were also conceived by the Commission to work together, as well as to be complementary to each other.

Overall, the case studies and interviews carried out **do not show contradiction between CAP objectives, measures or instruments** related to fostering knowledge exchange, innovation and advisory activities, as part of their design and the overall architecture of the CAP. There were also **strong expectations in terms of complementarities between the different Rural Development measures** related to fostering knowledge exchange, innovation and advisory activities (especially for those directly related but also including those indirectly related).

However, the synergies and complementarities at the design stage could not always be fully implemented **due to implementation delays or the abandonment of certain sub-measures** due to administrative burdens. Although the 2014-2020 architecture is more strategic and demonstrates a greater internal coherence, CAP support measures remain complex and sometimes difficult to read and communicate for stakeholders involved in Rural Development. Within national or regional administrations, separate management by individual measure or sub-

measure is still common. Few managers of measures have a cross-cutting vision of their Rural Development Programmes (RDP) and the way "their" measures/sub-measures support broader goals identified at the level of the RDP or the CAP as a whole.

The case studies show clear **progress towards greater integration and coordination** between the different measures, but differences exist across the Member States. Overall, the CAP architecture allows for a better integration of the measures linked to knowledge exchange, innovation and advisory activities within the different Priorities.

Some case studies show an important link with an EIP-AGRI unit or innovation support service, possibly setup within a national rural network (NRN) or regional rural network (RRN) at programme level. These EIP-AGRI units play a role of facilitation, coordination and transfer of information, in particular at the level of Measure 16. The coherent implementation of knowledge transfer and dissemination among the entities involved (EIP-AGRI Networks, National Rural Networks, various innovation support services within or outside the National Rural Networks, etc.) is an important feature both at Member State and EU level.

Although the internal coherence of Pillar 2 has improved compared to 2007-2013, there remains a lack of flexible and combined use of Measure 1 and its sub-measures with Measure 2.1 and the Operational Groups (Measures 16.1 and 16.2), in particular regarding dissemination of results.

4.12.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

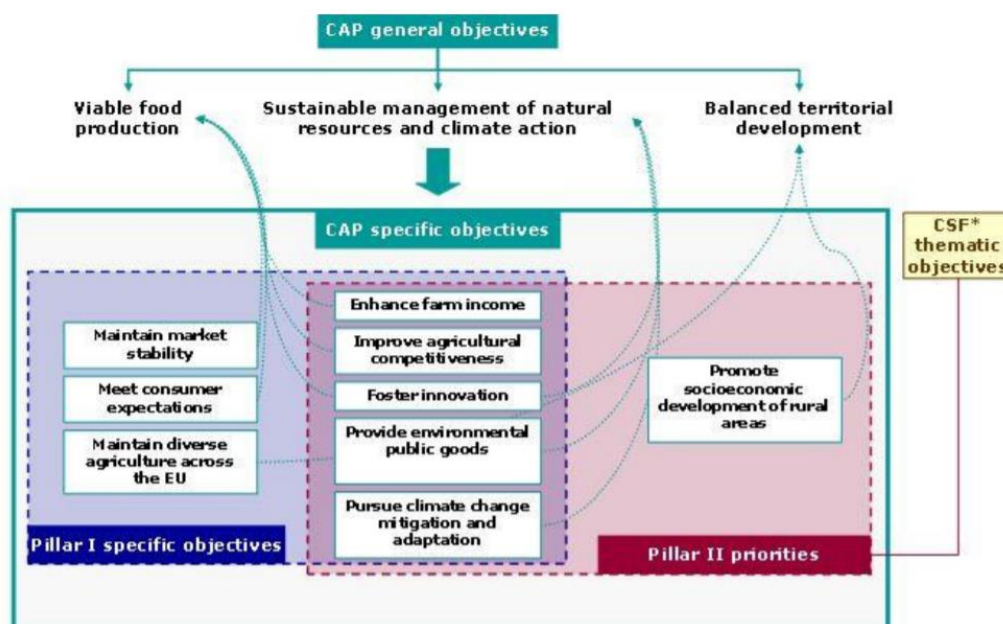
- [ESQ12 JC1 There is evidence of coherence between pillar 1 and pillar 2 of the CAP in relation to fostering knowledge exchange, innovation and advisory activities](#)

11.1 Evolution of the EU legal framework

The successive CAP reforms have aimed at strengthening the link between the instruments of the first pillar and CAP pillar 2 (and its measures).

Historically, the successive CAP reforms aimed to transition from product support to producer support, while better integrating environmental and climate considerations. Since several years, there was also a willingness to strengthen the links between pillars 1 and 2, in order to reinforce the CAP's internal coherence. Thus, for the first time in 2013, the various components of pillars 1 and 2 were reformed at the same time. Objectives were explicitly assigned to the CAP as a whole, hence directed together towards its two pillars. The resulting two-pillar approach is intended to be more comprehensive and integrated.

Figure 35: General and specific objectives of the CAP



* CSF: Common Strategic Framework including the ERDF, ESF, CF, EAFRD and EMFF

Source: EC, 2015, p11

The strengthening of the links and complementarities between the two pillars, to achieve a more coherent and integrated approach to the CAP, is illustrated in the following figure.

Figure 36: Actions targeted under both Pillars

PILLAR I	TARGETED ACTION	PILLAR II*
Green payment	ENVIRONMENT	Agri-environment-climate Organic, Natura 2000
Top-up payment	YOUNG FARMER	Business development grants Higher investment aid
Top-up payment	AREAS WITH NATURAL CONSTRAINTS	Area payments
Alternative simplified scheme	SMALL FARMER	Business development grants
Improved legal framework	PRODUCER COOPERATION	Aid for setting up producer groups Cooperation and short supply chain

*Only main measures that target the specific issue under Pillar 2 are mentioned.

Source: EC 2013b

One of the innovations in the 2013 revision of the CAP Basic Acts was also to extend a formal system of monitoring and evaluation of the CAP's performance beyond Pillar 2 Rural Development, where it had been long-established, to also cover Pillar 1 direct payments and market management (Matthews, 2015).

However, contrary to the ESI Funds (which demonstrate a strong common programming with the establishment of National Partnership agreements and further by the means of Regulation (EU) No 1303/2013 which covers together all structural funds – including the EAFRD), no such common programming was carried out for pillar 1 (funded by the EAGF) and pillar 2 (funded by the EAFRD) of the CAP. The will of strengthening the links between the two pillars therefore remained only at the level of the strategic documents. Case study MS did not see how they could implement it concretely with the existing responsibilities and structures (FR, DE). And this although each RDP was required to describe how it ensured complementarity and coherence with pillar 1 and greening (reference to section 14.1.1 of the RDPs). This section mainly describes what is done under each pillar and clearly excludes double funding.

The future CAP (for the 2021-2027 period) envisages to attempt to strengthen more the integration between the two pillars through the implementation of a single strategy document, the National Strategic Plan.

1.1.2 Internal coherence of the current 2014-2020 legal framework

The CAP's current legal framework is principally governed by four EU regulations: (i) Regulation (EU) No 1306/2013 covering horizontal issues such as the financing, management and monitoring of the CAP (including cross-compliance and the FAS); (ii) Regulation (EU) No 1305/2013 dealing with rural development; (iii) Regulation (EU) No 1307/2013 covering direct payments to farmers; and (iv) Regulation (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products (European Parliament, 2018).

As a cross-cutting objective, innovation is present across both the RD Regulation (EU) No 1305/2013 and the CMO Regulation (EU) No 1308/2013. A **minor lack of coherence was noted however about the definition** of the specific innovation measures, across these two regulations.

A specific innovation measure was set up under the Wine CMO Regulation (Article 51 of Regulation (EU) No 1308/2013). It supports the development of new products, processes and technologies concerning wine products. In the RDP Regulation (EU) No 1698/2005, Article 29 already referred to the 'cooperation for development of new products, processes and technologies in the agriculture and food sector and in the forestry sector'. At the time, the appropriation of this measure had been limited, with **Germany** referring to the regulatory framework and the definition of the terminology used, covering only "new" products, as the main limitation. As a result, the cooperation measure of the current RDP Regulation (Article 35 of Regulation (EU) No 1305/2013) widened the scope to 'support for **pilot projects** and for the development of new products, practices, processes and technologies in the agriculture, food and forestry sectors'.

The terminology in the current CMO regulation remained however unchanged (without reference to pilot projects). As a result, it must be noted that the Wine CMO innovation measure was hardly implemented, not even by the 3 Member States which had included it in their National Support Programmes (Agrosynergie, 2018a). Based on interviews with the German authorities¹⁰², the very strict definition (limited to the wine products where new products, processes or technologies should be developed) was a strong limitation to the implementation of the innovation measure within the CMO framework.

11.3 Investigation in Member States

Overall, the case studies and interviews carried out **do not show contradiction between CAP objectives, measures or instruments** related to fostering KE-I-A as part of their design and the overall architecture of the CAP. However, in most case study Member States, pillar 1 (national) and pillar 2 (national or regional) are managed by different authorities. These authorities are often based in very different locations and have completely separated competences. Member States have therefore struggled to coordinate the two pillars together, finding it especially complicated to operate in complementarity with Pillar 1 in the field of the RDP managing authorities.

The main synergies between the two pillars, reported at the case study level, concern greening. Together with cross compliance from the regulation on financing, management and monitoring of the CAP, they have led to additional needs in training and advisory activities. These specific needs are addressed (more or less explicitly) in a number of case studies.

In **Lower Saxony** (Germany), these additional needs in advisory services are addressed by the advisory measure (measure 2.1). Under this specific measure, advisory services on greening are mandatory. In **Estonia**, the implementation of cross-compliance is supported under measure 2.1 (and the FAS). While in **Flanders** (Belgium), the demonstration projects performed under measure 1.2 cover the cross-compliance themes (or themes which connect to cross-compliance). In **Veneto** (Italy), cross-compliance is addressed both as a main topic of measure 2.1 and trainings funded under measure 1.

The link between the advisory activities (and in a certain extent training) and pillar 1 is therefore effectively implemented in certain Member States. In **Lorraine** (France), even though there are no link determined between the two pillars, the managing authorities acknowledged that the perspective of changes in the rules of the pillar 1 may occasionally lead to more requests in terms of advice and training.

The study by Coffey *et al.* (2016) states that the **links of the EIP-AGRI with Pillar 1 (and Pillar 2) were implicit** and that, although the EIP-AGRI could help achieve other objectives of the CAP, the **managing authorities struggled to see these links**. Generally, there is a theoretical coherence between the EIP-AGRI and the 1st pillar (or

¹⁰² Interview with Rhineland-Palatinate authorities 19/12/2019

FAS), but there is no evidence of conscious efforts to ensure a coordination between 1st pillar and the EIP-AGRI.

For example, EIP-AGRI Operational Groups could address practices related to first pillar payments for Greening, or look for practical solutions to comply with CAP cross-compliance requirements stemming from Nitrates, Habitat, Water, Plant Protection Product Directives etc. or from the rules to keep the land under Good Agricultural and Environmental Conditions (GAEC), or even target sectors under Voluntary Coupled Support (VCS).

At the time of the study, few Operational Groups were actually related to the greening obligations of the CAP. 4 out of 55 were about protein crops in Rhône-Alpes, Brittany, Midi-Pyrenees, and Rhineland-Palatinate and 1 was on grassland management in Rhineland-Palatinate. There wasn't a clear pattern of Operational Groups focusing more on sectors supported by Voluntary Coupled Support, except in France, where a national plan for protein crops was drawn up in 2014, including coordination between actors (farmers, seed producers, grain collectors, feed factories, and research institute).

Across the Member States, the effective implementation of links between the two pillars is therefore to be moderated. Certain Member States or regions (such as Umbria – Italy and Lorraine - France) do not recognise or determine any link between the two pillars. While in other Member States or regions, some evidence is reported, but the links are not necessarily organised due to different people being involved. Overall, **the organisation of synergies remains low.**

11.4 Investigation of the stakeholder perception

Across the case studies, a certain unanimity has been recorded. There is no stakeholder perception that instruments and measures are having contradictory or duplication effects related to fostering knowledge exchange, innovation and advisory activities.

- [*ESQ12 JC2 There is evidence of coherence within pillar 2 of the CAP in relation to fostering knowledge exchange, innovation and advisory activities*](#)

12.1 Evolution of the EU legal framework

The **successive CAP reforms** have also aimed particularly at **strengthening the internal coherence between the different support measures of pillar 2.**

Historically (before 2007), the CAP consisted of different instruments and measures whose coherence and complementarities were not necessarily readable or well perceived by the different actors.

The CAP reform of June 2003 and April 2004 placed the emphasis on Rural Development by introducing a single financing and programming instrument: the European Agricultural Fund for Rural Development (EAFRD). The EAFRD, which was established by the Council Regulation (EC) No 1290/2005, aimed at strengthening the EU's Rural Development policy and at simplifying its implementation. In particular, it improved the management of the Rural Development policy for the **period 2007-2013.**

For this same period, the EU provided a menu of measures that were available for Member States to utilise under the RDR, framed under higher level 'axes' to be addressed (European Council, 2006):

- improving the competitiveness of the agricultural and forestry sector;
- improving the environment and the countryside;
- improving the quality of life in rural areas and encouraging diversification of the rural economy; and
- building local capacity for employment and diversification (LEADER).

The structuring in these 3 'axes' (plus LEADER) made it possible to improve the clarity of the strategies and enabled a more integrated management of the various schemes. As highlighted in the mid-term evaluation of the Hexagonal Rural Development Programme

(HRDP) in France, this was undeniable progress compared to the system-by-system management (or "organ pipes") that prevailed previously (Epices and ADE, 2011).

However, the strict compartmentalisation of the programmes into 'axes' and measures did not encourage a more strategic steering of the programmes. Neither did it promote the search for synergies or the interlinking between the different 'axes' or the financing of integrated projects. In this perspective, the training (m111) and advisory (m114 and m115) measures were exclusively associated with the axis 1 'Competitiveness'. It was not possible, although necessary, to implement trainings in line for example with axis 2 'Environment'. The rationale concerning the strategic cross-cutting objective to foster innovation also remained poorly defined.

The architecture **proposed for 2014-2020** for pillar 2 responded to these criticisms and limitations. By setting up a more strategic approach, it aimed at strengthening the coherence and mainstreaming of the interventions implemented in the framework of the Rural Development Programmes (RDP).

Six EU Rural Development Policy Priorities provided the basis for rolling out support from the EAFRD to rural areas. Priority 1 is a cross-cutting priority, supporting all thematic Priorities 2 to 6.

The structuring into these 6 broader policy Priorities, which are together broken down into 18 specific areas of intervention, known as Focus Areas (FAs), provided the Member States with greater freedom to include measures within these FAs. The linkages between operations, Measures, Focus Areas and Rural Development Priorities were also defined in three categories:

- Primary contributions: linkage of operations implemented under measures/sub-measures to Focus Areas under which they are programmed (vertical);
- Secondary contributions: linkage of operations implemented under measures/sub-measures to Focus Areas under which they are not programmed, but to which they nonetheless contribute (diagonal); and
- Transverse effects: linkage between Focus Areas and between rural development Priorities (horizontal). Positive effects are also called synergies. (EC, 2016b).

The structuring by Priorities and Focus Areas, with the obligation to distribute Measures 1, 2 and 16 funding among Priorities 2 to 6, as well as the introduction of primary and secondary contributions, have strengthened the interlinking between the KE-I-A measures and the other RDP measures in a more strategic way (at least in the design phase).

Innovation remains a cross-cutting theme which aims to reconcile an agriculture which is both productive and sustainable (EC, 2012). A new mechanism was created however, by the means of Measure 16, to promote innovation in a very concrete manner.

Although this new 2014-2020 architecture is more strategic and demonstrates a greater internal coherence, it is important to remark that it remains complex and sometimes difficult to read and communicate for stakeholders involved in Rural Development.

12.2 Internal coherence of the 2014-2020 RDPs

The internal coherence across the 2014-2020 RDPs is considered in particular regarding interlinkages of support measures associated to Priority 1 (mainly Measures 1, 2 and 16, but not limited to them) with all thematic Priorities (Priorities 2 to 6). The breakdown by Priority of Measures 1 and 2 is presented in Annex 8: ESQ5-6 – Supporting figures. Overall, the case studies and interviews performed **demonstrate strong expectations in terms of complementarities between the different Rural Development measures** related to fostering knowledge exchange, innovation and advisory activities (KE-I-A).

Measures 1, 2 and 16 have been initially designed by the Commission to work together as well as be complementary to each other. While this intention has been captured also in most Member States upon the programme development design (theoretical framework) of their 2014-2020 RDPs, its **effective implementation is however relatively limited at**

this stage. This is mainly **due to implementation delays or the abandonment of certain (sub-)measures** which faced administrative burdens (see Themes 2 and 3).

The following table presents the intended complementarity (upon the design) between measures 1, 2 and 16 compared to the effective complementarities implemented, across the investigated case study Member States.

Table 30: Complementarities between measures 1, 2 and 16 in case studies MS

Case study Member State	INTENDED complementarity	EFFECTIVE complementarity		
		M1 – M2	M16 – M1	M16 – M2
BE - Flanders	● Yes Especially between M1.1, M1.2 and M16.	● Limited <i>M1.2 projects focused on advisory services in the last call**.</i>	○ No Not reflected in M1.1, M1.2 and M16 description.	○ No
DE – Lower Saxony	○ No Sub-measures 1.1, 1.2 and 2.1 are totally isolated.	○ No Advisor training (M2.3) is managed under M1.1.	○ No	○ No
FR - Lorraine FR - Normandie ¹⁰³	● Yes Especially between M1 and M2, and potentially with M16.	○ No Implementation of M2 was abandoned.	● Limited <i>In Normandie*</i>	○ No Implementation of M2 was abandoned.
EE	● Yes	● Limited Advisors trained under M2.3 sometimes used as trainers of M1 activities.	● Limited Results of M16 projects introduced during some M1 activities.	○ No
GR	● Yes Especially between M1 and M2.	○ No M2 not yet implemented.	○ No M16 in early stage.	○ No M16 in early stage and M2 not yet implemented.
IE	● Yes Especially M1.1 and M2.3.	● Yes Especially M1.1 and M2.3.	○ No	○ No
IT –Umbria	● Yes Between M1, M2 and M16.	○ No M2 was hardly implemented.	● Limited	○ No M2 was hardly implemented.
IT – Veneto	● Yes Only with M16. Not M1 and M2 together.	○ No M2 was delayed.	● Yes M1 and M16.2 by the measure package.	○ No M2 was delayed.
Poland	● Yes Between M1 and M2.	● Yes Especially M1.1 and M2.3.	○ No	○ No

* establishing a link between the results of an Operational Group (M16.2) and M1.2 (demonstration projects) is quite complicated and manageable only by a few often-institutional stakeholders.

** The Flanders authority on M1.2 'demonstration projects' indicated that, in the submissions of the last call, there was a lot of attention for training opportunities for advisors, and projects that focus specifically on advisory services. This happened spontaneously as it was not mentioned in the call.

Source: ADE, based on case studies and interviews

The case studies illustrate the links between M1, M2 and M16 sub-measures, as well as the difficulties in implementing them.

¹⁰³ Normandie (France) was not selected as a case study region, but an interview was performed with the Measure 16 and Operational Group managing authorities, as it is recognised as the most 'advanced' region in this topic (with four calls for projects completed by early 2020).

- **In Poland**, advisors are trained under sub-measure 2.3 in the areas that are then implemented under sub-measure 2.1 in the form of advisory services. Moreover, the topics of trainings offered under M1 and M2.3 are closely related.
- **In Umbria (Italy)**, a set of complementary packages (namely M1, M2 and M16) is designed to support the interplays among the relevant actors and enhance the competencies. The themes tendered for vocational training (M1) and advisory services (M2) are intended to be strongly linked to each other and to M16, to mutually nourish themselves. In practice, M2 has hardly been implemented yet.
- **In Greece**, M1 and M2 are complementary to each other and designed in order to work together and favour implementation of M16 from the viewpoint of knowledge application. However, in practice the fact that only M1 is significantly used so far, while M16 is only in an early implementation stage and M2 is not yet implemented, implies that this synergy is not yet experienced.
- **In Lorraine**, the design envisaged a strong link between information (M1.2), training (M1.1) and advice (M2.1), which are mutually nourishing. Nevertheless, only the training measure (M1.1) was implemented due to administrative burdens. Therefore, the expected synergies could not be exploited in the framework of the current RDP's implementation.






Based on the European Network for Rural Development RDP analysis (ENRD, 2017a), some RDPs have also specifically linked their advice and training provision for environment and climate change to their support for innovation and research (under M16). For example, in Sachsen (Germany) and Aragon (Spain), the support under M1 is intended to be combined with support under M16. Aragon (Spain) has created a cooperation platform between the Managing Authority and actors involved in training, advisory and technological/innovation transfer under M1, M2, and M16. This platform advises the managing authority and plays a strategic role in energising innovation and training under a cooperation framework.

In certain Member States, **measures 1, 2 and 16 have also demonstrated potential links with other EAFRD measures**. Indeed, as detailed under Themes 1 and 2 (and the Table hereunder), some of these measures may have an intended indirect effect on knowledge exchange, innovation and advisory activities.

Table 31: Complementarities between measures 1, 2 and other Pillar 2 measures

Sub-measures	BE-Flanders	EE	FR-LO	DE-LS	GR	IE	IT-Veneto	IT-Umbria	PL
M3									
M4					Delay	M1	M1-M2	M1-M2	
M5									
M6					Delay		M1-M2	M1-M2	
M7									
M8									
M9	M1.2- M16				Delay				
M10		M1		M2.1	Delay	M1 ¹⁰⁴	M1	M1-M2	
M11		M1		M1.1-M2.1	Delay		M1		
M14		M1					M1	M1-M2	
M19						M16.1	M16		

Legend:

	Implemented and direct effect on KE-I-A
	Implemented and indirect effect on KE-I-A
	... and measure linked to M [...]
	Implemented (no effect on KE-I-A foreseen)
	Closed / not implemented

Source: ADE based on RDPs and case studies

¹⁰⁴ The measure engages compulsory training covered by M1.

The **quality scheme (M3.1)** includes some advisory activities for farmers in Estonia and Greece.

Strong links also exist between **investments support (M4)** and KE-I-A Measures. The Italian region of Veneto sheds a light on the link between M1 and M4.1 by explaining that a significant number of M4 beneficiaries are also involved in M1 training. Lower-Saxony (Germany) goes one step further by giving an advantage, through a point system, to farmers applying to M4.1 who have also participated in a "funded individual farm advisory service" as opposed to farmers who have not. Many applicants for these investments support recognised the importance of these additional points for their application, in a context of large number of applications and limited funds available.

There are also synergies between supports for investments and support for innovation. Based on the European Network for Rural Development RDP analysis (ENRD, 2017b), many RDPs (e.g. ES-Castilla Leon, FR-Auvergne, FR-Bourgogne, FR-Bretagne, IT-Liguria, UK-Northern Ireland, UK-Scotland) establish linkages among M16.1 and several investment Measures:

- M04 - Investments in physical assets,
- M06- Farm and business development,
- M07- Basic services and village renewal, and
- M08 - Investments in forest areas

Several RDPs (e.g. ES-Aragon, FR-Auvergne, FR-Bourgogne, FR-Franche Comte, FR-Haute Normandie, FR-Midi Pyrenees, FR-Nord pas de Calais, IT-Abruzzo, IT-Lazio) also establish linkages between M16.2 and the same four investment Measures. (ENRD, 2017c).

In Flanders, the proven successful innovations are included in the list of eligible investments (M4). In France (Lorraine) the RDP has also supported new technologies, notably through the targeting of investment support on environmentally-performant facilities which are part of the changes in practices (e.g. mechanical weeding) or collective investments (M4),

All CS having mentioned a link between the business start-up **aid for young farmers (M6.1)** and KE-I-A (BE-FL, EE, FR, GR, IT-VE and IT-UM) have put in place compulsory training in order to receive M6.1 funds.

The use of advice and training services is also often required by some MS/regions **prior to accessing environmental Measures** such as M10 'Agri-environment-climate', M11 'Organic farming', M12 'Natura 2000 and WFD' and M4.4 non-productive investments. The use of advisory services for example is compulsory in:

- Several MS, for agri-environment-climate beneficiaries (e.g. in FR, LU, IE, DE-Rheinland-Pfalz, ES-Andalucia, MT, UK-Northern Ireland, SK and SI).
- DE-Nordrhein-Westfalen, for the introduction of catch crops use, where it is eligible only in Water Framework Directive (WFD) sensitive areas.
- ES-Madrid, for steppe bird conservation schemes in Natura 2000 sites; and for sustainable use of grasslands in specific areas of the Natura 2000 network,
- FR-Guyane, for the operation on carbon sequestration increase in grassland through the cultivation of leguminous vegetables. (ENRD, 2017a).

Regarding **M10.1 – Agri-environment and climate measures (AECM)**, most CS put forward a link with training and advice. For France and Veneto (Italy) training or facilitation is needed to implement some AECM sub-measures, whereas in Estonia, Greece, Ireland and Umbria (Italy) training or advisory is compulsory in order to be allowed to implement AECM.

- In Umbria (Italy), from the second year of commitment beneficiaries have to update their competences, following at least 20 hours of training.
- In Ireland, beneficiaries of the M10 'Green Low Carbon Agri-Environment Scheme' must take part in obligatory training including: (1) education about the consequences of agricultural pollution, about its avoidance and about its impact on

climate change; and (2) preservation of Natura 2000 sites, important bird habitats, wildlife habitats and so on. Furthermore, beneficiaries of the M10 'Beef Data and Genomics Scheme' must participate in a two-hour training on the carbon navigator tool. (ENRD, 2017a).

Similarly to M10.1, some CS showed an obvious link between training and the implementation of **M11 – Organic Farming (OF)** and made available but not compulsory specialised training (DE-LS, FR, IT-VE) when other CS chose to make these trainings compulsory in order to be part of the programme (EE, IT-UM).

Regarding the **support for LEADER local development (M19)**, its integration with the innovation measure (m16) is quite evident in Veneto (Italy). It represents a good practice that should be monitored during the implementing phase, as it implies that innovation can be linked to local development actions.

The Coffey *et al.* study (2016) states that the **links of the EIP-AGRI with Pillar 2 were implicit**. Linking the EIP-AGRI Operational Group innovations with RDP measures can help meet the environmental and economic objectives of the CAP. In addition, knowledge exchange measures could be used for disseminating the results of the EIP-AGRI Operational Groups (e.g. demonstrations, visits in farms, trainings, etc.).

The intended complementarities have not always been materialised (yet). The **limitations to their implementation** range from:

- time limits and administrative burden (IT-VE, FR, GR);
- coordination by different services (national/regional);
- a weak and fragmented AKIS; and
- the absence of measure packages.

On the contrary, in Veneto (Italy), the strong and integrated AKIS facilitated the coherence of the actions implemented. And the presence of measure packages forces the managing authorities towards a better coordination.

I2.3 Investigation of the stakeholder perception

Across the case studies, a certain unanimity has been recorded. No stakeholder perceived contradictions or duplications of the Rural Development measures related to fostering knowledge exchange, innovation and advisory activities. Only the link between various innovation support services and National Rural Networks/LEADER could in some cases be improved in particular concerning dissemination of information.

- [ESQ12 JC3 There is evidence of an increasing level of integration and co-ordination between the CAP measures/instruments with regard to fostering knowledge exchange, innovation and advisory activities](#)

The evolution of the CAP regulations shows a strong will to increase integration. The case studies show clear **progress towards greater integration and coordination** between the different measures, but differences exist across the Member States. Overall, the CAP architecture allows for a better integration of the measures linked to knowledge exchange, innovation and advisory activities within the different Priorities, the Focus Areas and together with other measures. As discussed under the JC1, a strong complementarity is sought between measures 1, 2 and 16, even if their effective implementation is sometimes not (yet) integrated. A better consideration of the agro-environment and climate concerns has been noted across the case studies.

A few limitations must nevertheless be mentioned:

- the readability of the new CAP architecture for non-initiated actors;
- the synergies not implemented due to time delays and administrative burdens;
- the coordination difficulties, due to the management by different people or different levels of implementation (Pillar 1 versus Pillar 2 for example); and

- the link between the two pillars, with regard to knowledge exchange, innovation and advisory activities, which are sometimes poorly organised. It implies that the two pillars remain relatively independent in their implementation.

Some case studies also show an important a link with an EIP-AGRI unit within a national rural network (NRN) at Member State level. These units can also play a role of animation, coordination and transfer of information, in particular at the level of Measure 16. The coherent implementation of knowledge transfer and dissemination of information among the different entities involved (NRN, various types of innovation support services within or outside the NRN, etc.) is an important aspect covered to different degrees both at case study and at EU level.

Although the internal coherence of pillar 2 improved compared to 2007-2013, there is still a lack of flexible and combined use of Measure 1 and its sub-measures with Measure 2.1 and the Operational Groups (Measures 16.1 and 16.2), in particular regarding dissemination of results.

4.13 ESQ13: To what extent are CAP instruments and measures coherent with other related EU and national policies relevant for knowledge exchange, innovation and advisory activities?

4.13.1 Methodology

4.13.1.1 Rationale and coverage of the Evaluation Question

This question focuses on the external coherence of the CAP. According to the Better Regulations Toolbox #47 'Evaluation Criteria and Questions' of the EC Tool, 'checking "external" coherence means looking at how the various components of a EU intervention operate together with other interventions at different levels... At its widest, external coherence can look at compliance with national policies or international agreements/declarations.'

The external coherence was especially analysed at two levels:

- The level of **other EU policies and instruments** fostering knowledge exchange and innovation. In particular: the European Social Fund (ESF), the Europe Regional Development Fund (ERDF), the EU Research and Innovation programme Horizon 2020 (H2020) and Research and Innovation Strategies for Smart Specialisations (RIS 3).
- The level of **other national programmes** relevant for knowledge exchange, innovation and advisory activities related to agriculture, forestry and rural areas.

As for ESQ12, this question mainly addresses the analysis of external coherence against the diversity of architecture and implementation in various Member State specific contexts.

4.13.1.2 Judgement Criteria (JC)

JC1: There is / there is no evidence of coherence between CAP measures/instruments and **European Structural and Investment Funds (ESIF: ESF, ERDF) policies** relevant for knowledge exchange and innovation.

JC2: There is / there is no evidence of coherence between CAP measures/instruments and the **Horizon 2020 programme**.

JC3: There is / there is no evidence of coherence between CAP measures/instruments and **national programmes** relevant for knowledge exchange, innovation and advisory activities.

JC4: There is / there is no evidence of integrated approaches and co-ordination between CAP measures/instruments and other related EU policies and national programmes relevant for knowledge exchange, innovation and advisory activities.

4.13.1.3 Methodology

The answer to the evaluation question is based on a three-phase qualitative approach.

- 1) **The preliminary analysis of provisions and the literature review**, to better identify the complementarities and synergies envisaged between the different instruments (CAP, H2020, ESIF).
- 2) **Case studies and stakeholder interviews**, to identify and better understand the CAP interactions with other policies, programmes and instruments (EU and national), the dispositions taken to reinforce the coherence between these, the possible contradictions, duplication or synergy effects.
- 3) **Triangulation and contextualisation of information.**

4.13.2 Summary answer

ESQ13: To what extent are CAP instruments and measures coherent with other related EU and national policies relevant for knowledge exchange, innovation and advisory activities?

With regard to knowledge exchange, innovation and advisory activities, **other related EU instruments and policies play a role**, notably the European Structural and Investment Funds (ESIF: ESF, ERDF) and the Horizon 2020 programme.

The **legislator placed increased emphasis upon coherence**, especially in the context of the 2014-2020 programming period, via higher level requirements in order to strengthen the complementarities of the European instruments and programmes. The cross-cutting enhancement of research, innovation and training is clearly present within two of the thematic objectives defined under the ESI legal framework (Article 9 of Regulation (EU) No 1303/2013) ensuring that each ESI Fund shall support these objectives, in line with Europe 2020 strategy. A high degree of coherence, complementarity and potential synergies also exist between the Horizon 2020 Societal Challenge 2 - "Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy" - and the CAP (with the implementation of the EIP 'Agricultural productivity and sustainability').

The framework and the provisions mentioned above **ensure coherence and convergence in the objectives and clarify the demarcation lines** between each of the funding instruments, with a view to avoid any duplication. Overall, the objectives of the 2014-2020 RDPs have been built in line with the Common Strategic Framework (CSF), Partnerships Agreements (PAs) and ESIF. Attempts have been made in certain Member States or regions (France, Flanders (BE), Estonia, Italy and Poland), at least in the RDP design phase, to link the new Rural Development Measure 16 and/or the EIP-AGRI network with Horizon 2020.

The **implementation to date however does not always reveal a search for strong synergies or complementarities** between the European instruments. They are mostly being implemented independently or in parallel (notably with the ESF and ERDF). Overall, no contradictions were noted, with a few marginal exceptions due to the demarcation lines (e.g. non-agricultural trainings for farmers).

At EU level, the coherence with Horizon 2020 is recognised. Effective synergies and complementarities have been built between Horizon 2020 and the CAP within the EIP-AGRI (for e.g. in the organisation of seminars by the EIP-AGRI, with the support of national EIP-AGRI units, rural networks and some Operational Groups). In the beginning of the period, some Member States have encountered difficulties in ensuring national coordination with Horizon 2020 (Germany and Estonia), especially at Operational Group level, but most of them address it in the remaining period (until 2023). In France, there is first evidence of synergies between the implementation of measure 16, the EIP-AGRI network and H2020.

Based on the case studies and interviews, **only a portion of Member States** (France and Ireland) **possess specific national programmes** with regard to knowledge exchange, innovation and advisory activities in sectors covered by the PAC.

A strong coherence with the CAP objectives and a parallel evolution are noted both in France and Ireland. In other Member States or regions, occasional intended complementarities have been noted but most have not always been materialised (yet), implying that the expected coherence or integration have been more limited in the implementation.

4.13.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

- [ESQ13 JC1 There is evidence of coherence between CAP measures/instruments and European Structural and Investment Funds \(ESIF: ESF, ERDF\) policies relevant for knowledge exchange and innovation](#)

11.1 External coherence from an EU legislative perspective

At EU level, two main instruments and policies relevant for knowledge exchange, innovation and advisory activities are the European Structural and Investment (ESI) funds with the European Social Fund (ESF) and the Europe Regional Development Fund (ERDF).

The legislator has taken various initiatives and requirements upstream, in the context of the **2014-2020 programming period**, in order to strengthen the coherence and complementarities of the European instruments and programmes, in particular at the level of the ESI funds.

'Europe 2020' sets out a vision of Europe's social market economy for the 21st century. This strategy defines three broad socio-economic and mutually reinforcing Priorities, to be pursued in the **years 2010-2020**:

- Smart growth: developing an economy based on knowledge and innovation;
- Sustainable growth: promoting a more resource efficient, greener and more competitive Economy; and
- Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion. (EC, 2010a).

In order to contribute to the Union 'Europe 2020' strategy, as well as to the Fund-specific missions pursuant to their Treaty-based objectives, 11 common thematic objectives were defined under the ESI legal framework (see Article 9 of the European Parliament and Council Regulation (EU) No 1303/2013). Each ESI Fund shall support all objectives, including:

- the first one which refers to 'strengthening research, technological development and innovation'; and
- the tenth one which focuses on 'investing in education, training and vocational training for skills and lifelong learning'.

The 2014-2020 legal framework substantially strengthens the links with the 'Europe 2020' strategy and enhances the principle of coordination between the ESI Funds and other EU instruments. In particular, the Common Strategic Framework (CSF) and the National Partnership agreement vastly contribute to this principle.

The **Common Strategic Framework (CSF)** covers all five European Structural and Investment funds (**ERDF**, **ESF**, Cohesion funds, **EAFRD** – European Agricultural Fund for Rural Development and EMFF – European Maritime and Fisheries Fund). It aims to facilitate coordination and complementarity between interventions supported by the ESI Funds. Member States are encouraged to ensure cooperation between the managing authorities responsible for each ESI Fund, at all stages of the programming, implementation, monitoring and evaluation of their support, as well as both at the strategic and at the operational level. This framework is viewed as a practical means of coordination between ESI funds and a way to build synergies with other EU policies and instruments such as CAP, Horizon 2020, Erasmus+, etc.

The **National Partnership agreement (PA)** acts as overall strategic document, in each Member State, providing the comprehensive and coherent strategy regarding all five ESI Funds. It also provides an overview of how these ESI Funds will be used in the 2014-2020 programming period. This PA is based upon the Common Strategic Framework developed by the EC and is developed by each Member State, before building its RDPs for the same period.

The framework and the provisions mentioned above ensure coherence and convergence in the objectives and clarify the demarcation lines between each of the instruments, with a view to avoid any duplication.

The **Smart Specialisation Strategies (RIS3)** are also a key part of the EU Cohesion Policy, as well as a link with the Horizon 2020 programme and other initiatives. For the 2014-2020 period, RIS3 is a pre-condition to ERDF funding. Hence Member States and regions must have RIS3 strategies in place before their Operational Programmes supporting these investments are approved (EC, 2014c). A conclusion of the 2016 EIP-AGRI implementation evaluation (Coffey *et al.*, 2016) is that this disposition could provide a strong basis for exploiting and improving synergies and complementarities with the EIP-AGRI.

A typical example of potential synergies between Rural Development Operational Groups and ERDF funds is funding for thematic platforms and networks under ERDF. For these, stakeholders (in particular at regional level) have the potential to network and through this activity could lay the groundwork for setting up Operational Groups together (e.g. RIS3 Communities in Catalonia). Also, rural innovation actors seeking to form an Operational Group could use the Eye@RIS3 database to position themselves, find their niches and seek out potential partners for collaboration. Moreover, projects funded under the implementation of RIS3 strategies could benefit from the EIP-AGRI network to improve their visibility and share information that could potentially derive in interregional collaborations (e.g. Interreg). Despite the potential identified, a note of caution was highlighted by the 2016 EIP implementation evaluators (Coffey *et al.*, 2016), in particular as exchanges in the AKIS Strategic Working Group (SWG) have emphasised that links between Operational Group projects and ERDF funding were not yet delivering as intended in practice. Main reasons cited for the weak links included the fact that connections were too complicated for beneficiaries and selection procedures were managed by different Managing Authorities with scarce cooperation between them. Timing and conditions of calls were very different, which made it difficult to integrate funds into one project.

In 2016, the European Commission (DG AGRI, DG REGIO, DG RTD and DG JRC) launched the Smart Specialisation Platform for Agri-Food which the Operational Groups could also use. The Platform aims to promote innovation-driven investment in the domain of agri-food, based on bottom-up interregional cooperation. This initiative is intended to support regions in combining different EU investment instruments to develop their Smart Specialisation Strategies.

11.2 External coherence of the 2014-2020 RDPs

By obligation, the RDPs must include information on complementarities (under chapter 14 of each RDP). The two relevant sections include:

- Section 14.1: Description of means for the complementarity and coherence with other Union instruments and, in particular with ESI Funds and Pillar 1, including greening, and other instruments of the common agricultural policy; and
- Section 14.2: Where relevant, information on the complementarity with other Union instruments, including LIFE.

The **ex-ante evaluations of RDPs 2014-2020** (Kantor Management Consultants, 2015) assessed the RDP's consistency with the Common Strategic Framework (CSF), Partnership Agreement, country specific recommendations and other relevant instruments. It also analysed the ways in which stakeholders have interacted across funds during the RDP design. The overall conclusion of the ex-ante evaluators state that the objectives of the RDPs were overall built in line with the Common Strategic Framework, Partnership Agreements, ESIF and other operational programmes. In the majority of countries/regions, RDP consistency with the Common Strategic Framework was positively assessed as well as RDP coherence with other ESIF Operational Programmes. In countries/regions where this issue was analysed in more detail, potential synergies were identified more often than potential overlaps. More specifically, synergies between the EAFRD and the ERDF were noted with regard to actions which support innovation.

Complementarities with the ESF were identified in the areas of education, training, and social inclusion.

Coherence between the instruments was essentially achieved upstream during the design of the programmes and strategic partnerships. The **implementation** however does not necessarily reveal a search for effective strong synergies between the European instruments. The means are most often limited to the definition of demarcation lines.

At the level of the **ESF**, potential complementarities are noted with regard to training and Lifelong Learning aspects. Integration and coordination are however usually limited to the definition of demarcation lines between the themes and/or the managing authorities. In Lorraine (France), Ireland and Umbria (Italy), a single Monitoring or Coordination Committee manages at least the three funds (ESF, ERDF and EAFRD). In Ireland, support for upskilling of the labour force via ESF funding will complement various knowledge transfer measures within the RDP and provide a coordinated approach to developing the knowledge base at the national level. Among the case study Member States, the demarcation lines vary. In Germany, the demarcation is based on the content of the respective qualification measure and the group of people to be supported. The EAFRD training measure aims at improving the qualification of employees and advisors in forestry, horticulture and agriculture while the ESF measure "Further training in Lower Saxony" supports training measures for employees without thematic/branch-specific restrictions. In Veneto, the EAFRD funds activities considered necessary to achieve specific standards for the implementation of other RDP measures (cross-compliance, pesticide license, quality and security standards, etc.) and all other training activities are supported by the ESF. No real contradictions are noted, with only a few marginal exceptions. In France for example, applicants to training before installation are not eligible for the EAFRD, nor are trainings to farmers on themes outside of the agriculture context. However, no synergies are noted neither, the instruments being implemented independently or in parallel.

At the **ERDF** level, potential complementarities are noted on the innovation support aspects (particularly downstream or outside of Annex 1¹⁰⁵). As with the ESF, integration and coordination are most often limited to the definition of sectoral demarcation lines. No real contradictions are noted. But no synergies are noted neither, except for an illustration in Germany. In Lower-Saxony, a "Regional State Development and EU Funding" department was created and is responsible for the strategic coordination of the EAFRD programme and ESF/ERDF. Synergies are observed between M1.2 and M3.10.1.1 (ERDF), M2.1 and M3.8.1.1 (ERDF) as well as between M16.1 and M3.8.1.1 (ERDF), as detailed in the following Table. The greatest coherence probably occurs between EIP-AGRI and the ERDF measure "operational resource and energy efficiency". Otherwise, the instruments are being implemented independently or in parallel.

Table 32: External coherence to ERDF measures in Lower Saxony (Germany)

EAFRD measure (with No)	Content in EAFRD	ERDF measure (with No)	Content in ERDF
Water protection advice (M1.2)	Model and pilot projects for the development and demonstration of water-saving land management systems	Climate protection through peatland development (M3.10.1.1)	Development, testing and preparation for the sustainable establishment of measures for the climate-friendly management of peat soils
Single-farm Advice (EB) (M2.1)	Advice in 15 subject areas including sustainable company management	Operational resource and energy efficiency (M3.8.1.1)	e.g., energy efficiency projects (incl. plants and buildings, heat from renewable energies); advice on the use of materials and resources

¹⁰⁵ Referring to Annex 1 of the Consolidated version of the Treaty on the Functioning of the European Union which lists agricultural products.

EAFRD measure (with No)	Content in EAFRD	ERDF measure (with No)	Content in ERDF
EIP-AGRI (M16.1)	Development of new products, processes and technologies in the agricultural and food industry (including resource- and climate-friendly farming systems)	Operational resource and energy efficiency (M3.8.1.1)	e.g., energy efficiency projects (incl. plants and buildings, heat from renewable energies); resource efficiency (incl. advice on material and resource use)

Source: Lower Saxony Country Correspondent

11.3 Investigation of the stakeholder perception

Across the case studies (BE-FL, DE-LS, EE, FR, GR, IE, IT and PL) and interviews, a certain unanimity has been recorded. There is no stakeholder perception that the CAP instruments and measures are having contradictory or duplication effects with the ESI Funds (ESF, ERDF) policies relevant for knowledge exchange and innovation.

- [*ESQ13 JC2 There is evidence of coherence between CAP measures/instruments and the Horizon 2020 programme*](#)

12.1 External coherence from an EU legislative perspective

At the EU level, another main instrument relevant for knowledge exchange and innovation is Horizon 2020.

Horizon 2020 is the financial instrument implementing the Innovation Union¹⁰⁶, the 'Europe 2020' flagship initiative aimed at securing Europe's global competitiveness (EC, 2017e). Horizon 2020 is the biggest EU Research and Innovation programme ever with nearly EUR 80 billion of funding available over 7 years (2014 to 2020) – in addition to the private investment that it attracts. It brings together EU-level Research and Innovation funding into a single programme, covering the scope of the preceding Seventh Framework Programmes for Research and Technological Development (FP7), the innovation activities from the former Competitiveness and Innovation Framework Programme (CIP), as well as EU funding to the European Institute of Innovation and Technology.

By coupling research and innovation, Horizon 2020 helps removing barriers to innovation and makes it easier for the public and private sectors to work together. It connects projects born from territorially specific themes or issues with research. In addition to scientist-oriented research projects, Horizon 2020 makes available specific opportunities to support multinational interactive innovation projects in agriculture and forestry through Thematic Networks and through Multi-actor Projects (see section 4.4 on ESQ4).

Horizon 2020 is structured around three mutually reinforcing Priorities: excellent science, industrial leadership and societal challenges¹⁰⁷, each having their own specific objectives and broad lines of actions. In particular, **Societal Challenge 2** focuses on 'Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy'. The 2017 interim evaluation of Horizon 2020 (EC, 2017f) demonstrates that a high degree of coherence, complementarity and synergies exist between Societal Challenge and several other EU policies, particularly the CAP (in particular with the implementation of the EIP 'Agricultural productivity and sustainability').

Both Rural Development Policy and Horizon 2020 aim at demand-driven innovation and complement each other in providing opportunities for EIP-AGRI Operational Groups. The

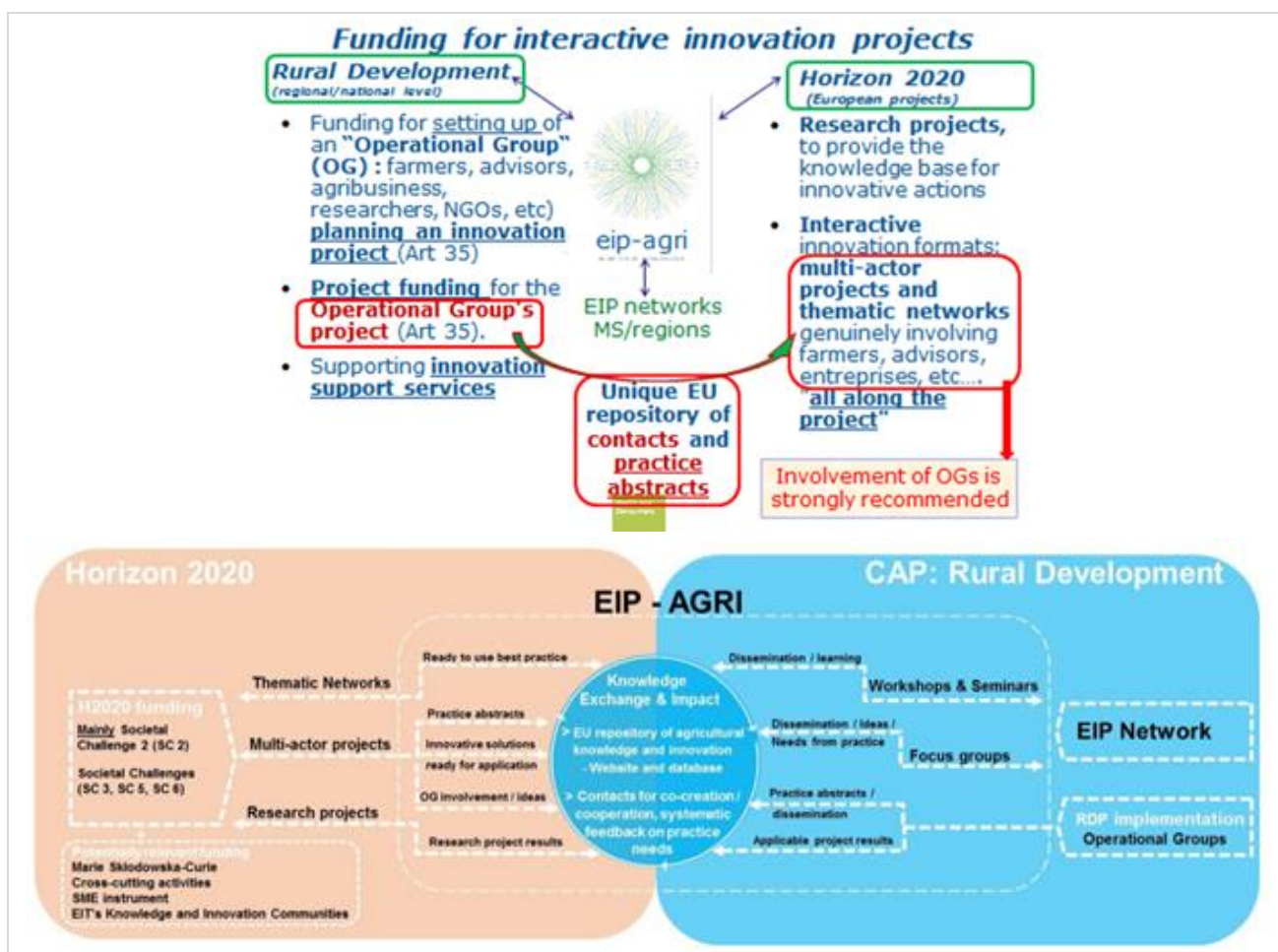
¹⁰⁶ The Commission has put forward seven flagship initiatives to catalyse progress under each of the 'Europe 2020' priority theme. These are (1) "Innovation Union" to improve framework conditions and access to finance for research and innovation so as to ensure that innovative ideas can be turned into products and services that create growth and jobs; (2) "Youth on the move"; (3) "A digital agenda for Europe"; (4) "Resource efficient Europe"; (5) "An industrial policy for the globalisation era"; (6) "An agenda for new skills and jobs"; and (7) "European platform against poverty". (EC, 2010a)

¹⁰⁷ It has two additional Priorities – 'spreading excellence and widening participation' and 'science with and for society' with their own broad lines of actions. (EC, 2017f).

Thematic Networks and Multi-actor Projects are expected to link with Operational Groups and to produce easily accessible end-user material that can be shared via the EIP-AGRI network. They also may provide innovative project ideas to Operational Groups and vice versa. Rural development programmes are applied within a specific country or region, while research policy co-funds innovative actions at transnational level. (Coffey *et al.*, 2016, p.17).

At the broader strategic level, initial conditions have indeed been established for the EIP-AGRI to contribute to Innovation Union. The links with Horizon 2020 are therefore supposedly the most concrete at this early stage of EIP-AGRI implementation, as depicted in Figure 37.

Figure 37: Interaction between Rural Development and Horizon 2020 under the EIP-AGRI



Source: DG AGRI presentation on the EIP-AGRI (upper picture); COFFEY evaluation team based on information provided by DG AGRI (lower picture)

12.2 External coherence of the 2014-2020 RDPs

Based on the 2017 interim evaluation of Horizon 2020 (EC, 2017f), complementarity between Horizon 2020 and national activities (not limited to the agricultural sector) is often considered crucial by Member States. Duplication, on the other hand, is not always perceived by default as a negative aspect, especially taking into account the global character of Horizon 2020 societal challenges. However, in the beginning of the period (2014-2020) in some Member States, it was difficult to ensure national coordination with Horizon 2020, notably in Research and Innovation systems where the bottom-up approach dominates. In other Member States however, effective synergies have been built between Horizon 2020 and the CAP within the EIP-AGRI (for e.g. in the organisation of seminars by the EIP-AGRI, with the support of national EIP-AGRI units, rural networks and some Operational Groups). Although the Public-to-Public Partnerships (P2P) supported by

Horizon 2020 co-funding are building lasting collaborations, they do not seem to have been influential yet on Member State policies and strategies.

Under the chapter 14 of each RDP, the Member States and regions must also include information on intended complementarities with Horizon 2020. Attempts are being made in certain Member States or regions to link the new Measure 16 (Article 34 of Regulation (EU) No 1305/2013) with Horizon 2020. In France, the National Rural Network aims to link the Operational Groups to Horizon 2020 projects (not yet effective in Lorraine and Normandie but it is part of the focus also for the managing authorities for the remaining of the current programming period). The French EIP-AGRI is co-financed by EAFRD and Horizon 2020, among others. In Germany however, to link Operational Groups to Horizon 2020 is considered complicated, but they intend to address it in the remaining period (until 2023). The setup of a new service joining the EIP-AGRI with both national research and EU research (Horizon 2020) has been perceived as very positive, but in practice the link of Operational Group with LEADER is currently still considered much more relevant than with Horizon 2020. The following table illustrates the intended and implemented links across the case studies.

Table 33: Links between the CAP instruments and measures and Horizon 2020

Case study Member State - region	Links between the CAP instruments and measures and Horizon 2020	
BE - Flanders	● Intended	Operational Groups are intended to be linked with the H2020 programme through the EIP-AGRI.
DE	● Intended	Until now, both Germany but also Lower Saxony considered it very difficult to establish a link with H2020.
EE	● Intended	M1 and M16 intend to help distribute (and implement) knowledge with the support of H2020 projects and research networks (e.g. ERA-Net Co-fund).
FR	● Yes	The National Rural Network links the Operational Groups to H2020 projects.
GR	○ No	No links mainly due to the lack of national level agriculture public financing.
IE	● Intended	Teagasc brings together, at national level, research, education and advice. RDP intends for these activities to complement the ones financed under H2020.
IT	● Intended	More interaction between actors involved in Operational Groups and in H2020 research partnerships are promoted.
PL	● Intended	Low presence of the Polish researchers in H2020 limit the current links but they are expected to get strengthened with the BioEast initiative.

Source: ADE based on case studies and interviews

Overall, as for the ESI Funds, coherence between the CAP instruments and measures and Horizon 2020 was essentially achieved upstream during the design of the programmes and strategic partnerships, but also at EU/national levels. The effective **implementation** at Operational Group level does not necessarily reveal yet a search for strong synergies or complementarities. The intensification of links between Measure 16 dynamic and Horizon 2020 is expected by the end of the current programming period.

12.3 Investigation of the stakeholder perception

Across the case studies and interviews, a certain unanimity has been recorded. There is no stakeholder perception that the CAP instruments and measures are having contradictory or duplication effects with the H2020 programme.

- [ESQ13 JC3 There is evidence of coherence between CAP measures/instruments and national programmes relevant for knowledge exchange, innovation and advisory activities](#)

13.1 National programmes exist with regard to knowledge exchange, innovation and advisory activities

Based on the case studies and interviews, only a portion of the Member States possess a specific national programme with regard to knowledge exchange, innovation and advisory activities. The following table illustrate their presence across the case studies.

Table 34: Presence of national programmes with regard to knowledge exchange, innovation and advisory activities

Case study Member State - region	Presence of national programmes with regard to knowledge exchange, innovation and advisory activities	
BE - Flanders	<input type="radio"/> No	
DE - Lower Saxony	<input type="radio"/> No	
EE	<input type="radio"/> No	
FR - Lorraine	<input checked="" type="radio"/> Yes	National Programme for the agricultural and rural development ("Programme National pour le développement agricole et rural") with a strong focus on agro-ecology
GR	<input type="radio"/> No	
IE	<input checked="" type="radio"/> Yes	Food Harvest 2020 (FH2020), Foodwise 2025 (FW2025) and Forestry Knowledge Transfer Group (KTG).
IT - Umbria and Veneto	<input type="radio"/> No	
PL	<input type="radio"/> No	

Source: ADE based on case studies and interviews

13.2 Evidence of complementarities and synergies based on literature and documentary review

Under the chapter 14 of each RDP, the Member States and regions must also include information on intended complementarities with national programmes. Based on documentary review, the information provided with regard to knowledge exchange, innovation and advisory activities is however rather limited, even for the two case study Member States which have a recognised national programme (France and Ireland).

13.3 Evidence of complementarities and synergies based on case studies

Among the two case study Member States with an **explicit national programme** with regard to knowledge exchange, innovation and advisory activities, **a strong external coherence can be noted.**

- The French National Programme for the agricultural and rural development, with a strong focus on agro-ecology, is completely coherent with the CAP and its evolution towards the EIP-AGRI. The economic and environmental aspects were already approached and addressed in parallel. The French programme therefore evolved together with the CAP revised objectives.
- In Ireland, evidence of some good interactions, between the CAP instruments and measures and other training national programmes open to the agricultural sector, are reported. Teagasc brings together research, education and advice to benefit their farmer clients across Ireland. Based on section 14.2 of the Irish RDP, H2020 'mirrors' what has been put in place by the Irish Department of Agriculture, Food and the Marine in recent years in terms of coupling research and innovation to tackle societal and economic challenges (support for technology adoption, support for EIP-AGRI). A good example of an integrated approach is CellCheck, which

brought together different elements of the AKS system to make a more coherent programme of activity focused on a specific national problem (Mastitis control).

Other regions, such as in Italy, demonstrate a marginal regionalised external coherence. Italy possesses a National Strategic Plan for Innovation and Research in Agricultural and Forestry sector, which doesn't qualify as an explicit KE-I-A national programme. In addition, its implementation at regional level is limited. Even though the Umbria Region does not have a specific regional programme on research and innovation, no contradictions are noted with the CAP measures and instruments. Only a marginal coherence with the National Strategic Plan for innovation and research in Agricultural and Forestry sector is recognised in Veneto, due to lack of resources allocated by national budget to this Plan.

Among the other case study Member States and regions, no contradictions were noted with the CAP instruments and measures. A few examples of marginal complementarities were even mentioned by the country correspondents.

- In Flanders, there is a link (synergy) between M1.2 (demonstration projects) and the LA-trajecten whose goal is to find innovative solutions to a specific problem or to a certain market opportunity. LA-trajecten often result in demonstration projects. Members of the Flemish Agency for Innovation and Entrepreneurship (which are at the initiative of the LA-trajecteren) are also involved in the selection commission of the demonstration projects to ensure that the projects are a continuation of the LA-trajecten and not a repetition.
- In Estonia, the RDP KE-I-A measures have potential links to the 2014-2020 Estonian Research, Development and Innovation Strategy.

Overall, the **limitations to a strong external coherence with regard to national programmes** range from:

- Lack of a coherent national or regional programme beyond the CAP measures, for the agricultural sector;
- Totally fragmented and independent measures/instruments (such as in Greece);
- Role of the RDP not necessarily detailed (such as in Flanders (Belgium));
- Few or no clear synergies; and
- No integrated approach or coordination.

The intended complementarities have also not always been materialised (yet), implying that the expected coherence or integration have been more limited in the implementation.

13.4 Evidence of complementarities and synergies based on stakeholder perception

For those case study Member States with an explicit national programme with regard to knowledge exchange, innovation and advisory activities, a certain unanimity has been recorded. There is no stakeholder perception that the CAP instruments and measures are having contradictory or duplication effects with the relevant national programme.

- [*ESQ13 JC4 There is evidence of integrated approaches and co-ordination between CAP measures/instruments and other related EU policies and national programmes relevant for knowledge exchange, innovation and advisory activities*](#)

There is evidence of integrated approaches and co-ordination approach mostly in France and Ireland, in line with a strong and integrated AKIS.

E

Theme 5: Relevance

4.14 ESQ14: To what extent do the CAP instruments and measures on knowledge exchange, innovation and advisory activities correspond and allow adaptations to the current needs and/or new or emerging issues or opportunities in agricultural and forestry and rural areas?

4.14.1 Methodology

4.14.1.1 Rationale and coverage of the Evaluation Question

The ESQ covers current needs and emerging issues/opportunities. The current needs refer to challenges that economic actors face on a daily basis; the new and emerging issues/opportunities relate to the CAP post 2020. The **needs cover both content** (different challenges to handle) **and process** (information flows to improve).

In terms of **content**, these **include among others climate change, environmentally friendly production methods** with e.g. a sustainable use of pesticides (including the end of glyphosate), but also "big data" and its use, etc.

In terms of **process**, the whole question of information and innovation flows will be considered. The EIP-AGRI and RDP Measure 16 with the creation of Operational Groups and funding of their projects is also an important element, as well as a more interactive role of advisors supporting both knowledge flows and knowledge creation, bridging the gap between science and practice.

This ESQ **differentiate between EU legal provisions and the design of measures at MS level.**

Are there gaps between these challenges and required knowledge and accessible information and advice?

4.14.1.2 Judgement Criteria (JC)

JC1: The instruments, measures and legal provisions proposed at EU level allow / do not allow to meet the identified needs

JC2: The measures and actions available in CAP framework respond to the current needs identified

JC3: The proposed instruments, measures and legal provisions at EU level are/are not sufficiently flexible to allow adaptations to current needs and/or new or emerging issues or opportunities

JC4: The needs analysis is updated periodically and taken into account as part of the selection and monitoring process to allow adaptations to the current needs and/or new or emerging issues or opportunities

4.14.1.3 Methodology

The answer to the ESQ is based on triangulation of mainly qualitative data sources and approaches. The ESQ starts with a literature review at EU level. Common current and emerging needs at EU level were identified. These are complemented by data and perception collected in case studies.

4.14.2 Summary answer

ESQ14: To what extent do the CAP instruments and measures on knowledge exchange, innovation and advisory activities correspond and allow adaptations to the current needs and/or new or emerging issues or opportunities in agricultural and forestry and rural areas?

In answering this question, evaluators should distinguish between the legal provisions at EU level and the measure design at Member State/regional level?

The agricultural sector must constantly adapt to new challenges, notably "produce more with less in a sustainable way". Also, the sector has seen an escalation of a wide range of challenges: price volatility, crises (e.g. milk), diseases (African Swine Fever, avian flu, etc.), the effects of climate change (droughts), changes in regulations, limits on the use of pesticides (e.g. an anticipated glyphosate ban in numerous Member States), and risks for salaried work, farmers' groups, etc.

The needs are at the level of the society and at farm level.

At farm level, these needs can relate to certain topics, such as economics (income instability, diversification, risk management and smart farming...), socio-economic aspects (stress management, quality of life, succession, management of labour forces) or technical topics. They can also refer to needs in terms of methods of KE.

Society also expresses relevant needs in terms of sustainability and public goods, such as environmental enhancement (reduced use of chemical inputs including pesticides), biodiversity, climate actions (mitigation and adaptation), animal welfare, food security and food safety, etc.

The legal provisions at EU level allow to meet the identified needs in terms of topics.

There is no restriction on these topics and content at European level, all themes can potentially be covered by CAP instruments and measures for training, advice and innovation to meet the needs of the target audience. Cases exist where Member States have investigated and supported new and emerging topics. However, with the exception of EIP-AGRI, there is no specific incentive to invest in these and many Member States therefore focus only on using CAP provisions to cover the obligatory requirements under cross-compliance and greening.

Compared to the 2007-2013 period, the scope of knowledge exchange has been expanded for the 2014-2020 period, both in terms of topics and methods.

For the FAS, the mandatory list of topics on which advice must be available for farmers has been expanded with greening, advice for beneficiaries of RD supported measures (especially investments), the Water Framework Directive (WFD) and Integrated Pest Management (IPM).

In Rural Development Programmes, compared to the previous period, the framework has expanded to include new activities like information or demonstration activities or visits and exchanges at farm level (sub-measures 1.2 and 1.3), the possibility to offer one-to-one advice combined with advice in small groups (M2.1) and the training of advisors (M2.3). The EIP-AGRI Operational Groups are a completely new approach based on 'bottom-up' co-creation of knowledge in response to farmers' and foresters' needs.

However, although the EU framework is meant to be broad, Member States identify limitations compared to their own initial scoping of needs. To fund one-to-one advice combined with advice in small groups (M2), the 'duly justified and taking into account the situation of the individual user of the advisory service' condition made implementation difficult for Managing Authorities due to uncertainty of interpretation and subsequent controls. Some Member States also encountered difficulties to adapt a pre-defined national funding framework to support notably webinars or other online training courses (BE-FL, DE-LS, FR-LO, EE, GR, PL) or new types of final beneficiaries.

To respond to national/regional needs, the EC required a SWOT analysis within Rural Development Programme preparation. The SWOT, linked to the explicit identification of needs and responses to those needs, is highly structured in the Rural Development Programmes and is a step forward compared to the previous programming period. This exercise has made it possible to refocus knowledge exchange, advice and innovation activities on specific themes, which was a recommendation of the European Court of Auditors report (2015).

Despite this, a significant proportion of the current support to knowledge exchange, advice and innovation is funded by national or regional resources and/or is indicated to

fall short of meeting needs. This is partly due to complexity and administrative burden linked to the implementation of the relevant CAP instruments and measures).

At the level of many Member States, the **CAP only supports a** (sometimes very limited) **part of the knowledge exchange, advice and innovation measures and actions** implemented at national or regional level. The case studies only **give a partial picture of the coverage of needs**, with many initiatives being taken elsewhere, **which makes it difficult to assess their relevance.** The case studies have highlighted different approaches to the coverage of needs in terms of topics. Most case study Member States made training and advice available for farmers, targeting their needs (technical, economic, social related topics) and societal needs (carbon management, biodiversity, environment, animal welfare). However, some have put more of an emphasis than others on societal themes and quality of life, mainly Member States with stronger AKIS (BE-FL, FR, IT, DE-LS, IE). On the other hand, other Member States have concentrated CAP-facilitated advice on themes related to farmers' needs, giving little attention to societal topics (EE, GR, PL). These Member States with notably weaker and less integrated AKIS also cover fewer emerging topics (which need to be addressed).

M1 measure fiche¹⁰⁸ (Article 14) also calls for a recurrent need's analysis occurring after the SWOT analysis to ensure that knowledge transfer activities really correspond to the needs of the target groups.

About half of the CS MS have realized an updated needs analysis since the SWOT (DE-LS, EE, FR-LO, PL), while the other half has not (BE-FL, GR, IT, IE). For the MS who have, the update of the needs analysis is rarely formalized and happens rather on a continuous basis at the initiative of operators in close contact with the field or through satisfaction surveys. A limit to these needs analysis is that they only reach farmers who regularly participate in training and advisory activities.

Regarding emerging needs, there is a gap in the needs expressed by MS with strong integrated AKIS and those expressed by MS with weaker less integrated AKIS.

On the one hand MS with stronger AKIS are expressing needs related to the social aspect of agriculture and quality of life. On the other hand, stakeholders from MS with weaker or/and less integrated AKIS go less into the details of emerging topics which need to be addressed but concentrate on needs that relate to the structure of their AKIS (e.g. ageing advisors).

Overall, the EU framework is flexible enough when it comes to the content of the training and advice activities. The difficulties that have been reported in the CS mainly come from the national/regional framework or interpretation of EU framework, which, once written, can be binding and rather inflexible.

Current and emerging needs

Current and emerging needs have been identified at EU level thanks to a literature review and at CS level. **Societal needs**, which focus on public assets like the environment or the climate, **shall be distinguished from the needs of the farmers**, who want their farm to be economically sustainable in the first place. The goal of CAP measures is to combine these two needs, so that rural operators (farmers, foresters...) can enhance their competitiveness and improve their environmental performance. Needs in terms of content or topic must also be distinguished from needs in terms of type of service.

The **agricultural sector is challenged with an acceleration of changes notably since 2015**, in a general context of price volatility, crises (e.g. milk), the effects of climate change (i.e. droughts, hailstorms, ...), diseases (ASF, avian flu, etc.), changes in regulations, the coming glyphosate ban in a lot of MS, development of salaried work, farmers' groups, etc. Therefore, different needs are identified at both EU-level and farm-level.

Economic challenges at EU-level concern farm income, which is below the average income in the rest of the economy across the EU. Even though the gap is narrowing (from a third of the average wage in 2007 to almost half of the average wage in 2017), the agricultural sector is still considered less attractive than other sectors (EC, 2018e). Labour productivity in agriculture is lower than that of other sectors. In 2016, the average

¹⁰⁸ Measure Fiche – Knowledge transfer and information actions (Measure 1 – Article 14 of Regulation (EU) No 1305/2013); DG AGRI non binding guidance.

agricultural income per AWU in 10 MS was even below 50% of the national average productivity, and only in two MS (CZ and NL) agricultural productivity was higher than the national average for the entire economy (Agrosynergie, 2018b). Besides, with the increasing alignment of the EU with world prices, farm income also suffers from the volatility of the prices of agricultural products. Tools like direct payments stabilize farm income but are often concentrated to a minority of farmers (it is estimated that 20% of the farmers receive 80% of payments (EC, 2018e)). In the CS, several themes of advice and training have been identified by farmers to cope with income instability: diversification (FR-LO), risk management and smart farming (BE-FL), more advice possibilities on drafting a business plan (BE-FL), socio-economic support during crises (DE-LS), priority needs on economic advice (DE-LS).

The position of farmers in value chains is also an issue, as agri-food value chains suffer from clear bargaining power and price transmission asymmetries. A reason for this imbalance is the high concentration in processing, distribution, and retail, while Producer Organisations are struggling to develop. So, even though agriculture has the largest number of businesses, its share of value added is low and declining at about 25% (EC, 2019c). Measures like M16 are therefore important to help farmers develop cooperation

Farmers also suffer from social isolation and stress. The CS have highlighted different themes of advice and training, like stress management, quality of life (BE-FL, FR, DE-LS) or health and safety (IE). Regarding succession, there is a demand for advice on the part of older farmers who want to find a successor and from young people who want to be trained before going into agriculture (pre-starter advice and training in FR and BE-FL). In Lower-Saxony there is a strong demand considering the important restructuring of the sector.

In addition to these needs directly expressed by farmers are the **challenges of climate change, biodiversity, and the environment**. Agriculture is strongly linked to climate change, as it contributes to climate change by releasing greenhouse gases. Indeed, EU agriculture represented 12% of all GHG emissions in 2016 (EC, 2019d). On the other hand, it is highly vulnerable to its effects because agriculture directly depends on climatic conditions. In 2017, hailstorms and frosts in spring caused a lot of damage to European vineyards and frequent rainfalls in northern Europe damaged the quality of wheat crops while 2018 was characterized by severe droughts.

As a response to the growing challenges related to climate change, the 2014-2020 CAP introduced for the first-time climate action as one of its general objectives (Focus Area 5). The response is two-folded: on the one hand, climate change mitigation, through Focus Area 5 of the RDP and more recently the European Green Deal, which aims at reducing EU's greenhouse gas emissions to 50% for 2030 (EC, 2019e). On the other hand, climate change adaptation. Consequently, there are many needs for training and advice expressed by advice and training providers, in order to offer adequate content regarding climate change, and by applied research and farmers. For instance, climate resistant farming (FR-LO, BE-FL, IT-VE) and the use of renewable energies (FR-LO) were two topics that were mentioned in the CS.

Biodiversity is fast declining in the world, including in the EU. The Farmland Bird Index is an indicator of populations of bird species which depend on EU farmland habitats. It provides information on bird populations but also offers hints at the overall situation of farmland biodiversity in each area. In 2016, this index had fallen by 15 points since 2000, and by 35 points since 1990 (EC, 2019f). The EU implemented several directives: The Birds and Habitats Directives and the Nitrates, Water Framework and Sustainable Use of Pesticides Directives. The needs for advice and training regarding biodiversity and the environment (in particular, the management of water, air, and soil) target more sustainable practices and types of agriculture, like agroecology or organic and conservation agriculture (FR-LO, IT). Other societal challenges are animal health and inputs reduction (pesticides and fertilizers), in relation to the future ban of glyphosate in the EU (yet only Luxemburg has already banned it). Through its Water Protection Advice, Lower-Saxony (Germany) has succeeded in reducing of 34 kg N/ha of agricultural land in five years.

Innovation is another current need, and a transversal issue of the CAP second pillar as part of priority 1: "fostering knowledge transfer and innovation in agriculture, forestry, and rural areas". With the new EIP-AGRI measure (sub-measure 16.1), the EC promotes a bottom-up and cooperative vision of innovation, to find new solutions to the current and emerging challenges that EU's agriculture is facing.

Technologies and digitalisation are themes that often come up as under-exploited and in demand by farmers in the CS (FR-LO, BE-FL, EE, PL). Farmers would like to be trained on these topics to be able to follow the changes in agriculture towards a more digitalized agriculture (e.g., precision agriculture). They would also like to see online courses and webinars supported and used more frequently as a training format. Indeed, they allow farmers to follow training courses from their farm, hence reducing the burdens of having to travel and of spending an entire day on training.

In a nutshell, there is a diversity of emerging needs that EU's agriculture will have to tackle in the coming years. They are economic (e.g., price volatility or farm income), socio-economic (e.g., generation renewal, farmers' quality of life), environmental (e.g. preservation of biodiversity, ecosystems, and natural resources), climatic (e.g., climate mitigation and adaptation) or transversal (e.g., innovation, big data). These issues are already identified in the 9 key objectives of the future CAP post 2020.

4.14.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

- [ESQ14 JC1 The instruments, measures and legal provisions proposed at EU level allow / do not allow to meet the identified needs](#)

This first judgement criterion **focuses on the framework**, including the instruments, measures, and legal provisions, **established at EU level**.

Regarding the content/topic:

Overall, CAP instruments, measures and legal provisions proposed at EU level allow in theory to meet the identified need regarding the content/topics. There are no barriers nor limits mentioned in CS related to EU legal provisions to cover identified topics.

The measure fiche for M1¹⁰⁹ clearly state that M1 aims at providing information and training regarding every subject that people of the agricultural, food and forestry sectors need to know to improve the performance of their holding/business. Advice supported under M2 (Article 15) is oriented to more specific issues that are directly asked by the recipients of the advice. This advice can be very broad. It covers economic and environmental performance as well as climate change and resilience of the farm and investments. The farm advisory system (FAS) aims to ensure that farmers can find advice at least on 6 topics, namely cross-compliance, greening, maintenance of agricultural area, the Water Framework directive, Integrated Pest Management and on RD measures from he/she benefited.

As for M16 and EIP-AGRI, they reinforce awareness on innovation and cooperation between rural operators especially on those topics where farmers' needs are not yet answered.

Regarding the method of training/advice:

The **European framework has been considerably expanded to provide a wide range of actions and modalities of intervention available to MS/MAs.** This allows in theory covering the different needs of the final beneficiaries.

Measure 1's scope has been broadened, which allows to support other actions than conventional training such as demonstration activities and information actions (sub-measure 1.2) or short-term farm management exchange and farm visits (sub-measure 1.3). Besides, other types of activities aiming knowledge transfer among farmers, forest

¹⁰⁹ Measure Fiche – Knowledge transfer and information actions (Measure 1 – Article 14 of Regulation (EU) No 1305/2013); DG AGRI non binding guidance.

holders and SMEs in rural areas could be programmed under the measure (e.g. knowledge transfer groups organised in Ireland, or long-term knowledge exchange programmes in Estonia).

Few case study MS have foreseen demonstration/information actions (sub-measure 1.2) (BE-FL, EE, IT-VE, PL) and amongst them two have not, or barely have, activated it (IT-VE, PL). However, the implementation of demonstration projects (M1.2) was a success in Flanders (Belgium), as it enabled farmers to see the implications of research results in a more practical way than a classroom presentation. Demonstration projects (M1.2) are considered crucial to the Flemish AKIS. Estonia chose to implement demonstration projects (M1.2) along with LLL and vocational training (M1.1) and farm visits (M1.3) as part of Long-term Knowledge Transfer Programmes. In Umbria, demonstration projects contribute to training requirements related to other measures (see ESQ5 JC2). In Lower Saxony, M1.2 is especially focused on water protection advice with a budget of EUR 75 million targeting 820 000 ha of UAA (instead of the initial 292 000 ha concerning drinking water production areas only). Advisory services are specifically adapted and comprehensive according to the category of farms, namely model farms, "advised" farms, "in-demand farms" and farms looking for information.

So, even though these new formats of training are bringing added value when they are implemented, few CS MS have taken advantage of them yet.

Regarding M2, the 2014-2020 regulation includes the training of advisors (sub-measure 2.3) as a new element to ensure the quality and the relevance of the advice provided, which was a response to one of the ECA's comments in its 2015 report.

Measure 16, and in particular the EIP-AGRI Operational Groups, were a completely new approach. They have been widely implemented across the EU, demonstrating their relevance with regard to the perceived needs of Member States, MA and stakeholders aware of this opportunity.

The main remarks made at the case study level to meet the identified needs relate to the method of KE/advice. However, the European framework is not always the restraining factor but rather the national framework, as illustrated hereunder.

The idea of supporting **more digital options for training**, such as webinars and online training, emerged in several case studies (BE-FL, DE-LS, FR-LO, EE, GR, PL). However, the measure fiche for M1¹¹⁰, mentions that "... E-learning training courses could also be eligible for support." In Lower Saxony (Germany), this type of training courses exists since 2018 or 2019, and its advantages are already recognized: geographical independence, flexibility in terms of time, sufficient interaction possibilities, less effort to participate at the level of the farmers... In 2019, the LWK NI conducted about ten webinars with about 15 to 20 external customers each and several are already planned for 2020. However, these webinars are not supported by the CAP, as their format does not meet the minimum requirements set by the regional framework (MA) in terms of duration.

The German CS also highlighted that **small group advice** under M2.1 could be beneficial. Several advisory bodies consider this approach to be useful as an introduction to new advice topics or for topics that have a high public interest (e.g., advice on biodiversity, climate protection or sustainability). M2 measure fiche¹¹¹ proposes that "*Where duly justified and appropriate, advice may be provided partly in group, while taking into account the situation of the individual users of advisory services*". However, it might not be easy for advisors to duly justify the need for small group advice as it is required by the EC.

Regarding the **final beneficiaries of training and advice**, M1's measure fiche states that the range of participants is broad: "The participants in the knowledge transfer and information actions should be persons engaged in the agricultural, food and forestry

¹¹⁰ Measure Fiche – Knowledge transfer and information actions (Measure 1 – Article 14 of Regulation (EU) No 1305/2013); DG AGRI non binding guidance.

¹¹¹ Measure Fiche – Advisory services, farm management and farm relief services (Measure 2 – Article 15 of Regulation (EU) No 1305/2013); DG AGRI non binding guidance.

sectors, land managers and economic actors/SMEs operating in rural areas. In principle, neither unemployed people nor municipalities could benefit from the measure”.

In Lower-Saxony, the scope of final beneficiaries has been broadened to advisors to agricultural/gardening enterprises, rural women members in a rural women's association and women in agriculture, and to rural actors in the field of moderation and support of village development processes.

However, the Irish CS noted that the CAP targeted mostly individuals and not “farming families”. The problem is not the EU framework but the implementation of advisory and knowledge transfer support at the national level and a lack of integrated approaches. Schemes tend to be targeted at the ‘farmer’ rather than the ‘farming family’ or businesses, missing opportunities to engage with the wider set of individuals associated with farming; and, separating out agriculture from the wider rural context. This is also reflected in the list of topics not or poorly covered by the CAP (see introduction of ESQ14), which are often related to a holistic approach, such as rural isolation, health, service provision, and succession planning.

In France, but also in other MS (e.g., BE), there is an issue about young farmers. As long as they are not officially recognized as “farmer”, they are excluded from supported trainings.

Even though there are few major constraints linked to the EU framework regarding the topics and methods of KE, administrative burden is an important reason why some MS do not mobilise all CAP measures (see ESQ9 and ESQ10).

- [ESQ14 JC2 The measures and actions available in CAP framework respond to the current needs identified](#)

This second judgement criterion addresses the **adequacy of the design of CAP measures** in relation to the needs identified **at Member State level**.

At the level of many Member States, the **CAP only supports a** (sometimes very limited) **part of the KE-I-A measures and actions** implemented at national or regional level. The case studies therefore **give a partial picture of the coverage of needs**, with many initiatives being taken elsewhere, **which makes it difficult to assess their relevance**. Besides, beneficiaries and participants (farmers, foresters, etc.) do not necessarily distinguish co-financed and non-co-financed actions.

Finally, in some countries, such as Greece, implementation is not sufficiently advanced to assess the coverage of needs.

Needs analysis

The 2015 ECA report on knowledge transfer and advisory measures of CAP 2007-2013 highlighted that the **funds allocated to KE-A activities had to be spent in response to identified needs**, and that the CAP had to target more precisely the actions it supported. In the current **2014-2020 RDPs, greater attention is being paid** at the level of the European framework to gearing actions more **towards needs**: “Knowledge transfer and information actions should not only take the form of traditional training courses but should also be adapted to the needs of rural actors” (Regulation (EU) No 1305/2013).

Besides, when preparing each RDP, **European legislation requires a SWOT analysis** to be carried out **and an identification of the needs** specific to the areas covered by the RDP (see Article 8 of Regulation (EU) No 1305/2013). The EC has given clear guidance on this SWOT and needs analysis exercise by structuring it around RD priorities (knowledge transfer and innovation in agriculture, forestry and in rural areas is the cross-cutting priority 1). All case studies refer to the SWOT exercise and needs analysis as part of the preparation of the RDPs. It is highly structured at EU level and is a real step forward compared to the previous programming period. **However, this exercise** aims to analyse the needs of the area at RDP level, but **is not necessarily focused on the specific needs in KE-I-A terms**.

This exercise has made it possible to refocus KE-I-A activities on certain specific themes. For example, in DE-LS, the SWOT analysis made it possible to award additional points for submitted EIP-AGRI project proposals on the topics of competitive resource-saving and animal friendly production systems, grassland and permanent crop management systems and improving the GHG balance of agricultural systems and downstream value chain. In France also, it allowed to refocus EAFRD support (M1, M2) on a few priority themes linked to agro-ecology, compared to the previous programming period.

However, the case studies make relatively little mention of specific/structured analyses of KE-I-A needs and issues at the beneficiary level, both in method of knowledge transfer and content, in support of SWOT programming. This does not necessarily mean that the actions are not based on needs analyses of the final beneficiaries (farmers, foresters, etc.). These 'opinions' are collected continuously and in direct contact with the field, but by the training bodies, and therefore they are not structured specifically in the framework of the RDP. For example, in Germany, the topics for advice were previously defined and weighted by the Ministry in a demand analysis for M2.1. It has led to a modulation of the aid rate according to the type of subject: biodiversity, sustainability systems and conversion to organic farming were fully financed, while for the remaining topics the grant rate was 80%.

Needs in terms of topics:

The CS have highlighted different approaches regarding the coverage of needs in terms of topics. Most case study MS offered farmers training and advice targeted at both their direct needs (technical, economy, social related topics) and societal needs (carbon management, biodiversity, environment). However, some MS have put more of an emphasis than others on societal themes (BE-FL, FR, IT, DE-LS, IE). For instance, in order to encourage the uptake of advice on societal topics, Flanders has made advice on biodiversity, climate, water, soil or safety at work compulsory if farmers want to access to the more popular topics "business plan" and "management". Lower-Saxony has limited its M2 funded advice to societal themes. Through GLAS and Carbon Navigator trainings both funded by M1, Ireland has put an emphasis on societal topics. Lorraine, Flanders and Veneto have defined environment related topics as priority themes. On the other hand, some MS have concentrated their advice topics on themes related to farmers' direct needs, while leaving little space to societal topics (EE, GR, PL). This is the case for Poland for whom the public advisory system focuses on farmers compliance to EU regulation and absorption of EU funds and for Estonia whose advice and training themes are aimed at answering farmers' technical needs (plant production, animal husbandry, organic farming...). It is often noted in CS that financial support for societal themes is key to catch farmers' attention on these themes.

Overall, the measures proposed (with and without CAP funding) make it possible to cover most of the needs identified in terms of content according to the case studies. The CS (BE-FL, DE-LS, EE, FR-LO, PL, IE) reported that the range of advice and training topics responded at least partly to the farmers' needs. German farmers answered to a small survey held in January 2020, that available advice and training were partly in line with their needs, even though they expressed having no or less time for these activities. Besides, from the point of view of the advisory services providers, the topics covered are much more concrete and practical compared to 2007-2013 (it was focused on cross-compliance advice supported by a checklist folder, occupational safety and energy savings). They are very "practice-oriented" and the current range of advice offered largely meets farmers' demand. 65% of the farmers in the Grand Est region (France) surveyed in January 2020 declared either that training opportunities and advice were adapted to their needs (6%) or fairly adapted to their needs (59%). Regarding Greece and Italy, the implementation stage was either too early (GR, IT-UM) or there was no specific answer (IT-VE).

Regarding EIP-AGRI Operational Groups, the approach is interesting because it is bottom-up and addresses issues **starting directly from the needs expressed by farmers**. There are however exceptions, such as the Umbrian CS (IT-UM), which showed that Operational Groups are intended to address the needs expressed in the RDP, rather than the farmers' needs, which can be different and more specific. Indeed, a lot of projects

were proposed by the University of Perugia or local professional organisations, who then asked farmers to adhere. Therefore, some farmers struggle to see how these projects will respond to their needs at the farm.

Needs in terms of method of KE and advice:

A number of proposals have been highlighted in the CSs: digitalization of the training courses (webinars) so that it is more practical for farmers to follow them, small group advice, beneficiaries... Limitations that have been encountered by the MS often come from the way the national frameworks were drafted, which does not allow to easily adapt to emerging needs.

- [ESQ14 JC3 The proposed instruments, measures and legal provisions at EU level are/are not sufficiently flexible to allow adaptations to current needs and/or new or emerging issues or opportunities](#)

As for Judgement Criterion 1, this criterion is about the EU framework. As a reminder, JC1 showed that **there is no restriction in terms of topics** as defined by the Regulatory framework. **The constraints noted by the case studies concerned the method of KE** (e.g. use of e-learning). This was **however generally due to national restriction once a framework was given than to the EU framework**. Indeed, once the regional/national framework is drafted, it may be binding and inflexible and bringing in emerging needs may be more complex.

Overall, CS reported that the instruments, measures, and legal provisions at **EU level were sufficiently flexible to allow adaptations to current and emerging issues or opportunities** (FR-LO, DE-LS, GR, PL, IT).

Only BE-FL noted that M2 KRATOS was not flexible enough. Indeed, according to MA, in a time of crisis or when an urgent need arises, it is not possible to add an extra module because of administration. Another drawback is that, when asked for advice, advisor must include all elements described in the specification of the modules, hence an advice that is not tailored to the farmer's needs. However, the current advisory measure is still more flexible than previous measure m114, where farmers were obligated to request advice on every advice module.

Where rigidities are found (e.g. EE, IE), the case studies attribute them to the national/regional level and not to the European framework. For instance, in Ireland, a list of topics is set for the Knowledge Transfer groups, often preventing from exploring local issues. An extensive 3-year plan must be developed, which was felt by the participants to be too demanding given the level of financial support. Similarly, in Estonia, it was reportedly difficult to include emerging needs in long-term knowledge transfer programmes.

In case the administrative burden would be too high, MSs tend to use national measures and funding instead of the CAP (see ESQ9).

- [ESQ14 JC4 The needs analysis is updated periodically and taken into account as part of the selection and monitoring process to allow adaptations to the current needs and/or new or emerging issues or opportunities](#)

This JC focuses on the update of the need's analysis at the level of the Member States, and in particular the CS Member States.

Updated needs analysis:

As presented in JC2, a SWOT analysis is required when preparing the RDP. M1 measure fiche (Article 14) also calls for a recurrent need's analysis occurring after the SWOT analysis to ensure that knowledge transfer activities really correspond to the current needs of the target groups. It furthermore asks that actions supported by the EAFRD should respond to the demands of rural actors rather than being directed by service providers, without more precise instructions.

“In order to **provide appropriate knowledge transfer activities which match the needs of the target groups in the programming area, a recurrent analysis should be conducted**. Trainings, as well as other knowledge transfer actions supported by the EAFRD **should respond to the demands of the rural actors instead of being driven by the service providers**. As the needs of rural actors evolve during time, the analysis must be up to date in order to respond timely and accurately to actual needs. There are standard methodologies to conduct such analysis. Managing Authorities are also encouraged to exchange good practices for instance in the context of the network activities (e.g. ENRD and EIP-AGRI networks). This recommendation stems from the ECA special report 12/2015 (ECA, 2015) on knowledge transfer and advisory measures.”

The situation regarding recurrent needs analysis greatly varies from MS to MS. In the CS, 3 MS have not realised any need update since the SWOT analysis (BE-FL, IE, IT), and in Greece, there has not been any update either, but few measures have been implemented yet.

In Estonia, Germany and Poland, needs have been updated: in Poland, the updated needs analysis is considered during the selection and monitoring process to allow adaptations to the current or emerging issues. In Estonia, on the other hand, the needs are discussed in a more informal way and long-term contracts make it difficult to adapt them in the middle of the period.

In Lower Saxony (Germany), advisory service providers had to answer a survey at the end of the first award period for M2.1 (2016-2018). The survey asked the respondents from whom originated the topics of advice (the advice provider or the beneficiary of the advice), the deficits encountered by farmers for each advisory topic and the main recommendations made by the providers on the topics. For the second allocation period starting in 2019, the 15 topics were combined into 12 and ranked anew because of the experience and assessments made. The ranking points were increased for the following advisory services: Advice on greening and agri-environmental measures (No. 1), advice on sustainable animal performance (No. 8) and advice on diversification, socio-economics and risk management as well as improving communication (No. 12).

In France, the needs analysis is adapted at the level of training organisations and the choice of training themes is driven by the needs from the field and the national policy (PNDAR). The EAFRD is not the driver of training activities nor of the content.

In several case studies, the assessment of needs and priority themes for training is done at national/regional level but local actors have their say in the topics for training and advice thus, to a certain extent, adapting offer to geographical areas (FR-LO, BE-FL, DE-LS, IE). In Lorraine, needs and priorities are identified at regional level but training organizations update the content of trainings depending on the periodic needs' analysis. In both Flanders and Lower-Saxony, assessments and decisions are made at a regional level but consider the local scale: consultations with experimental stations in Flanders and analysis of surveys aimed at trainers and advisors in Lower-Saxony.

Overall, the update of the needs analysis is rarely formalised at this stage. Still, it does not mean that it is not done. Needs analysis is carried out more on a continuous or informal basis (FR-LO, EE) at the initiative of operators in close contact with the field in order to adapt the content of actions (BE-FL) or through satisfaction surveys. However, these **satisfaction surveys** are generally oriented towards system participants or "customers" of the system and **do not necessarily capture the needs of farmers or foresters who do not train or seek advice from the supported organisations**. Indeed, the French CS indicated that the renewal rate of participants to training in the Grand-Est region was low, meaning that farmers who attend training are generally always the same ones. Therefore, there is a considerable number of farmers that never go to training courses. The problem is the same in Ireland, where training and advice activities only reach one to two thirds of the Irish farmers. The remaining farmers are very hard to reach (although they may be the ones who would need training and advice the most) and it is equally difficult to get their opinions on the actions supported by the CAP.

Emerging needs and opportunities:

Needs for further advice/training on topics such as technologies, environment and biodiversity, adaptation to climate change (droughts especially) and economy and farm performance were widely mentioned in the case studies. There is however a gap in the needs expressed by MS with strong integrated AKIS and those expressed by MS with weaker less integrated AKIS. On the one hand some regions like Lorraine (management of labour force, human relations), Flanders (managing employees), Lower-Saxony (generational change) and Ireland (integration of women, isolation) are expressing needs related to the social aspect of agriculture and quality of life. On the other hand, stakeholders from MS with weaker or/and less integrated AKIS go less into the details of emerging topics which need to be addressed but concentrate on structural needs. Estonia along with Poland call for the renewal of their aging advisors and further cooperation between farmers, research, and advisors.

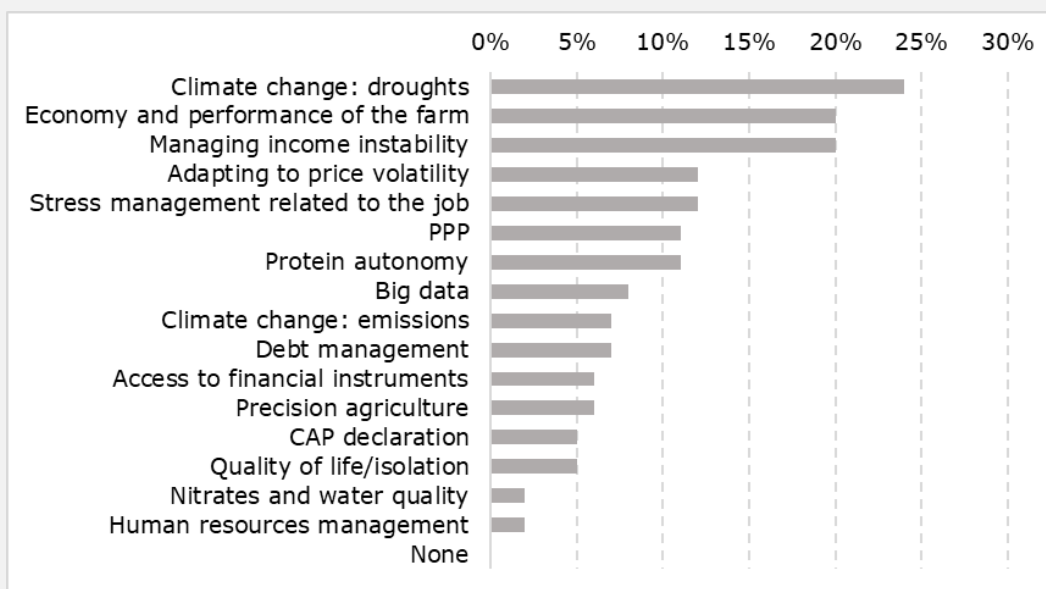
In DE-LS, farmers would have liked to see supported advice about things that they would otherwise have to pay for separately, e.g. the nutrient comparison.

In IT-VE, the change of the agricultural sector towards more sustainable practices and technologies has been highlighted as a "relevant and absolute" priority, all the more with increasing environmental crisis and climate change. Besides, both Italian and French KE-I-A stakeholders reported that forestry issues were not sufficiently covered by the RDP.

ADE survey "ADVICE AND TRAINING, WHAT DO YOU NEED?" in Grand-Est (France)

The survey conducted by ADE among the farmers of the Grand-Est region (France) showed that a majority of the 142 respondent farmers consider that the available training activities and advice correspond to their needs. However, 34% of them considered that the available offer was not very adapted (29%) or not adapted at all (5%) to their needs.

Droughts (24% of farmers) came as the most urgent need as the region has suffered several years in a row from severe droughts. Unstable income (20%), price volatility (12%) came close behind alongside economy and holdings' performances (17%) and stress management (12%) as insufficiently developed themes in trainings and advice. As for reasons given by surveyed respondents for non-subscription to training programmes or not seeking for advice, 36% answered the services proposed do not correspond to their needs. The other main barriers to training and seeking advice are purely material reasons: they lack the time (35%), the centres are located too far (33%) and the times chosen for the training programmes are not adapted (29%). Cost limitation (15%) and lack of information (12%) are for a minority a reason for not participating in training activities or not seeking advice. When given a possibility to propose solutions on how to improve trainings and advice, 4 farmers suggested for trainings to be made online and/or in winter in order to gain time or be trained and advised when they have more time at their disposal. Trainings involving fewer people to guarantee a more personal experience was suggested by one respondent. The lack of advisors was mentioned twice including advisors specialized in organic agriculture. Finally, the idea of supporting other training associations (APAD, Ver de terre productions etc.) along with making all trainings free of charge.

Figure 38: Emerging needs for training and advice expressed by Grand-Est farmers

Source: ADE Final Beneficiaries survey in Grand Est (France), 2020

4.15 ESQ15: To what extent have the CAP instruments and measures and corresponding developed concepts, strategies and systems (e.g. EIP-AGRI, EIP networks, AKIS, etc.) implemented under the CAP been relevant for the EU/national/regional development and fostering of the knowledge exchange, innovation and advisory activities, and in this context to what extent is the support by the Rural Development policy relevant to the FAS obligation?

4.15.1 Methodology

4.15.1.1 Rationale and coverage of the Evaluation Question

This question requires firstly an assessment of priorities and needs for the effective and efficient functioning of KE – I and A across the EU, and some measurement of whether the CAP response to these priorities and needs – in all its elements - appears appropriate and proportionate.

The second part of this ESQ asks for an assessment of the extent to which RDP funding for relevant measures is supporting the rationale and goals of the FAS, as set out in the EU regulation on financing, management and monitoring of the CAP. It must assemble evidence clarifying how and if RDP funding has supported FAS structures and activities and assess the relative influence of this funding upon the overall achievements of the FAS, as compared to a constructed counterfactual (estimating what would have been possible to achieve through the FAS, without the RDP funding and considering what FAS did to funding performance).

4.15.1.2 Judgement Criteria (JC)

JC1: The CAP measures relevant for training, advice and innovation; and the CAP instruments and measures and related concepts and systems (including FAS); help to address the relative weaknesses in the AKIS across Member States, promoting less fragmentation and greater provision in line with needs.

JC2: There is strong evidence from particular case study examples where RDP measures (1, 2, and 16) and/or CAP instruments and systems (e.g. FAS, cross-compliance

obligations) play a critical role in sustaining the effectiveness of AKIS functions and resources.

JC3: The relevant CAP measures have made a significant / modest / insignificant impact upon the operational effectiveness of the FAS, relative to the counterfactual.

4.15.1.3 Methodology

Information sources and tools:

- Simple examination of maps, charts or tables comparing AKIS quality and functionality to patterns/levels of CAP expenditure on the relevant measures
- EU level surveys – the FAS survey seeking views on the role of FAS; and the survey of MAs concerning KE-I-A.
- Case studies – interviews with MAs, with FAS administrators, advisory and training providers, beneficiaries of advisory support, and independent experts, to gather examples and evidence of CAP measure/instrument performance, CS judgements.

4.15.2 Summary answer

ESQ15: To what extent have the CAP instruments and measures and corresponding developed concepts, strategies and systems (e.g. EIP-AGRI, EIP networks, AKIS, etc.) implemented under the CAP been relevant for the EU/national/regional development and fostering of the knowledge exchange, innovation and advisory activities, and in this context to what extent is the support by the Rural Development policy relevant to the FAS obligation?

Examination of actual and planned expenditures for Measures 1,2 and 16 in RDPs show only weak links to the notion that funding should be greatest in MS with greatest needs for knowledge exchange, advice and innovation, as an indicator of relevance. The correlation between *planned* use of these measures and need as indicated by territories with weaker AKIS appears stronger than that between *actual* use and this indicator, up to 2018, suggesting that implementation issues may have reduced the relevance of CAP measures in practice.

However, interviewees in most case studies feel strongly that all the relevant CAP measures and instruments promote better functioning of the AKIS in their Member State or region, in a variety of ways. In some cases the AKIS is deemed highly reliant upon CAP funding to survive, while in others, funding is much less a factor and it is more the impact of the specific measures which is deemed significantly to improve AKIS functioning.

There is evidence that the EU and MS networks and institutional developments supporting EIP-AGRI, in particular, have fostered significant new functionality, mobilising farmer learning and strengthening links between research and innovation in practice; albeit for relatively small numbers of farmers, to date. Many interviewees among Managing Authorities, stakeholder organisations and knowledge exchange providers in most of the case study countries express positive views about the emerging potential of the EIP-AGRI approach to transform the functionality and innovation capacity of the AKIS. Also, National Rural Networks in some MS (e.g. Italy, Estonia) are identified by stakeholders as important in enhancing knowledge exchange among Pillar 2 beneficiaries and the advisory and training community.

Specific examples of measures enhancing AKIS include distinctive approaches to Measure 16 in Ireland, Poland, France, Germany and Estonia. To a lesser extent, Measure 2 in Italy and Measure 1 in Flanders are also highlighted as important. However, the case studies also emphasise that an integrated approach to deployment of all relevant measures can be particularly beneficial, as described in Italy, France, Ireland and Germany.

There is a clear division among Rural Development Programmes between those for which support to advisory services (M2) has been critical for mobilising the Farm Advisory System (FAS), and those where the funding can still be important but is not directly impacting the role or performance of FAS (Lower Saxony in Germany, France). The former situation is encountered most often in Member States with relatively weak AKIS where implementing the FAS was closely linked to establishing one or more farm advisory services, for which EAFRD funding was and remains valuable. However, even in Member States or regions with quite strong or medium AKIS, such as Flanders (Belgium) and Italy (also Estonia), Managing authorities used support to advisory services (M2) notably but not only to meet the FAS obligation. Advisory bodies receiving Rural

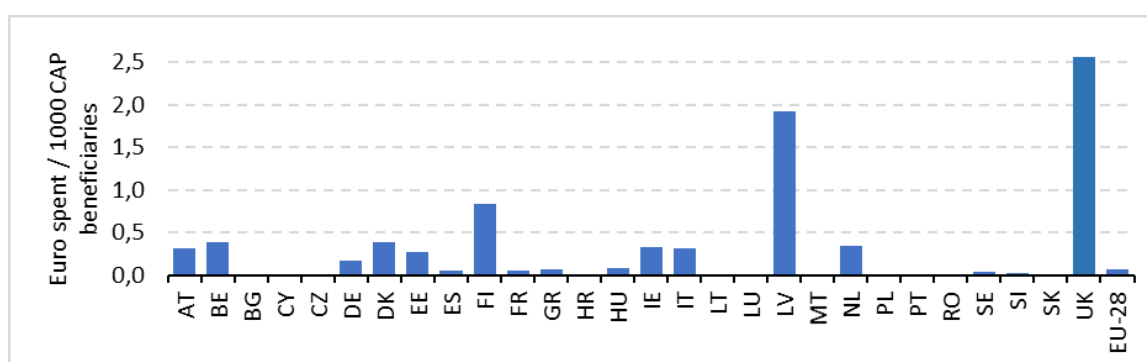
Development funding for advice (M2) are required to report on the type of advice provided and the number of farmers advised, as a condition of receiving the Rural Development Programme support. Whether this 'guarantee' represents a significant difference from the counterfactual (i.e. if there were no FAS obligation) cannot be determined, as case study interviewees' opinions differed, on this question. Logically, in those MS and regions where a pre-existing and strong integrated advisory service was simply identified to fulfil the FAS obligation, there is little influence of Rural Development Programme funding on the FAS– as appears the case in Ireland, France and Germany (Lower Saxony).

4.15.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

- [ESQ15 JC1 Relevance of CAP measures and instruments to address relative weaknesses in the AKIS](#)

Indicator 1: Figure 39 presents a comparison between MS' actual realised intensity of spend per CAP beneficiary (2018), on Measures 1, 2 and 16.1/16.2 combined (Potential budget for EIP-AGRI at national level is under M20.2 and this data is not available).

Figure 39: Total budget spent on M1, M2 and sub-measures M16.1 and M16.2 (most relevant for EIP-AGRI) by 2018, per thousand CAP beneficiaries in 2018



Source: CCRI based on 2018 AIR dataset, the European Structural and Investment Funds (ESI) and DG-AGRI's number of CAP beneficiaries (fiscal year 2018)

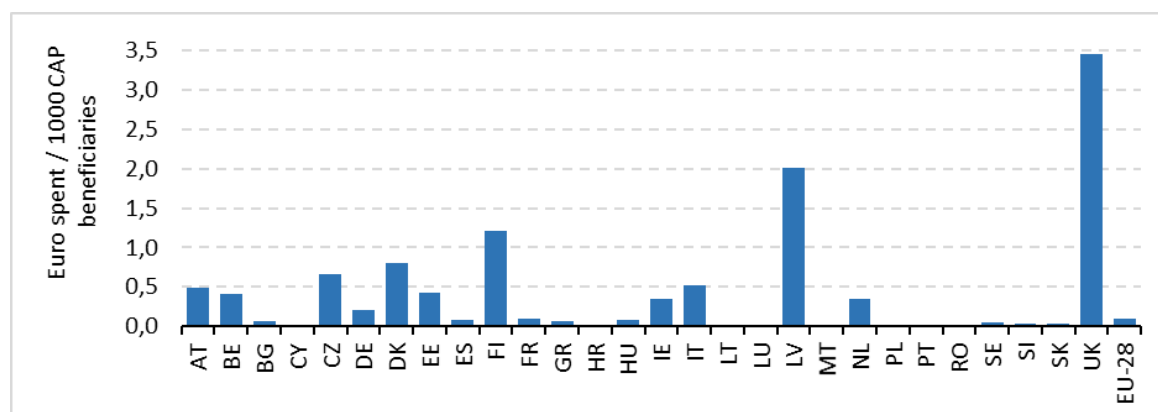
The chart shows clearly that the intensity of actual spending in the first 4 years of RDPs was highest in a few northern MS: UK, Latvia and Finland; and relatively high in Austria, Belgium, Denmark, Estonia, Ireland, Italy and the Netherlands. These MS include some with strong and integrated AKIS (Ireland) but also a few with weaker AKIS, as judged some years ago in the PRO-AKIS study. However, actual spending on some measures is known to have been lower than intended partly due to administrative and regulatory obstacles, so an examination of intensities of planned spending (Figure 41), compared to intensity of actual spending, on the three measures 1, 2 and 16¹¹² (Figure 40) gives a comparison of the intention to meet needs, among the MS, compared to what was actually realised.

Here again a strong emphasis can be seen upon spending in the UK and Latvia, but also in the Netherlands. Quite high spends are also planned in Czechia, Finland, Italy and Poland when considered relative to the average level for EU28. Greece, Hungary, Slovakia and Estonia, also Denmark and Germany, Belgium and Austria, appear to plan above average spending on these measures, while Ireland and Bulgaria are also just above the EU28 average level. This presents a stronger link between resources and relative needs: many of those MS with weaker AKIS are in the group planning to spend above average on these measures, relative to eligible beneficiaries. Nevertheless, there remain MS with weak AKIS which apparently do not plan much use of these measures (e.g. Portugal, Romania, Malta).

¹¹² Note that the figures for planned expenditures do not break down the individual components of M16 so it is only possible to compare planned against actual for the whole of M16, along with M1 and M2, rather than just the EIP-AGRI spending within M16.

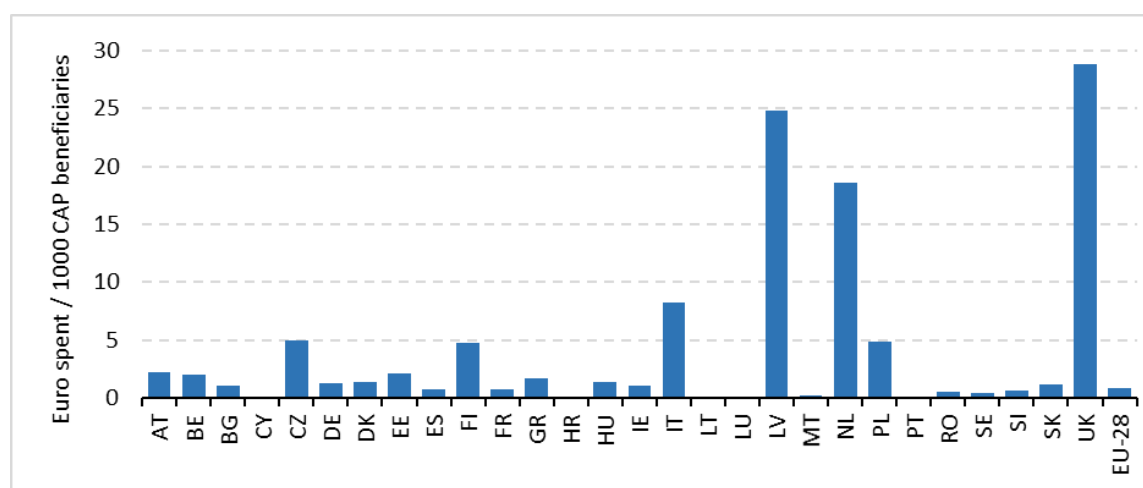
The suggestion from comparison of these two charts is that implementation issues, leading to lower than planned expenditures particularly in MS with relatively weak AKIS, have reduced the relevance of these 3 CAP measures for strengthening AKIS.

Figure 40: Budget spent on M1, M2 and total M16 (including all sub-measures) by 2018, per thousand CAP beneficiaries in 2018



Source: CCRI based on 2018 AIR dataset, the European Structural and Investment Funds (ESI) and DG-AGRI's number of CAP beneficiaries (fiscal year 2018)

Figure 41: Planned budget spend on M1, M2 and total M16 (including all sub-measures) for 2014-2020, per thousand CAP beneficiaries in 2018



Source: CCRI based on 2018 AIR dataset, the European Structural and Investment Funds (ESI) and DG-AGRI's number of CAP beneficiaries (fiscal year 2018)

The RDP survey produced a range of positive opinions concerning the relevance of the various CAP measures and instruments in enhancing the AKIS.

Measure 2 was largely felt valuable for several key roles including "support environmentally-friendly practices", "support emerging themes", also "independent advice" and "adequately qualified advisors".

Measure 1 was noted as supporting knowledge exchange well-adapted to needs, with a variety of knowledge exchange approaches, and training providers with the required capacity.

The EIP-AGRI was identified as particularly valuable (see ESQ16 JC4)

The **Case Study evidence** is supportive of the relevance of CAP pillar 2 measures. Notable views of interviewees and conclusions of CS authors are given as follows.

In **EE**, CAP instruments and measures help to address the weaknesses of AKIS and better meet the needs regarding KE-I-A. In the opinion of the representatives of the Managing Authority, one example could be the need to foster co-operation between farmers/

enterprises and research and development institutions. As the main barrier has been lack of financial capacity, the measures providing support for cooperation (M 16) have been very well received and the calls for applications have been very competitive. Several interviewees say M16.0 is a good example of fostering the link between farmer and research (which is usually weak). Innovation clusters (M16.0) are a distinctive feature, in EE the farmer groups operating innovation clusters are not officially Operational Groups but in fact they function as Operational Groups. Farmers discuss their needs, select activities to be implemented and are members of the organizations managing the activities. Each group has research partners and selected activities (sub-projects) are implemented in co-operation between farmers and research (and development) partners. Unfortunately, involvement of farm advisors in these groups is mostly rather weak.

Another positive example was long-term knowledge transfer programmes where several organisations/research institutes have formed consortia to execute a wide range of KE activities. Before this, activities were fragmented and planned for much shorter periods, sometimes duplicating similar themes as there was less cooperation between different stakeholders. Present programming period measures force, as well as allow, service providers and beneficiaries to have better and longer-term planning than earlier.

The National Rural Network in EE is actively involved in innovation transfer and in the framework of their activities, the separate Innovation Network was established in 2014. ENRN (Estonian National Rural Network) actively promotes the exchange of knowledge and experience at local, national and EU level and is seen by all interviewees as valuable.

The DE-LS PFEIL funding programme uses the 3 RDP measures 1, 2 and 16 in an integrated approach that is strategically oriented towards sustainable, environmentally friendly and animal-friendly agriculture and the improvement of ecosystems. Compared to the last funding period, M1.2 and M2.1 have been given higher weighting. Based on the positive experiences of the past it has been shown that accompanying advisory services increase both the scope of participation and the environmental impact of agri-environmental climate measures (AUM). The targeting of significant funding to M1.2 advice to support targets of the Water Framework Directive is also highly relevant.

The training measure M1.1 supports the personal and operational development of participants. The training courses supported with EAFRD funds are aimed at actors with management functions as well as employees, trainees and family members. The opportunities for continuing vocational training can have positive effects at the personal, company and social level.

Measure 2.1 continues to be of great importance - EAFRD funding secures the state funds over a period of seven years. Topics with high social and lower economic benefits for the farm, such as "sustainability systems" and "biodiversity" would not be taken up without funding. The measure is well accepted and represents a kind of door opener for some topics on the farms. Advice often brings about a change in farmers' awareness, which would often not take place without the support.

The CS author concludes the importance of EIP-AGRI has been demonstrated by the cooperation in EIP-AGRI projects involving actors from (very) different functional areas and giving them a new and expanded view of innovation. At national level, Germany was very sceptical about the EIP-AGRI and Operational Group process at the beginning (2012): they did not really want this concept, they considered they did not need it and were happy it was not mandatory. Today they are very happy: it is dynamic and provides added value, bottom-up innovation with co-creation of knowledge and more exchange of information between research and farmers.

In IE, stakeholder interviewees suggest the AKIS has become slightly more fragmented as the result of a reduction in state support and CAP measures which have provided funding and training for private sector advisors (and other bodies such as the National Rural Network) to become involved in AKIS delivery. The AKIS, however, is still viewed as a strong system and the changes can be seen as positive in enabling a wider diversity of advice providers, in addition to the public service of Teagasc.

CAP measures and instruments have enabled previously successful elements of the AKIS (such as discussion groups) to expand, as well as providing incentive and/or support to build advisor capacity (both public and private) by training new FAS advisors (funded by the DAFM), GLAS scheme advisors, Knowledge Transfer facilitators, and a wider range of stakeholders involved with the 'CellCheck' scheme. CellCheck brings together farm advisors, veterinary practitioners, and other industry stakeholders to provide a consistent message to farmers.

What CAP measures have been unable to do is widen the access of farmers to the AKIS. The focus of attention continues to be on the most profitable farms, while a large proportion of the sector continues to rely on informal, and in some cases biased, sources of information and advice. CAP measures have maintained a strong AKIS, but this is only relevant for perhaps half of the agricultural sector.

In BE-FL, the MA believes that M1.1 training and refresher courses, M1.2 demonstration projects, M2 KRATOS individual advice and M16 EIP-AGRI Operational Groups form a vital part of the AKIS as some of the links in the AKIS can be considered a direct result of these measures; connecting the Flemish government to a wide variety of actors such as farmers, advisors, experimental stations, training centres, etc.

The KRATOS system corresponds to the M2-FAS package. The Member State authorities see an added value in the FAS obligation; without it, certain modules would probably not have been implemented. However, the uptake of M2.1 is limited¹¹³ but aligned with the objectives.

EIP-AGRI, its support unit at national level and Measure 16, is identified as particularly valuable in **FR-LO**. The French Operational Groups (209 groups by July 2019) will contribute to the AKIS by fostering networking, supporting bottom-up processes and co-construction of innovation. Among those leading the Operational Groups, there are as many producers' associations as research organisations. Chambers of Agriculture and other training/advice organisations are also important leading actors. In an unpublished review by the Departmental Administrations for agriculture in France, 70% of responding MAs said that Operational Groups allow creating a network and synergies between stakeholders and that Operational Groups adapt to more local/territorial needs and create territorial dynamics.

The CS authors judge that the cooperation measure M16 in Lorraine-Champagne (Grand-Est) has proved an original and relevant tool that strengthens territorial and collective actions. It has led to a real collective dynamic. Many project leaders have broadened their partnership in this framework. More than forty different partners are involved. Operational Groups cover a wide variety of subjects relating to autonomy, the circular economy, environmental management and performance, mutual aid and digital technology, the development of co-products, forestry, etc.

In this way, the approach really meets a need and provides a tool to support innovation. Nevertheless, innovation necessarily involves taking risks, but the administrative rigour associated with the EAFRD appears incompatible with risk-taking. Also, it seems that the measure provides a further stimulus to learning among farmers who already engage with advisory services, and these services are already well linked to research institutes. Less evident is any notable impact on 'hard to reach' farmers.

In GR, RDP measures address AKIS weaknesses but in a very limited way, so far. Serious implementation delays and structural obstacles limit the ability to meet needs efficiently. The measures are more than necessary and very welcome by the stakeholders, provided they are implemented in the right way. Given the recent environment in the agricultural sector with limited coordination, very weak cooperative structures, fragmented land and very large numbers of small farms, no public advisory system; the RDP provisions for innovation and knowledge exchange and the establishment of FAS are considered as absolutely relevant and necessary.

¹¹³ In BE-FL, 1163 one-to-one advice have been given to the 23 225 farmers, hence 5%. It is limited but aligned to their target.

The architecture of the CAP is relevant in addressing needs for the AKIS system in **IT**. National level interviewees highlighted that national resources devoted to AKIS by different actors have been decreasing in the last decade and this requires a more focused planning of the resources available from the CAP.

The setting up of Operational Groups is considered a good step forward to integrate research, training and advisory services in a more efficient and realistic scale. Some real progress has been promoted in the linkage between EIP-AGRI and Horizon 2020. The National Rural Network helps to ensure these links, provide methodological support for EIP-AGRI and build a culture of innovation within AKIS.

National Rural Network activities include dissemination of best practice and innovation case studies, promoting communities of practice; also networking among the main EIP-AGRI actors and attending SCAR and EIP-AGRI meetings; and finally offering advice and information to individual groups and actors at national and regional levels.

The obligation to set up FAS was implemented **in IT** through a national decree that provided homogeneous principles and criteria, agreed with regions. The responsibility of advisory bodies' accreditation has been delegated to regions. FAS is thus a system whose efficiency and effectiveness strongly differs from region to region. It includes advisory bodies of different nature, either public or private. But over time, public services have been dismantled in many regions and the personnel with advisory skills re-oriented to other administrative and control functions. This did not happen everywhere, but as a result in many regions private bodies increasingly dominate the regional advisory system, pushing the RDPs to urgently cover all advisory needs.

Measure 16 success, should see a strengthening of the links between different actors and creation of new spaces for exchange, by including also those farms who show a low propensity to implement innovative processes. Measure 16.1 plays a central role in promoting innovation, both in terms of innovation typologies and the number of involved farms. An important role is also played by Measure 16.2., via which 5 networks were funded (MS 16.2.1) and pilot projects for the development of products, practices, processes and technologies (MS 16.2.2). According to the needs assessment, the pilot projects aim at applying and/or using research results to give practical and concrete answers to the innovation needs of agricultural, agri-food and forestry companies. These interventions are implemented through "lighter" forms of cooperation than Operational Groups, which are obliged to sign a network contract for the duration of 5 years.

In **PO**, the key weaknesses of the Polish AKIS seem to be underdeveloped knowledge exchange and lack of an ongoing system of knowledge upgrading for the agricultural advisors. The CAP measures support improvement in these two fields. CAP instruments are relevant: rural development policy plays the key role. The implemented measures play a vital role in sustaining the effectiveness of AKIS functions and resources.

➤ *ESQ15 JC2 Examples of good relevance enhancing AKIS*

In **EE**, the co-operation measure signals real improvement in comparison with the previous programming period. Calls for applications during the current programming period have seen tough competition (success rate around 35%) and the budget has been increased twice to accommodate a greater number of quality projects.

Farmers groups operating innovation clusters are not officially Operational Groups, but in fact they function as such. Farmers discuss their needs, select activities to be implemented and are members of the organizations managing the activities. Each group has research partners and selected activities (sub-projects) are implemented in co-operation of farmers and research (and development) partners. Unfortunately, involvement of advisors is mostly rather weak. A positive sign is also that the project teams have submitted another project application together after their previous joint activities.

In IE the two most successful measures in the 2014-20 programme cycle have been the Knowledge Transfer discussion groups and EIP-AGRI, delivered through locally led Operational Groups. Both have strengthened AKIS functionality and information flows

among those who have been involved, according to Managing Authority, advisory and beneficiary interviewees.

Over 20 000 farmers became involved with Knowledge Transfer discussion groups. Some in the dairy sector existed prior to 2014 but expanded when CAP support was introduced, and new groups were formed in other sectors (beef and sheep). The number of farmers involved in discussion groups approximately doubled over the programme period. Knowledge Transfer groups are facilitated by local advisors, who had to undergo enhanced training to build capacity in subject knowledge, and group facilitation. Stakeholders report a significant improvement in group management skills because of the advisor training. Knowledge Transfer groups are based on peer-to-peer learning, which is supported by farmer interviewees, who noted that wider participation in groups enhanced the quality of discussion and range of issues explored. (Farmer Focus Group). The scheme also helped to sustain the number of private sector advisors (Teagasc Advisors).

EIP-AGRI Operational Groups are applauded by stakeholder groups and advisors for their bottom-up approach and in addressing local needs; as a carefully-designed programme based on extensive consultation with stakeholders across Ireland. The allocation of financial resources was significantly increased in the second RDP amendment, and the number of Operational Groups more than doubled, from 10 planned originally to 23. Ireland funds multi-annual projects (3-5 years) supported by significant budgets ranging from EUR 400 000 to EUR 25 million, with overall investment of EUR 59 million. This approach was viewed as more sustainable in terms of long-term outcomes and enabling stakeholder engagement.

Most of the projects are bottom-up, led by farmers. 23 EIP-AGRI Operational Groups across Ireland have created a demand for greater knowledge and understanding regarding specific issues (e.g. water quality; ecology of species and habitat management) among land managers and stakeholders where they are implemented. Operational Groups are also beginning to link up in thematic networks across Ireland. They have also led to a wider range of stakeholders becoming involved in the AKIS. LEADER companies (LAGs), for example, have become involved in supporting programme delivery. The National Rural Network (NRN) works in partnership with Teagasc and other bodies to deliver training to those involved in Operational Groups, particularly to industry stakeholders that have not traditionally accessed the AKIS.

In **FR**, a 'Specific National Rural Network (NRN) programme' for the 2014-2020 period includes a specific unit on the EIP-AGRI, as a sort of national EIP-AGRI service point. The RDP Managing Authority considers the support to Operational Groups as real added value, giving support to territorial projects. It has been particularly beneficial in the French case that EIP-AGRI developed alongside institutional and policy innovations to further promote the national Agroecology vision, under the Ecophyto II plan. EIP-AGRI is thus seen as integral to the pursuit of these aims (National Ministry interview), which strengthens its impact.

DE-LS implements 2 sub-measures of M16 specifically focused upon innovation in broader rural development, promoting social inclusion and KE in rural areas. M16.7 promotes bottom-up capacity building for integrated local development strategies, while M16.9 particularly targets education of the wider population to increase understanding of where food comes from, promoting knowledge about farming and the environment. This initiative supports regional co-ordinators who connect farmers with education providers, as well as funding events and outreach. Between 2016 and 2018, more than 40 regional educational institutions were supported, including environmental education centres (15), rural people's associations (13), nature conservation organisations (8), school farms and agricultural enterprises (6) and an open-air museum. In the networks initiated by training providers, agricultural enterprises account for over 35% of members.

In **PL**, a good example of relevance is the list of topics for training agricultural advisors under sub-measure 2.3. In 2017 these topics were: Installations for obtaining renewable energy on a farm; Impact of agricultural production on climate change and its adaptation to these changes; Processing on a farm as a way for diversifying the income of farming

families and the basis for direct sales; "Bioinsurance" and animal welfare on pig farms. In 2019 the topics were: Integrated plant protection; Impact of agricultural production on climate change and its adaptation to these changes; Hygiene, "biosecurity" and animal welfare as alternatives to the use of antibiotics in animal breeding; Farming and agricultural retail trade; Precision farming in plant production; Farm management, organization and planning, including production and market risk management on the farm; and Limitation of water pollution with nitrate from agricultural sources.

➤ [*ESQ15 JC3 How important have RDP measures been, for the FAS?*](#)

In the FAS survey¹¹⁴, among the 16 respondents (out of 21) that activated RDP Measure 2 to support the FAS, the majority view was that Measure 2 support was important for the functioning of the FAS (see responses in Figure 34).

In EE the RDP M2 has made a significant impact upon the operation of the FAS. Tasks of the FAS are performed by RDF, which is also the only eligible organisation to offer Measure 2.1 supported advice. Taking this into account it has been crucial to have RDP M2 support available in offering advice to farmers.

The **Belgian** authorities on M2 KRATOS see added value in the FAS obligation. There are certain modules or subjects for advice that probably would not have been implemented without the obligation. However, some of these themes are not very popular, and the time spent on/ cost of these modules is not always proportionate to their benefits. BE-FL opted to implement the FAS under measure M2, which makes it more efficient.

RD M2.1 is not linked to the FAS obligation in **FR**. M2.1 was closed due to administrative burden linked to the selection of advisory bodies. Accreditations issued for the FAS are independent of the selection procedure carried out under M2. Accredited bodies are the only ones that can deliver the first level of environmental certification which is currently still limited (but gaining importance) and focused mainly on wine, fruit and veg.

The FAS in **IT** is completely dependent on RDP M2, as a result of declines in national and regional resources. M2 is planned in almost all regions and autonomous provinces (except Basilicata and Valle d'Aosta). Despite implementation problems and late application (which contributed to a reduction of over 50% of originally planned resources), regional RDPs have maintained this measure over the programming period.

From the FAS survey, Figure 34 shows the perceived added value of M2 support to FAS (see ESQ11).

F

Theme 6: EU added value

4.16 ESQ16: To what extent have the CAP instruments and measures created EU added value in relation to knowledge exchange, innovation and advisory activities?

4.16.1 Methodology

4.16.1.1 Rationale and coverage of the Evaluation Question

According to the Better Regulation Guidelines (COM (2015) 215 final), "the European added value is the value resulting from an EU intervention which is additional to the value that would have been otherwise created by Member State action alone (...) Under the principle of subsidiarity (Article 5 Treaty on European Union (...)) the EU should only act when the objectives can be better achieved by Union action rather than action by the Member States. (...) The sources and nature of this additional value vary from interventions

¹¹⁴ FAS Survey sent to FAS coordination unit in MS, February 2020. A total of 21 respondents from 17 different MS answered the survey. 16 MS responded to the question concerning MS that activated RD M2 to support the FAS.

to intervention. It is useful to distinguish the European added value of an EU policy measure in general (like an EU regulation to foster the single market) and that of an EU spending programme per se. In both cases, European added value may be the results of different factors: coordination gains, legal certainty, greater effectiveness, complementarities etc. In both cases, measurement is a challenge (...)".

This ESQ assesses to what extent the CAP instruments and measure(s) have achieved results above or different from those that would have been achieved by national or regional programmes alone and whether they do not simply substitute to pre-existing national or regional policies.

The challenge for an effective evaluation of EU added value is to establish what national or regional policies might have done alone without the CAP (being equivalent or even more extended due to the removal of certain EU constraints).

EU added value includes different dimensions: incentive or trigger effects to invest in certain areas or raise the level of ambitions, better coordination, alignment of MS policies, analysis and integration of new or emerging issues, creation of missing links, avoidance of fragmentation, efficiency gains by pooling resources and expertise, synergy and leverage effect on certain programmes, etc.

4.16.1.2 Judgement Criteria (JC)

JC1: CAP instruments and measures have / do not have an incentive effect on knowledge exchange, innovation and advisory activities across MS.

JC2: There is no / there is evidence that the CAP instruments and measures has created added value in relation to **knowledge exchange** at the level of MS compared to the situation if MS acted on their own.

JC3: There is no / there is evidence that the CAP instruments and measures has created added value related to **advisory activities** at the level of MS compared to the situation if MS acted on their own.

JC4: There is no / there is evidence that the CAP instruments and measures has created added value in relation to **innovation**, in particular EIP-AGRI, at the level of MS compared the situation if MS acted on their own.

4.16.1.3 Methodology

The approach to answer this evaluation question is based on a qualitative analysis.

Starting with **literature review**, it aims in particular to identify the main lessons and evidence of EU added value reported in the context of the various relevant evaluations carried out at European level relating to relevant CAP measures and instruments for this study.

The question of EU added value is also a **synthesis question**. The answer is therefore based on the information collected in the framework of the other evaluation questions (ESQs) on effectiveness, efficiency and coherence (ESQ4-13).

The **case studies and interviews** with national and RDP authorities allow a better understanding of the EU added value under different implementation architectures and situations. While the **survey** conducted towards RDP Managing Authorities enables to confirm European trends.

These first findings will be further consolidated, and moderated where necessary, in the framework of the ongoing/upcoming national and EU workshops.

4.16.2 Summary answer

ESQ16: To what extent have the CAP instruments and measures created EU added value in relation to knowledge exchange, innovation and advisory activities?

The EU added value points at achievements as a result of EU action that would not have happened if Member States acted on their own. In answering this question the contractor should take into account the implementation choices of the Member States.

CAP instruments and measures have fostered **knowledge exchange, innovation and advisory activities** (KE-I-A) across Member States (MS). The cross-cutting Priority 1 of CAP Pillar 2 encourages Managing Authorities (MA) to consider supporting knowledge exchange, advice and innovation under each thematic Priority and Focus Areas (FA). Cross-compliance provides a core set of topics common across the MS while the framework determined by the EU regulation and directives as well as the financial support to MS enable to limit the risk of 'unfair competition' between the different MS.

More specifically, there is evidence that CAP instruments and measures have created added value in relation to knowledge exchange, training and advice.

Regarding **knowledge exchange** at the level of Member States (MS) the following elements were highlighted compared to the situation if MS acted on their own.

- The EAFRD support enables to **secure budgets dedicated to knowledge exchange** in certain MS. The EU action, also by the means of financial support, enables to **drive additional achievements and deliver extended services**.
- The EU policies and measures allow for a **wider thematic coverage**, with potentially also a greater attention given to environmental topics and resource management.
- They also initiated and/or further encourage a key **evolution in terms of methods** of knowledge exchange activities (away from classical training and towards a multitude of activities).
- The **national and regional rural networks as well as the EIP-AGRI**, which are "RD concepts", play an important role in facilitating knowledge exchanges (as detailed under ESQ4).

There is also evidence that CAP instruments and measures have created some added value related to **advisory activities** at the level of MS compared to the situation if MS acted on their own. The assessment of EU added value related to advisory activities is however hindered by administrative burden.

Some findings are similar to those of knowledge exchange (as listed here above):

- The EAFRD support enables to **secure budgets dedicated to advisory activities** in certain Member States.
- The EU policies and measures allow for a **wider thematic coverage**, with potentially also a greater attention given to public goods and societal issues (environment, stress, animal well-being, etc.).

Other added values of the EU action are however specific to advice:

- The EAFRD support enables to make advisory activities **more accessible and/or attractive to final beneficiaries**, in certain Member States. Because advice on environmental issues for instance is supported and thus less costly, farmers accept to spend time on issues which they do not consider as essential.
- The list of mandatory topics in Member States' FAS obligation has also been broadened.

There is evidence that CAP instruments and measures have created considerable added value in relation to **innovation**, in particular EIP-AGRI, at the level of Member States compared the situation if Member States acted on their own.

- The EU offers a decisive added value regarding cooperation and innovation, particularly in terms of **approach and method**. This contribution lies mainly in the bottom-up collective co-creation of the EIP-AGRI Operational Groups. Indeed, the RDR (pillar 2) contributes to considering, implementing and co-creating **bottom-up innovation**.
- The EU policy linking the CAP (through EIP-AGRI) to the Research policy (H2020) is acting as a booster of research and innovation processes across the agricultural sector.

- The EU action, also by the means of the obligation to disseminate the results, enables to **drive additional cooperation and enhances information flows**, sometimes even cross-border.

4.16.3 Detailed analysis based on the Judgement Criteria (JC)/Indicators

Before detailing the EU added value of the relevant CAP instruments and measures, it is important to recall the possible limitations to the expression of EU added values.

The EU added value can be **difficult to assess in cases where strong national programmes or funds also play an important role**. In France, the EAFRD is only mobilised when it is in line with the national strategy, with the systems in place and is not too restrictive. The EU added value regarding farm advice is therefore difficult to perceive in France. When it comes to innovation, based on the case study findings, the estimation is more positive. Even in the Member States (MS) with a strong national programme, the CAP measures were implemented with a common approach but a determined added value.

A second difficulty in this assessment comes from the **variation of the MS national funds allocated to knowledge exchange, innovation and advisory activities**. To maintain a focus on these, the EAFRD funds have been mobilised to a greater extent by some MS to balance limited national resources. The case study findings in Italy and Greece strongly illustrate this point. The EU funds are used to maintain a certain level of service instead of supporting the development of additional activities, hence rendering the definition of EU 'added value' subject to MS context.

Last, **administrative burdens** have limited the implementation of certain measures, and possibly also limited their added value where implemented. Specifically, Measure 2 was planned by France but not implemented due to these specific constraints. In a similar manner, its implementation is still delayed in Greece and fairly limited in Italy (Table 7 in section 4.1). In Umbria (Italy), the stakeholders interviewed recognise that the CAP Measure 1 brings additional resources but the rules of the EAFRD are considered critical, compared to the ESF and other national funds. Even for Measure 16, for which the evaluation across case study MS is generally very positive, the French Managing authorities nuanced the EU added value due to the administrative constraints for its implementation and coordination (see ESQ16 JC3). In this context, the potential EU added value of the relevant instruments and measures was not always materialised.

- [*ESQ16 JC1 CAP instruments and measures have an incentive effect on knowledge exchange, innovation and advisory activities across Member States.*](#)

CAP instruments and measures enable **more attention to be given to knowledge exchange, innovation and advisory activities** across Member States (MS).

The **cross-cutting Priority 1** of CAP pillar 2 specifically focuses on 'fostering knowledge transfer and innovation in agriculture, forestry and rural areas'. The **organisation in Focus Areas (FA)**, with recorded contributions, further forces Managing Authorities (MA) to consider knowledge exchange and innovation under each thematic priority. In this perspective, the EU regulation contributes to generating a clear EU added value, even if with varying intensity across the different MS context. It also enhances complementarities, even if sometimes limited at this stage in terms of implementation.

Furthermore, all final beneficiaries receiving CAP support (under pillar 1 or 2) have to comply with the **EU norms referred to as 'cross-compliance'**. These include rules in terms of farming practices based on several directives and regulations applying to different topics. These form a first set of core elements for knowledge exchange and advisory activities, common to all MS.

The framework determined by the EU regulation and directives as well as the financial support to the MS also enable to **limit the risk of 'unfair competition'** between the different MS. According to the Flemish MS authorities, the fact that the policy covers a large geographical area is a bonus. Since the EU regulations, they state that there is a reflection on a broader scale which allows for better environmental decision making.

With regard to innovation, the 2016 EIP evaluation (Coffey *et al.*, 2016, p.153), already reported that as an EU-wide measure based on the cross-cutting priority of innovation embedded as an obligation in the RD regulation, the EIP-AGRI added value is demonstrated in its speeding up of innovation development and dissemination in the MS and regions. The case studies are rather unanimous confirming that there would be significantly less attention and activity in the field of innovation across the agricultural sector without the EU policies on EIP-AGRI and Horizon 2020 (DE-LS, IE, IT-UM).

- *ESQ16 JC2 There is evidence that CAP instruments and measures have created added value in relation to **knowledge exchange**¹¹⁵ at the level of MS compared to the situation if MS acted on their own.*

Regarding knowledge exchange in agriculture, **the assessment of the EU added value is positive**. The set of possible EU added value, emerging in particular from case studies and adding to the transversal ones already exposed under JC1, are detailed in the following paragraphs.

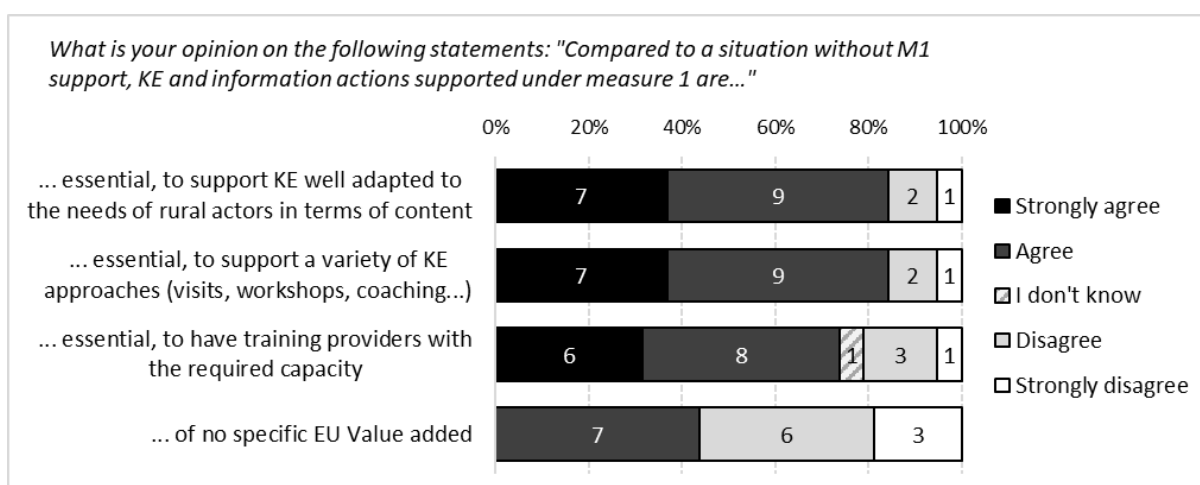
- The EAFRD support enables to **secure budgets dedicated to knowledge exchange** in certain Member States. While it provides a higher planning security in certain RDPs (such as DE-LS), it is decisive in others (such as in IT and GR). The EAFRD share secures the national/regional resources over a period of seven years and thus forms a fixed funding budget for all actors involved. With the considerable reduction of the national resources for knowledge exchange, farm advice and innovation, the Italian case study illustrates that without public support, even the requirements of the CAP would have hardly been achieved. In the Greek case study, there is not yet evidence due to the very low level of implementation (0,17% absorption rate), but the stakeholders declared that it is likely that what has been implemented would not have happened without CAP funding. Thanks to co-financing, the final cost for farmers can also be more limited (as illustrated in the EE, FR and EE case studies).
- The EU action, also by the means of financial support, enables to **drive additional achievements and deliver extended services**. The case studies are rather unanimous that the CAP brings additional resources (FR, IT-UM) and that without EU support, the finances available for knowledge exchange would be much smaller (EE). In Lower Saxony (Germany) for example, the stakeholders indicated that significantly fewer courses on organic farming would have taken place. In Ireland, CAP support enabled a doubling of the number of farmers involved, while also enabling to cover the topics across all the regions (without which a lot of farmers would simply not have attended the training sessions).
- The EU policies and measures allow for a **wider thematic coverage**, with potentially also a **greater attention given to themes addressing the environment and resource management**. A large consensus (84.21% of respondents, N=20/33) was achieved in the RDP MA Survey when tackling the essential need for Measure 1 to support knowledge exchanges well adapted to the needs of rural actors (farmers, forest holders, etc.) in terms of its content. In the Flanders (Belgium) case study, the MS authorities indicated that the budget provided by the EU allows for a broader array of themes to be covered. In France and Umbria (Italy), the stakeholders indicated that the EU support and provisions enable them to direct training towards more difficult or more innovative themes such as the environment or resource management.
- The EU policies and measures also initiated or further encouraged a **key evolution in terms of method of the knowledge exchange activities** across the MS. Moving away from classical trainings delivered by the same providers, knowledge exchange has evolved towards a multitude of activities including coaching, short term farm/forest exchange schemes, visits, demonstration, information, etc. This evolution of training has been recorded as key in Lower Saxony (Germany) and

¹¹⁵ Knowledge exchange is mainly supported by the RD sub-measures of training and information actions (M1.1, M1.2 and M1.3) but also through the Operational Groups and their activities supported by the sub-measures 16.1 and 16.2. It is also promoted through cross-compliance and its evolution and topics included in the FAS.

Flanders (Belgium) case studies. A large consensus (84.21% of respondents, N=20/33) was also achieved in the RDP MA Survey when tackling the essential need for Measure 1 with regard to supporting a variety of knowledge exchanges approaches.

This large range of potential added values, illustrated throughout the case studies, consolidates the general opinion of the RDP Managing Authorities. Indeed, in the RDP MA survey, **more than 81% of respondents (N=20/33) stated that knowledge exchange and information actions supported with Measure 1 have a specific EU added value** (see following Figure). A few respondents disagreed. One of the justifications provided from those disagreeing is that in a context where adequate support is already provided through national means, the EU funds merely replace national funds but do not increase activities.

Figure 42: RDP Managing Authorities survey – Added value of RDP Measure 1 (indicating number and percentage of respondents)



Source: ADE RDP Managing Authorities survey (N=20/33)

These positive elements need to be slightly counter balanced by an **EU added value which can be more limited individually in certain Member States**. In France for example, even if it is acknowledged that the CAP brings additional resources, the EAFRD is not a "driver" of training activities. The EAFRD is only mobilised when it is in line with the national strategy, the systems in place and is not too restrictive.

The **national and regional rural networks but also the EIP-AGRI**, that are "RD concepts", also play an important role in facilitating knowledge exchange (as detailed under ESQ4 and ESQ15). The assessment of their EU added value is further detailed under ESQ16 JC3.

- [*ESQ16 JC3: There is evidence that CAP instruments and measures have created some added value related to **advisory activities**¹¹⁶ at the level of MS compared to the situation if MS acted on their own.*](#)

The assessment of the EU added value related to advisory activities is hindered by administrative burden. As a result, certain Member States saw no added value and even a negative one in others (FR) due to the efforts invested without actually achieving implementation of the measure. Nonetheless, EU added values remains in particular for those MS who managed to implement it. This is emerging in particular from the case studies and the RDP MA survey, as detailed in the following paragraphs.

¹¹⁶ Advisory activities, considering one-to-one advice, are supported by RD sub-measure M2.1, and fostered by the FAS.

The following assets are similar to those of knowledge exchange (as detailed under ESQ16 JC2):

- The EAFRD support enables to **secure budgets dedicated to advice** in certain Member States. While it enables to achieve more advisory services in certain MS (such as EE and IT-VE, based on the case study findings), it also ensures one-to-one advice on important topics such as the environment, climate change and societal issues (antibiotics, stress management for example in DE-LS).
- Indeed, the EU policies and measure allow for a **wider thematic coverage**, with potentially also a **greater attention given to public goods and societal issues** (environment and climate change, farm stress management, animal well-being, etc.). In the RDP MA Survey, when addressing Measure 2 in terms of added value, its support to sustainable and environmentally friendly farming practices came first in terms of responses (with agreement of 73.68% of respondents, N=20/33). In Lower Saxony (Germany) for example, the case study stakeholders indicated that Measure 2.1 enables to offer advice on a wide range of topics and secure advice on environment, climate change and societal issues. In Flanders, the MS authorities indicated that they fear the KRATOS system would only be focused on economic themes and less on environmental ones, without EARDF support. A lower share of the RDP MA Survey respondent (but still 68.42%, N=20/33) also acknowledged Measure 2's necessity with regard to supporting new and emerging themes.
- The EU action, also by the means of financial support, enables to **drive additional achievements and deliver extended services** (such as in DE-LS, EE and IE).

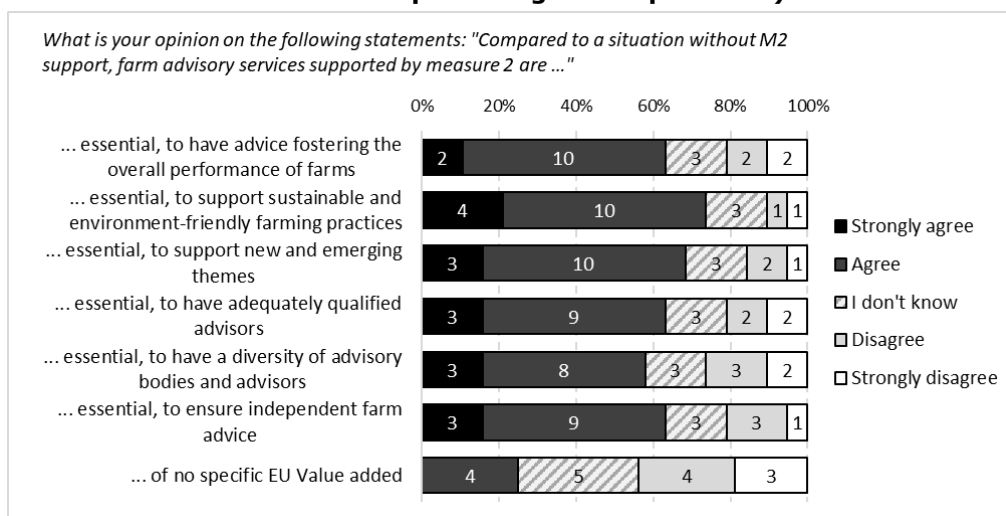
Other added values of the EU action are specific to advice:

- The EAFRD support enables to **make advisory activities more accessible and/or attractive to final beneficiaries**, in certain Member States. Even in Umbria (Italy) where Measure 2 has never been particularly attractive neither for advisors nor for farmers, the stakeholders agree that it certainly makes certain advice services more accessible. More importantly, because it is rendered less costly, **final beneficiaries accept to spend time on issues which they do not consider as essential**. In Lower Saxony (Germany) for example, the stakeholders indicate that Measure 2.1 enables to offer cost-effective advice. The qualified advice provided on socially desired topics, such as improved environmental practices or animal well-being, causes additional costs and hardly brings any economic benefits for the farmer in the short term. However certain topics (e.g. biodiversity, emission reduction, etc.) are now being transferred to the farms while without support the farm managers would previously have been less or even unwilling to deal with them¹¹⁷. The Irish case study also states that a key benefit of CAP support is that a much larger number of farmers actually engage with an advisor at least once per year. It provides an opportunity for advisors to inform a larger proportion of the beneficiaries on other topics.
- The public support (**not limited only to CAP**) also enables to **maintain an offer of independent advisory services**. This is more an added value of publicly supported advice than a specific EU added value. More than half of the respondents to the RDP MA Survey (63.16%, N=20/33) agreed that RD Measure 2 plays a role to ensure independent farm advice compared to a situation without this support. The percentage is lower (57,89%) when it comes to Measure 2's necessity to ensure a diversity of advisory bodies and advisors.

This 'mixed' perception, illustrated throughout the case studies and survey responses, is aligned with the general opinion of the RDP Managing Authorities. Indeed, in the MA survey, **56% of respondents (N=20/33) stated that farm advisory services supported by Measure 2 have a specific EU added value** (see following graph). More importantly 25% of respondents do not know whether Measure 2 had an added value or not. The administrative constraints, even if improved by the so called 'Omnibus' regulation (Regulation (EU) No 2017/2393), account for an important part of this perception.

¹¹⁷ While the availability of advice (at an acceptable price) is an important aspect, it is important to recall that financial incentives also play an important role in the interest of farmers to adopt changes in practice.

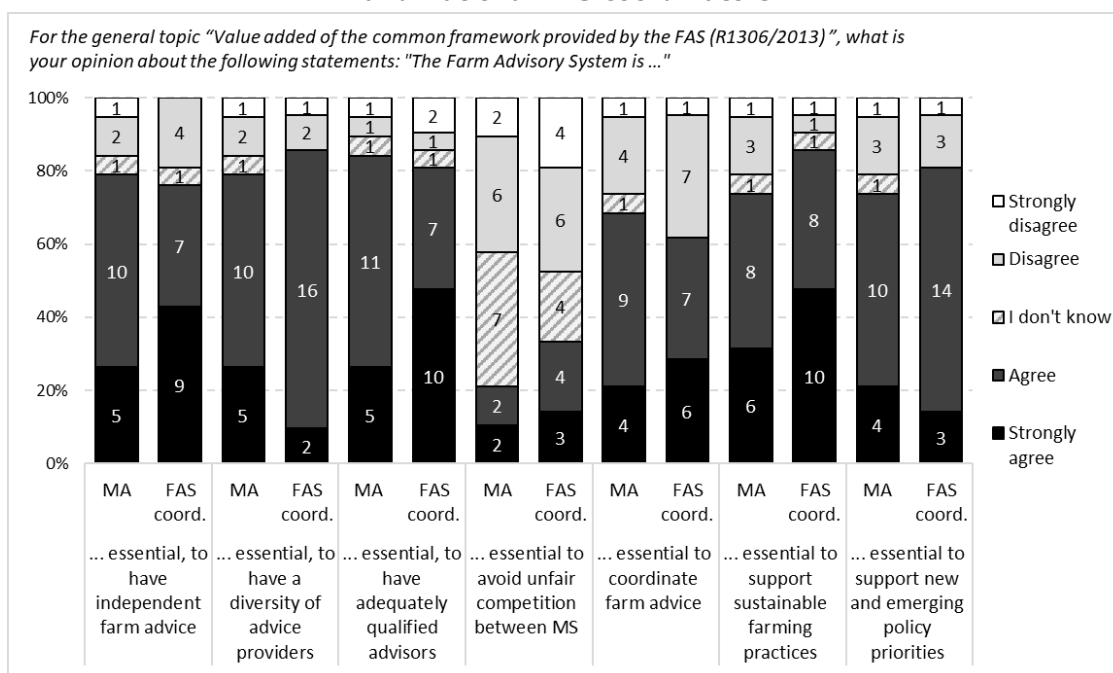
Figure 43: RDP Managing Authorities survey – Added value of RDP Measure 2 (indicating number and percentage of respondents)



Source: ADE RDP Managing Authorities survey (N=20/33)

Regarding the FAS, the EU added value considers the framework of the FAS supported by M2. Indeed, several MS assimilate both concepts. The answers from the national FAS coordinators and RDP Managing Authorities have to be read taking into account this assimilated concept. As illustrated in Figure 44, the national FAS coordinators and RDP Managing Authorities consider the common framework essential to have qualified advisors, support sustainable farming practices, independent advice and emerging policies. Some respondents disagree with these statements. Indeed, in MS with a pre-existing comprehensive and multiple advisory landscape (such as DE, DK, FR and IE), they simply responded to the mandatory FAS without EU added value.

Figure 44: Added value of the common framework provided by the FAS largely supported by M2 (indicating number and percentage of respondents) to RDP Managing Authorities and National FAS coordinators



Source: ADE RDP Managing Authorities survey (N=20/33) and ADE FAS Coordinating Authorities survey (N=21/28)

- ESQ16 JC4 There is evidence that CAP instruments and measures have created considerable added value in relation to **innovation**¹¹⁸, in particular EIP-AGRI, at the level of MS compared the situation if MS acted on their own.

Regarding innovation in agriculture, **the assessment of the EU added value is globally very positive**. The EIP-AGRI network and the new bottom up approach to innovation in Operational Groups (M16) based on farmers' needs, involving a collaborative approach to innovation, are an important added value in most Member States. Certain CS stakeholders have expressed a more nuanced position due to the administrative constraints of Measure 16. The set of possible added values, emerging in particular from case studies and the RDP MA survey (and adding to the transversal ones already exposed under JC1), are detailed in the following paragraphs.

- The RDR (pillar 2) contributes to **giving consideration, implementing and co-creating bottom-up innovation**. It therefore enhances a new concept and approach for innovation. In Flanders (Belgium) for example, the MS authorities interviewed in the case study, feel that the work of the Flemish AKIS is much more integrated because of EU regulations. Indeed, to be eligible for funding, the experimental stations or other research institutes have to meet certain conditions, such as cooperation for the EIP-AGRI Operational Groups. Without these constraints, the authorities feel these institutes would act more independent from each other and farmers would not be involved in research. The authorities even fear that, without the EU intervention, agricultural programming making in Flanders would be more influenced by lobbying. The EU regulations create openings for new actors, who would otherwise be overshadowed by more established actors.

It is also important to recall that Operational groups are not limited to the agricultural sector. Several Operational Groups of the Grand-Est (France) region have been set up in forestry.

- The EAFRD support enables to **increase budgets dedicated to innovation** in Member States. While it enables more to be achieved in certain MS and regions, (such as EE and FR), stakeholders in others have indicated that without the EU funding none of the projects would have actually happened or been implemented (such as the 23 projects in IE). Compared to approaches such as the GIEEs, in France the EIP-AGRI Operational Groups also have budgets which allow for more ambitious projects. The effects however vary among MS. They have been smaller for example in Poland, with only 10 Operational Groups having signed support agreements and only 2 of them having already received funding.

Based on the 2016 EIP evaluation (Coffey *et al.*, 2016, p.153), the EIP-AGRI could also works to **reduce the duplication of funding** spent by the MS and regions on similar problems/opportunities. Indeed, even if the applications are still limited at this stage, the EIP-AGRI network can monitor needs emerging from practice. Convergence between Operational Groups arising from similar problems existing in different RDP areas can more easily be spotted. These common challenges could then be tackled at EU level while making the best use of limited financial resources.

- The EU has a decisive added value to offer regarding cooperation and innovation, particularly in terms of **approach and method**. This contribution lies mainly in the bottom-up and collective co-creation of the EIP-AGRI Operational Groups, with potentially a **greater integration and networking of actors** (including farmers and foresters) territorially but also throughout the chain. A large consensus (80% or above, N=20/33) was achieved in the RDP MA survey when tackling the essential need for Operational Groups and their pilot projects with regard to ensuring bottom-up innovative approaches and the co-creation of knowledge between farmers, foresters, research and advisors. This approach is also followed and capitalised in all EIP-AGRI Service Point activities (focus groups, workshops, etc.).

The 2016 EIP evaluation (Coffey *et al.*, 2016, p.83) already emphasized that, in many RDPs, stakeholders agreed that the participation and involvement of farmers

¹¹⁸ Innovation is supported by the cooperation sub-measures M16.1 and M16.2, but also through the EIP-AGRI network and the EIP-AGRI Service Point.

and forest managers constituted the main added value of the EIP-AGRI (compared with other sources of public support for innovation in the agricultural sector). Most stakeholders agreed that the EIP-AGRI is well designed to fill the gap between research and practice, particularly for small farmers, who traditionally do not have access to big European consortia that apply for innovation support. Furthermore, the 2018 Operational Group assessment (IDEA, 2019, p.56) established that another added value of having different types of actors such as researchers, technicians, farmers and advisors working together is the possibility to cover the entire Research and Development chain.

The multi-actor approach which fosters transdisciplinary cooperation for innovation, through contributing to initiate new relations and consolidate interplays and collaborations both within and across the regional knowledge and innovations system, was enhanced in the Umbria (Italy) case study. The added value of the supported collaborations is also emphasised as an effect in Lower Saxony (Germany). Across the EU, the large number of EIP-AGRI and Operational Groups¹¹⁹ formed is therefore potentially a source of added value in terms of networking, institutional infrastructure, competitiveness, and sustainability in the sector.

- The EU action, also by the means of the obligation to disseminate the results, enables to **drive additional cooperation and enhances information flows**, sometimes even cross-border. A very large consensus (84.21% of respondents, N=20/33) was achieved in the RDP MA survey when tackling the essential need for Operational Groups and their pilot projects with regard to facilitating information flows between practice and research, as well as to achieve results by pooling resources and expertise at EU, national, local level.

At local level, the 2018 Operational Group assessment (IDEA, 2019, p.61) already highlighted the importance of the regular interactions performed with the target group of farmers in the scope of the Operational Groups and pilot projects. Furthermore, the occasional guided visits and meetings at farms can be very beneficial to demonstrate the added value of the methods, techniques or solutions developed in the Operational Group and allow other farmers to experience and exchange on their implementation.

At national level, the French and German case studies illustrate how the EU measures may further encourage cooperation among MS authorities. Indeed, since the very start in 2013, the French Agriculture and Food Ministry invested in creating link between its food directorate (DGAL) and its education and research directorate DGER) which previously had little exchanges. The Ministry in Bonn (Germany) also undertook a reorganisation since 2017. Ever since, a single division regroups both research and innovation covering the EIP-AGRI, H2020 and the national agricultural research department. Without the EIP-AGRI and Measure 16, such collaboration and reorganisation might have eventually been implemented but most probably much later and in a lesser extent. The EU added value lies in the incentive created.

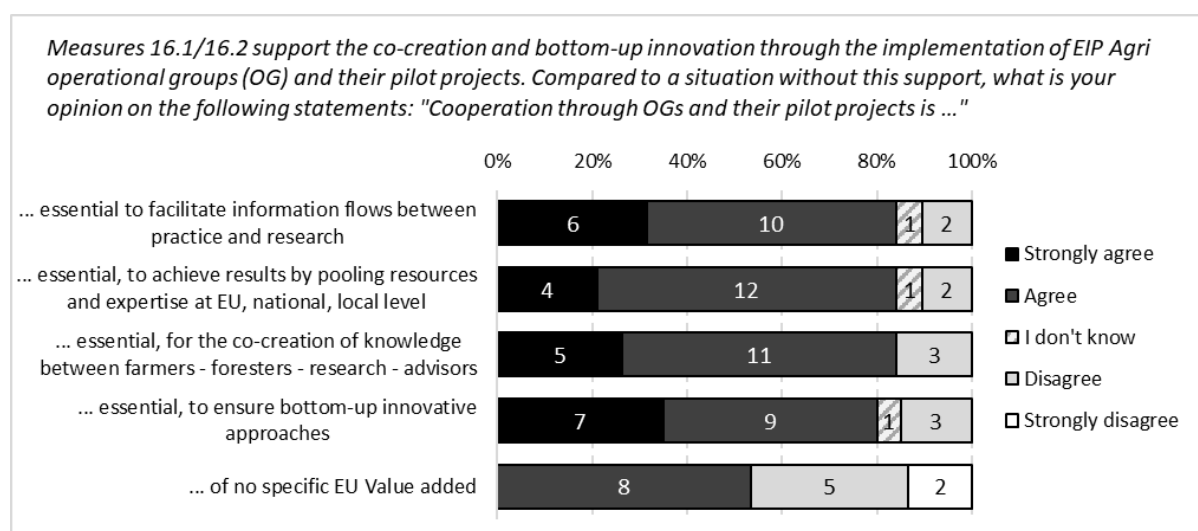
At EU level, the 2016 EIP evaluation (Coffey et al., 2016 p.153) noted that the EIP-AGRI can also enable additional innovations to be developed beyond what can be achieved in regions and MS alone. Some innovation needs will be unique to particular, localised farming systems or environments, but many topics covered by Operational Groups are not confined to national or regional boundaries. Also, real innovation often comes from applying ideas from one area in a new context. In this perspective, the role and the added value of the EIP-AGRI network and EIP-AGRI Service Point are crucial.

- The EU policies and measure allow for an enlarged vision, notably with **greater attention given to themes addressing the environment and sustainable production**. In Veneto (Italy) for example, Measure 16 enabled to promote a relevant effort from supply chains to strengthen projects focused on sustainable production, in a greater extent than what would have happened with the Operational Groups setting up and the related public support.

¹¹⁹ The number of Operation Groups just reached 1,500 in May 2020.

This large range of potential added values, illustrated throughout the case studies and previous evaluations, consolidates the general opinion of the RDP Managing Authorities. Indeed, in the RDP MA survey, **more than 86% of respondents (N=20/33) stated that co-operation through Operational Groups and their pilot projects, supported by Measure 16, have a specific EU added value** (see following Figure). The few respondents who do not agree also do not recognise any added value to Measure 1 and Measure 2. One of the reasons given is that in their context they strongly believe that national financed measures (both public and private) already adequately cater for co-creation and bottom up innovation in agriculture. Their model builds on farmer based experiments and testing within the advisory system, strong knowledge exchange between the advisory services and research and national support for project involving the entire value chain in co-creation, hence not recognising any added value to the EU measures.

Figure 45: RDP Managing Authorities survey – Added value of RDP Measures 16.1 and 16.2 (indicating number and percentage of respondents)



Source: ADE RDP Managing Authorities survey (N=20/33)

The very strong EU added value on innovation, derived from the complementarities with MS programmes, the co-creation of responses to the needs, the collective methodology and the enhanced bottom-up approach is clearly demonstrated throughout the different methodological sources of this study. MS had to get familiar with this new concept that is currently largely understood and adopted. Some elements, including issues already stated in the 2016 EIP evaluation (Coffey et al., 2016) slowed down the initial implementation of this concept. They are currently largely (not entirely) managed. The limiting factors are addressed in other sections of the report (Themes efficiency and effectiveness).

The role of the **EIP-AGRI network** is crucial in these efforts. Indeed, while the EIP-AGRI is an instrument that, in the first instance, is implemented primarily at the MS / regional level, the EU added value also lies into the benefits from agricultural innovation being spread more widely across Europe. Its assessment in the 2016 EIP evaluation (Coffey et al., 2016 p.104), made it clear that the EIP-AGRI network has the potential to fulfil this specific niche and has already helped connect rural innovation stakeholders from different groups (i.e. farmers, researchers, government authorities, etc.) and in different countries. It was noted however that the intended interplay and respective role of the EIP-AGRI network, was not always clear (territory versus EU level approach).

At this stage, the specific added values provided by the EIP-AGRI network (including the EIP-AGRI Service Point) range from:

- networking across Member States and regions;
- creation of a database of people, projects and ideas which can be publicly accessed via the EIP-AGRI website (the dissemination of the Operational Groups' results however is difficult to assess given that they are at an early stage of implementation in most MS/regions);

- promotion of research needs and best practices (also though the EIP-AGRI network events, focus groups and publications); and
- connection to H2020 stakeholders. This is the case of two Focus Groups organised by the EIP-AGRI network (2014-15 Short Food Chains and 2015 Precision Livestock Farming) which were instrumental for starting thematic networks.

The extent to which the EIP-AGRI network potential is fulfilled is highly dependent on the enhanced awareness and knowledge of the network throughout Europe, across the RDP regions as well as across all groups of rural innovation stakeholders. Due to practical constraints (mainly linked to the amount and variety of information that the EIP-AGRI is expected to generate, combined with language barriers and resource constraints), the implementation of the added value is sometimes still limited. Linkages and synergies with other relevant networks focused on rural development, national / regional rural networks (NRNs/RRNs) and (where they have been set up) national EIP-AGRI networks are key.

Innovation is also supported by the **Horizon 2020** (H2020) projects. The EU policy linking the CAP (through the EIP-AGRI) to the Research policy (H2020) is acting as a real booster of research and innovation processes across the agricultural sector. The added value of the H2020 projects range from:

- Financial support. Running from 2014 to 2020 with a budget of nearly EUR 80 billion, **H2020** is the largest ever envelope dedicated to supporting activity of this kind.
- Complementarity with Rural Development Policy. Both aim at demand-driven innovation and complement each other. The 2016 EIP evaluation (Coffey et al., 2016 p.130) also confirmed a good alignment between topics, priorities and approaches covered under the two initiatives, in the Work Programme 2016-2017 of H2020, which incorporated agricultural and forestry priorities.
- EU cooperation approach. To be eligible for support under research policy, H2020 projects have to involve partners from at least 3 MS, which encourages cross-border collaboration between partners in different regions.

While rarely implemented yet, the 2018 Operational Group assessment (IDEA, 2019) and the case studies confirmed that the Operational Groups do see potential in more exchange with other Operational Groups and H2020 projects to learn from each other's results and functioning and could profit from better support in this regard. As already states, the implementation of the articulation between the two project types (EIP-AGRI and H2020) remains difficult at this stage. This could be further developed with a view on generating further EU added value.

5 CONCLUSIONS

5.1 Theme 1 – Causal Analysis

CAP instruments and measures contribute to Member State Agricultural Knowledge and Innovation Systems (AKIS), as shown in all case study Member States. However, CAP support only concerns a small (sometimes very small) part of Member States' AKIS (ESQ1).

Agricultural Knowledge and Innovation Systems (AKIS) is a broad concept. "*AKIS is the organisation and interaction of persons, organisations and institutions who use and produce knowledge and innovation for agriculture and interrelated fields*" (EC, 2019a). It implies that AKIS cover whatever topics **farming and rural activities** relate to, such as landscape, environment, climate, biodiversity, consumers and citizens, food and non-food systems including processing and distribution chains. They cover education, training, advice, research, with many different organisations and institutions involved (public, private, NGO, etc.). The main actors are farmers (foresters), advisors, researchers, farmers'/producers' organisations, NGOs, networks, food industries, retailers, media, services, various ministries, etc. The AKIS concept focuses on the flow of information between these organisations and their actors.

A first tentative approach to illustrating Member States' AKIS was provided by the ProAkis study in 2015 (Knierim and Prager, 2015; Seventh Framework Programme for Research and Technological Development), notably characterising them according to their **strength** (financial resources, organisations supporting AKIS, etc.) **and integration** (linkage between actors). This characterisation does not capture all dimensions and has evolved in several Member States and regions since 2015. The evaluation demonstrated however the relevance of the concept of AKIS to **addressing the issue of information flows between groups of actors**, which is essential for responding to key issues for the agricultural sector (overall: to "*produce more with less in a sustainable way*") and to achieve CAP objectives.

At the end of 2019, contrary to researchers active in the AKIS field, overall **few Managing Authorities and other national stakeholders were already familiar with the AKIS concept**. (ESQ1)

The organisation of advisory services is extraordinarily diverse across the Member States and their regions and linked to the historical context of privatisation of earlier public-supported extension services. This diversity and context also explains the specific use made of CAP instruments and measures. Regarding CAP implementation, the administrative burden of the knowledge exchange, advice and innovation measures (whose budgets remain small compared to other CAP support measures) limits their use, especially in cases where Member States have the capacity to support these activities with their own funds. An important number of State Aid cases related to knowledge exchange and advice are exempted or notified (over 560) for the 2014-2018 period, which supports this observation. The same diversity also affects very different implementation of the FAS obligation (ESQ2).

The **architecture of CAP implementation** in Member States *related to knowledge exchange, innovation and advice*, is not consistently related to the characteristics of the Member State AKIS nor to its contribution to Member State AKIS. Several Member States with weaker or intermediate AKIS planned high budgets for relevant measures¹²⁰ (T1 Common Monitoring and Evaluation Framework indicator), such as Greece, Estonia and Italy. But some Member States with a strong AKIS also planned high budgets such as Belgium (Flanders), Germany (Lower Saxony) and Ireland (ESQ1 and ESQ7). Linkages

¹²⁰ First target indicator of Pillar 2 namely the percentage of expenditure under knowledge transfer and information (measure 1), advisory services (measure 2) and cooperation (measure 16) of Regulation (EU) No 1305/2013 in relation to the total expenditure for the Rural Development Programmes (RDP).

between relevant Rural Development measures are not necessarily more developed in one type of AKIS than in another.

In the same way, Member States' responses to the obligation to establish a Farm Advisory System (FAS) have varied in scale and over time. The FAS concerns the Member States' obligation to ensure that all CAP beneficiaries (including non-farmers) and farmers not receiving support under the CAP may have voluntary access to advisory services on a specific range of topics; and also that FAS advisors are suitably qualified and regularly trained (as is also required by advisory services (M2) in Rural Development Programmes). There is no specific funding linked to the FAS. Rural Development advisory services measure (M2) mobilises EU funding for advice, which can be used for the FAS instrument, (ESQ2).

There is a variation along a gradient, from Member States where the FAS has simply meant an *ex post* 'statement' of pre-existing elements in the advisory landscape (and where the FAS can even take the form of an informative website only (Wallonia in Belgium)), without any investment of new resources (Wallonia in Belgium, Germany, France), to other Member States where the FAS may have provided a stimulus **to use CAP Rural Development funding** in order to help provide elements that the FAS required, and more thanks to Rural Development Measure 2 (Flanders in Belgium, Estonia, Italy). It is important to note that, even though it is an obligation, there is no specific control on FAS effective implementation (such that it is still not achieved in Greece¹²¹), nor on how it is conceived or organised.

Among the critical success factors for knowledge exchange and advice activities, widespread beneficiary awareness of opportunities for training and advice and integration within existing trusted providers/groups/networks are noted. Also, sources of knowledge exchange and advice have to be easy to access locally, based close to farmers, seen as credible and able to deal with a range of individual situations. Advisors must be trusted and kept up to date with research and relevant practices. Collective learning approaches are useful for new ideas but some need support in organisation and co-ordination. Bureaucratic obstacles and narrow focus can reduce effectiveness (ESQ3).

5.2 Theme 2 – Effectiveness

5.2.1 Effect on fostering knowledge exchange, innovation and advisory activities in rural areas (ESQ4)

The increased budget (compared to 2007-2013) allocated by Rural Development Programmes to knowledge transfer and information actions (M1), advisory services (M2) and innovation (M16) suggests a growing interest in using these means and activities, notably to achieve CAP objectives.

The 2014-2020 **cross-cutting Priority 1 of Rural Development Programmes (RDPs) relating to Knowledge and Innovation**¹²² positively influenced this budget allocation. **However, this trend is due solely to the new co-operation measure (M16) which is notably used by innovation projects of EIP-AGRI Operational Group**, and widely taken up by Member States and regions. And this combined planned budget remains a small share of RDPs' total budget (reaching on average only 3.63%¹²³). Moreover, at the end of 2019, **knowledge transfer (M1) and advisory services (M2) show extremely low spending levels** (respectively 31% and 17% of planned expenditures¹²⁴).

¹²¹ In July 2020, Greece had not yet implemented the FAS and this 11 years after the official obligation. The Greek stakeholders recognise however that the FAS's institutional capacity building has a potential added value.

¹²² Article 5(1) of Regulation (EU) No 1305/2013: fostering knowledge transfer and innovation in agriculture, forestry, and rural areas.

¹²³ In comparison, Rural Development Measure 4 on Investments represents 22.82% of the RDPs' total budget.

¹²⁴ Based on the ESIF database, situation up to the 31/12/2019, extracted on 2/7/2020. The reduction in the planned budget, especially for M2, also impacts this percentage.

Support for lifelong learning (LLL) and vocational training (through knowledge transfer (M1) under Rural Development) was planned by a large majority of the Rural Development Programmes (101/112, in 27 of the 28 Member States), but with a 13% reduction in its budget compared to the previous period.

The budget planned for **advisory services (M2)** decreased by 20% compared to the previous period mainly due to administrative constraints. This does not necessarily imply a decrease of public support for these services. In several Member States, these services are supported by national funds only (Wallonia in Belgium, Cyprus, Czechia, Denmark, France, Luxemburg, some German regions, the Netherlands).

Despite limited financial allocation and administrative burdens in implementation, each measure contributes individually to strengthening knowledge exchange, innovation and advisory activities in rural areas.

The number of participants and of training hours is comparatively higher (for the 2014-2020 period compared to 2007-2013) **per relative unit spent under M1**. Overall, this implies that training was provided at a lower relative cost, per participant and per training hour. Indeed, according to the figures reported in the Annual Implementation reports (AIRs) of 2018, 1.07 million participants (*Belgium excluded*) were trained over the 2014-2018 period as a result of M1. This represents 37% of the target (*Belgium excluded*) and indicatively "20% of CAP beneficiaries". This comparison is fragile due to the multiple counting of participants and diverse registration of training units.

Although monitoring data improved with the current indicator system (CMEF), the available data do not provide information on the uptake of training or advice among the farming population. For knowledge transfer (M1), the output indicator referring to the number of participants is not collected homogeneously, limiting a robust aggregation at EU level. The monitoring guidance given to Managing Authorities is not precise enough¹²⁵, enabling multiple counting, and different interpretation of a training unit. As a result, Member States' reporting on participants in training is not homogenous across the EU. Similarly, for the FAS, the output indicator "number of farmers advised" (O58) is not specified by type of advice, while various types of advice can be counted (from individual and small group advice to a simple visit of a website or use of a telephone helpdesk).

Different counting of these straightforward indicators constitutes a real constraint as it does not enable assessing the share of the target population that has taken up training or FAS advice. On contrary, the supported advisory services under Rural Development (M2.1) report correctly on individual advice provided.

82% of Member States (but only around 50% of Rural Development Programmes) implement supported advisory services (M2). Establishing a Farm Advisory System (FAS) as prescribed by the financing, management and monitoring Regulation is a separate CAP instrument from that of supporting advisory services with funding (M2) under Rural Development Programmes.

The mandatory FAS was introduced in parallel with cross-compliance in the 2003 CAP reform. Farm advice was not invested by the CAP before. During the 2007-2013 period the FAS familiarised farmers and their farm holdings with cross-compliance and fostered knowledge of legal requirements among farmers, supported by checklists. During the current period, several Member States or regions use advisory services supported by the EAFRD (M2) to provide for the implementation of the FAS (Flanders in Belgium, Estonia, Italy but also Lithuania, Malta, Portugal, Slovakia and Scotland in the United Kingdom (AgriLink)). In these Member States/regions, it is difficult to isolate the effect of the FAS without Rural Development support. Several other Member States, with a strong AKIS as well as a pre-existing and diversified advisory landscape, consider that the FAS had little impact. It was implemented within their existing advisory services, without additional

¹²⁵ According to the Rural Development Monitoring Guidance (August 2015), "it is not necessary to register the identity of participants; the same participant could be counted as many times as she/he participates in different trainings.

tasks or funding (Austria, Wallonia in Belgium, Germany, Denmark, France, the Netherlands, Poland, Luxemburg) (case studies and AgriLink).

One-to-one advice supported by advisory services funded under Rural Development sub-measure **2.1** (M2.1) increased compared to 2007-2013. This despite the reduction in budget and the limited implementation up to end of 2018. Almost 334 000 farmers were advised by the end of 2018, hence 27.8% of the target and almost twice the level achieved over the entire 2007-2013 period (with 178 500 beneficiaries advised) when there was no **cross-cutting objective of Knowledge and Innovation**.

These Rural Development supported advisory services aim *"to improve the sustainable management and the economic and environmental performance of farms"*. Thus, they foster a **holistic approach** of the farm and may cover a very large range of topics integrated in a broader economic and environmental approach of the farm while the FAS rests on a specified list of topics¹²⁶, especially topics of common public interest.

Farmers do not necessarily ask advice on the FAS topics alone. They are more interested if these are integrated with economic aspects, linked to these topics or to the specific situation of their farm.

Also, the FAS advisor accreditation procedure, as implemented in some Member States, has limited the involvement in the FAS of certain advisors which are well-trusted by farmers.

In a few Member States, advisory services (M2) are combined with other measures in "integrated" packages and serves to ensure better results from other measures (for instance innovative investments combined with advice to fine-tune the use of that investment). Some case studies where implementation is already advanced illustrate that Rural Development knowledge transfer and advisory measures (M1 and M2) foster the adoption by farmers of obligatory standards and notably also lead to the improvement of farming practices and management on a variety of other topics beyond the standards (Germany – Lower Saxony, Estonia, France - Lorraine, Ireland).

Rural Development 'Establishment of Operational Groups' and 'Pilot project' sub-measures (M16.1/M16.2) are new and did not exist in the previous programming period. The implementation of the Operational Groups, linked to the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) network at EU and national levels, is a success. Currently there are around 1 600 Operational Groups and the EU level target of 3 200 Operational Groups should be reached by the end of the programming period (2023) according to a recent forecast. This dynamic now covers virtually all Member States, with Eastern Member States catching up after a slower start in the early years of the programming period (ESQ4).

The involvement of farmers as partners in Operational Groups is recognised as an added value of the measure by all stakeholders, as it promotes solutions adapted to farmers' needs.

Case studies have demonstrated that often the success of the EIP-AGRI is linked to the efforts of individuals, notably within "innovation support services", whether or not they are carried out under a national rural network (NRN), regional rural networks (RRN) or by other actors. At the European level, the EIP-AGRI network plays an important role in stimulating dynamics and fostering information exchange at all levels and in particular between Member States. Many of the EIP-AGRI seminars helped Managing Authorities to improve their understanding and use of the measure, based on the examples of other Member States.

¹²⁶ Cross-compliance; greening; definition of maintenance of agricultural area, advice related to several other Rural Development supported measures at farm level like farm modernisation, innovation; requirements of the Water Framework Directive (2000/60/EC); principles of integrated pest management (Article 14 Directive 2009/128/EC) and where relevant, occupational safety standards, linked to the farm and/or specific advice for farmers setting up for the first time.

The cornerstone of AKIS and EIP-AGRI is the strengthening of information flows.

The case studies illustrate that (1) making a link between research and farmers is a challenge in all Member States; (2) in some Member States, the information flow between researchers and advisors is weak; (3) the information flow between advisors and farmers is generally good but depends on the number and quality of impartial advisors and, in some Member States where advice is charged for, on the ability of farmers to pay for the service.

Despite the implementation success of the EIP-AGRI and Operational Groups, some challenges should be mentioned.

- Firstly, the involvement of farmers is not so simple. For farmers, the main difficulty is their availability to engage and participate in these Operational Groups at the expense of time spent on their farm. Only a very small minority of farmers, those who are already reflecting on farming practices, engage in these projects. They are not representative of the large majority of farmers. The adoption of new farming practices confirms this: there is always a relatively small share of front-runners (pilots) who try out new things, while the majority of farmers rather wait to see the outcomes first, before they change.
- Secondly, dissemination and knowledge-sharing beyond the own Operational Group activities remains limited, despite the obligation for each project to provide a publicly available report. The main constraints identified at this level are language barriers, a low level of involvement of farm advisors in EIP-AGRI, and a lack of active promotion (funding) of results to interested farmers both within the country or region and across the EU.
- Thirdly, especially at this stage of implementation but also in general, it is challenging to collect evidence on the impacts of the EIP-AGRI projects (Operational Groups) on broader farm level change.

Regarding effectiveness, in addition to these three Pillar 2 measures and the Farm Advisory System, several other CAP measures contribute to reinforcing knowledge exchange, innovation and advice, to varying degrees among the Member States. They include the Rural Development LEADER measure (M19), the EIP-AGRI networks in Member States, the National/Regional Rural Networks and also other specific support measures (see sections hereafter).

Other programmes such as the LIFE programme, Interreg and the European Regional Development Fund (ERDF) also contribute to the strengthening of the AKIS. Some Horizon 2020 (H2020) research funding is directly related to the implementation and extension of the EIP-AGRI and synergies between the two policies are built in the EIP-AGRI concept and in EIP-AGRI networking events.

Regarding the wine sector, the new innovation measure “development of new products, processes and technologies concerning wine products” (Article 51 of Regulation (EU) No 1308/2013) was included by just three Member States in their National Support Programmes (Germany, Spain and Cyprus), with a very limited budget. In addition, measure implementation was very low within these Member States. The main reason is the combined requirement for “new products” that are strictly connected to wine products (defined explicitly in the annex of the Regulation), and the fact that grape producers who do not own a processing facility cannot benefit from the innovation measure.

To conclude, **all the CAP instruments and measures** (Rural Development knowledge transfer (M1), advisory services (M2) and cooperation (M16), including the introduction of a cross-cutting priority of Knowledge transfer and Innovation for Rural Development Programmes, the FAS and all other specific measures) **contributed to strengthening knowledge exchange, innovation and advisory activities in rural areas. The magnitude of this contribution is difficult to quantify but, as suggested by several case studies, varies from a significant to a limited contribution to Member States’ AKIS** (ESQ4).

5.2.2 Lifelong learning and vocational training in the agriculture and forestry sectors (ESQ5)

CAP instruments and measures promote and encourage lifelong learning and training in the agricultural sectors mainly in two ways: (1) directly by funding lifelong learning and vocational training actions (M1) and advisory services (M2) – as already detailed in the previous section and (2) indirectly through requirements or conditions related to the use of certain CAP measures or instruments.

Advisory services, and also the obligation to set-up a FAS, contribute to lifelong learning among farmers. Access to advisory services by the FAS is open to all farmers of all ages. The FAS has increased farmers' awareness of the available advisory services.

Other CAP instruments and measures have been identified in case studies and AIRs as encouraging farmers and foresters to participate in lifelong learning and vocational training, such as Rural Development measures funding investment support (M4), setting-up of young farmers (M6.1), cooperation (M16) and LEADER (M19). Some of these encourage farmers and foresters to undertake training as a condition of accessing these CAP supports. However, it appears that often such training or advice is funded by national/regional funds, outside the Rural Development Programmes, and potential synergies between the various measures remain little exploited.

Cooperation (M16) and LEADER (M19) can foster lifelong learning and vocational training in a more direct way by setting up training or demonstrations. However, these occurrences remain rare.

5.2.3 Entry and maintenance of adequately skilled farmers into the agricultural sector with a focus on meeting the standards of modern, high quality agriculture and on sustainable and environmentally friendly farming systems (ESQ6)

CAP instruments and measures have supported the entry and maintenance of adequately skilled farmers into the agricultural sector, mainly in three ways: **directly (1) by funding knowledge transfer** (M1) and **advisory services** (M2) – as already detailed in the previous section, **(2) by the obligation to implement a FAS** offering advice to farmers in each Member State, and **directly or indirectly through (3) specific requirements** notably in terms of skills, specifically to facilitate the entry of young adequately skilled farmers into the agricultural sector.

Agricultural advice remains an important lever for achieving changes in farming practices, as highlighted in a recent survey (performed for the 2018 AIR) of over 150 advisors in Lower Saxony¹²⁷.

The Rural Development Programme advice measure (M2.1 and M2.3) supported the mandatory FAS in some Member States, and there they have fostered maintenance of adequately skilled farmers in various ways.

According to the survey of FAS coordination units, the FAS has increased farmers' awareness of advisory services.

In some Member States, support from the Rural Development advisory services measure (M2) is closely supporting the implementation of the FAS. Together, the FAS and M2 have contributed to improvement in the quality of advice offered (survey of FAS coordinators and AgriLink project).

Regarding new entrants, the conditions set both by the EU and Member States on the Rural Development start-up-aid (M6.1) are the CAP's main tool for improving the level of qualification of young farmers. The requirements in terms of a minimum initial level of qualification or compulsory vocational training and advice during

¹²⁷ Each advisor covers between 20-100 farmers in average with Rural Development funded one to one advice (M2).

the first years of installation increase the initial qualifications among young farmers. The associated mandatory business plans can also stimulate uptake of training and advice.

Between 2010 and 2016 there was significant progress for all age groups in the share of farm managers with full agricultural training (6.9% to 9.1%: +32%). The increase is notably linked to the entry of young farmers with higher levels of education than their elders. The start-up aid has contributed to this improvement.

Other CAP instruments and measures also encourage farmers, directly or indirectly, to seek training or advice, such as: cross compliance, greening, **agri-environment and climate measures (AECM) of Rural Development (M10)**. Member States should "endeavour that beneficiaries are provided with the required knowledge and information to implement" the AECM. They can do so by "making expert advice conditional for support under the AECM (M10)"¹²⁸. Also, the obligatory certification to use plant protection products and requirements linked to funding under Rural Development measures such as for certain investments in agricultural holdings (M4.1) and organic farming aid (M11) incentivise farmers to get trained/advised.

All instruments and measures related to knowledge exchange, including the FAS, appear positively related to employment in the advisory and training sectors. As these measures aim at assisting with both the design and implementation of advisory and training programmes, there was a clear perception in the investigated Member States that they contribute to the creation of actual working hours for advisory and training specialists. More specifically, these measures and the FAS obligation are successful in maintaining jobs in the sector, due not only to the workload created, but also to the fact that in the long term these jobs are essential for transferring knowledge to farmers regarding the sustainable development of their farms (ESQ 7).

5.3 Theme 3 - Efficiency

5.3.1 Assessment of how efficiently the CAP instruments and measures help to improve AKIS functioning, the flow of information and knowledge acquisition in rural areas (ESQ8)

There is limited evidence of CAP instruments and measures significantly increasing the reach of knowledge exchange, advice and innovation within the farming population: it appears that these activities reach only a minority of CAP beneficiaries and EU farmers.

Reach is an important issue. CAP-funded training, advice and innovation measures are estimated to reach indicatively around 10% of farm holdings and around 20% of CAP beneficiaries. The low level of reach suggests that Member States do not regard these provisions as a high priority for all farmers, as perhaps also indicated by the relatively low funding allocations made to relevant measures within Rural Development Programmes.

However, **in countries with a strong and well-integrated AKIS, the broader reach of knowledge exchange, advice and innovation among the farm population is greater than that directly linked to CAP instruments and measures** (e.g. Ireland, France, Germany, Italy). This is due to a combination of national government-funded provision (Ireland, France) and regional government and farmer-funded provision (France, Germany), **as well as significant provision via supply chain actors** (e.g. co-operatives and Producer Organisations, Italy and France).

Nevertheless, in most cases it is agreed that there remain 'hard to reach' farmers among conventional farmers, but also some who are managing smaller or part-time farms and those who are less formally educated. Typically, 'hard to reach' farmers do not see the benefit of these services and can be slower to adapt to new demands of competitiveness and sustainability. There is some evidence also that CAP measures are more readily accessible to full-time and fully trained farmers, who are more likely to be male (2018

¹²⁸ Article 28(4) of Regulation (EU) No 1305/2013.

AIR, screening of Common Evaluation Question 3). Case studies have demonstrated that CAP measures have successfully targeted harder to reach groups in a few regions (e.g. Italy, Lower Saxony in Germany) but there is also evidence, from other cases studies where these groups are considered significant in scale or strategically important, that CAP measures are not helping to reach them (e.g. Greece, Poland, Ireland). A lack of funding to enable stronger promotion and targeting of excluded groups is cited by stakeholders and knowledge providers in many cases.

The cost-efficiency of knowledge exchange, advice and innovation measures and instruments appears reasonable in many cases; however, scope for improvement is highlighted in respect of skills in managing demand, enabling efficient delivery by knowledge providers, and effective targeting to those in most need or those with most potential to benefit.

Cost-efficiency is also important. There is mixed evidence on this point, drawn from case studies. Some kinds of training and advisory provision are more complex and demanding to design and deliver but this is not necessarily inefficient – e.g. in Lower Saxony where the most costly-to-deliver measures (where costs represent 47% of output value¹²⁹) are for training which leads to vocational qualifications, as opposed to individual on-farm advice on practical issues which carries a lower administrative overhead (17%). **It is important to distinguish the costs which arise due to the necessary complexity leading to higher impact value, from costs arising due to inefficient design or delivery features.** Some examples indicate that where Managing Authorities and Paying Agencies seek more 'efficient' delivery by pre-judging the average or standard costs (e.g. Lower Saxony in Germany and Italy), this simply transfers costs on to advisory or training bodies which they struggle to absorb, compromising the quality of the offer or reducing the capacity of these organisations to take up the funding. Inefficiencies in the public administration arising from lack of experience and foresight in the skills of demand management and careful targeting of measures are also evident (e.g. Poland, Italy). It has not been possible to make a generalised assessment of the cost-efficiency of the FAS obligation because its implementation varies considerably between Member States, and the implementation costs are not separately monitored or acknowledged by the public administration.

The promotion of advisor training is essential to meet the key CAP objectives, as required both by the FAS and by the advisory services funded by Rural Development (M2). CAP funding appears to be an efficient way of enhancing AKIS functions, and EIP-AGRI.

The CAP instruments and measures which focus on **advisor training appear to offer added value** to enhance AKIS functioning, especially when these are linked to other CAP measures which attract a significant number or concentration of farmers. For instance in Ireland, linking both advice and EIP-AGRI Operational Groups to farmers in marginal areas *via* the significant incentive of agri-environment and climate measures (which constitute a significant incentive), and requiring those advisors to be certified and regularly trained under the FAS obligation and using the advisory services measure (M2) of the Rural Development Programmes (hence linking FAS and M2), appears to have been an effective way of improving knowledge flows in these areas.

Finally, the **EIP-AGRI Service Point** and its activities are widely regarded as an important and valuable addition to AKIS efficiency across the case studies and at EU level. This opinion is as yet based largely upon identified potential for impact, rather than actual impact, but it is nonetheless notable.

5.3.2 Administrative burden (ESQ9, ESQ10 and ESQ11)

As regards the issues related to administrative burdens, different conclusions can be drawn for farmers, public administrations, and the EU level. For the relevant Rural Development measures, spending rates at the end of 2019 are low, with 31% for 'knowledge transfer'

¹²⁹ Due to the change of beneficiary of support in 2014-2020 compared to the previous period, without adaptation of IT support and thus returning to paper file management.

(M1), 17% for 'advisory services' (M2) and 18% for 'cooperation' (M16) (compared to 53% for all Rural Development measures combined). This is a first indicator of the likely administrative burden.

Administrative burdens for the beneficiaries (farmers, etc.) were found to be quite negligible for training (M1) and advice (M2) since most of the burdens to access and utilise these funds are borne by intermediate bodies (training and advisory bodies). For the co-operation measure (M16), there are administrative burdens for farmers within Operation Groups, who are reportedly not accustomed to managing innovation projects.

Administrative burdens for public administrations and intermediate bodies (advisory and training bodies) are important and are related to different factors: EU regulations, measures' design and public administration procedures, and finally structural and institutional features of delivery. At the level of the Managing Authorities, the administrative burden was quite significant for all knowledge exchange, advice and innovation measures and this partly explained the delay in measure implementation. The specific reasons for high administrative burdens on Managing Authorities and intermediate bodies vary per measure, as detailed hereunder.

As regards advisory services, in some Member States the Managing Authorities **dropped the Rural Development advice measure (M2) due to the initial obligation to choose beneficiaries through public procurement with an open call for tender procedure**. In other Member States, the 'Omnibus' regulation (Regulation (EU) No 2017/2393) solved this problem at the end of 2017, meaning much-delayed implementation. In a few Member States where a call for tenders was launched (in 2016 or in late 2019), its preparation and issuing **required a substantial effort from public officials** (e.g. Lower Saxony in Germany, Veneto in Italy, Flanders in Belgium). The upper thresholds (maximum amount) are also considered insufficient for a certain type of specialised advice (as for Operational Groups' projects).

The novelty of the EIP-AGRI approach, relying on mixed partnerships, has created the need for a learning process both in the public administration and in Operational Groups. The need to understand the logic and the characteristics of EIP-AGRI strongly affected the often slow preparation of the design of the 'establishment of Operational Groups' and 'pilot projects' sub-measures (M16.1 and M16.2) in the Rural Development Programmes and then in the operational phase, when Managing Authorities have to design calls for potential beneficiaries.

There were no significant administrative burdens arising from Rural Development training and advice measures (M1 and M2) **at the EU level**, according to interviews with EU officials. As regards innovation projects, the need for a learning process is recognised. Administrative burdens have been lowered due, in fact, to strong initial efforts by EC services in coordination, training, technical support to and communication with Managing Authorities, networks and thematic groups.

Some limitations have been found in the use of simplified costs to reduce the administrative burden, especially when they are set at inadequate levels and in the case of innovative projects. These sometimes increase the administrative burden on beneficiaries and can even disincentivise uptake in some cases (e.g. Lower Saxony in Germany).

Regarding explicitly the FAS (ESQ11), at EU level the benefits of the *2014-2020 period* was mainly the increase in awareness of beneficiaries on the offer of advice, and the list of specific topics (in particular environmental standards) for which advice has to be available. Thanks to Rural Development support under M2.1 and M2.3, the FAS enhanced the quality of advice, including the qualification of advisors. Member States do not evaluate specifically advice from the FAS instrument (because it is either integrated in their existing advisory services, which are extremely diversified, or because it is already monitored if provided under Measure 2).

How these **benefits are proportionate to costs** is heterogeneous between Member States and regions. From case studies, benefits appeared rather limited in Member States

where the offer of farm advisory services is already well developed and embedded in a **strong and integrated AKIS**. The establishment and application of the FAS had overall limited costs but also strongly limited benefits (France, Germany). In Flanders (Belgium), sub-measure (M2.1) supporting the 'use of advice' supported the FAS, which together led to the integration of new topics, especially on environment, linked to advisory modules of interest to farmers as more focused on economic issues.

Other Member States characterised by an **intermediate AKIS** (e.g. Estonia and Italy in Umbria and Veneto), with a weaker advice offer and more budgetary constraints, chose to use Rural Development advisory services (M2) to support the FAS. The costs of the 'FAS-M2 package' arose mainly from the accreditation procedures (public procurement rule of Rural Development), and the advisors' training requirement; the benefits regards the structuring of AKIS (improved integration of advisors), the improved services' offer (topics and quality) and the increased farmers' awareness. Overall, the benefits outweigh the costs, the CAP FAS-M2 contributing to a better functioning of the AKIS and providing a helpful financial support.

Finally, in Member States with a **weak and fragmented AKIS** such as Greece (*and Malta*) the FAS and the essential EAFRD support for advice are expected to have a substantial contribution to the development of advisory services, in terms of topics and quality of services (potentially the case for Greece – still under development, and *already functioning in Malta*). Historically, the FAS obligation exists since 2007, but Greece had not mobilised the Rural Development advice measure (m114) across 2007-2013. In the current period, the Rural Development advice measure (M2) has been selected and, while its implementation is delayed, it is slightly ahead of the FAS setup. The Rural Development advice measure (M2) appears the essential tool for supporting the establishment and operation of the FAS in Member States/Regions facing strong financial and institutional capacity constraints.

5.4 Theme 4 - Coherence

A will to improve internal coherence within the CAP and within Pillar 2 with mixed results (ESQ12).

Regarding internal coherence within the CAP, the EU 2014-2020 legal framework sought to reinforce the links between Pillar 1 (funded by the European Agricultural Guarantee Fund - EAGF) and Pillar 2 (funded by the EAFRD) with **common objectives** and a **single monitoring and evaluation framework** (CMEF). However, in contrast to the European Structural and Investment Funds, **no common programming** was required for either CAP pillar. Pillars 1 and 2 are mostly **managed by different competent authorities, based in different locations, particularly in regionalised or devolved Member States**. The resulting approach, intended at EU level as more comprehensive and integrated remained in the strategic documents, without materialising effectively in case study Member States.

Still regarding the CAP's internal coherence, the mandatory topics of the FAS (see Theme 2) fall under the financing, management and monitoring Regulation, while support for advisory services (M2) falls under the Rural Development Regulation. As a result, FAS and Rural Development supported advisory services (M2) are managed by authorities from different departments and, in regional Member States, by authorities with different jurisdictional powers.

The successive CAP reforms (2007-2013 and 2014-2020) also sought to strengthen internal coherence within Pillar 2 (and its different measures and sub-measures). Priority 1 is a cross-cutting priority, and funds for knowledge transfer (M1), advisory services (M2) and innovation (M16) are allocated within the thematic Priorities 2 to 6. This strengthened the coherence between these support measures and the other Rural Development measures (at least in the design phase). Measures 1, 2 and 16 were also conceived by the Commission to work together, as well as to be complementary to each other.

However, **these complementarities and synergies** at the design stage could not always be fully implemented. CAP support measures remain complex and sometimes difficult to read and communicate for stakeholders involved in Rural Development. Within national or regional administrations, separate management by individual measure or sub-measure is still common. Few managers of measures have a cross-cutting vision of their Rural Development Programmes (RDP) and the way "their" measures/sub-measures support broader goals identified at the level of the RDP or the CAP as a whole. In addition, administrative burdens related to implementation (i.e. delays or the abandonment of certain sub-measures) or lack of stakeholder and administrations' capacity to appreciate or pursue synergistic links between measures resulted in limited achievements in this respect.

The 2014-2020 Rural Development cross-cutting priority on knowledge and innovation (including a budgetary target) has not missed its intended effect, but each measure needs embedding and learning both at national and regional level.

Some case studies show an important link with an EIP-AGRI unit or innovation support service, possibly setup within a national rural network (NRN) or regional rural networks (RRN), at programme level. These EIP-AGRI units play a role of facilitation, coordination and transfer of information, in particular at the level of the EIP-AGRI Operational Group projects within the Rural Development cooperation measure (M16). **The coherent implementation of knowledge transfer and dissemination among the entities involved (EIP-AGRI Networks, National Rural Networks, various innovation support services within or outside the National Rural Networks, etc.) is an important feature** both at Member State and EU level.

Although the internal coherence of Pillar 2 has improved compared to 2007-2013, there remains a lack of flexible and combined use of measures, both among knowledge exchange, advice and innovation measures as well as between these and other Rural Development measures.

Other related EU instruments and policies also play a role in knowledge exchange, advice and innovation, notably the European Structural and Investment Funds (ESIF: ESF, ERDF) and the Horizon 2020 programme (ESQ13).

With the intent of strengthening complementarities, the EU legal framework placed increased emphasis on coherence via higher-level requirements (such as the 2014-2020 Partnership Agreements). While these have ensured clear demarcation lines between the different funding instruments and encouraged coherent objectives, implementation to date does not reveal a search for strong synergies or complementarities (notably with the ESF and ERDF).

At EU level, the coherence with the Horizon 2020 programme is recognised. It has also been addressed at national level. Effective synergies and complementarities have been built between Horizon 2020 and the CAP within the EIP-AGRI (for e.g. in the organisation of seminars by the EIP-AGRI, with the support of national EIP-AGRI units, rural networks and some Operational Groups). In the beginning of the period, some Member States have encountered difficulties in ensuring national coordination with Horizon 2020 (Germany and Estonia), especially at Operational Group level, but most of them intend to address it in the remaining period (until 2023).

5.5 Theme 5 - Relevance

5.5.1 Response to current needs – emerging issues

The legal provisions at EU level enable the identified needs to be met, in terms of topics (ESQ14).

Farming practices are increasingly complex, and the agricultural sector must constantly adapt to new challenges: price volatility, crises (e.g. milk, bovine meat), diseases (African swine fever, avian flu, etc.), the effects of climate change (droughts), limits on the use of

pesticides (e.g. an anticipated glyphosate ban in numerous Member States), and risks to salaried work, farmers' groups, etc.

Society also expresses relevant needs in terms of sustainability and public goods, such as environmental enhancement (reduced use of chemical inputs including pesticides), biodiversity, climate actions (mitigation and adaptation), animal welfare, food security and food safety, etc.

There is no restriction on these topics and content at European level; all themes can potentially be covered by CAP instruments and measures for training, advice and innovation to meet the needs of the target audience. This is currently underestimated by authorities and policy makers. Cases exist where Member States have investigated and supported new and emerging topics. However, with the exception of EIP-AGRI, there is no specific incentive to invest in these and many Member States therefore focus only on using CAP provisions to cover the obligatory requirements under cross-compliance and greening.

Compared to the 2007-2013 period, the scope of knowledge exchange has been expanded for the 2014-2020 period, both in terms of topics and methods.

In Rural Development Programmes, compared to the previous period, the framework has prominently expanded to include many new activities such as information and demonstration activities or visits and exchanges at farm level (sub-measures 1.2 and 1.3), the possibility of offering one-to-one advice combined with advice in small groups (M2.1) and the training of advisors (M2.3). The EIP-AGRI Operational Groups are a completely new approach based on 'bottom-up' co-creation of knowledge in response to farmers' and foresters' needs.

For the FAS, the mandatory list of topics on which advice must be available for farmers has been expanded (see Footnote 126).

However, although the EU framework is meant to be broad, Member States identify limitations compared to their own initial scoping of needs. To fund one-to-one advice combined with advice in small groups (M2) is possible only under the reglementary condition that they are 'duly justified and appropriate, taking into account the situation of the individual user of the advisory service'. This hindered Managing Authorities due to uncertainty of interpretation and subsequent controls. Some Member States also encountered difficulties in adapting a pre-defined national funding framework to support notably webinars or other online training courses (Flanders in Belgium, Lower Saxony in Germany, Lorraine in France, Estonia, Greece, Poland) or new types of final beneficiaries.

To respond to national/regional needs, the European Commission required a SWOT analysis within Rural Development Programme preparation. The SWOT, linked to the explicit identification of needs and responses to those needs, is highly structured in the Rural Development Programmes and is a step forward compared to the previous programming period. This exercise has made it possible to refocus knowledge exchange, advice and innovation activities on specific themes, which was a recommendation of the European Court of Auditors report of 2015.

Despite this, a significant proportion of the current support for knowledge exchange, advice and innovation is funded by national or regional resources and/or is indicated as falling short of meeting needs. This is partly due to complexity and administrative burden linked to the implementation of the relevant CAP instruments and measures).

In addition, the renewal rate of participants to trainings is low (such as in the Grand-Est region in France), meaning that farmers who attend training are generally always the same ones.

The case studies only **give a partial picture of the coverage of needs.** They have highlighted different approaches to the coverage of needs in terms of topics. Most case study Member States made training and advice available for farmers, targeting their needs (technical, economic, social related topics) and societal needs (carbon management,

biodiversity, environment, animal welfare). However, some have put more emphasis than others on societal themes and quality of life, mainly Member States with stronger AKIS (Flanders in Belgium, France, Italy, Lower Saxony in Germany, Ireland). Other Member States have concentrated CAP-facilitated advice on themes related to farmers' needs, giving little attention to societal topics (Estonia, Greece, Poland). These Member States with notably weaker and less integrated AKIS also cover fewer emerging topics (which need to be addressed).

5.5.2 Relevance regarding the EU/national/regional development and fostering of knowledge exchange, innovation and advisory activities (ESQ15)

CAP instruments and measures have promoted knowledge exchange, advice and innovation at the level of Member States and regions as shown above. Their actual contribution to AKIS is more difficult to establish as the systems are supported by national or regional resources outside CAP funding. In some cases the AKIS is highly reliant upon CAP instruments and measures to operate, while in others the availability of CAP obligations and funding in itself is much less a factor underpinning AKIS, and it is more the impact of the types of obligation or measure offered which are deemed to improve AKIS functioning.

The correlation between *planned* use of relevant CAP measures and need as indicated by territories with weaker AKIS appears stronger than that between *actual* use up to 2018 and indicated need. This suggests that **implementation issues** (delays and administrative burdens) **somehow have reduced the relevance of CAP measures**.

The EU and Member State networks and institutions supporting EIP-AGRI, in particular, have fostered significant new functionality, mobilising farmer learning and strengthening links between research and innovation, albeit for relatively small numbers of farmers to date (even when including those not directly involved in the Operational Groups). Many interviewees among Managing Authorities, stakeholder organisations, researchers and knowledge exchange/advice providers in most of the case study Member States express positive views about the emerging potential of the EIP-AGRI approach to transforming the functionality and innovation capacity of the AKIS. Also, National Rural Networks in some Member States (e.g. Italy, Estonia) are identified by stakeholders as important in enhancing knowledge exchange among Pillar 2 beneficiaries and the advisory and training community.

Specific cooperation approaches based on particular examples of M16 use enhancing AKIS have been implemented in Ireland, Poland, France, Germany and Estonia. To a lesser extent, advisory services (M2) in Italy and knowledge transfer (M1) in Flanders (Belgium) are also highlighted as important. However, the case studies also emphasise that an integrated approach to deployment of all relevant measures can be particularly beneficial, as described in Italy, France, Ireland and Germany (Lower Saxony).

5.5.3 Relevance of the Rural Development Programmes to the FAS obligation (ESQ15)

There is a clear division among Rural Development Programmes between those for which support to advisory services (M2) has been critical for mobilising the Farm Advisory System, and those where the funding can still be important but is not directly impacting the role or performance of FAS (Lower Saxony in Germany, France).

In Member States with relatively weak AKIS, EAFRD funding (M2) was and remains essential to implement the FAS and farm advisory services.

In Member States or regions with quite strong or medium AKIS, such as Flanders (Belgium) and Italy (also Estonia), Managing Authorities used advisory services (M2) not only to meet the FAS obligation, but to offer a broad range of advice. Advisory bodies receiving Rural Development funding for advice (M2) are required to report on the type of advice provided and the number of farmers advised, as a condition of receiving the Rural Development Programme support.

Logically, in those Member States and regions where pre-existing and strong integrated advisory services existed prior to the FAS, these were simply identified to fulfil the FAS obligation, there is little influence of Rural Development Programme funding on the FAS – as appears the case in France and Germany (Lower Saxony).

5.6 Theme 6 - EU added value

CAP fostering knowledge exchange, advice and innovation provides EU added value in many aspects, even if sometimes limited due to the administrative burden (ESQ16).

A specific emphasis has been put on innovation: the **added value of the EIP-AGRI and Operational Groups approach is highly recognised**, throughout case studies as well as in the surveys and EC interviews (ESQ16). This contribution lies mainly in the bottom-up collective co-creation of knowledge and responses to issues and opportunities of farmers and the agricultural sector, but also in the recognition of the farmers' role as providers of knowledge. The Operational Groups in Member States supported by rural networks or innovation support services and the EIP-AGRI network and the EIP-AGRI Service Point play a crucial facilitating role.

EU added value lies also in the cross-cutting Priority 1 specifically encouraging Managing Authorities to consider supporting knowledge exchange, advice and innovation under each thematic Priority and Focus Area, as well as providing an 'alone standing' funding source where bottom-up issues can be incorporated.

With regard to knowledge exchange and advice, all case studies confirm that CAP funding enables **additional achievements** (in comparison to what would have been achieved only with national budgets) and **extended services**. Overall, more courses have been achieved thanks to the CAP, based on services close to farmers and at a lower cost for farmers.

The CAP has also encouraged a key evolution in terms of:

- **Methods.** Going beyond traditional training, CAP measures support and encourage a multitude of forms of knowledge exchange such as demonstration (M1.2), farm visits (M1.3) and interactive innovation projects (M16.1); *and*
- **Thematic coverage.** The Rural Development funding for advice, setting up of advisory services and training of advisors on whatever topic, encourage and enable Member States and regions to put greater focus on advice covering public goods and societal issues; the list of mandatory topics in Member States' FAS obligation has also been broadened.

6 RECOMMENDATIONS

R1: Develop an integrated vision of Member State's AKIS (ESQ1 and ESQ2)

In preparing their CAP strategic plans, Member States (*Ministries in charge of the CAP Strategic Plans*) should develop and set out a comprehensive vision of their AKIS, to include future CAP interventions in the most strategic way. The setting of priorities should be promoted along with identification of complementarities between the relevant knowledge exchange, innovation and advice measures and instruments and the Member State's AKIS.

The strategy should be built on analysis of the strengths and weaknesses of the existing AKIS, giving an explicit inventory of all components and a critical analysis of the needs to be covered and their interconnections. The strategy should establish a short- and medium-term vision to promote the strengthening and adaptation of the AKIS to the needs of farmers and society. A coordination body could be set up to ensure continuous strengthening of the effectiveness of these interventions (encouraging knowledge exchange between Member States as well as their adaptation of the AKIS to respond to emerging needs) at EU and Member State level. The vision of the Member State's AKIS must be established at regional level in regionalised or devolved Member States.

This strategic approach is important in order to make sure support is used in the most effective way, improving information flows between actors and between the various geographical levels, so they contribute to the achievement of CAP objectives.

R2: Strengthen coherence between CAP instruments and measures and Member State's AKIS (ESQ1 and ESQ2)

The evaluation showed that the CAP instruments and measures were generally well focused on the objectives of the CAP but not explicitly linked to the whole AKIS. This does not promote coherence between the CAP and measures supported by national resources. Based on a comprehensive view of the existing AKIS with its strengths and weaknesses, CAP Strategic Plans should specify how CAP instruments and measures will be designed and deployed to support and strengthen Member States' AKIS, in line with the priorities and objectives pursued at the national level. In this way, the CAP will be more effective, and the AKIS can be strengthened. A minimum share of CAP budget to be spent on knowledge exchange/advice and innovation should be set for all Member States.

Considering many stakeholders are not yet familiar with the concept of AKIS, its promotion at EU, national and regional level is important.

R3: Maintain and develop the EIP-AGRI (ESQ4)

The EIP-AGRI is a success in terms of concept, method and implementation, and it shows potential in terms of impact. It responds to a variety of innovation needs (both in terms of content and method) faced by the sector and by farmers (foresters), largely in a bottom-up approach. Therefore, it is important to maintain the EIP-AGRI network and support its EU/local/national activities. The evaluation nevertheless identified some points to improve the effectiveness and impact of the EIP-AGRI.

The following points are recommended:

1. Make sure the EIP-AGRI is well known and well integrated in Member States AKIS.
2. Respond to the need, at EU, national and regional levels, to have innovation support services: a group of advisors dedicated to helping develop individual grassroots ideas into innovation projects. Such innovation support service could be designed as a one-stop-shop for innovation or as pluralistic innovation brokers on various locations, however always ensuring that they are well coordinated and networked. An EIP-AGRI extended Service Point and a dedicated innovation strand (within the National/Regional CAP Networks or another entity/actor) will also be key to promoting knowledge exchange, advice and innovation. Together, they should make it possible:
 - a. **first** to promote, overall, the EIP-AGRI and Operational Groups;

- b. **second** to support the concrete implementation of Operational Groups; ensure that farmers can make use of innovation support services to help them develop an innovative idea or solve a problem by the means of EIP-AGRI Operational Group project proposals, and to support them in finding and interacting with other partners; *and*
 - c. **third** to implement a wide variety and large number of communication actions such as preparing trainings, educational material, demonstrations, knowledge reservoirs, etc. to spread the innovative knowledge as wide as possible.
3. Improve the information flows between farmers and their contacts (i.e. advisors, innovation support services or other stakeholders such as cooperatives, unions, etc., which have a knowledge of the EIP-AGRI). This is essential. A communication and diffusion strategy could be developed, both at the EU and Member State levels. The use of several communication channels is important (e.g. peer-to-peer events: not only testing, but also showcasing; use of social media; etc.).
4. Identify and address the barriers which currently discourage farmers from being actively involved in EIP-AGRI Operational Groups. In particular, ensure that controls and risk management measures do not disincentivise farmer involvement, and facilitate earlier and easier access to funds to support farmer membership.
5. Encourage the participation of farm advisors in Operational Groups. It is highly recommended as they are key for upcoming information flows and facilitation within the group. Financial support should be offered for their participation.
6. Put more emphasis on outputs and expected results than only on financial issues and compliance with eligibility rules in the monitoring.
7. Identify and record the results and impacts of Operational Groups on changes in farming practice and on the dissemination of these results.

R4: Foster information flows between advisors and both farmers and research (ESQ4)

Advisors play a key role regarding information flows. They bring in practical knowledge of farmers' needs, but they also disseminate new knowledge. They are also the ones best suited to link up with research and with Operational Groups of the EIP-AGRI (Theme 2 - ESQ 4). The information flows between advisors and farmers, and in particular with Operational Groups and research should be strengthened. Incentives should be given to advisors to take the initiative to communicate farmers' needs on a regular basis and notably take up the role of innovation support.

R5: Maintain training and knowledge support for advisors (ESQ3 and ESQ4)

Maintain training in various forms and upskilling for advisors, enabling advisors to respond to the numerous challenges they face; a good practice is to link funding of advice to training of advisors (such as in M2.1).

R6: Foster holistic advice in response to farmers' needs including topics of public interest (ESQ4 and ESQ6)

Advice really needs to be adapted to the farmers' needs, including topics of public interest, but also providing advice on the economic and environmental performance of the farms in the most adapted way to each local situation. Advisory services which form an important part of the AKIS have to be embedded in their AKIS with a clear flow of information. Moreover, advisors should be constantly updated on emerging topics.

R7: Increase the ability of all farmers to access advisory services and promote advisory activities while enabling approaches to evolve (ESQ4 and ESQ6)

Access to agricultural advice remains an important issue. Expectations and needs emerging from the agricultural sector are increasingly numerous and complex, covering competitiveness, environmental issues, climate issues, societal issues, etc. In this context,

farmers must be able to access and be strongly incentivised to use a variety of high-quality forms of advice **taking into account the specificities of their farm.**

This **access must be guaranteed to all European farmers and financial resources should be made available to support these activities**, to provide at least partial co-funding for those topics which are most likely to deliver public benefits, but including social, environmental and economic aspects (and hence reducing advice costs for the end-user beneficiaries) in response to needs¹³⁰.

These advisory activities should be promoted by AKIS actors beyond advisors themselves, by farmer and producer organisations, networks, and media but also Ministries, Technical Colleges, Universities and others. In addition, specific promotion may be needed to convince 'hard to reach' farmers to participate in knowledge exchanges.

To support the variety of topics on which advice will be needed, an EU-wide platform collecting the latest knowledge and innovative practices, as well as support from specialist (thematic) advisors, would be useful. Connections with researchers on specific topics are key, including an "EIP-AGRI" connecting the CAP to Horizon Europe.

Individual on-farm one-to-one advice remains the major approach, but it should be complemented by other approaches wherever useful and effective (peer-to-peer, small groups, etc.).

R8: Place more emphasis upon reaching the "hard to reach" (ESQ8)

Place more emphasis upon reaching the "hard to reach", who include many conventional farmers. Providing specific CAP funding targeting these groups with knowledge exchange, advice and innovation adapted to their specific needs.

Develop strategic approaches to foster the most efficient balance of public, private and hybrid forms of knowledge exchange and advice, in various configurations (peer-to-peer, one-to-one, small groups, etc.), working with sector bodies and other key stakeholders (e.g. environmental and community NGOs).

R9: Relative to "targeting" (ESQ8)

Ensure that Member States (CAP Managing Authorities) examine where their needs for advice and training are greatest among all potential CAP beneficiaries, including women, young people, part-time and elderly farmers and farm households, and other rural businesses and service providers (SWOT and needs assessment of CAP Strategic Plans) (considering also coherence with other European Structural and Investment Funds' provision for these groups). Increase awareness of how CAP measures can effectively target excluded groups and use knowledge exchange, advice and innovation instruments as a mechanism for enabling and strengthening capacity and governance in these contexts.

R10: Support knowledge exchange, advice and innovation methods based on new technologies (ESQ4 to ESQ6)

In several Member States, difficulties have been noted in financing certain types of measures, particularly in connection with new technologies. However, these approaches are able rapidly to reach a large number of farmers who can take part in training courses or exchanges without having to travel.

The measures should therefore make it possible to finance knowledge exchange, advice and innovation activities based on new technologies, such as distance learning, collaborative work, discussion groups, webinars, etc., as well as knowledge exchange and advice activities for end-user beneficiaries on how to use these new technologies and methods.

¹³⁰ Impartial advisory activities should be supported financially in one way or another (very different models exist throughout the Member States) to facilitate their use by farmers by reducing advice costs but also having a profession of advisors that "does not need "commercial" activities to survive"

R11: Reduce administrative burden (ESQ9 and ESQ10)

Reducing the administrative burden is key to improving the implementation of measures, ensuring an efficient understanding of the measures' operation by the managing authorities and final beneficiaries, and reducing transaction costs for all stakeholders. It implies some institutional changes both at EU and national/regional levels when the measures are designed.

Within the sphere of policy design and management, the following issues should be included:

1. Maintain delivery relying on intermediate bodies (training and advisory bodies as well as individual trainers and advisors);
2. Strengthen support/animation/networking in the setting up of Operational Groups. There is a strong potential role of national, regional and EU rural networks, in all phases, to spread learning processes;
3. Ease the process of public procurement (provide more information on flexibility in the rules, to respond to local contexts and simplify documents) for small projects and innovation projects;
4. Introduce more proportionality in management and control procedures for small projects – i.e. simplify the procedures for small projects; *and*
5. Offer training to Managing Authorities and Paying Agencies in managing demand, understanding the variety of effective approaches and their varied costs and impacts, and working with all key actors in the AKIS to enhance efficient design and delivery.

Within financing issues, the following should be included:

1. Make advance payments eligible for EU support;
2. Introduce as much flexibility as possible in the application of standard costs, and promote the approach better at the level of the Member State;
3. Introduce flexibility in financial allocation by focus areas (for the remaining current 2014-2020 period extended to 2023); *and*
4. Eliminate all thresholds for advice: drop the upper threshold (maximum amount) of EUR 1 500 per single advice episode, and the maximum amount of budget (EUR 200 000) allowed for three-year programmes of advisor training.

R12: Revise and specify data collection of evaluation and monitoring indicators (ESQ5 and ESQ11)

This evaluation illustrated the monitoring difficulties even for straightforward indicators (training, participants in training, beneficiaries advised (FAS)). Too much flexibility in the approach to collecting information is counterproductive when it comes to EU aggregation of data (multiple counting of beneficiaries, different types of training units, collection within a single indicator of different types of advice and information, no opportunity for assessing the percentage of uptake in relation to target populations, etc.). This highlights the need for:

1. a clear common definition of beneficiaries (e.g.: farmer, advisor, etc.),
2. a registration of participants on the basis of a single user-ID (corporate number or national number); this data only would provide information on uptake of training and advice by the farming population,
3. a clear and identical definition of units (training, advice, knowledge exchange),
4. data collection of advisory activities focusing on the main types of advice, including collection of data on the number of farmers advised by the means of individual on-farm advice,
5. separate monitoring of other types of advisory or knowledge exchange activities, showing the growing diversity and implementation of each of them, *and*
6. an identification of the results and impacts of advice on changes in farming practices in evaluation activities.

ANNEX 1: REFERENCES

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ANNEX 2: INTERVENTION LOGIC – INVENTORY OF RELEVANT INSTRUMENTS AND MEASURES

Table 35: Current CAP: intervention logic for instruments and measures affecting Knowledge exchange, innovation and advisory activities

REGULATION	MEASURES WITH POTENTIAL KIA IMPACTS	MEASURES/SUB-MEASURES	FOCUS AREAS	DIRECT KE IA IMPACTS	INDIRECT KE IA IMPACTS
R1305/2013 EAFRD (Rural development- RD)	Art. 14 Knowledge transfer and information actions (measure 1)	1.1. Professional training and skills acquisition activities 1.2. Demonstrations and information actions 1.3. Agricultural and forestry management exchanges and visits	Contributes to RDP Priorities 2-6 and respective Focus Areas	This measure directly supports knowledge exchange. Several activities may be conducted, not only training and workshops, but also coaching, short-term farm and forest exchange schemes, visits, demonstration activities, information actions etc. (recital 12)	KE can support the uptake of innovation. According to the subjects covered, this may include diffusion of best agricultural and forestry production practices: enhanced competitiveness of SMEs and resource efficiency; improved environmental performance while at the same time contributing to the sustainability of the rural economy (statement 12)
R1305/2013 EAFRD	Art. 15 Advisory services, farm management and farm relief services (measure 2)	2.1. Aid for the use of advisory services 2.2. Aid for setting up agricultural advisory, management and substitution services and forestry advisory services 2.3. Aid for training advisors	Contributes to RDP Priorities 2-6 and respective Focus Areas	This measure directly supports advisory services (...). These services help farmers (including young), forest holders, other land managers and SMEs in rural areas to improve the economic and environmental performance as well as the climate friendliness and resilience of their holding, enterprise and/or investment (statement 13). This measure could also be used to assist farmers buying innovative investments, to finetune the use and promote them (possibly in combination with the outcomes of EIP-AGRI Operational Groups).	Helps farmers to assess the performance of their agricultural holding and to identify the necessary improvements (statement 13)
R1305/2013 EAFRD	Art. 16 Quality schemes for agricultural products, and foodstuffs (measure 3)	3.1. Aid for taking part in quality systems for the first time	Contributes to: P2: Competitiveness P3: Food chain organisation P4: Restoring, preserving and enhancing ecosystems		Farmers participating in quality schemes have to adapt their production system to comply with the rules of the respective scheme. This may foster innovation (possibly less intensive, more sustainable)

REGULATION	MEASURES WITH POTENTIAL KIA IMPACTS	MEASURES/SUB-MEASURES	FOCUS AREAS	DIRECT KE IA IMPACTS	INDIRECT KE IA IMPACTS
R1305/2013 EAFRD	Art. 17 Investment in physical assets (measure 4)	4.1. Aid for farm investments 4.2. Aid for investment in transforming, marketing and/or developing agricultural products 4.3. Aid for investment in infrastructures linked to developing, modernising and adapting agriculture and forestry 4.4. Aid for non-productive investment in meeting agricultural, environmental and climate targets	Contributes to all Priorities in particular P2	Encourages possibly the financing of innovation	May set the conditions for an appropriate framework for innovation, in order to contribute to agricultural productivity and sustainability
R1305/2013 EAFRD	Art. 19 Farm and business development (measure 6)	6.1. Business start-up aid for young farmers 6.2. Business start-up aid for non-agricultural activities in rural areas 6.3. Business start-up aid for developing small farms 6.4. Investment aid for starting up and developing non-agricultural activities	Contributes to the following RD Priorities: P1: Knowledge transfer and innovation P6: Social inclusion, poverty reduction and economic development in rural areas	Aid for young farmers' installation, (main support under measure 6) is linked to a business plan and minimum skills are required. Support is conditional to an adequate level of training. Promotes also investment in the creation and development of non-agricultural activities, which may be linked to innovation	Conditions for access to Young Farmer (YF) installation aid indirectly promote KE and training (GR, 2019)
R1305/2013 EAFRD	Art. 26 Investments in forestry technologies and in processing, in mobilising and in the marketing of forest products (measure 8.6)	Aid to private forest-holders, municipalities and their associations and to SMEs for investments enhancing forestry potential or relating to processing, mobilising and marketing adding value to forest products.	Contributes the following RD Priorities: P1: Knowledge transfer and innovation; P4 and P5 P6: Social inclusion, poverty reduction and economic development in rural areas	Encourages notably the financing of innovative harvesting (soil friendly machinery) and energy efficient equipment that include innovation and KE	
R1305/2013 EAFRD	Art. 27 Setting-up of producer groups and organizations (measure 9)	Aid in order to facilitate the setting up of producer groups and organizations in the agriculture and forestry sectors	Contributes to all RD Priorities especially: P1: Knowledge transfer and innovation P2: Competitiveness of all types of agriculture and farm viability	Leads to carry out activities such as the development of business and marketing skills and the organisation and facilitation of the innovation processes	By collaborating, members of PO talk and exchange knowledge, this might contribute to knowledge transfer and possibly to innovation

REGULATION	MEASURES WITH POTENTIAL KIA IMPACTS	MEASURES/SUB-MEASURES	FOCUS AREAS	DIRECT KE IA IMPACTS	INDIRECT KE IA IMPACTS
R1305/2013 EAFRD	Art. 28 Agro-environment and climate (measure 10)	10.1. Preserving and promoting the necessary changes to agricultural practices that make a positive contribution to the environment and climate 10.2. Aid for agro-environment and climate commitments	Contributes to: P1: Knowledge transfer and innovation P4: Restoring, preserving and enhancing ecosystems P5: Resource efficiency and shift towards a low carbon and climate resilient economy	Implement agricultural practices that contribute to climate change mitigation and adaptation and that are compatible with the protection and improvement of the environment, the landscape and its features, natural resources, and the soil and genetic diversity (statement 22) Member States shall endeavour to ensure that persons undertaking to carry out operations under this measure are provided with the knowledge and information required to implement such operations They may do so through, inter alia, commitment-related expert advice and/or by making support under this measure conditional on obtaining relevant training (possibly supported through Measure 1 or Measure 2).	Aims to promote the necessary changes to agricultural practices that make a positive contribution to the environment and climate, it fosters knowledge exchange and innovation
R1305/2013 EAFRD	Art. 29 Organic farming (measure 11)	Aid for adopting ecological agriculture methods and practices	Contributes to: P3 especially 3.A: Improving competitiveness of primary producers P4: Restoring, preserving and enhancing ecosystems P5 especially 5.E: Fostering carbon conservation and sequestration in agriculture and forestry	Conversion to organic farming from conventional farming includes important changes in farming practices.	Strong link to KE, advisory activities and innovation; all restrictions on inputs in particular the absence of chemistry require farming practices that innovate compared to conventional farming for pest control (biocontrol), soil fertility and other
R1305/2013 EAFRD	Art. 35 Co-operation (measure 16)	16.1. Support for the establishment and Operational Groups of the EIP-AGRI for agricultural productivity and sustainability ¹³¹ 16.2. Support for pilot projects and for the development of new products, practices, processes and technologies 16.3. Cooperation between small players to organise joint working processes and share installations and resources	P1: Knowledge transfer and innovation Contributes also to all other RDP Priorities and Focus Areas	This measure primary aim is knowledge and innovation and directly supports cooperation, in particular the development of pilot projects, new products, practices, processes, technologies, organisation of joint work processes and sharing of facilities, diversification of farming activities and much more. All these activities can be covered by EIP-AGRI Operational Groups and the EIP-AGRI network	In order to contribute to agricultural productivity and sustainability, also promoting a resource-efficient, productive and low-emission agricultural sector (statement 42 and 44)

¹³¹ These Operational Groups follow the interactive innovation model and can implement all types of topics mentioned here under in the cooperation sub-measures (testing in pilot projects, joint working, short supply chains, environmental actions, biomass and energy related actions, forest plans and diversification management, and any other subject not in the list below (e.g. preparation of CAP measures such as for agri-environment and climate measures, care farming, generational renewal, etc.)). The main difference is the learning process organised between the Operational Groups and also with Horizon research projects, as well as the use of complementary knowledge, co-creation and the focus on the needs of farmers and foresters.

REGULATION	MEASURES WITH POTENTIAL KIA IMPACTS	MEASURES/SUB-MEASURES	FOCUS AREAS	DIRECT KE IA IMPACTS	INDIRECT KE IA IMPACTS
		16.4. Aid for horizontal and vertical cooperation between the players in the distribution chain and for promotional activities in a local context 16.5. Aid for joint actions and approaches carried out with a view to mitigating climate change and adapting to it, and to environmental projects and existing environmental practices 16.6. Aid for cooperation between the distribution chain players in the sustainable supply of biomass for making food, producing energy and for industrial processes 16.7. Aid for the various CLLD strategies 16.8. Aid for drawing up forest management plans and similar tools 16.9. Aid for diversifying agricultural activities into activities linked to healthcare, social integration, agriculture supported by the community, and education on the environment and food			
R1305/2013 EAFRD	Art. 42 – 44 LEADER/CLLD (measure 19)	19.1. Aid for drafting local development strategies (LDS) 19.2. Aid for LDS operations 19.3. Aid for planning and implementing local action group cooperation activities 19.4. Aid for promotional and working costs	Contributes to: P1: Knowledge transfer and innovation P2: Competitiveness P6: especially 6.B: Fostering local development in rural areas	To network rural areas, by sharing experiences and expertise in the development of rural areas by creating databases, publications and other modes of information exchange	Several local action groups can share their resources; therefore it supports cooperation and foster knowledge exchange
R1305/2013 EAFRD	Art. 53 European Innovation Partnership network	Support the EIP-AGRI for agricultural productivity and sustainability and enable the networking of Operational Groups, advisory services and researchers	P1: Knowledge transfer and innovation Contributes also to all RDP Priorities and Focus Areas	Aims to facilitate the exchange of expertise and good practices, knowledge transfer, establish a dialogue between farmers and the research community, provide information, promote innovation	Improve the productivity and sustainability of agriculture
R1305/2013 EAFRD	Art. 54 National rural network	Each Member State shall establish a national rural network, which groups the organisations and administrations involved in rural development	Contributes to all RDP Priorities	Aims, between others, to foster innovation in agriculture, food production, forestry and rural areas (Article 54.2.d) by the means of its networking. These activities may support EIP-AGRI Operational Groups (measure 16) in their implementation and the diffusion of their results.	Constitutes a vector for informing on all RD measures, including innovation

REGULATION	MEASURES WITH POTENTIAL KIA IMPACTS	MEASURES/SUB-MEASURES	FOCUS AREAS	DIRECT KE IA IMPACTS	INDIRECT KE IA IMPACTS
<p>R1306/2013 Financing, management and monitoring of the CAP</p>	<p>Art. 12 Principle and scope of the farm advisory system</p> <p>Art. 14 Access to the farm advisory system</p>	<p>Establishment of a <i>farm advisory system</i> with designed/accredited Operating bodies (OB) with advisors covering land management and farm management.</p> <p>The FAS must be able to provide information about at least cross-compliance. It should also cover:</p> <ul style="list-style-type: none"> • Greening • RD support measures at farm level supporting farm modernisation and all dimensions of competitiveness and innovation • Agricultural practices beneficial for the climate and the environment (crop diversification, maintenance of existing permanent grassland, having ecological Focus Area on the agricultural area) as specified in the direct payments) • Water protection, efficient and sustainable water use (<u>Directive 2000/60/EC</u> DCE Community actions in the field of water policy) • Plant protection products (<u>Regulation (EC) No 1107/2009</u>) • Integrated pest management (<u>Directive 2009/128/EC</u> Sustainable use of pesticides) <p>The FAS may also enable provision of information notably on:</p> <ul style="list-style-type: none"> • Promotion of farm conversion and diversification • Risk management • Minimum requirements for agri-environment-climate payments • Climate change mitigation and adaptation <p>Beneficiaries and farmers not receiving support under the CAP may use the farm advisory system on a voluntary basis.</p>	<p><i>Respect of cross-compliance is the mandatory for any CAP support</i></p> <p><i>Contributes to the whole CAP, may help farmers to full direct payments and touch upon some rural development Priorities</i></p>	<p>The FAS enables access to advice on land and farm management, in particular on the implementation of CAP cross-compliance, greening, water protection, integrated pest management but also on environmental and climate friendly agricultural practices</p> <p>Farmers having access to advice, if they are making use of it, be helped to reflect about the specific situation of their holding</p>	<p>Intend to help farmers and foresters to better understand and meet certain EU provisions, notably those covered by cross-compliance</p>

REGULATION	MEASURES WITH POTENTIAL KIA IMPACTS	MEASURES/SUB-MEASURES	FOCUS AREAS	DIRECT KE IA IMPACTS	INDIRECT KE IA IMPACTS
<p>R1307/2013 Direct payments</p>	<p>Direct payments</p>	<p>The regulation sets out the rules for direct payments made to support farmers and defines the cross-compliance requirements. .</p> <p>In particular, agricultural practices beneficial for the climate and the environment are laid down in Chapter 3 of Title III of Regulation (EU) No 1307/2013; the maintenance of the agricultural area as referred to in point I of Article 4(1) of Regulation (EU) No 1307/2013.</p> <p>“Maintaining an agricultural area in a state which makes it suitable for grazing or cultivation without preparatory action going beyond usual agricultural methods and machineries, based on criteria established by Member States on the basis of a framework established by the Commission”</p> <p>Direct payments include compulsory support schemes and optional support schemes. Coupled support may be granted in certain sectors and productions: cereals, oilseeds, protein crops, grain legumes, flax, hemp, rice, nuts, starch potato, milk and milk products, seeds, sheep meat and goat meat, beef and veal, olive oil, silkworms, dried fodder, hops, sugar beet, cane and chicory, fruit and vegetables and short rotation coppice.</p>	<p>All fields of cross-compliance covered under CAP support</p>	<p>Coupled support may only be granted to those sectors or to those regions of a Member State where specific types of farming or specific agricultural sectors that are particularly important for economic, social or environmental reasons undergo certain difficulties.</p>	<p>Direct payments should enhance environmental performance to farmers which are more targeted and greener; this could potentially in some specific cases lead to innovation especially green one</p>

REGULATION	MEASURES WITH POTENTIAL KIA IMPACTS	MEASURES/SUB-MEASURES	FOCUS AREAS	DIRECT KE IA IMPACTS	INDIRECT KE IA IMPACTS
R1308/2013 (CMO)	Art. 51 Innovation in the wine sector	Support for tangible or intangible investments aimed at the development of new products, processes and technologies concerning the wine sector	Contributes to innovation and to competitiveness	<p>Regulation (EU) No 1308/2013 offers Member States the possibility to implement five-year national programmes to finance specific support measures to assist their wine sector. Among 8 articles, Art. 51 concerns innovation in the wine sector (Art. 51)</p> <p>As compared to the previous 2008-2013 programming period, the main changes brought by the 2013 CMO reform include the new measure 'innovation in the wine sector' for the development of new products, processes and technologies concerning wine products which may include an element of knowledge transfer</p> <p><i>"Support may be granted for tangible or intangible investments aimed at the development of new products, processes and technologies concerning the products referred to in Part II of Annex VII. The support shall be intended to increase the marketability and competitiveness of Union grapevine products and may include an element of knowledge transfer."</i></p>	Could be relevant to respond to needs to adapt the technology used in vineyards and the production structure to market and climate changes issues but has not been used (source: Evaluation of CAP measures applicable to the wine sector, 2018).
R1308/2013 (CMO)	Part II, Art. 33	Operational programmes in the fruit and vegetables sector; these may include improvement of quality and crises management; these may include training and exchange of best practices			Implementation of operational programmes could contribute to KE and innovation, if programmed

Source: ADE based on literature and regulation review

ANNEX 3: OBJECTIVES, SCOPE AND EVOLUTION OF THE FARM ADVISORY SYSTEM (FAS) SINCE 2007

A) PRESENTATION OF THE EU-FAS

➤ *Objectives and overall scope of the FAS*

The **CAP reform of 2003** introduced the obligation for Member States (MS) to set up a system of advising farmers on land and farm management, called the 'Farm Advisory System' (FAS; Articles 13 to 16 of **Regulation (EU) No 1782/2003**). The deadline for setting up that FAS instrument was 1 January 2007. The FAS was intended to raise farmers' and foresters' awareness of EU provisions - to better understand and meet certain EU legal requirements - in particular those covered by cross-compliance, i.e. the Statutory Management Requirements (SMR) and Good Agricultural and Environmental Conditions (GAEC).

As stated in Regulation (EU) No 1782/2003 (recital 8) the initial objective of the FAS was the following: "In order to help farmers to meet the standards of modern, high quality agriculture, it is necessary that Member States establish a comprehensive system offering advice to commercial farms. The farm advisory system should help farmers to become more aware of material flows and on-farm processes relating to the environment, food safety, animal health and welfare without in any way affecting their obligation and responsibility to respect those standards."

FAS activities (advice) had to be clearly distinguished from checks carried out in the framework of cross-compliance or to ensure compliance with the sectoral legislation (EC, 2010). It was not mandatory for farmers to make use of the FAS instrument, nor for Member States to provide support for the advice given.

For the 2007-2013 period FAS advice had to cover at least the whole cross-compliance requirements at farm level, meaning all SMR and GAEC. And from 2007 to 2009, FAS advisors had to systematically cover all legal requirements included in cross-compliance when providing services. This led to the development of extensive checklists. As stated in the 2009 FAS evaluation (ADE *et al.*) "*the core FAS approach, on-farm one-to-one advice linked to the major tool (checklists) that is used in most MS (foreseen in 23 MS and operational in 18 MS), supports the implementation of cross-compliance requirements through its comprehensive coverage of all regulatory aspects, their translation into understandable questions for the farmers, and the induced discussions with advisors on the rationale of the different requirements. Improving the capacity to respect cross-compliance requirements is also the main motivation from farmers of making use of this advice.*"

In the EC communication COM(2010) 665 final, it was clarified that farmers were not obliged to take up advice on each cross-compliance requirement in order to be entitled to receive support for the use of a farm advisory service (EC, 2010). In fact, most MS limited the FAS topics to the scope of cross-compliance, although they could have included other advice. Also, in MS those that used EAFRD to support the use of farm advisory services, the minimum scope of the advice had to cover occupational safety standards in addition to cross compliance requirements, as specified in 2007-2013 RD Regulation as follows:

Article 24 (**R1698/2005**) Use of advisory services

"Support provided for in Article 20(a)(iv) shall be granted in order to help farmers and forest holders to meet costs arising from the use of advisory services for the improvement of the overall performance of their holding.

As a minimum the advisory service to farmers shall cover:

(a) the statutory management requirements and the good agricultural and environmental conditions provided for in Articles 4 and 5 of and in Annexes III and IV to Regulation (EC) No 1782/2003;

(b) occupational safety standards based on Community legislation."

"The FAS may also provide advice on minimum requirements for the use of fertilisers and plant protection product (PPP), which are part of the [baseline]¹³² for the farmers benefiting from agri-environmental payments. The FAS may also support the implementation by farmers of animal welfare commitments. Minimum requirements on the use of fertiliser and plant protection products **have been mostly addressed through other advisory services**, with limited direct contribution from the FAS" (ADE *et al.*, 2009).

Overall, according to the 2009 FAS evaluation (ADE *et al.*), the FAS helped to raise awareness of farmers on cross-compliance topics (SMRs and GAEC). Other conclusions from the evaluation include the followings.

- *Effect on land and farm management and farmers reached.* The FAS contributed to a better overall hygiene on the farm and a reduced risk of non-compliances with the EU legislation, hence less penalties from the cross-compliance controls. Even though the main clients of the FAS were large farms, there has been an effort made to ensure that the FAS also reaches farmers who do not normally ask for advisory services.
- *Effect on farmers' income.* The FAS did not significantly impact the average farmers' income, neither through costs of advice, which were largely offset by public support, nor through immediate positive returns. Both costs and benefits secured by the FAS were rather limited. Using the EAFRD helped MS in providing the core FAS approach (one-to-one on-farm advice), which can be seen as an effective approach, although it might be a rather costly one.
- *Achievement of global objectives.* MS have tended to shape their FAS to cover, among the standards of modern high-quality agriculture, the obligations under cross-compliance only (SMR and GAEC requirements). The issues included in cross-compliance (such as food safety and animal health) are therefore well covered by the FAS. But the issues of competitiveness and animal welfare were covered to a much lesser extent. Only few MS had integrated the former in the scope of their FAS advisory activities. However, services on these issues were available to farmers outside the FAS, e.g. through other advisory/extension services or vocational training notably supported under CAP's m111.
- *Other impacts and unintended effects.* A major positive side effect of the FAS was that some MS took this opportunity to rethink their advisory services and knowledge information systems in the agricultural sector. Additional value added was further provided by MS using the fund for enlarging the scope of the FAS to other regulatory requirements linked to national / regional legislation or to quality insurance systems, or for integrating economic advice on the farm.
- *Relevance and coherence.* The FAS was considered relevant at EU level to meet the needs of the European agricultural sector, such as climate change and price volatility. However, at MS level, the FAS did not address the more region-specific needs of farmers (be it technical, economic, financial, competitiveness, etc.), which were generally covered by the existing advisory/extension services. Possibilities for synergies between the FAS and CAP pillar 1 and 2 or other EU interventions were high, but the MS did not really exploit them.

For the 2014-2020 period, the scope of the FAS was explicitly enlarged¹³³. The objective is still to raise beneficiaries' awareness on "the relationship between agricultural practices and management of farms on the one hand, and standards relating to the environment, climate change, good agricultural condition of land, food safety, public health, animal health, plant health and animal welfare on the other" (recital 10 of **Regulation (EU) No 1306/2013**). The "beneficiaries" now encompass all EU farmers, including those not receiving support under the CAP, but also non-farmer CAP beneficiaries.

¹³² The exact quotation is "the scope of cross-compliance". The EC suggests it was a wording mistake, as minimum requirements for fertilisers and pesticides are part of the baseline but not of cross-compliance.

¹³³ And the one of the supporting Rural Development Measure 2 even more.

The list of topics on which Member States have to ensure advice to beneficiaries has been enlarged to cover, beyond cross-compliance, e.g. the direct payment for 'greening', the conditions for maintenance of eligible land for direct payments, the Water Framework and Sustainable Use of Pesticides Directives, as well as certain Rural Development measures, including innovation actions. Thus as stated in the Regulation (EU) No 1306/2013 (Article 12) the FAS shall cover at least the following:

- Obligations at farm level resulting from the statutory management requirements (SMR) and the standards for good agricultural and environmental condition of land (GAEC), those obligations being related to “**cross-compliance**” to respect for beneficiaries of CAP direct payments (Regulation (EU) No 1307/2013);
- The agricultural practices beneficial for the climate and the environment (“**greening**” provisions of CAP Pillar 1), and the **maintenance of the agricultural area**;
- Advice for **RD supported measures** to beneficiaries at farm level, in particular investment or innovation (Regulation (EU) No 1305/2013);
- Requirements of the **Water Framework Directive** (Directive 2000/60/EC);
- **Integrated pest management** (Article 55 of Regulation (EC) No 1107/2009 and Article 14 of Directive 2009/128/EC).

MS can also enlarge the scope of their FAS notably (but not limited) to:

- the promotion of conversions of farms and the diversification of their economic activity;
- risk management and the introduction of appropriate preventive actions to address natural disasters, catastrophic events and animal and plant diseases;
- the minimum requirements related to agri-environment-climate commitments;
- the information related to climate change mitigation and adaptation, biodiversity and protection of water.

The scope of the FAS with references to legal provisions is detailed in Table 36. All the mandatory and optional elements the FAS can cover has been gathered into 13 topics related to: public, animal and plant health; animal welfare; environment; RD supported measures and other possible measures.

Table 36: Scope of the FAS

R1306/2013 – Article 12	Reference to legal provisions and FAS topics
<p><i>FAS should at least cover:</i></p> <p>(a) <i>SMRs and GAEC (= cross-compliance)</i></p>	<p>R1306/2013 – Annex 2</p> <p><i>Environment, climate change, good agricultural condition of land</i></p> <ul style="list-style-type: none"> - Council Directive 91/676/EEC <ul style="list-style-type: none"> ✦ 4. Nitrates directives - 7 requirements and standards related to Water, Soil and carbon stock, and Landscape (see Annex 2 Reg 1306/2013) <ul style="list-style-type: none"> ✦ 3. Good agricultural and environmental condition (GAEC) - Directive 2009/147/EC - Council Directive 92/43/EEC <ul style="list-style-type: none"> ✦ 5. Birds and habitats directive <p><i>Public health, animal health and plant health</i></p> <ul style="list-style-type: none"> - Reg 178/2002 → food law - Council Directive 96/22/EC → hormones - Reg 999/2001 → Animal diseases <ul style="list-style-type: none"> ✦ 6. Food law/hormone ban/transmissible spongiform encephalopathies - Council Directive 2008/71/EC → pigs - Reg 1760/2000 → bovine animals - Council Reg 21/2004 → ovine and caprine animals <ul style="list-style-type: none"> ✦ 7. Animal identification and registration - Reg 1107/2009 <ul style="list-style-type: none"> ✦ 8. Pesticides legislation <p><i>Animal welfare</i></p> <ul style="list-style-type: none"> - Council Directive 2008/119/EC → calves - Council Directive 2008/120/EC → pigs - Council Directive 98/58/EC → animals kept for farming <ul style="list-style-type: none"> ✦ 9. Animal welfare legislation
<p>(b) <i>Greening</i></p>	<p>R1307/2013</p> <ul style="list-style-type: none"> - Reg 1307/2013 Title III Chap 3 Art 43 <ul style="list-style-type: none"> ✦ 1. Green Direct payments (crop diversification, maintenance of permanent pasture, ecological focus area)
<p>(c) <i>Maintenance of agricultural area</i></p>	<p>R1307/2013</p> <ul style="list-style-type: none"> - Reg 1307/2013 Art 4(1-c) <ul style="list-style-type: none"> ✦ 2. Maintenance of the agricultural area
<p>(d) <i>RD measures</i></p>	<p>R1305/2013: measures at farm level provided for in rural development programmes for farm modernisation, competitiveness building, sectoral integration, innovation and market orientation, as well as for the promotion of entrepreneurship</p> <ul style="list-style-type: none"> - Reg 1305/2013, Art 17 (M4 investment), Art 16 (M3 quality schemes), Art 19 (M6 farm and business development), Art 27 (M9 producer groups), Art 29 (M11 organic farming), Art 35 (M19 cooperation) <ul style="list-style-type: none"> ✦ 12. Rural development measures
<p>(e) <i>Water Framework Directive</i></p>	<p>Directive 2000/60/EC</p> <ul style="list-style-type: none"> - Directive 2000/60/EC Art 11(3) <ul style="list-style-type: none"> ✦ 10. The water framework directive

R1306/2013 – Article 12	Reference to legal provisions and FAS topics
(f) <i>Integrated pest management</i>	Article 55 of Regulation (EC) No 1107/2009 and Article 14 of Directive 2009/128/EC <ul style="list-style-type: none"> - Directive 2009/128/EC Art 14 - Reg 1107/2009 Art 55 <ul style="list-style-type: none"> ✳ 11. The directive on the sustainable use of pesticides (including Integrated Pest Management)
<i>The scope of the FAS can be enlarged to:</i> <ul style="list-style-type: none"> - conversions and diversification; - risk management; - agri-environment-climate; - information on climate change, biodiversity... 	<ul style="list-style-type: none"> - Reg 1305/2013, including Art 18 (M5 natural disasters), Art 36 (M17 Risk management), Art 28 (M10 Agri-environment-climate) <ul style="list-style-type: none"> ✳ 13. Other possible measures including agro-ecology

✳ 1. ... = FAS topic as defined in the FAS questionnaire to MS.

Source: ADE based on Regulation (EU) No 1306/2013

In a nutshell, MS most often cover all the mandatory topics, with some exceptions, RDP measures being the least covered. Ten of the 28 MS/regions encompassed in the 2017 FAS questionnaire to MS¹³⁴ from the JRC database declare not to provide advice for non-mandatory topics (others).

➤ [Support under RD measure on advice](#)

The FAS instrument does not provide itself any financial support. As for the previous period, **Pillar 2 of the CAP has a measure supporting** advice which is often used to fulfil the FAS obligation.

For the 2007-2013 programming period, two RD measures could notably be used to support the use of advice or the setting-up of advisory services. Those measures, established by the **Council Regulation (EC) No 1698/2005**¹³⁵ allowed MS to:

- m114 Support the use by farmers and forest holders of advisory services;
- m115 Support the setting up of farm management, farm relief and farm advisory services, as well as forestry advisory services.

For the 2014-2020 programming period, Article 15 of **Regulation (EU) No 1305/2013** on rural development provides a measure to support 'Advisory services, farm management and farm relief services' (Measure 2¹³⁶), divided in three sub-measures:

- M2.1 Support to help farmers, forest holders, other land managers and SMEs in rural areas to meet the costs arising from the use of advisory services;
- M2.2 Support for the setting-up of farm management, farm relief and farm/forestry advisory services (M2.2);
- M2.3 Support for training of advisors (newly introduced with the 2013 reform).

Under this 2014-2020 period, Measure 2 can be mobilised to support advice of the FAS but it is not automatically linked; Measure 2.1 may also support advisory services provided by non-FAS bodies. Through interviews with MS representatives it appeared that several MS do not make the distinction between the Farm advisory system (FAS) on the one hand, and EAFRD supported advisory services on the other hand (Table 37), although

¹³⁴ Questionnaire completed by the MS national authorities as per the obligation to inform the EC on the establishment and application of the FAS (Article 102(2) of R1306/2013). Note that as of 20/08/2020, Greece had not replied to the questionnaire yet.

¹³⁵ Measure programming codes are set in Commission Regulation (EC) No 1974/2006 on the rules for the application of the EAFRD Regulation.

¹³⁶ Measure and sub-measure programming codes are set in Commission Implementing Regulation (EU) No 808/2014 on the rules for the application of the EAFRD Regulation.

fundamentally different (the first is an obligation, the second a financial instrument available to support advice).

Table 37: Differences between the Farm advisory system (FAS) (R1306/2013, articles 12-14) and farm advisory services supported by M2.1 (R1305/2013, article 15.1.a)

	Farm advisory system (FAS)	Farm advisory services (supported by RD M2.1)
Type of instrument	Legal obligation for MS	Financial instrument (measure) that can be mobilised by the MS in its RDP
Topics	Mandatory and optional topics (<i>for the latter, 5 topics are mentioned but others could be added; see Table 36</i>)	Services must cover at least one RD priority and one of 7 topics notably among the mandatory FAS topics (5) or 2 others; other topics may be added
Advisory bodies	The FAS shall be operated by designated public bodies and/or selected private bodies ¹³⁷	The beneficiaries under this measure (<i>advisory bodies</i>) shall be chosen through calls for tenders . The selection procedure shall be governed by public procurement law and shall be open to both public and private bodies . It shall be objective and shall exclude candidates with conflicts of interest. Omnibus (R2017/2393): Removal of the public procurement requirement; replaced by "an objective and transparent selection procedure"
Requirements regarding advisors	Advisors should be suitably qualified and regularly trained	Advisors have to be qualified and regularly trained and have to demonstrate an advisory experience and reliability with respect to the fields in which they advise ¹³⁸

Source: ADE, based on Regulation (EU) No 1306/2013 and Regulation (EU) No 1305/2013

When investigating which MS mobilised M2 sub-measures and/or provided national funding to support the FAS, no unique answer per MS is possible, as it differs according to the regional RDPs. Also, as the FAS is often assimilated with M2, the data from the FAS questionnaire to MS (2017) combines the 2 concepts, which are hard to distinct.

It appears that at EU-28 MS level, a majority of MS (20/28 respondents) use M2.1, possibly to support access to FAS services, and among the others, 6 MS offer national support; however, the situation is very different when considering regional RDPs (at RDP level, **51 out of 112 had foreseen a support to M2**) and the terms and conditions may vary between topics. RDPs support to a lesser extent the setting up of farm advisory services including the FAS (M2.2) and the training of advisors (M2.3). No MS has activated M2.2 or M2.3 without M2.1, except Cyprus (mobilised only M2.3). When the RDP M2 is mobilised, national co-funding is requested by the EU regulation.

➤ [Procedure for designating FAS bodies](#)

The JRC Database on FAS based on the FAS questionnaire sent to MS (2017) distinguishes three general types of procedures (Table 38): simple designation by the public authority, call for tender, and selection committee. As previously underlined, **a unique response is not possible for regionalised MS (DE, ES, IT) but also for France where the organisation varies according to regions**. The corresponding lines are indicated in grey.

Simple designation is the most commonly used selection procedure, found in 17 MS, especially where OBs are mainly public. OBs are selected through call for tender in 11 MS.

¹³⁷ For the EC, under the FAS, the MS must designate or select. It makes no difference as long as it is not cofounded. The "selection" of private bodies has been specified in response to the European Parliament who wanted to avoid unfair competition. But the EC does not control anything as long as it is not co-funded. If advisory services are co-funded, the MA shall provide evidence of appropriate resources during the whole period of implementing support.

¹³⁸ The authorities or bodies selected to provide advice shall have appropriate resources in the form of regularly trained and qualified staff and advisory experience and reliability with respect to the fields in which they advise.

All but one (CZ) of these MS use the EAFRD to support advisory services. In 3 MS, a selection committee is charged exclusively to designate/select bodies (FR, LU, PT).

Table 38: By which procedure are FAS bodies designated/selected?

MS	FAS support under M2.1	Simple designation by the public authority	Call for tender	Selection Committee	Other / comment
AT	✓	✓		✓	
BE-FL	✓		✓		
BE-WL		✓			
BG	✓	✓			
CY		✓			
CZ			✓		
DE	✓	✓	✓		
DK		✓			
EE	✓		✓		
ES	✓	✓	✓	✓	It differs by region. Other: concurrencia competitiva
FI	✓		✓		
FR MAINLAND				✓	Call for proposals made by the DRAAF (regional authority of the Ministry of agriculture)
HR	✓	✓			
HU	✓	✓			
IE		✓			
IT	✓		✓		
LT	✓	✓		✓	
LU	✓			✓	Selection by the public authority on the bases of application documents proving the qualification of the bodies and the advisors
LV	✓		✓		
MT	✓	✓			
NL	✓	✓			
PL		✓	✓	✓	The Agricultural Advisory Centre is designated to maintain lists of entitled advisors and is in charge of continuous training; Public Procurement Law for bodies selected under M2
PT MAINLAND	✓			✓	
SE	✓		✓		
SI		✓			
SK	✓	✓			
UK-E	✓		✓		
UK-NI		✓			
Total		17	11	7	

Source: ADE, based on Article 102.2 FAS questionnaire to MS (JRC, 2017)

➤ *Training of advisors*

To the question "How do you ensure that FAS advisors are suitably qualified and regularly trained?", 24 MS (/28) stated advisors could or were required to either follow an **initial training** or/and **yearly trainings**.

- 19 MS have declared organising, or making sure entities organise, yearly trainings for FAS advisors. Some MS specified a volume in hours of yearly training (AT and EE: 25h of training per year, LT: 16h per year) but most only declared the existence of such trainings (CZ, DE, ES, IE, LV, NL, SE).
- Only around **half of the MS** (13) have **made these yearly trainings compulsory** (AT, CZ, DE, EE, ES, IE, LT, LV, PL, SE, SI, SK, UK-NI).
- Some MS have only a **compulsory initial training** (FI, IE, PL) and then encourage the continuous learning process without making it obligatory. These MS leave the

training responsibility to organisms such as associations, chambers of agriculture or separate administrations (FI, IT, NL, PL, PT, UK-E).

- In Lithuania (LT) all advisors must undergo a knowledge test only every 3 years in order to get an accreditation.

Nine MS stated having **educational/degree requirements** in order for advisors to be accredited: DE, IE, IT (unclear position however), NL, PT, UK-NI, EE. A few MS have detailed their experience requirements: UK-E (12 years of experience delivering pillar 1 advice), LT (one-year experience).

➤ [Link with research and innovation](#)

It was observed in 2009 that linkages to other extension or research institutions had not been very developed even though ad hoc contacts were being promoted when necessary (ADE *et al.*, 2009).

From the 2017 FAS questionnaire to MS, 10 MS claim to promote a link between FAS/advisory activities¹³⁹ and the EIP-AGRI implemented in the MS/region (CY, CZ, DE, ES, HU, LT, PL, PT MAINLAND, SI, SK). The following narrative is given by some MS about the link with the EIP-AGRI.

- CZ: M16 - Brokers (some are accredited advisors for M2 or FAS).
- ES - Basque Country: from Measure 16.1 of the RDP, the AEI's operations are financed through KATILU (Broker innovation). In the three calls held in 2015, 2016 and 2017, 27 Operating Groups have been funded.
- HU: If the advisor is part of an Operational Group this is a plus point, so these calls receive preferential treatment.
- LT: Compulsory condition for EIP-AGRI Operational Groups is to have advisors as a member of EIP-AGRI Operational Groups.
- PL: As part of the National Rural Network, it has been operating since 2015, pursuant to the Act of 20 February 2015 on support for rural development with the participation of the European Agricultural Fund for Rural Development under the Rural Development Programme for 2014 - 2020 Network for Innovation in Agriculture and Rural Areas (SIR). The central coordinator of the SIR is the Agricultural Advisory Centre in Brwinów, and at the regional level the tasks are carried out by voivodship agricultural advisory centres. An innovation broker operates in each of the 16 ODRs. The purpose of SIR is to promote innovative solutions among farmers and rural residents, and activation of the rural environment is a basic element of increasing the competitiveness of agriculture and rural development.
- PT: The Directorate General for Agriculture and Rural Development as National Entity responsible for SAAF has competencies in EIP-AGRI network.
- SK: The Ministry of Agriculture and Rural Development of the SR delegated the consulting company PROUNION a.s. represented by p. Daniel Ács as Representative to the European Network Essential and Subgroup for Innovation. The Agency for Rural Development and the LAG also have EIP-AGRI on their agenda.

➤ [Advisory activities](#)

A wide diversity of information and advisory activities is offered to farmers, and listed as "advice" according to the 2017 FAS questionnaire: "one-to-one on the farm", "one-to-one outside the farm (consultations, etc.)", "telephone helpdesk", "Small group advice on the farm", "Small group advice out of the farm", "Internet", "Publications", "Other". According to the questionnaire, one-to-one advice is the most commonly used method for advice, both on the farm and outside, while small-group advice is less proposed.

Due to incomplete data on the level of uptake for each kind of activity (see data limitations in section 3.3), a full picture of the farm advisory services cannot however be drawn.

¹³⁹ Many MS (except CY and CZ) use M2 and might assimilate the FAS and advisory services supported under Measure 2.1 of the RDP.

B) FAS IMPLEMENTATION IN CASE STUDY MEMBER STATES/REGIONS

This section details how the FAS is implemented in each CS MS/Region, the drivers and reasons behind the implementation choices, and the costs/benefits associated with the FAS. The possible link with M2 RD support is also developed. This information is based on case study reports and the AgriLink study (2020). It is substantially used to answer ESQ2 (especially JC1) and ESQ11.

➤ FR: France

Public information on the French FAS: <https://agriculture.gouv.fr/le-systeme-de-conseil-agricole-sca-pour-accompagner-les-exploitants>, from the official website of the Ministry in charge of agriculture (MAAF).

Implementation choices

For the **2007-2013 programming period**, the FAS was governed by the first pillar of the CAP (Council Regulation (EC) No 1782/2003 and following) which is centrally governed in France (through three legal documents called "circulars"), but the implementation of the FAS was managed at the level of the regions. The scope of the FAS in France was limited to cross-compliance. The objective was to "allow each farmer to fully integrate on his farm requirements related at least to cross-compliance [i.e. environmental, public, animal and plant health and animal welfare requirements which are a precondition for access to direct payments] and, where appropriate, to change his/her practices". The **accreditation** of the advisory bodies/networks was managed at regional level. Both public and private bodies were eligible. The **DRAAFs**¹⁴⁰ (Regional Directorate of Agriculture, Agrifood and Forestry) were designated as responsible for examining applications and the accreditation (detailed in the circulars). The DRAAF also had to inform the FAS-accredited bodies/networks of evolutions in cross-compliance.

France based its FAS on the principle of "**networks of competences**", which are local associations (i.e. within regions or departments) of various advisory bodies that together cover the whole field of cross-compliance. A facilitation function had to be clearly defined and ensured within the network.

For the current **2014-2020 period**, the principle of accreditation of advisory bodies/networks, public or private, at regional level by the DRAAFs, was maintained. The scope of the FAS was extended beyond cross-compliance to promote further topics and optional themes (according to the Regulation (EU) No 1306/2013). The idea was to align the FAS scope to France's principles of agro-ecology. However, the list of optional themes was interpreted as restrictive because of the absence of the phrase "in particular", Article 12(3), in the French version of the Regulation¹⁴¹. The DRAAF still facilitates the system, in particular by informing the FAS bodies/networks of changes in cross-compliance, and by ensuring that agro-ecology is integrated into implementation. It also runs the system in terms of FAS advisors training. DRAAF ensures monitoring via annual activity reports transmitted by the FAS networks, in order to be able to re-examine accreditation (in particular to check that skills are maintained), and to complete the MAA monitoring system. The accreditation is valid for a period of 5 years¹⁴². An advisor/body may participate in an unlimited number of FAS networks. FAS-accredited bodies/networks must offer face-to-face advice (exclusion of advice by telephone, transmission of documents by e-mail, etc. in the definition of "advice"). The French legal instruction makes it clear that **the accreditations issued for the FAS is independent of RD measure 2 and its selection procedure.**

¹⁴⁰ Formerly DRAF (Direction régionale de l'Agriculture et de la Forêt), replaced by the DRAAF following decree n° 2008-1406 of the 19 December 2008.

¹⁴¹ Indeed, according to the French technical instruction, "*the existence of a list of optional topics in the European regulation also excludes the inclusion, in the national scope of the FAS, of topics other than those mentioned in the regulation*". In order to fully include the FAS in the agro-ecological project, the FAS scope encompassed, besides mandatory themes, the two optional themes on the promotion of conversion/diversification of farm activities, and information on climate change mitigation, biodiversity preservation and water protection.

¹⁴² Accreditations issued pursuant to circular DGPAAT/SDEA/C2009-3123 of 7 December 2009 (and limited to the scope of cross-compliance) expired on 31 December 2015.

For both periods (2007-2013 and 2014-2020) the FAS was not supported by public funding; FAS advice is considered among the common tasks of the bodies. Although the FAS was successful especially in the 2007-2013 period regarding cross-compliance, it is currently almost not used. Indeed in 2013, to raise awareness of farmers on EU regulations and especially on cross-compliance was considered an accomplished task, and the Ministry (and its representatives in the Regions (DRAAF)) did not perceive any other potential benefit in this system for farmers, as France already has very comprehensive and diverse advisory services, both private and public for more independent advice. France also specified that, to be FAS-accredited, a body or network have to address advice on all topics for all the productions relevant in the geographical zone.

Regarding RDP M2.1, Lorraine in its RDP wanted to make a dynamic combined use of M1.1-M1.2 and 2.1 which finally did not work out as M2.1 is not implemented due to the public procurement rules. Planned advisory activities were focused on combined economic and environmental performances of the farm. A special focus was given to consolidate polyculture-livestock systems which is the type of farm that currently disappears the most in favour of specialised farms either in plant production or in animal production.

FAS costs/burden and benefits

From the **Ministry of Agriculture's** perspective, the FAS is overall almost 0-0 cost-benefit: **very limited costs of implementation for the administration, and little added value** for the sector (including the National Agricultural and Rural Development Programme's objectives, focusing on the agroecological transition). National authorities initially hoped that the EU would associate to FAS services a reduced pressure for checks. Hence advisors accredited under the FAS are the only ones able to issue "cross-compliance certificates" which the farmer may claim as a lower risk factor for the selection of CAP controls. However, directly linking FAS advice and checks is explicitly forbidden in the EC Regulation, because it is essential to separate control from advice. Advisors accredited under the FAS are also the only ones who can deliver the first level of environmental certification to farm holdings (currently mainly used in the wine sector).

From the **advisory bodies'** perspective, being part of the System (FAS) **creates operational costs, especially administrative ones** in order to constitute the request for accreditation, provide evidence and ensure suitable qualification and regular training to its advisors, and implement monitoring activities. Hence, despite the exclusive competences awarded to FAS bodies, because of those burdens, a very limited number of structures applied for accreditation, and Chambers of Agriculture were systematically selected in order to comply with the obligation to set up a FAS.

No information is available on the costs and burden for the regional administration (DRAAF) that launched the call for proposals.

Final **beneficiaries** (mostly farmers) **do not seem to be aware of the existence of the FAS**, hence they cannot express a particular interest in this System compared to the pre-existing advice offer in France. Independent advice is essential, beneficial and requested by farmers, however the FAS services are not requested more (not significantly improved quality, no decrease of pressure in controls, or financial support). Note that in France, advisory services appear quasi free to farmers when they use public advice (from Chambers of Agriculture); this advice is co-financed by the State and the farmers (through parafiscal taxes).

However, the limited potential benefit overall perceived by stakeholders (regarding the FAS) should not be interpreted as a lack of interest in **advisory services** in general. For the Ministry of Agriculture, there is no doubt about the interest of advisory services for farmers. In France, there are already numerous and diverse bodies providing advice; France is among the MS classified as a strong and effective AKIS. As public institutions, the chambers of agriculture have, among other things, tasks related to advising farmers and these tasks are similar to the FAS topics. The European obligation of the FAS has resulted in France in an artificial layer of recognition of advisory bodies.

➤ **DE-LS: Lower Saxony**

Implementation choices

Lower Saxony (Germany) originally started implementing the FAS in **2005** focused on individual advice on cross-compliance with accredited advisors from the existing advisory services. The FAS in **2007-2013** was supported by RD m114 and was mainly linked to cross-compliance in addition to advice on occupational safety and energy efficiency.

For the **2014-2020 period**, the FAS is not supported under RD anymore. LS has very comprehensive advisory services with a wide variety of advisory structures (Chamber of Agriculture, advisory rings, private engineering consultancies, land advisory services, etc.). The requirement to set-up a farm advisory system (FAS) is fulfilled by the Chamber of Agriculture (LWK) that was designated as FAS advisory body. No support is linked to this designation. The advisors of the LWK altogether cover the different topics required.

Regarding supported advisory services under RD M2, LS implemented the public procurement as foreseen by the regulation. Currently advice providers are supported and not the farmers (as it was the case in 2007-2013). Advisory services must meet several defined eligibility criteria¹⁴³ (see theme 3). 25 advisory bodies were selected. Each organization has a budget to implement advice. Advice covers several topics of public interest regarding notably the environment, climate change, animal welfare, etc. (see theme 2). The use of advisory services (M2.1) is an important subject for the Managing Authorities. The EAFRD funding secures the State funds over a period of seven years. Without support, these environmental and societal topics would not be taken up by farmers or to a much more limited extend.

FAS costs/burden and benefits

In LS, the regulatory requirement to have a "Farm advisory system" is provided by the Chamber of Agriculture (LWK). The LWK covers all the required FAS topics and these advisory services provided by the Chamber of Agriculture are part of their regular duties. No monitoring is done of these services by the Ministry and no support is foreseen, neither by the EAFRD nor by the Region.

Lower Saxony already has multiple, varied and comprehensive advisory services. Therefore, the requirement to set-up a FAS was only seen by as a regulatory requirement by the Ministry. This establishment and its operation does not represent an administrative burden for the Ministry, as it only consisted in the designation of the Chamber of Agriculture. But it ensures no benefit in Lower Saxony compared to a situation "without FAS". The Ministry does however see a potential benefit of such a system in other European MS or regions with fewer advisory services.

In addition, the region does implement the use of individual advisory services under measure 2.1 but largely on other topics than those of the FAS list. To do so, the Ministry selected a series of advisory bodies through a public call for proposals. The Chamber of Agriculture is part of the selected bodies, together with advisory rings and private advisors.

➤ **IE: Ireland**

Public information on the Irish FAS: <https://www.agriculture.gov.ie/farmerschemespayments/farmadvisorysystem/>, from the official website of the government department of agriculture, food and marine (DAFM).

Implementation choices

Regarding the FAS implementation, the idea was to create an official public database of advisors qualified to fulfil the functions required by the FAS. The existence of the FAS ensures that each farmer can seek and receive advice on Cross Compliance. Entry into and use of the FAS is on a voluntary basis for beneficiaries.

¹⁴³ Have adequate resources in form of regularly trained and qualified advisors, experience in advisory work, independence (no sales activities (machinery, inputs, etc.)) and reliability with regard to the advice area.

In order to ensure the efficiency of the system, advisors should be suitably qualified and regularly trained. DAFM provides a schedule of Farm Advisory System (FAS) Training and FAS training presentations. This training is provided on an ongoing basis to both new and existing FAS and GLAS advisors.

The process of selecting and registering advisors is as follows:

1. DAFM check on eligibility criteria fulfilment and education.
2. Compulsory annual training (three days for new advisors, one day for already registered advisors, once a year).

Educational qualifications required to become a FAS advisor include:

- HETAC level 8 degree in Agricultural Science / Land Management in Agriculture; *and*
- Having taken soil science and an animal or crop production subject as part of the level 8 Degree programme.

A Degree Transcript from the relevant institution had to be submitted to DAFM for verification.

FAS training runs in parallel in three locations across Ireland, with approximately 100 people attending in each location (DAFM interview).

Table 39: Farm Advisory System training topics

Cross Compliance- Statutory Management Requirements and GAEC standards
Water Framework Directive
Sustainable Use of Pesticides Directive
Land Eligibility and Greening
Climate Change
Nitrates and EIA Regulation
ANC Review
LPIS Rebuild
TAMS (M4)
BPS Online
Antimicrobial Resistance (AMR)
Entitlements
BEEP

Source: Ireland case study, based on DAFM information

There are some 800 advisors, 300 from Teagasc¹⁴⁴ and 500 privates listed in the FAS database. Annual training provided by DAFM is compulsory for FAS advisors, otherwise they are taken off the list of registered FAS advisors.

Advice support M2.1 has been implemented only in the spectre of "Targeted Advisory Service on Animal Health and Welfare" TASAHW. It is the only form of on-farm EAFRD supported advice. The choice to focus on TASAHW for M2.1 with a fairly high budget (EUR 6 million) is explained by the importance of livestock in the Irish economy. It involved the specialist training of practitioners/veterinarians to deliver an on-farm animal health and welfare advisory service. The advice is provided to individual farmers on request and strategically targets a number of core areas such as Bovine Viral Diarrhoea (BVD), Johne's disease (JD), Somatic Cell Count (SCC) and significant animal health issues in the pig sector. Measure 2 also complemented the animal health component within Knowledge Transfer groups under Measure 1.

¹⁴⁴ Teagasc is the semi-state authority in the Republic of Ireland responsible for research and development, training and advisory services in the agri-food sector. The official title of the body is Teagasc - The Agriculture and Food Development Authority.

Training of advisors by M2.3 has been implemented under TASAHW AND Knowledge Transfer groups in order to train facilitators. Indeed, the two bodies DAFM and Teagasc "realised that to be successful advisors would have to be well prepared and respected not just for their knowledge but also their ability to facilitate group dynamics".

M2.1 Support for the setting up of Producer Organisations involves the provision of advice to prospective Producer Organisations of active beef suppliers to assist them with start-up requirements for formal recognition. Groups of farmers wishing to come together within a Producer Organisation can apply for advice from the approved list of advisors. Farmers can apply for advice under two categories:

- Advice on business planning, production planning, membership of Producer Organisations; *and*
- Advice on establishment and registration of a Producer Organisation as a legal entity and drafting Statutes of a Producer Organisation.

GLAS has a separate list of advisers who are GLAS registered and have to complete separate GLAS training. GLAS Training Courses for farmers must be delivered by a GLAS approved Trainer registered with the Department. These are funded under M1.

A panel of DAFM-Approved trained Burren Farm Advisors has been drawn up for the purposes of implementing the new Burren programme. These Advisors, who must also be FAS approved, must undergo an intensive training course given by the Burren Team and must participate in annual 'refresher' courses on farming for conservation in the Burren. Farmers approved for participation in the programme must select their Farm Advisor from this panel, which is published on DAFM's website. The training is delivered through M20.

FAS costs/burden and benefits

Costs:

Thorough checks are made on educational levels regarding interested advisors in respect of FAS training, and equally to become a facilitator for Knowledge Transfer groups (M1), EIP-AGRI advisors, Burren Programme, etc. This **is a time consuming exercise** for the DAFM. FAS training is supported by the DAFM, with no intervention of the CAP.

No evidence was available with regard to the costs and administrative burdens of establishment or delivery of the FAS, except the high administrative burden associated with **training of advisors** as highlighted by some respondents.

Benefits:

In general, the training of advisors was identified as a key aspect of the successful delivery of a number of schemes (e.g. GLAS, Burren programme, Knowledge Transfer groups, EIP-AGRI Operational Groups). The additional training of advisors also **increased levels of knowledge among advisors and levels of trust** between training participants and advisors.

The value of the Advisor training delivered under FAS is difficult to gauge. Interviewees report that for young advisors, it was useful, but for those who had several years of experience its utility was limited to keeping them up-to-date with regard to changes in regulations. The more experienced advisors felt they learned little that was new.

Without the FAS obligation, MS representatives state **there would most probably be some kind of training in place anyway**, as it is important for the MA (DAFM) to have an effective way of delivery and training is a good option/tool; it would certainly be much more scheme oriented.

Speaking generally, the CAP Rural Development measures (M1.1, M2.1, M2.3) alongside the FAS have together resulted in a larger number of advisors becoming involved in providing advisory support (e.g. through FAS for new advisors, TASAHW, GLAS, and running Knowledge Transfer groups under M1), and a higher level of training for advisors. Farmers have thus benefitted from greater access to advisory support and better trained advisors.

➤ **BE-FL: Flanders**

Implementation choices

In Flanders, in order to understand the implementation of the Farm Advisory System, a historical perspective of the previous RDP's has to be taken into account.

During **RDP I**, the advice system consisted only of accountancy related advice. The advisory bodies involved were thus all bookkeeping companies.

At the start of **RDP II** (2007-2013), the FAS was mandatory and Flanders chose to couple it to the advice system that was already installed in RDP I. When a farmer requested (economic) advice during RDP II, he was also given advice regarding cross-compliance. The advisory bodies were still bookkeeping companies, with a focus on agriculture.

For **RDP III** (2014-2020), the FAS was transformed into KRATOS which, apart from including economic themes (modules 1 and 2), info on cross-compliance (module 3) and info on greening (module 4), also covers advice on environmental themes, which makes the advice service more diverse than it was during RDP II and RDP I.

Because of the history of the advice system, the MA on KRATOS anticipated a higher popularity of the economic modules. Therefore, they installed the obligation of requesting advice on one of the environmental themes or on the occupational safety modules¹⁴⁵ in order to be able to request advice on business plan (module 1) or management advice (module 2). According to the MA on KRATOS, the farmers requesting advice via the KRATOS system are not merely the innovators or pioneers, all kinds of farmer request advice. Kratos represents the FAS in Flanders and it is supported by RDP Measure 2.1.

Apart from private companies and farmers' associations providing advisory services, the Flemish government implemented the **KRATOS-system as the output for the European requirement of installing a Farm Advisory System (FAS)**. This service provides business economic and environmental advice, as well as information about cross-compliance, greening, etc. The advisory service is completely free for the farmer as the advisory services are selected via a public procurement. The FAS in Flanders was programmed under measure M2 KRATOS – individual advice and was extended to include more topics than required by the FAS obligation. Every reference in the CS report to FAS, refers to M2 KRATOS – individual advice. FAS (=KRATOS) is a very circumscribed supported "entity" within the AKIS, not at all linked to the other advisory services of Flanders.

FAS costs/burden and benefits

Costs and administrative burden are, for the most part, linked to the EAFRD requirements on M2 support (especially because of the public procurement rule).

The Member State authorities on M2 KRATOS see an added value in the FAS obligation as there are certain **modules or subjects for advice** that probably wouldn't have been implemented without the obligation (including modules on business plan, greening, biodiversity, climate and soils). However, MS authorities underlined that this is a purely hypothetical question and no reflection was led during the implementation of the measure. Some of these themes are not very popular, and the time spent on/ the cost of these modules is not always proportionate to their benefits.

That being said, Flanders opted to finance the FAS under measure M2, which provides also some more accessible themes and, in this way, makes the implementation more efficient. Furthermore, the service is completely free for the farmer.

As there is no system in place to assess the impact of an advice, the government has no insight in the secured benefits resulting from the FAS instrument. **More efforts for impact measurements should be done.**

¹⁴⁵ Modules: 5) Biodiversity, 6) Climate, 7) Water, 8) Soil, 9) Safety at work.

➤ EE: Estonia

Implementation choices

State and private advisory services co-exist in Estonia and evolved since the early 1990ies. Early 2000, centres of county level farmers' or producers' Unions were established (advisory centres). The 2014 PROAKIS study and the Estonian RDP reported that, over the years, the activity of county level advisory centres has demonstrated a "chaotic" cooperation between them and with coordinating centres and research institutions. There was a need to establish a coherent advisory organisation for agriculture and the rural economy.

In Estonia, the RD measure 2 exclusively supports FAS bodies. A call for tenders was launched and one single operator was selected, namely the Rural development foundation (RDF)¹⁴⁶. This is the only organisation eligible for supported advisory services under M2.1 (assimilated to the FAS). Several positive but also negative aspects are reported about the operation of the RDF and their advisors. Next to RDF advisors, there are many private non-RDF advisors.

Accredited RDF advisors need to have a professional licence that is apparently time-consuming. In 2016, Estonia created the "mentoring programme" as a possibility within M2.1. Lists of mentors are established by type of production. It is easier to be a mentor than an RDF advisor. Farmers looking for support (i.e. young farmers) may select a mentor in a list. If the YF for instance looks for advice in beef production, he can select a specialised "mentor" in this sector. This programme is currently gaining interest of farmers.

Training of advisors under M2.3 is also opened to other advisors than those contracted by RDF.

FAS costs/burden and benefits

Tasks of the FAS are operated by RDF, they are also the only eligible organisation to offer Measure 2.1 supported advice since 2015. Almost all advice (more than 99%) given through them is supported by M2.1 (covering mandatory FAS topics as well as optional topics). Therefore, it is rather difficult to separate FAS and M2.1 supported advice. And interviewees could not specify how the FAS would function if not supported by M2.

RDF representative mentioned that, **without the FAS obligation**, there would probably be some topics less. Also, the need to have FAS most probably helped to increase the budget of RDP M2 when preparing the EE RDP.

Interviewees considered a hypothetical situation **without the FAS-M2 package**; in this situation, there would be - less advising hours; - less advisors; - advice at market prices (probably higher than currently); - less advisory topics. One of the benefits of the FAS system functioning with M2 support in this way is that its existence is **guaranteed at certain agreed quality level** and **advice in wide range of topics is offered**. In the opinion of stakeholders, delivery of the needed advice would not be guaranteed at this level without the support. All advisors are trained thanks to RDP M2 support.

➤ GR: Greece

Implementation choices

The FAS has **not been adequately implemented** in Greece yet.

Indeed, the State is experiencing severe delays on the delivery of the institutional framework necessary to implement the FAS. The main reason is the dramatic lack of resources the county is still facing, due to the financial and economic crises, that limits the capacities of the administration. To overcome those delays and have a future properly functioning FAS, the following critical factors have to be summoned: political will and decision making; infrastructure development both in institutional and technical terms; and the establishment of a certification and control system.

¹⁴⁶ RDF is a state-owned organization which operates in private law.

Farmers on the other hand must change their customs from 'traditionally knowledge acquiring' methods to 'advice specifically targeted to their actual needs', in order to increase their added value and productivity and to contribute to agricultural development.

The desirable characteristics of the FAS should be credibility of the system, sustainability, and effectiveness. Greece is actually confronted to an issue of very low trust of farmers in public advisory services, parallel to a limited access to costly private services due to low agricultural incomes. Therefore, the main challenge of the Greek FAS is to persuade farmers about its credibility and the derived contribution to agricultural products' added value, to generalise the use of advice.

The legal institutional framework to set up should allow the participation of both public and private sectors.

FAS costs/burden and benefits

Costs:

Data are not available because Greece has not fully/has only recently implemented the FAS. So far, there is no public farmers advisory service available in Greece. The new one under RDP 2014-20 is under construction. A training programme for the scientist/advisors was under way in February 2020.

Benefits:

At the level of farmers, **the setup of good quality and impartial advice, provided at a limited cost, would be very important**, especially in the context of decreasing farm incomes as well as low and even decreasing profitability of many small farms in Greece. Indeed, under the current arrangements these people have very limited access to commercial advisors. If they buy farm inputs, they may get some of this commercial advice 'for free', as part of the supply relationship, but it is mainly related to the purchased pesticides, fertilizers, machinery or plants and animal breeds. Farmers taking part in Producers' organizations or in cooperatives for the marketing of their products may also get 'free' advice and support from this relationship: however, this situation applies to a very small proportion of farmers in Greece.

Secured benefits are **not yet known**. However, FAS could be considered as an added value for **institutional capacity building**, now. Integrating the question of agricultural advice in institutions' reflections, initiate political discussion, is already a first and significant step forward. Its results are expected to be seen.

➤ IT: Italy

Implementation choices

The obligation to set up a FAS exists since 2007. The scope of the FAS was further enlarged by the 2014-2020 CAP regulation no. 1306/2013 (articles 12-14). The FAS in Italy has been implemented through a national decree that provided homogeneous principles and criteria in a country strongly decentralised¹⁴⁷. The responsibility of advisory bodies' accreditation has been delegated to regions and autonomous province, in accordance with constitutional rules which attribute functions of policy interventions in agriculture only to regional responsibilities.

FAS is in reality a system that has developed differently in each region. Efficiency and effectiveness strongly differ from region to region. It includes advisory organisms of different nature, either public or private. But over time, public organisms have been dismantled in many regions and the personnel with advisory skills has been reorganised/re-oriented towards other tasks, more similar to administrative and control functions. This did not happen everywhere, but as a result in many regions private bodies

¹⁴⁷ These national principles include notably common requisites for defining adequate advisors' skills, common rules to accede to funds supporting advisory activities. Only authorised and accredited bodies can participate to public regional and national calls published to provide advisory services. They can be either public or private bodies. In addition, the national decree sets up a unique inventory of advisory bodies and a quality certification system.

have increasingly predominated in the regional advisory system. This pushed the RDP to urgently cover all advisory needs at regional level.

The implementation of the FAS in Italy and specifically at regional level has been quite complex, since the regional administrations had to wait for the national decree to be definitive, before initiating the procedures for the FAS accreditation. The managing authority questioned if it was worth the efforts put for the setting up of the FAS.

Umbria, as other Italian regions, decided to cancel the list of bodies already accredited by the previous programming period (2007-2013) and to start from the scratch with new selection criteria and accreditation processes. The reason was apparently coming from the use of RD M2 to support advice, due to the public procurement rules required from 2014-2017 (until it was removed from the Omnibus regulation).

In Italy, the Farm Advisory System is set up by Regions, to ensure that compliance with EU rules are met. FAS activities are mainly supported via the measure 2 due to the lack of national or regional funds over time. For this reason, Measure 2 is planned in almost all regions and autonomous provinces (except for Basilicata and Valle d'Aosta). Despite implementation problems and late application (which have contributed to the reduction of more than 50% of originally planned resources), regional RDPs have maintained this measure over the programming period.

In both regions (Veneto and Umbria), RD M2 supports the FAS. Advisory services supported by RD Measure 2 may only be provided by FAS accredited advisors.

FAS costs/burden and benefits

FAS implemented in Italy relies on a system of certification of organisms that are recognised by the public authorities as competent to provide farm advice. Main roles to do this activity have been delegated to regional administration. Certified organisms were selected through calls for tenders. Italy (Umbria and Veneto) uses M2.1 to support the FAS.

Costs/burdens:

During the current programming period, the implementation of the FAS appeared quite complex, especially for regional administrations, which had to **wait for the national decree** to be definitive, before initiating the procedures for the FAS accreditation.

Umbria, as all over in Italy, decided to cancel the list of bodies already FAS accredited under the previous programming period and to **start from the scratch with new selection criteria and accreditation processes**, because of the rules on public calls. This certainly caused a time consuming and loss of interests by the candidates. Hence the proposals submitted by the advisors to the call were fewer and lesser than the expectations.

Secured benefits:

This system of certification ensures that minimum requisites are met and a certain number of accredited organisms can perform their functions. However in several interviews there was some **criticism on the quality control** over time that should be put in place and work more effectively.

The cost of implementing FAS has been charged by RDP funds, and due to the limited implementation of measure 2 the secured benefits resulting from the FAS instrument are not evident yet. Anyhow, an important benefit regards the implications for the advisory bodies to **systematically fulfil the professional competencies** requested by the regional administration to obtain and maintain the accreditation. It can also be stated that the FAS supported by Measure 2 **disseminated more knowledge of EU rules, especially those regarding environmental issue and competitiveness of farming.**

➤ **PL: Poland**

Implementation choices

Farm advisory services in Poland have a long history. The first services were offered to farmers before the World War II. The actual development of the FAS in Poland based on public entities dates back to 1970s. Agricultural Advisory Services Centres (AASCs) were created in 1991. Current Polish FAS is organised at a national level and is operational since 2009. It has been implemented through the existing actors and can provide farmers with advice larger than the scope foreseen by the FAS obligation. The EAFRD (M2.1 and M2.3) fund the FAS advisory services and the training of FAS advisors, but the FAS setting-up is the object of a national fund (without use of M2.2).

The Ministry of Agriculture and Rural Development is responsible for the designation/selection of FAS bodies. Currently, advice regarding the FAS in Poland is provided by the following entities:

- Public Agricultural Advisory Services Centres (AASCs): 16 regional centres and 1 central/national centre;
- Private advisory companies;
- Chambers of agriculture (16);
- Agricultural sector associations;
- Agricultural research institutes;
- Agricultural tertiary education institutions.

The National AASC provides indirect assistance for all actors involved in the FAS system. It also handles the training of advisors employed in the 16 AASCs and it maintains updated the lists of certified advisors. AASCs are subordinate and monitored by the Polish Ministry of Agriculture and Rural Development as of 20 August 2016. Before, regional centres were subordinate to their specific regional self-government bodies, while the central was subordinate to the Minister.

The condition of Polish FAS has deteriorated significantly in recent years.

It appears that the key role of farm advisors (closely and effectively cooperating with the sphere of research and development) in the dissemination of innovative solutions, has been underestimated in Poland for years. The result is a systematic decline in employment in AASC in 1992-2017. During this period, the number of employees in AASCs, who are basically a monopolist in the provision of consultancy services, decreased from 5 800 persons to 4 100 including the number of managerial and advisory staff; the latter decreased from 4 600 to 3 400 advisors. In the recent years, the condition of the Polish FAS has deteriorated significantly. In the period September 2016 to March 2019 as many as 1 329 employees left advisory services centres, of which 1 003 were advisors and the others were support staff. Almost a half of advisors left the service due to retirement. In the same period 1 069 new advisors were employed but in most cases with no prior experience in farm advisory services. This high rotation endangers the quality of offered services. To prevent high rotation the budgetary spending has been increasing in recent years. In 2019 the Polish state budget spending on FAS amounted to over PLN 200 million (approximatively EUR 50 million).

Overall, the role played by other bodies than public AASCs is marginal.

In Poland, the FAS is linked to the EIP-AGRI. There is a Scientific Committee on Innovation in Agriculture and Rural Development, coordinated by the Agricultural Advisory Centre at a national level. At the regional level, the AASCs are implementing innovation measures and have an innovation broker operating in each of their structures.

FAS costs/burden and benefits

In Poland, the FAS implementation relies on a system of certification of organisms that are recognised by the public authorities as competent to provide farm advice. The Polish FAS is widely understood as an agricultural advisory system operating for years in the form of regional agricultural advisory centers (AASCs) providing advisory services in accordance with general EU requirements.

Costs/burdens: During the current programming period, the implementation of the FAS appeared quite complex due to the changes in the EU regulations requiring creation of the new eligibility criteria and implementation procedures.

Secured benefits: So far, the FAS-M2 package has had limited but fruitful results. This is due to the fact that the farm advisory system in Poland has already carried out many activities, including those formulated in the FAS scope. Nevertheless, according to the AgriLink study (2020), the targeting of the agricultural advisory system in Poland on the FAS priorities brought some positive effects. First, as accessing MS, the AASCs had to focus on the most important issues related to the implementation of the CAP: knowledge about CAP requirements, including GAEC, SMR, climate changes and other important issues was significantly increased. Secondly, it caused an increase in farmers' ecological awareness. As a result of intensive actions in all priority areas, the state of the environment has improved throughout the country.

ANNEX 4: ESQ4 – FINANCIAL TABLES**Table 40: Comparison of public planned budget (in €m and in % of total RDP budget) for knowledge exchange, innovation and advisory measures in 2007-2013 and in 2014-2020 and trends between 2007-2013 and 2014-2020**

	Total public planned budget in €m		Total public budget planned in % of total RDP budget (incl. TA)		Trends between 2007-2013 and 2014-2020
	2007-2013	2014-2020	2007-2013	2014-2020	
IE	14	196	0.3%	5.2%	1 301%
CZ	45	163	1.2%	5.6%	262%
GR	75	262	1.5%	4.2%	249%
FI	81	274	1.2%	4.8%	238%
DE	123	399	0.9%	2.3%	223%
SI	14	43	1.2%	3.4%	219%
HR	0	43	0.0%	1.5%	100%
LV	23	45	1.7%	3.2%	98%
AT	135	256	1.7%	3.4%	89%
MT	6	11	6.0%	8.2%	84%
NL	48	85	4.9%	7.4%	76%
IT	658	1 077	4.0%	5.3%	64%
SE	232	346	5.9%	7.9%	49%
FR	282	405	2.3%	2.3%	44%
SK	47	67	1.8%	3.2%	43%
UK	353	486	4.1%	8.9%	38%
EE	33	44	3.6%	4.1%	33%
ES	453	516	2.9%	3.4%	14%
DK	49	54	5.9%	9.5%	11%
BE	64	65	5.6%	4.3%	2%
RO	119	110	1.3%	0.8%	-7%
CY	6	5	1.7%	2.1%	-9%
LT	53	46	2.5%	1.9%	-13%
BG	102	78	3.2%	1.6%	-24%
HU	212	147	4.1%	2.5%	-31%
PT	141	88	2.9%	1.6%	-38%
PL	390	201	2.3%	1.5%	-48%
LU	3	0	0.9%	0.0%	-100%
Grand Total	3 760	5 512	2.7%	3.9%	47%

Note: The sum of the three measures is M1+M2+M16 (M16.1 to M16.9).

Source: ADE based ADE based on synthesis of the ex-ante evaluation of CAP 2007-2013 and ESI Funds (situation: 31/12/2018)

Table 41: Comparison of realised versus planned spending for the sum of the three RD measures M1, M2 and M16 (M16.1 to M16.9) in 2014-2020

	Total public budget planned in €m	Realised total public budgets in € millions	Execution rates
DK	54	34	64%
FI	274	80	29%
BE	65	17	26%
IE	196	47	24%
PT	88	20	23%
AT	256	51	20%
EE	44	8	19%
DE	399	73	18%
CZ	163	22	13%
FR	405	53	13%
UK	486	58	12%
SE	346	33	10%
ES	516	46	9%
CY	5	0	7%
LV	45	3	7%
BG	78	5	6%
HR	43	3	6%
IT	1 077	63	6%
LT	46	3	6%
SI	43	2	4%
GR	262	9	3%
HU	147	4	3%
NL	85	2	3%
SK	67	2	3%
RO	110	1	1%
LU	0	0	0%
MT	11	0	0%
PL	201	0	0%
Grand Total	5 512	639	12%

Source: ADE based on ESI Funds (situation: 31/12/2018)

Table 42: Comparison of RD measure 16 (M16.1 to M16.9) (2014-2020 and 124 total public planned budgets (in €m and in % of total RDP budget) and execution rate of RD measure 16

	Total public planned in €m		Total public planned in % of total RDP budget (incl. TA)		Execution rate of M16
	2007-2013	2014-2020	2007-2013	2014-2020	
DK	32	33	3.9%	2.7%	51%
PT	42	45	0.9%	1.0%	33%
FI	27	160	0.4%	2.8%	24%
DE	22	196	0.2%	1.4%	19%
AT	30	117	0.4%	1.5%	17%
EE	26	21	3.0%	2.1%	15%
CZ	0	150	0.0%	4.0%	14%
BE	0	20	0.0%	1.5%	13%
FR	13	227	0.0%	1.4%	12%
ES	50	257	0.3%	2.1%	11%
UK	120	194	1.4%	2.9%	9%
IE	0	62	0.0%	1.6%	8%
LT	0	22	0.0%	1.1%	6%
SE	23	153	0.6%	3.5%	6%
IT	152	692	0.9%	3.3%	5%
SK	0	49	0.0%	2.3%	4%
NL	10	62	1.0%	4.9%	3%
RO	0	31	0.0%	0.3%	2%
LV	0	22	0.0%	1.4%	1%
BG	0	33	0.0%	1.1%	0%
CY	0	3	0.0%	1.2%	0%
GR	0	78	0.0%	1.3%	0%
HR	0	8	0.0%	0.3%	0%
HU	0	51	0.0%	1.2%	0%
LU	0	0	0.0%	0.0%	0%
MT	1	4	1.0%	2.9%	0%
PL	0	68	0.0%	0.5%	0%
SI	0	20	0.0%	1.8%	0%
Grand Total	550	2 778	0.5%	1.9%	10%

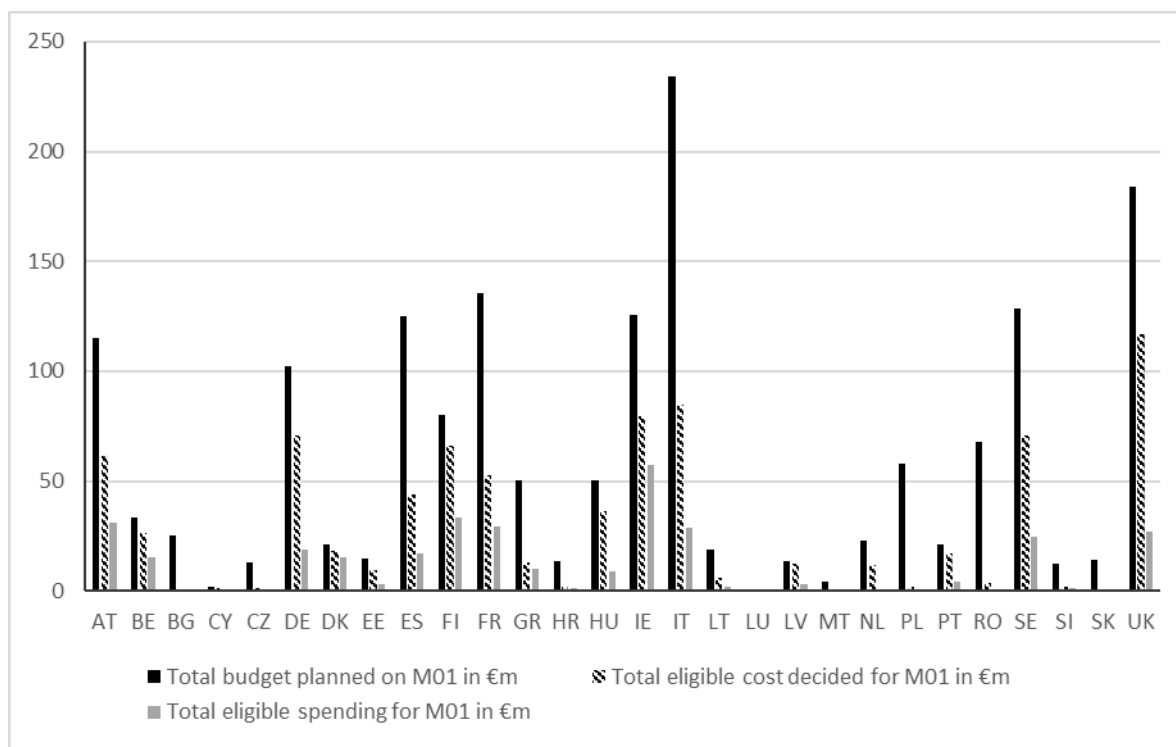
Source: ADE based on synthesis of the ex-ante evaluation of CAP 2007-2013 and ESI Funds (situation: 31/12/2018)

ANNEX 5: FINANCIAL TABLES FOR M1**Table 43: Financial resources planned, decided and spent on RD measure 1, decision and spending rates at EU-28 level for 2014-2020 (in total expenditure: EU and National)**

Resources planned, decided and spent M01 in 2014-2020 (ESI)					
MS	Total Amount Planned M01	Total eligible cost decided M01	Total eligible spending M01	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
AT	115.2	61.4	30.8	53%	27%
BE	33.2	26.1	15.1	79%	46%
BG	25.4	-	-	-	-
CY	2.0	1.0	0.4	50%	20%
CZ	12.8	1.3	0.5	10%	4%
DE	102.0	70.7	18.8	69%	19%
DK	21.2	18.4	15.5	87%	73%
EE	14.5	9.6	3.2	66%	22%
ES	125.0	43.7	16.9	35%	14%
FI	80.1	66.1	33.4	83%	42%
FR	135.8	52.4	29.5	39%	22%
GR	50.2	12.8	9.8	25%	20%
HR	13.3	1.6	1.0	12%	7%
HU	50.4	36.2	8.6	72%	17%
IE	125.8	79.7	57.4	63%	46%
IT	234.0	84.8	28.4	36%	12%
LT	19.0	5.8	1.7	31%	9%
LU	-	-	-	-	-
LV	13.4	12.1	2.9	91%	22%
MT	4.4	-	-	-	-
NL	22.9	11.7	0.4	51%	2%
PL	58.0	2.0	-	4%	0%
PT	21.4	16.8	4.1	79%	19%
RO	67.6	3.7	0.6	6%	1%
SE	128.6	70.8	24.8	55%	19%
SI	12.5	1.9	1.0	15%	8%
SK	14.3	-	-	-	-
UK	183.9	116.6	26.9	63%	15%
Total EU28	1 686.9	807.3	331.8	48%	20%

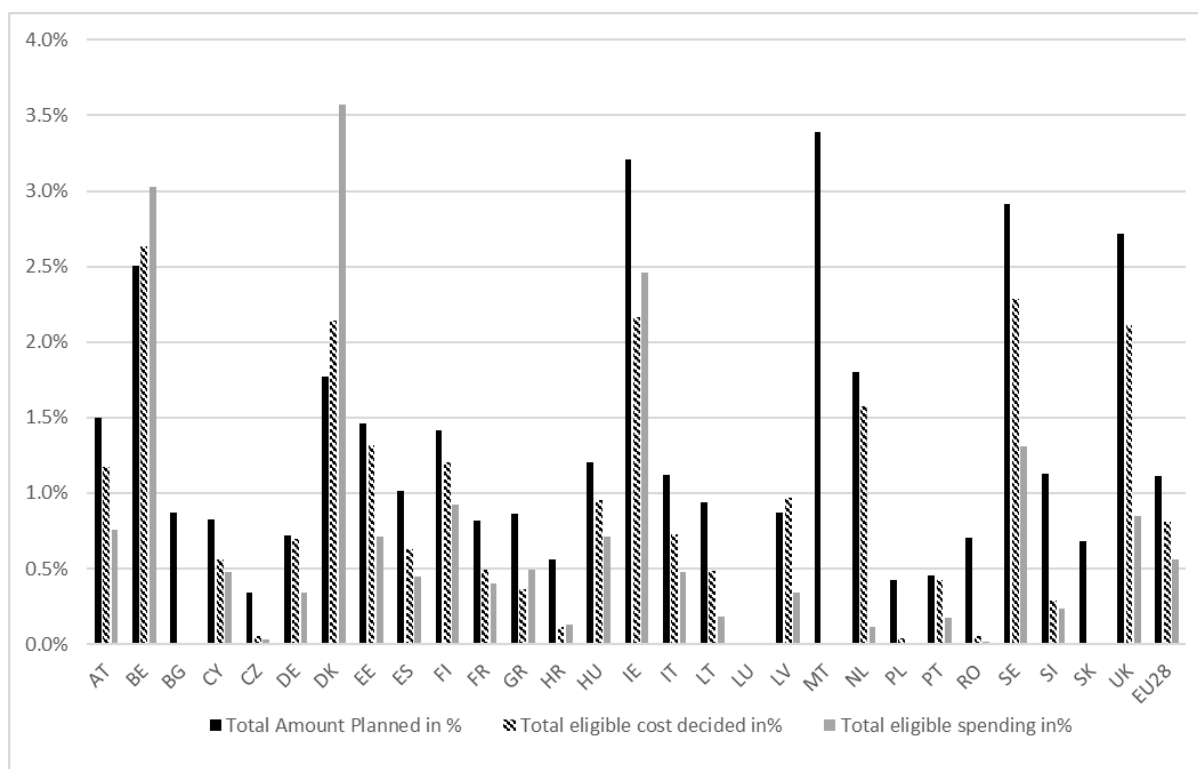
Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on 28/08/2019)

Figure 46: Resources planned, decided and spent on RD measure 1 at EU-28 level for 2014-2020 (in total expenditure: EU and National)



Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on 28/08/2019)

Figure 47: Share of RD measure 1 in total RDPs spending for 2014-2020 (in total expenditure: EU and National)



Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on 28/08/2019)

Table 44: Financial resources planned, decided and spent on RD measure 1, decision and spending rates at RDP level for 2014-2020 (in total expenditure: EU and National)

Resources planned, decided and spent M01 in 2014-2020 (ESI)					
RDP	Total amount planned	Total amount decided	Total amount spent	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
Austria – National RDP	115.2	61.4	30.8	53%	27%
Belgium	33.2	26.1	15.1	79%	45%
<i>Flanders – RDP</i>	26.2	25.9	15.1	99%	58%
<i>Wallonia – RDP</i>	7	0.2	0	3%	0%
Bulgaria – National RDP	25.4	0	0	0%	0%
Croatia – National RDP	13.3	1.6	1	12%	7%
Cyprus – National RDP	2	1	0.4	50%	20%
Czech Republic – National RDP	12.8	1.3	0.5	10%	4%
Denmark – National RDP	21.2	18.4	15.5	87%	73%
Estonia – National RDP	14.5	9.6	3.2	66%	22%
Finland	80.1	66.1	33.4	83%	42%
<i>Aland Islands – RDP</i>	0.1	0.1	0	46%	9%
<i>Mainland Finland – RDP</i>	80	66.1	33.3	83%	42%
France	135.8	52.4	29.5	39%	22%
<i>Alsace – RDP</i>	0.7	0.2	0	26%	0%
<i>Aquitaine – RDP</i>	6.4	1.6	1.4	25%	22%
<i>Auvergne – RDP</i>	3.5	0.1	0	1%	0%
<i>Ile-de-France – RDP</i>	0	0	0	-	-
<i>Basse-Normandie – RDP</i>	3.8	0.3	0	8%	0%
<i>Bourgogne – RDP</i>	3.5	1.2	0.2	34%	5%
<i>Bretagne – RDP</i>	0	0	0	-	-
<i>Centre – RDP</i>	4.5	1.6	0.5	36%	10%
<i>Champagne-Ardenne – RDP</i>	3.3	0	0	0%	0%
<i>Corse – RDP</i>	1.8	0.3	0.1	20%	5%
<i>France – National RDP</i>	0	0	0	-	-
<i>France – Rural Network</i>	0	0	0	-	-
<i>Franche-Comté – RDP</i>	1.6	0.8	0	46%	0%
<i>Guadeloupe – RDP</i>	3.5	2.2	2.1	62%	58%
<i>Guyane – RDP</i>	5.9	3.6	1	61%	16%
<i>Haute-Normandie – RDP</i>	1.6	0.2	0	12%	0%
<i>Languedoc-Roussillon – RDP</i>	2.7	0.4	0.1	16%	2%
<i>Limousin – RDP</i>	3.1	0.1	0.1	4%	3%
<i>Lorraine – RDP</i>	3.3	0.8	0	23%	0%
<i>Martinique – RDP</i>	5.9	2.3	2	38%	34%
<i>Mayotte – RDP</i>	2.8	2.7	0.4	97%	13%
<i>Midi-Pyrénées – RDP</i>	13.8	4.1	0.7	30%	5%
<i>Nord-Pas de Calais – RDP</i>	2.7	0	0	0%	0%
<i>Pays de la Loire – RDP</i>	4.1	0.3	0	7%	0%
<i>Picardie – RDP</i>	3.2	0	0	0%	0%
<i>Poitou-Charentes – RDP</i>	4.3	0.5	0.3	12%	8%
<i>Provence-Alpes-Côte d'Azur – RDP</i>	2.9	0	0	0%	0%
<i>Réunion – RDP</i>	36.5	26.7	19.9	73%	55%
<i>Rhône-Alpes – RDP</i>	10.5	2.4	0.9	22%	8%
Germany	102	70.7	18.8	69%	18%
<i>Baden-Wurtemberg – RDP</i>	1.4	0.5	0.3	40%	23%
<i>Bayern – RDP</i>	0	0	0	-	-
<i>Berlin / Brandenburg – RDP</i>	11.9	4.3	2.4	36%	20%
<i>Germany – Rural Network</i>	0	0	0	-	-

Resources planned, decided and spent M01 in 2014-2020 (ESI)					
RDP	Total amount planned	Total amount decided	Total amount spent	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
<i>Hessen – RDP</i>	0	0	0	-	-
<i>Mecklenburg-Vorpommern – RDP</i>	5.6	3.6	2	64%	35%
<i>Niedersachsen / Bremen – RDP</i>	56.9	53.1	9.4	93%	17%
<i>Nordrhein-Westfalen – RDP</i>	5.3	1.1	0.7	21%	12%
<i>Rheinland-Pfalz – RDP</i>	3.2	0.6	0	17%	0%
<i>Saarland – RDP</i>	0	0	0	-	-
<i>Sachsen – RDP</i>	9.9	3.4	1.7	34%	17%
<i>Sachsen-Anhalt – RDP</i>	0	0	0	-	-
<i>Schleswig-Holstein – RDP</i>	3.8	2.3	1.7	61%	45%
<i>Thuringen – RDP</i>	4	1.8	0.7	46%	18%
Greece – National RDP	50.2	12.8	9.8	25%	20%
Hungary – National RDP	50.4	36.2	8.6	72%	17%
Ireland – National RDP	125.8	79.7	57.4	63%	46%
Italy	234	84.8	28.4	36%	12%
<i>Abruzzo – RDP</i>	4.7	0	0	0%	0%
<i>Basilicata – RDP</i>	9	0	0	0%	0%
<i>Bolzano – RDP</i>	1.4	0.3	0.1	20%	5%
<i>Calabria – RDP</i>	10	6.7	0.1	67%	1%
<i>Campania – RDP</i>	23.3	0.8	0.4	4%	2%
<i>Emilia-Romagna – RDP</i>	17.6	9.9	7.4	56%	42%
<i>Friuli-Venezia Giulia – RDP</i>	5	5	0.1	100%	2%
<i>Italy – National RDP</i>	0	0	0	-	-
<i>Italy – Rural Network</i>	0	0	0	-	-
<i>Lazio – RDP</i>	6.6	5.5	0.1	83%	2%
<i>Liguria – RDP</i>	5.1	1.2	0.7	23%	14%
<i>Lombardia – RDP</i>	9.8	4.7	0	48%	0%
<i>Marche – RDP</i>	11.6	4.1	0.5	35%	4%
<i>Molise – RDP</i>	5.8	0	0	0%	0%
<i>Piemonte – RDP</i>	42.5	22.5	10	53%	23%
<i>Puglia – RDP</i>	25	0.6	0.2	3%	1%
<i>Sardegna – RDP</i>	3	0.6	0.6	21%	21%
<i>Sicilia – RDP</i>	9	0.7	0	7%	0%
<i>Toscana – RDP</i>	10.3	3	1.3	29%	13%
<i>Trento – RDP</i>	1.5	0.5	0	36%	0%
<i>Umbria – RDP</i>	10.3	4.3	1.8	41%	17%
<i>Valle d'Aosta – RDP</i>	0.4	0.2	0	60%	0%
<i>Veneto – RDP</i>	22.2	14.2	5	64%	23%
Latvia – National RDP	13.4	12.1	2.9	91%	22%
Lithuania – National RDP	19	5.8	1.7	31%	9%
Luxembourg – National RDP	0	0	0	-	-
Malta – National RDP	4.4	0	0	0%	0%
Netherlands – National RDP	22.9	11.7	0.4	51%	2%
Poland – National RDP	58	2	0	3%	0%
Portugal	21.4	16.8	4.1	79%	19%
<i>Azores – RDP</i>	1.3	0.2	0	17%	0%
<i>Continental Portugal – RDP</i>	18.8	15.8	4.1	84%	22%
<i>Madeira – RDP</i>	1.2	0.7	0	60%	1%
Romania – National RDP	67.6	3.7	0.6	6%	1%
Slovakia – National RDP	14.3	0	0	0%	0%

Resources planned, decided and spent M01 in 2014-2020 (ESI)					
RDP	Total amount planned	Total amount decided	Total amount spent	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
Slovenia – National RDP	12.5	1.9	1	15%	8%
Spain	125	43.7	16.9	35%	14%
<i>Andalucia – RDP</i>	53.9	8.2	0.4	15%	1%
<i>Aragon – RDP</i>	7.6	3	2.7	39%	35%
<i>Asturias – RDP</i>	0	0	0	-	-
<i>Baleares – RDP</i>	1.5	0.8	0.7	50%	47%
<i>Canarias – RDP</i>	1.8	0.2	0	13%	1%
<i>Cantabria – RDP</i>	0	0	0	-	-
<i>Castilla y Leon – RDP</i>	5	1.5	0.3	31%	6%
<i>Castilla-La Mancha – RDP</i>	6.6	3.7	2.4	56%	37%
<i>Cataluna – RDP</i>	9.4	3.2	2.4	34%	26%
<i>Extremadura – RDP</i>	3	0.8	0.6	26%	19%
<i>Galicia – RDP</i>	11.4	4.6	1.6	41%	14%
<i>La Rioja – RDP</i>	3.5	2.6	0.4	75%	11%
<i>Madrid – RDP</i>	0.9	0.2	0	21%	0%
<i>Murcia – RDP</i>	4.5	9.4	1.7	207%	37%
<i>Navarra – RDP</i>	3.5	1.6	1.4	46%	39%
<i>Pais Vasco – RDP</i>	2.1	1.3	0.9	63%	41%
<i>Spain – National RDP</i>	6.6	1.2	1	18%	15%
<i>Valenciana – RDP</i>	3.5	1.3	0.6	36%	17%
Sweden – National RDP	128.6	70.8	24.8	55%	19%
United Kingdom	183.9	116.6	26.9	63%	15%
<i>England – RDP</i>	67.5	0.1	0.1	0%	0%
<i>Northern Ireland – RDP</i>	29.4	28.1	4.9	96%	17%
<i>Scotland – RDP</i>	4.5	2.8	2.5	61%	55%
<i>Wales – RDP</i>	82.5	85.7	19.5	104%	24%
Total RDPs	1 686.90	807.3	331.8	48%	20%

Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on the 28/08/2019)

Table 45: Financial resources planned and spent on RD measures 111 and 331, spending rate at EU-28 level for 2007-2013 (in total expenditure: EU and National)

Resources planned and spent on m111 and m331 in 2007-2013			
MS	Total amount planned	Total amount realised	Spending rate
	in €m	in €m	in %
AT	105.4	120.1	114%
BE	44.6	52.2	117%
BG	102.4	9.2	9%
CY	3.5	1.0	29%
CZ	25.2	14.2	56%
DE	59.0	37.1	63%
DK	16.3	88.9	544%
EE	4.3	3.4	79%
ES	80.1	75.1	94%
FI	53.6	108.7	203%
FR	260.3	269.5	104%
GR	25.0	-	0%
HU	152.8	85.9	56%
IE	14.0	5.4	39%
IT	248.6	158.5	64%
LT	16.5	29.8	180%
LU	2.2	0.8	37%
LV	10.2	1.1	11%
MT	1.2	0.3	26%
NL	29.4	40.5	138%
PL	40.0	28.3	71%
PT	38.8	23.5	61%
RO	119.0	19.3	16%
SE	208.4	278.8	134%
SI	13.6	2.0	15%
SK	27.0	34.0	126%
UK	212.5	146.7	69%
Total EU-27	1 913.9	1 634.3	85%

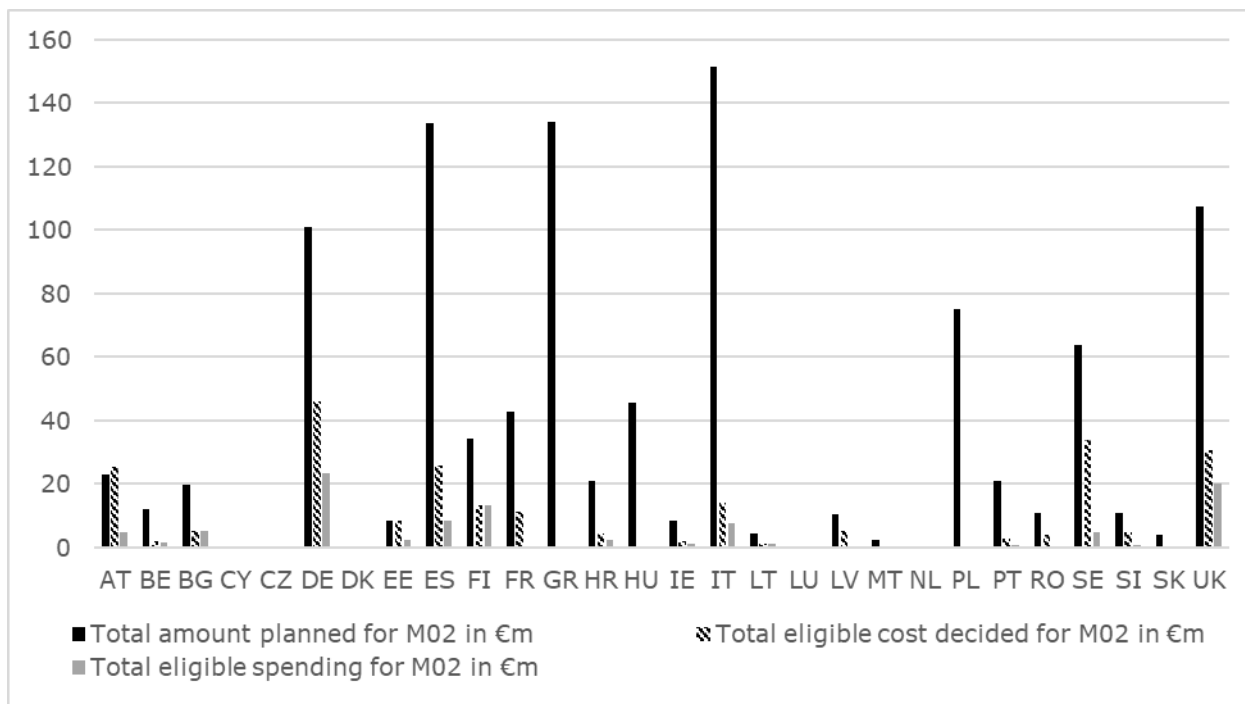
Source: ADE based on the ex-ante evaluation of CAP 2007-2013 and on DG-Agri database (extraction 31/12/2018)

ANNEX 6: FINANCIAL TABLES FOR M2**Table 46: Financial resources planned, decided and spent on RD measure 2, decision and spending rates at EU-28 level for 2014-2020 (in total expenditure: EU and National)**

Resources planned, decided and spent M02 in 2014-2020 (ESI)					
MS	Total Amount Planned M02	Total eligible cost decided M02	Total eligible spending M02	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
AT	23.0	25.5	5.0	111%	22%
BE	12.2	2.2	1.6	18%	13%
BG	19.9	5.4	5.4	27%	27%
CY	-	-	-	-	-
CZ	-	-	-	-	-
DE	100.8	46.1	23.6	46%	23%
DK	-	-	-	-	-
EE	8.6	8.6	2.5	100%	29%
ES	133.9	25.7	8.6	19%	6%
FI	34.2	13.5	13.5	40%	40%
FR	42.7	11.3	0.2	27%	0%
GR	133.9	-	-	0%	0%
HR	21.2	4.5	2.4	21%	12%
HU	45.5	0.0	0.0	0%	0%
IE	8.3	1.9	1.1	23%	14%
IT	151.6	14.2	7.6	9%	5%
LT	4.6	1.2	1.2	27%	27%
LU	-	-	-	-	-
LV	10.4	5.3	0.4	51%	4%
MT	2.5	-	-	0%	0%
NL	-	-	-	-	-
PL	75.0	0.1	0.1	0%	0%
PT	21.2	2.8	0.9	13%	4%
RO	11.1	3.9	-	35%	0%
SE	64.0	34.1	4.9	53%	8%
SI	10.8	5.0	0.8	46%	8%
SK	4.0	-	-	0%	0%
UK	107.4	30.7	20.1	29%	19%
Total EU28	1 046.8	242.1	99.9	23%	10%

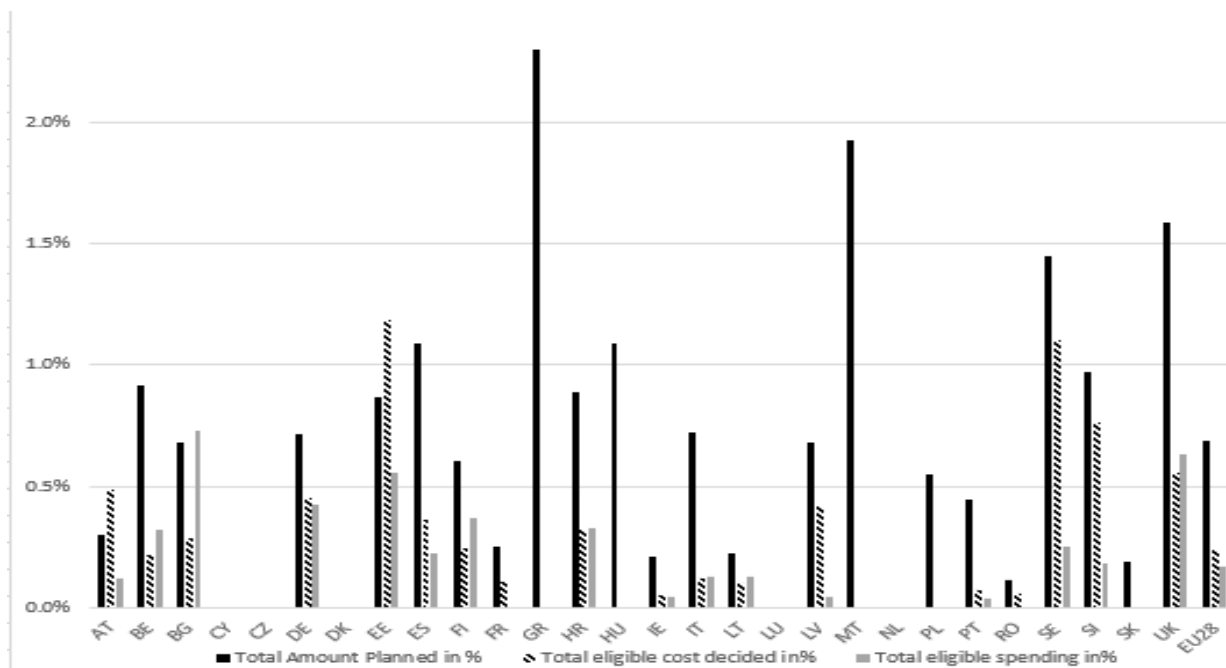
Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on 28/08/2019)

Figure 48: Resources planned, decided and spent on RD measure 2 at EU-28 level for 2014-2020 in million euro (in total expenditure: EU and National)



Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on 28/08/2019)

Figure 49: Share of RD measure 2 in total RDPs spending for 2014-2020 (in total expenditure: EU and National)



Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on 28/08/2019)

Table 47: Financial resources planned, decided and spent on RD measure 2, decision and spending rates at RDP level for 2014-2020 (in total expenditure: EU and National)

Resources planned, decided and spent M02 in 2014-2020 (ESI)					
RDP	Total amount planned	Total amount decided	Total amount spent	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
Austria – National RDP	23.0	25.5	5.0	111%	22%
Belgium	12.2	2.2	1.6	18%	13%
<i>Flanders – RDP</i>	12.2	2.2	1.6	18%	13%
<i>Wallonia – RDP</i>	0.0	0.0	0.0	-	-
Bulgaria – National RDP	19.9	5.4	5.4	27%	27%
Croatia – National RDP	21.2	4.5	2.4	21%	11%
Cyprus – National RDP	0.0	0.0	0.0	-	-
Czech Republic – National RDP	0.0	0.0	0.0	-	-
Denmark – National RDP	0.0	0.0	0.0	-	-
Estonia – National RDP	8.6	8.6	2.5	100%	29%
Finland	34.2	13.5	13.5	39%	39%
<i>Aland Islands – RDP</i>	0.2	0.0	0.0	0%	0%
<i>Mainland Finland – RDP</i>	34.0	13.5	13.5	40%	40%
France	42.7	11.3	0.2	27%	0%
<i>Alsace – RDP</i>	0.6	0.0	0.0	0%	0%
<i>Aquitaine – RDP</i>	0.0	0.0	0.0	-	-
<i>Auvergne – RDP</i>	0.0	0.0	0.0	-	-
<i>Ile-de-France – RDP</i>	0.0	0.0	0.0	-	-
<i>Basse-Normandie – RDP</i>	0.0	0.0	0.0	-	-
<i>Bourgogne – RDP</i>	3.4	0.7	0.0	20%	0%
<i>Bretagne – RDP</i>	0.0	0.0	0.0	-	-
<i>Centre – RDP</i>	0.0	0.0	0.0	-	-
<i>Champagne-Ardenne – RDP</i>	3.4	0.0	0.0	0%	0%
<i>Corse – RDP</i>	0.0	0.0	0.0	-	-
<i>France – National RDP</i>	0.0	0.0	0.0	-	-
<i>France – Rural Network</i>	0.0	0.0	0.0	-	-
<i>Franche-Comté – RDP</i>	0.0	0.0	0.0	-	-
<i>Guadeloupe – RDP</i>	11.0	4.0	0.1	36%	1%
<i>Guyane – RDP</i>	2.6	0.0	0.0	2%	1%
<i>Haute-Normandie – RDP</i>	0.0	0.0	0.0	-	-
<i>Languedoc-Roussillon – RDP</i>	0.0	0.0	0.0	-	-
<i>Limousin – RDP</i>	0.0	0.0	0.0	-	-
<i>Lorraine – RDP</i>	2.4	0.0	0.0	0%	0%
<i>Martinique – RDP</i>	7.1	0.0	0.0	0%	0%
<i>Mayotte – RDP</i>	1.8	0.0	0.0	0%	0%
<i>Midi-Pyrénées – RDP</i>	0.0	0.0	0.0	-	-
<i>Nord-Pas de Calais – RDP</i>	0.0	0.0	0.0	-	-
<i>Pays de la Loire – RDP</i>	0.0	0.0	0.0	-	-
<i>Picardie – RDP</i>	0.0	0.0	0.0	-	-
<i>Poitou-Charentes – RDP</i>	0.0	0.0	0.0	-	-
<i>Provence-Alpes-Côte d'Azur – RDP</i>	0.0	0.0	0.0	-	-
<i>Réunion – RDP</i>	10.4	6.6	0.0	63%	0%
<i>Rhône-Alpes – RDP</i>	0.0	0.0	0.0	-	-
Germany	100.8	46.1	23.6	46%	23%
<i>Baden-Wuerttemberg – RDP</i>	38.5	18.3	8.3	47%	22%
<i>Bayern – RDP</i>	0.0	0.0	0.0	-	-
<i>Berlin / Brandenburg – RDP</i>	2.7	0.1	0.1	4%	4%
<i>Germany – Rural Network</i>	0.0	0.0	0.0	-	-

Resources planned, decided and spent M02 in 2014-2020 (ESI)					
RDP	Total amount planned	Total amount decided	Total amount spent	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
<i>Hessen – RDP</i>	0.0	0.0	0.0	-	-
<i>Mecklenburg-Vorpommern – RDP</i>	18.7	1.4	1.0	7%	5%
<i>Niedersachsen / Bremen – RDP</i>	9.8	5.8	3.6	59%	37%
<i>Nordrhein-Westfalen – RDP</i>	3.6	0.2	0.1	5%	3%
<i>Rheinland-Pfalz – RDP</i>	4.5	0.0	0.0	0%	0%
<i>Saarland – RDP</i>	0.0	0.0	0.0	-	-
<i>Sachsen – RDP</i>	0.0	0.0	0.0	-	-
<i>Sachsen-Anhalt – RDP</i>	0.0	0.0	0.0	-	-
<i>Schleswig-Holstein – RDP</i>	19.2	18.4	9.1	96%	47%
<i>Thuringen – RDP</i>	4.0	2.1	1.4	52%	36%
Greece – National RDP	133.9	0.0	0.0	0%	0%
Hungary – National RDP	45.5	0.0	0.0	0%	0%
Ireland – National RDP	8.3	1.9	1.1	22%	14%
Italy	151.6	14.2	7.6	9%	5%
<i>Abruzzo – RDP</i>	4.2	0.0	0.0	0%	0%
<i>Basilicata – RDP</i>	3.8	0.0	0.0	0%	0%
<i>Bolzano – RDP</i>	0.0	0.0	0.0	-	-
<i>Calabria – RDP</i>	13.7	0.0	0.0	0%	0%
<i>Campania – RDP</i>	10.0	0.0	0.0	0%	0%
<i>Emilia-Romagna – RDP</i>	2.8	0.8	0.0	30%	0%
<i>Friuli-Venezia Giulia – RDP</i>	0.0	0.0	0.0	-	-
<i>Italy – National RDP</i>	0.0	0.0	0.0	-	-
<i>Italy – Rural Network</i>	0.0	0.0	0.0	-	-
<i>Lazio – RDP</i>	6.4	0.2	0.0	4%	1%
<i>Liguria – RDP</i>	2.7	0.1	0.0	3%	0%
<i>Lombardia – RDP</i>	11.3	0.0	0.0	0%	0%
<i>Marche – RDP</i>	5.0	0.1	0.0	1%	0%
<i>Molise – RDP</i>	5.5	0.0	0.0	0%	0%
<i>Piemonte – RDP</i>	15.0	2.0	1.3	13%	9%
<i>Puglia – RDP</i>	11.8	0.1	0.1	1%	1%
<i>Sardegna – RDP</i>	9.0	0.0	0.0	0%	0%
<i>Sicilia – RDP</i>	3.0	0.1	0.0	2%	0%
<i>Toscana – RDP</i>	18.1	9.7	5.6	54%	31%
<i>Trento – RDP</i>	0.0	0.0	0.0	-	-
<i>Umbria – RDP</i>	9.8	0.0	0.0	0%	0%
<i>Valle d'Aosta – RDP</i>	0.0	0.0	0.0	-	-
<i>Veneto – RDP</i>	19.6	1.0	0.5	5%	2%
Latvia – National RDP	10.4	5.3	0.4	51%	4%
Lithuania – National RDP	4.6	1.2	1.2	27%	27%
Luxembourg – National RDP	0.0	0.0	0.0	-	-
Malta – National RDP	2.5	0.0	0.0	0%	0%
Netherlands – National RDP	0.0	0.0	0.0	-	-
Poland – National RDP	75.0	0.1	0.1	0%	0%
Portugal	21.2	2.8	0.9	13%	4%
<i>Azores – RDP</i>	0.8	0.0	0.0	0%	0%
<i>Continental Portugal – RDP</i>	19.2	2.8	0.9	15%	5%
<i>Madeira – RDP</i>	1.2	0.0	0.0	0%	0%
Romania – National RDP	11.1	3.9	0.0	35%	0%
Slovakia – National RDP	4.0	0.0	0.0	0%	0%
Slovenia – National RDP	10.8	5.0	0.8	46%	8%

Resources planned, decided and spent M02 in 2014-2020 (ESI)					
RDP	Total amount planned	Total amount decided	Total amount spent	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
Spain	133.9	25.7	8.6	19%	6%
<i>Andalucia – RDP</i>	45.2	0.3	0.0	1%	0%
<i>Aragon – RDP</i>	9.2	0.7	0.7	7%	7%
<i>Asturias – RDP</i>	0.0	0.0	0.0	-	-
<i>Baleares – RDP</i>	0.0	0.0	0.0	-	-
<i>Canarias – RDP</i>	1.9	0.6	0.5	32%	26%
<i>Cantabria – RDP</i>	0.0	0.0	0.0	-	-
<i>Castilla y Leon – RDP</i>	14.0	10.0	0.0	71%	0%
<i>Castilla-La Mancha – RDP</i>	6.7	0.1	0.0	2%	0%
<i>Cataluna – RDP</i>	0.0	0.0	0.0	-	-
<i>Extremadura – RDP</i>	17.0	0.3	0.1	2%	1%
<i>Galicia – RDP</i>	16.7	3.4	0.1	20%	1%
<i>La Rioja – RDP</i>	4.2	3.2	1.0	75%	23%
<i>Madrid – RDP</i>	0.7	0.0	0.0	0%	0%
<i>Murcia – RDP</i>	3.7	0.0	0.0	0%	0%
<i>Navarra – RDP</i>	14.8	7.2	6.3	49%	43%
<i>Pais Vasco – RDP</i>	0.0	0.0	0.0	-	-
<i>Spain – National RDP</i>	0.0	0.0	0.0	-	-
<i>Valenciana – RDP</i>	0.0	0.0	0.0	-	-
Sweden – National RDP	64.0	34.1	4.9	53%	8%
United Kingdom	107.4	30.7	20.1	29%	19%
<i>England – RDP</i>	62.1	10.0	8.5	16%	14%
<i>Northern Ireland – RDP</i>	1.1	0.0	0.0	0%	0%
<i>Scotland – RDP</i>	23.8	11.9	8.7	50%	37%
<i>Wales – RDP</i>	20.4	8.9	2.9	44%	14%
Grand Total	1 046.8	242.1	99.9	23%	10%

Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on the 28/08/2019)

Table 48: Financial resources planned and spent on RD measures 114 and 115, spending rate at EU-28 level for 2007-2013 (in total expenditure: EU and National)

Resources planned and spent on m114 and m115 in 2007-2013			
MS	Total amount planned	Total amount realised	Spending rate
	in €m	in €m	in %
AT	0	0.0	-
BE	19.0	12.2	64%
BG	0	0.0	-
CY	2	0.1	3%
CZ	19.8	12.8	65%
DE	42.4	13.5	32%
DK	0.8	-	-
EE	2.3	5.0	219%
ES	322.1	87.3	27%
FI	0.0	0.0	-
FR	8.4	1.2	15%
GR	50.0	-	-
HU	59.6	17.4	29%
IE	0.0	0.0	-
IT	257.7	64.0	25%
LT	36.4	4.9	13%
LU	1.2	0.0	0%
LV	12.9	0.0	0%
MT	3.6	0.3	7%
NL	9.0	1.0	12%
PL	350.0	33.6	10%
PT	59.6	20.3	34%
RO	0.0	-	-
SE	0.0	0.0	-
SI	0.0	0.0	-
SK	19.6	1.0	5%
UK	20.5	2.7	13%
Grand Total	1 296.754	277,4	21%

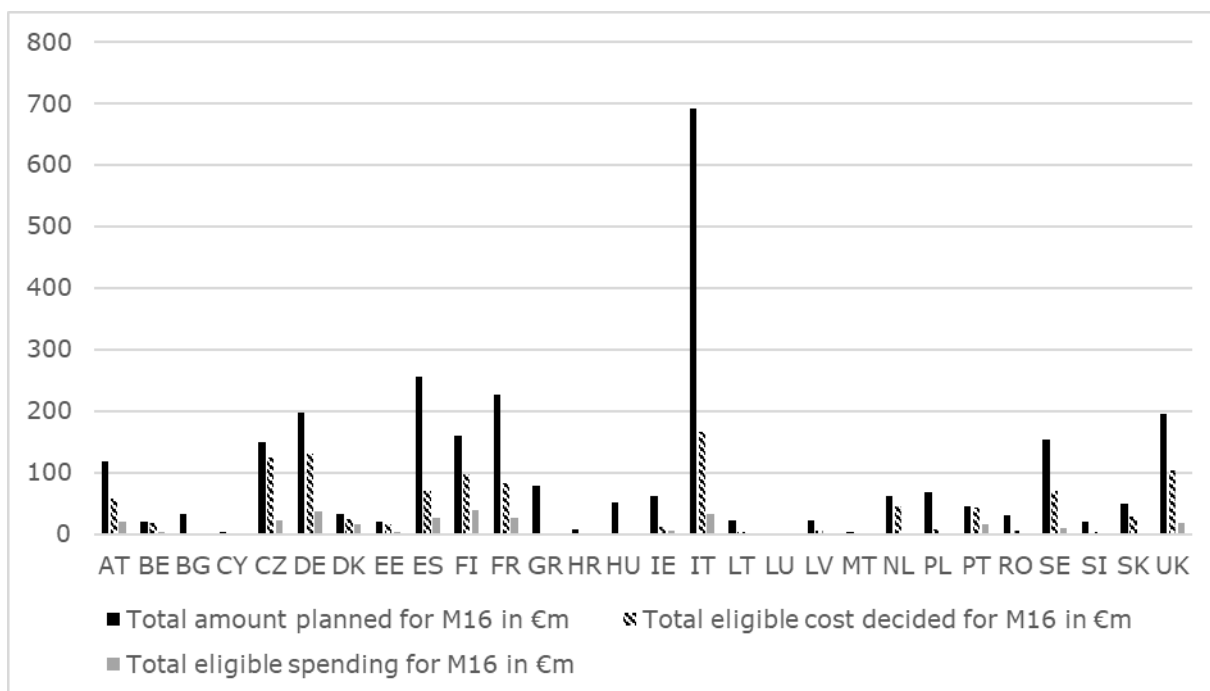
Source: ADE based on the ex-ante evaluation of CAP 2007-2013 and on DG-Agri database (extraction 31/12/2018)

ANNEX 7: FINANCIAL TABLES FOR M16**Table 49: Financial resources planned, decided and spent on RD measure 16, decision and spending rates at EU-28 level for 2014-2020 (in total expenditure: EU and National)**

Resources planned, decided and spent M16 in 2014.02020 (ESI)					
MS	Total Amount Planned	Total eligible cost decided	Total eligible spending	Decision rate	Spending rate
	M16	M16	M16		
	in €m	in €m	in €m	in %	in %
AT	117.4	57.8	19.9	49%	17%
BE	19.8	17.6	2.6	89%	13%
BG	32.6	0.0	0.0	0%	0%
CY	3.0	0.0	0.0	0%	0%
CZ	150.3	123.8	21.3	82%	14%
DE	196.4	129.8	37.0	66%	19%
DK	32.9	25.3	16.9	77%	51%
EE	20.7	15.4	3.2	75%	16%
ES	256.8	70.0	27.1	27%	11%
FI	160.0	97.8	38.4	61%	24%
FR	226.9	83.2	26.5	37%	12%
GR	77.8	0.0	0.0	0%	0%
HR	8.3	0.1	0.0	1%	0%
HU	51.2	2.4	0.0	5%	0%
IE	62.0	12.4	4.7	20%	8%
IT	691.6	166.8	33.2	24%	5%
LT	22.2	4.5	1.4	20%	6%
LU	0.0	0.0	0.0	0%	0%
LV	21.7	6.3	0.3	29%	1%
MT	3.7	0.0	0.0	0%	0%
NL	61.8	44.4	1.9	72%	3%
PL	68.0	6.8	0.0	10%	0%
PT	45.1	42.8	15.1	95%	33%
RO	31.4	5.9	0.6	19%	2%
SE	153.3	70.0	8.9	46%	6%
SI	20.1	3.2	0.0	16%	0%
SK	48.5	29.2	1.9	60%	4%
UK	194.3	104.3	17.3	54%	9%
Total EU28	2 777.9	1 119.9	278.1	40%	10%

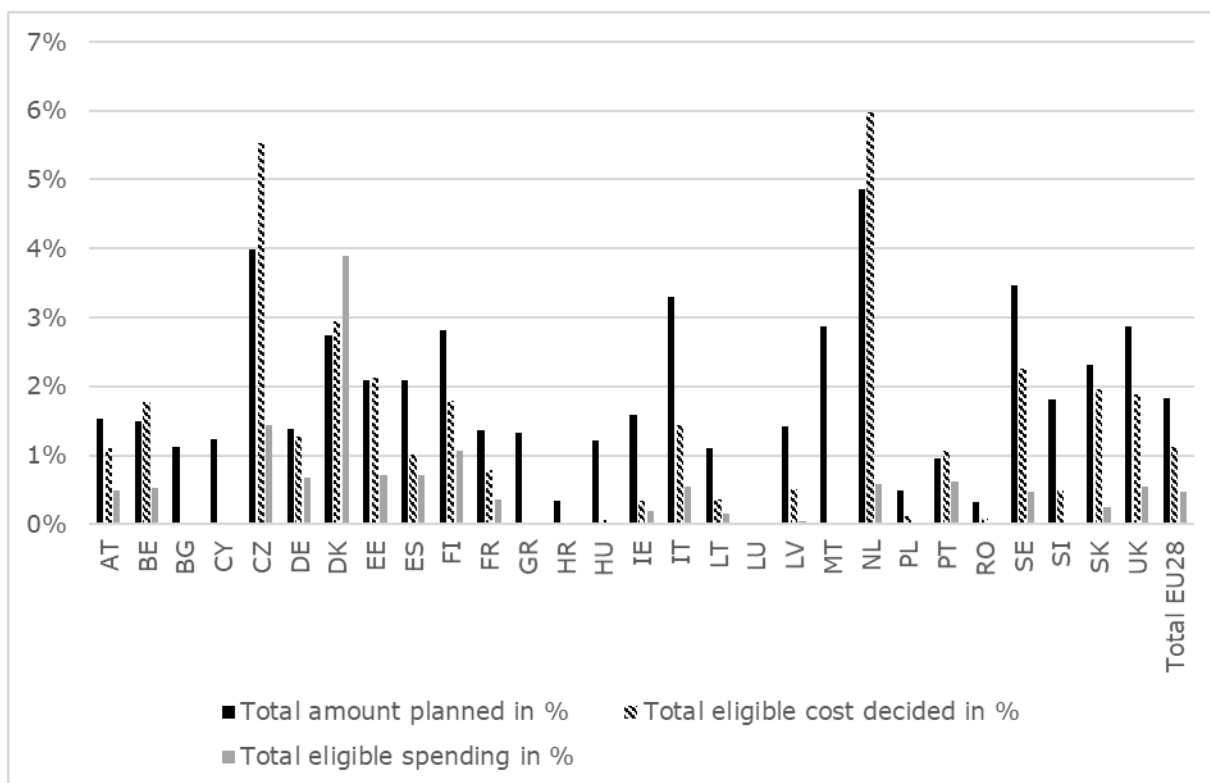
Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on 28/08/2019)

Figure 50: Resources planned, decided and spent on RD measure 16 at EU-28 level for 2014-2020 (in total expenditure: EU and National)



Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on 28/08/2019)

Figure 51: Share of RD measure 1 in total RDPs spending for 2014-2020 (in total expenditure: EU and National)



Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on 28/08/2019)

Table 50: Financial resources planned, decided and spent on RD measure 16, decision and spending rates at RDP level for 2014-2020 (in total expenditure: EU and National)

Resources planned, decided and spent M16 in 2014-2020 (ESI)					
RDP	Total amount planned	Total amount decided	Total amount spent	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
Austria – National RDP	117.4	57.8	19.9	49%	17%
Belgium	19.8	17.6	2.6	89%	13%
<i>Flanders – RDP</i>	9.2	7.0	1.6	76%	17%
<i>Wallonia – RDP</i>	10.6	10.5	1.1	99%	10%
Bulgaria – National RDP	32.6	0.0	0.0	0%	0%
Croatia – National RDP	8.3	0.1	0.0	1%	0%
Cyprus – National RDP	3.0	0.0	0.0	0%	0%
Czech Republic – National RDP	150.3	123.8	21.3	82%	14%
Denmark – National RDP	32.9	25.3	16.9	77%	51%
Estonia – National RDP	20.7	15.4	3.2	75%	16%
Finland	160.0	97.8	38.4	61%	24%
<i>Aland Islands – RDP</i>	0.0	0.0	0.0	0%	0%
<i>Mainland Finland – RDP</i>	160.0	97.8	38.4	61%	24%
France	226.9	83.2	26.5	37%	12%
<i>Alsace – RDP</i>	1.4	0.0	0.0	0%	0%
<i>Aquitaine – RDP</i>	2.8	0.0	0.0	0%	0%
<i>Auvergne – RDP</i>	6.7	2.0	0.0	30%	0%
<i>Ile-de-France – RDP</i>	3.8	0.0	0.0	0%	0%
<i>Basse-Normandie – RDP</i>	4.0	1.4	0.0	34%	1%
<i>Bourgogne – RDP</i>	9.5	1.3	0.4	13%	4%
<i>Bretagne – RDP</i>	5.8	4.4	0.3	76%	5%
<i>Centre – RDP</i>	6.1	1.6	0.1	27%	1%
<i>Champagne-Ardenne – RDP</i>	9.6	0.0	0.0	0%	0%
<i>Corse – RDP</i>	0.0	0.0	0.0	0%	0%
<i>France – National RDP</i>	0.0	0.0	0.0	0%	0%
<i>France – Rural Network</i>	0.0	0.0	0.0	0%	0%
<i>Franche-Comté – RDP</i>	0.6	0.4	0.0	57%	0%
<i>Guadeloupe – RDP</i>	11.7	6.6	3.1	57%	26%
<i>Guyane – RDP</i>	6.3	3.8	1.0	60%	15%
<i>Haute-Normandie – RDP</i>	3.9	0.0	0.0	0%	0%
<i>Languedoc-Roussillon – RDP</i>	11.6	3.5	0.4	30%	3%
<i>Limousin – RDP</i>	3.1	0.0	0.0	0%	0%
<i>Lorraine – RDP</i>	6.6	0.0	0.0	0%	0%
<i>Martinique – RDP</i>	13.5	0.8	0.0	6%	0%
<i>Mayotte – RDP</i>	9.7	8.2	1.8	85%	19%
<i>Midi-Pyrénées – RDP</i>	11.5	4.6	0.4	40%	3%
<i>Nord-Pas de Calais – RDP</i>	1.8	0.0	0.0	0%	0%
<i>Pays de la Loire – RDP</i>	4.1	3.8	0.1	93%	2%
<i>Picardie – RDP</i>	2.3	0.0	0.0	0%	0%
<i>Poitou-Charentes – RDP</i>	3.0	0.0	0.0	0%	0%
<i>Provence-Alpes-Côte d'Azur – RDP</i>	15.9	1.4	0.1	9%	0%
<i>Réunion – RDP</i>	54.9	32.8	18.9	60%	35%
<i>Rhône-Alpes – RDP</i>	16.7	6.6	0.1	39%	0%
Germany	196.4	129.8	37.0	66%	19%
<i>Baden-Wurttemberg – RDP</i>	22.7	10.3	1.7	45%	8%
<i>Bayern – RDP</i>	4.0	0.6	0.0	14%	0%
<i>Berlin / Brandenburg – RDP</i>	44.2	35.1	9.3	80%	21%
<i>Germany – Rural Network</i>	0.0	0.0	0.0	0%	0%
<i>Hessen – RDP</i>	5.0	6.3	1.8	126%	36%

Resources planned, decided and spent M16 in 2014-2020 (ESI)					
RDP	Total amount planned	Total amount decided	Total amount spent	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
<i>Mecklenburg-Vorpommern – RDP</i>	7.3	7.3	3.4	99%	46%
<i>Niedersachsen / Bremen – RDP</i>	47.2	35.4	8.9	75%	19%
<i>Nordrhein-Westfalen – RDP</i>	9.4	4.2	1.3	45%	14%
<i>Rheinland-Pfalz – RDP</i>	8.7	2.4	0.3	27%	4%
<i>Saarland – RDP</i>	0.0	0.0	0.0	0%	0%
<i>Sachsen – RDP</i>	9.8	2.0	0.5	21%	6%
<i>Sachsen-Anhalt – RDP</i>	11.1	2.5	0.3	22%	3%
<i>Schleswig-Holstein – RDP</i>	16.0	17.5	6.3	109%	39%
<i>Thuringen – RDP</i>	10.9	6.3	3.2	57%	29%
Greece – National RDP	77.8	0.0	0.0	0%	0%
Hungary – National RDP	51.2	2.4	0.0	5%	0%
Ireland – National RDP	62.0	12.4	4.7	20%	8%
Italy	691.6	166.8	33.2	24%	5%
<i>Abruzzo – RDP</i>	9.9	2.5	1.6	25%	16%
<i>Basilicata – RDP</i>	20.0	4.3	1.1	22%	6%
<i>Bolzano – RDP</i>	1.8	0.7	0.0	41%	0%
<i>Calabria – RDP</i>	17.7	3.4	0.8	19%	4%
<i>Campania – RDP</i>	49.3	2.3	0.0	5%	0%
<i>Emilia-Romagna – RDP</i>	61.6	26.8	2.8	43%	5%
<i>Friuli-Venezia Giulia – RDP</i>	14.3	1.0	0.0	7%	0%
<i>Italy – National RDP</i>	93.2	0.0	0.0	0%	0%
<i>Italy – Rural Network</i>	0.0	0.0	0.0	0%	0%
<i>Lazio – RDP</i>	25.0	2.8	0.9	11%	3%
<i>Liguria – RDP</i>	11.8	0.5	0.2	4%	2%
<i>Lombardia – RDP</i>	17.3	6.7	0.3	39%	2%
<i>Marche – RDP</i>	36.7	17.0	0.6	46%	2%
<i>Molise – RDP</i>	11.0	1.0	0.9	9%	8%
<i>Piemonte – RDP</i>	37.7	3.5	0.1	9%	0%
<i>Puglia – RDP</i>	75.0	12.5	6.9	17%	9%
<i>Sardegna – RDP</i>	31.6	0.2	0.0	1%	0%
<i>Sicilia – RDP</i>	41.2	0.0	0.0	0%	0%
<i>Toscana – RDP</i>	30.2	28.3	4.2	94%	14%
<i>Trento – RDP</i>	5.8	4.8	0.2	82%	4%
<i>Umbria – RDP</i>	70.3	33.2	11.8	47%	17%
<i>Valle d'Aosta – RDP</i>	0.4	0.0	0.0	0%	0%
<i>Veneto – RDP</i>	29.8	15.1	0.8	51%	3%
Latvia – National RDP	21.7	6.3	0.3	29%	1%
Lithuania – National RDP	22.2	4.5	1.4	20%	6%
Luxembourg – National RDP	0.0	0.0	0.0	0%	0%
Malta – National RDP	3.7	0.0	0.0	0%	0%
Netherlands – National RDP	61.8	44.4	1.9	72%	3%
Poland – National RDP	68.0	6.8	0.0	10%	0%
Portugal	45.1	42.8	15.1	95%	33%
<i>Azores – RDP</i>	1.8	0.2	0.0	14%	1%
<i>Continental Portugal – RDP</i>	42.4	42.6	15.1	100%	36%
<i>Madeira – RDP</i>	1.0	0.0	0.0	0%	0%
Romania – National RDP	31.4	5.9	0.6	19%	2%
Slovakia – National RDP	48.5	29.2	1.9	60%	4%
Slovenia – National RDP	20.1	3.2	0.0	16%	0%
Spain	256.8	70.0	27.1	27%	11%
<i>Andalucia – RDP</i>	38.6	2.3	0.1	6%	0%

Resources planned, decided and spent M16 in 2014-2020 (ESI)					
RDP	Total amount planned	Total amount decided	Total amount spent	Decision rate	Spending rate
	in €m	in €m	in €m	in %	in %
<i>Aragon – RDP</i>	24.1	9.7	6.3	40%	26%
<i>Asturias – RDP</i>	10.0	0.6	0.0	6%	0%
<i>Baleares – RDP</i>	1.6	1.0	0.1	62%	9%
<i>Canarias – RDP</i>	8.1	0.0	0.0	0%	0%
<i>Cantabria – RDP</i>	0.5	0.2	0.0	49%	2%
<i>Castilla y Leon – RDP</i>	12.5	2.2	0.0	18%	0%
<i>Castilla-La Mancha – RDP</i>	4.8	0.0	0.0	0%	0%
<i>Cataluna – RDP</i>	24.1	14.1	6.5	58%	27%
<i>Extremadura – RDP</i>	13.6	2.3	0.3	17%	2%
<i>Galicia – RDP</i>	31.5	11.6	4.0	37%	13%
<i>La Rioja – RDP</i>	4.1	4.3	0.2	104%	6%
<i>Madrid – RDP</i>	3.8	0.3	0.0	8%	0%
<i>Murcia – RDP</i>	5.9	2.6	0.6	44%	10%
<i>Navarra – RDP</i>	4.8	2.3	0.6	49%	12%
<i>Pais Vasco – RDP</i>	7.4	8.0	2.9	108%	40%
<i>Spain – National RDP</i>	59.0	8.5	5.5	14%	9%
<i>Valenciana – RDP</i>	2.5	0.0	0.0	0%	0%
Sweden – National RDP	153.3	70.0	8.9	46%	6%
United Kingdom	194.3	104.3	17.3	54%	9%
<i>England – RDP</i>	61.8	10.2	3.1	16%	5%
<i>Northern Ireland – RDP</i>	4.7	0.4	0.0	9%	1%
<i>Scotland – RDP</i>	13.6	5.7	3.0	42%	22%
<i>Wales – RDP</i>	114.3	88.0	11.1	77%	10%
Total RDPs	2 777.9	1 119.9	278.1	40%	10%

Source: ADE based on ESI Funds database (situation: 31/12/2018, data retrieval on the 28/08/2019)

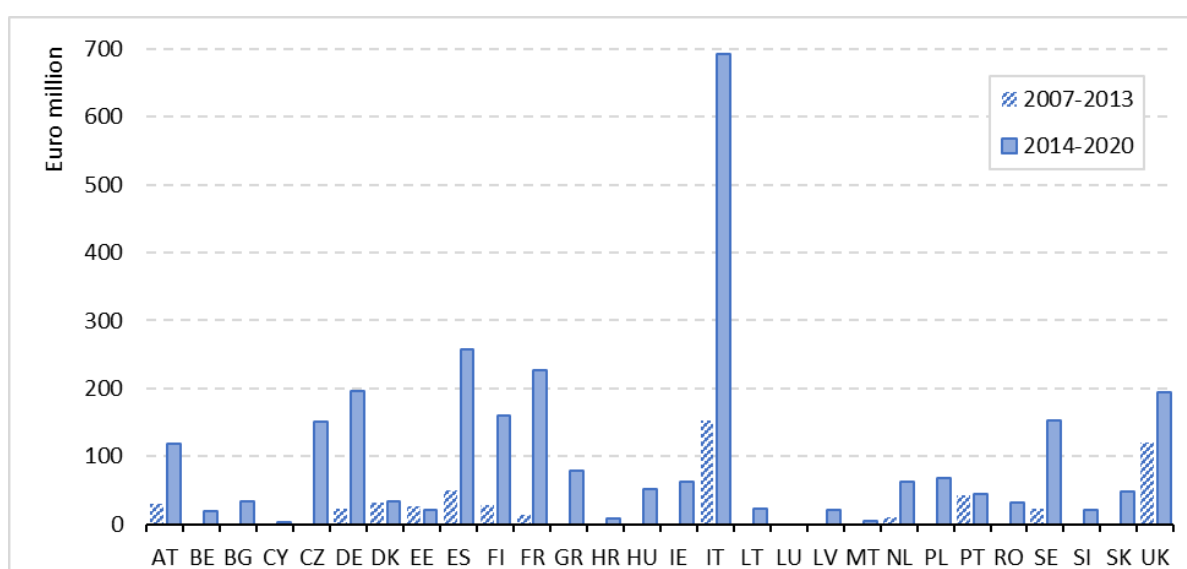
Table 51: Financial resources planned and spent on RD measure 124, spending rate at EU-28 level for 2007-2013 (in total expenditure: EU and National)

Resources planned and spent on m124 in 2007-2013			
MS	Total amount planned	Total amount realised	Spending rate
	in €m	in €m	in %
AT	30.0	13.5	45%
BE	0.0	0.0	0%
BG	0.0	0.0	0%
CY	0.0	0.0	0%
CZ	0.0	41.7	0%
DE	22.1	2.9	13%
DK	31.8	31.9	100%
EE	26.4	4.5	17%
ES	50.5	32.1	64%
FI	27.4	56.2	205%
FR	13.2	5.1	38%
GR	0.0	0.0	0%
HU	0.0	0.0	0%
IE	0.0	0.0	0%
IT	152.0	156.9	103%
LT	0.0	0.0	0%
LU	0.0	0.0	0%
LV	0.0	0.0	0%
MT	1.0	0.3	25%

Resources planned and spent on m124 in 2007-2013			
MS	Total amount planned	Total amount realised	Spending rate
	in €m	in €m	in %
NL	9.8	33.4	342%
PL	0.0	0.0	0%
PT	42.4	11.6	27%
RO	0.0	0.0	0%
SE	23.3	2.1	9%
SI	0.0	0.0	0%
SK	0.0	0.0	0%
UK	119.9	36.4	30%
Total EU-27	549.7	428.6	78%

Source: ADE based on the ex-ante evaluation of CAP 2007-2013 and on DG-Agri database (extraction 31/12/2018)

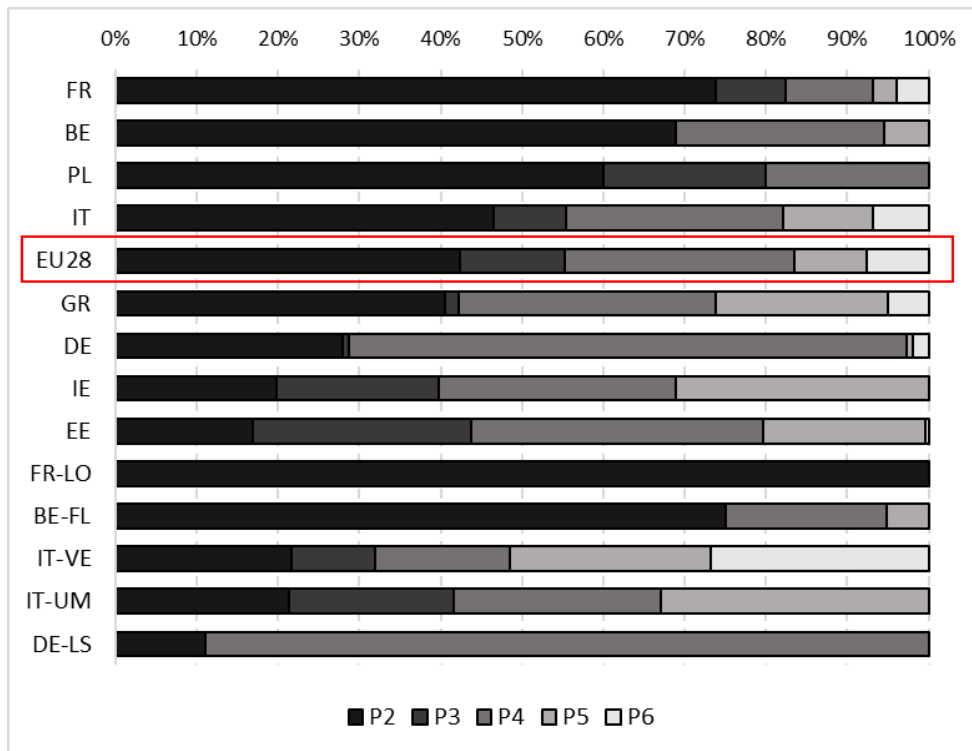
Figure 52: Total public budget planned for cooperation measures between 2007-2013 (m124) and 2014-2020 (M16) periods, at EU-level



Source: ADE based on the ex-ante evaluation of CAP 2007-2013 and ESI Funds (situation: 31/12/2018, data retrieval on the 28/08/2019)

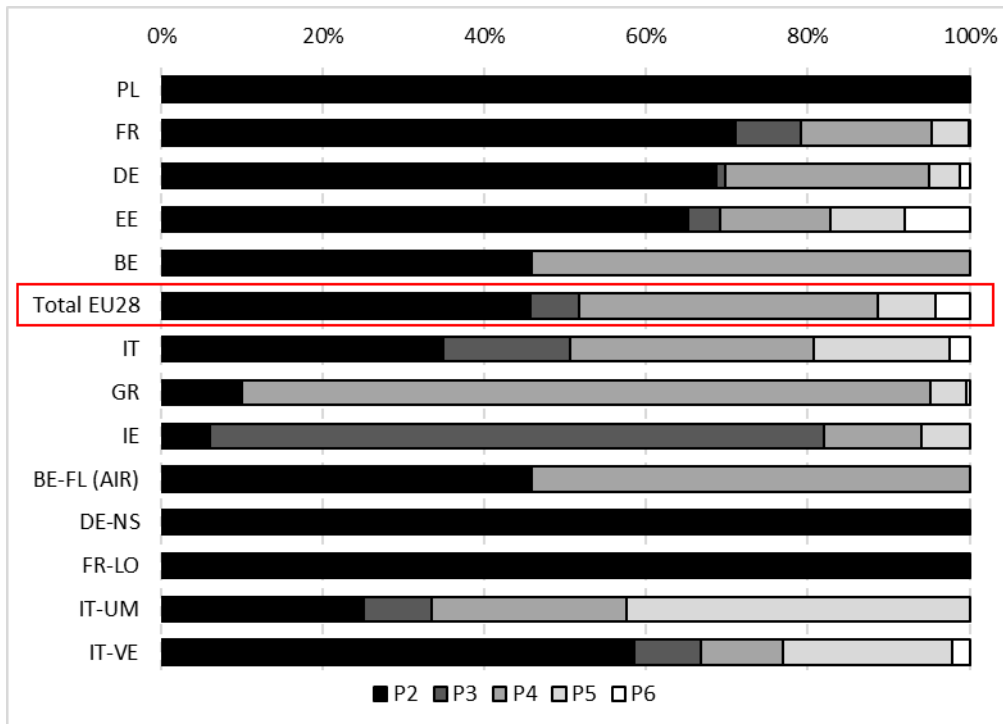
ANNEX 8: ESQ5-6 – SUPPORTING FIGURES

Figure 53: Distribution of planned total public expenditure (EU and national) by priority for RD Measure 1 in CS MS and regions in 2014-2020



Source: ADE based on RDP section 11

Figure 54: M2 – Distribution of planned total public expenditure by Priority for RD Measure 2 in CS MS and regions in 2014-2020



Source: ADE based on RDP section 11

ANNEX 9: ESQ9-10 – TABLES ON CRITICAL FACTORS OF BURDEN**Table 52: M1- Summary of critical factors of burden from the case studies (score higher than 3=intermediate difficulty) (MA= managing authority, TB= training body)**

Phases of the process and critical factors of burden	Case studies							
	Veneto-IT	Umbria-IT	Flanders-BE	Lorraine-FR	Lower Saxony-DE	Estonia	Greece	Poland
Call for applications								
a) Inadequacy of standard costs	TB	TB				TB		
b) Quantification of "reasonable costs" (inadequate for specialised courses)				MA				
c) Changes of implementing rules over time	TB	TB						TB
d) Low ceilings for expenditures	TB					TB		TB
e) Lack of adequate national guidelines		MA						
f) Too restrictive guidelines						TB		
g) Requirements and accreditation procedure for beneficiaries				MA		MA, TB		
Applications' assessment								
h) Complex selection criteria and procedures	TB	MA, TB					MA, TB	TB
i) Data collection and scores' calculation not completely automated			MA					
j) Complexity of training projects		MA, TB						
k) Inadequate skills in the selection process				MA			MA	
l) Organising the work of evaluation commission						MA	MA	
m) High number of projects to be assessed						MA		
n) Long times of assessment						TB		TB
Projects' implementation								
o) Financial constraints imposed by the national Paying Agency		MA						
p) Too constraining allocation by focus areas		MA						
q) Burdensome control and payment system		TB					MA, TB	TB
r) Administrative controls, not proportioned to projects financial size			MA		MA, TB	TB	MA, TB	TB
s) Maintenance of e-portal			MA					
t) Fragmented payments			MA					
u) Lack of flexibility in training activities			TB					TB
v) Lack of advance payment				TB				
w) Lack of IT support					MA, TB		MA, TB	

Source: CREA elaboration from interviews and case study reports

Table 53: M16- Summary of critical factors of burden from the case studies (score higher than 3=intermediate difficulty) (MA= managing authority; OG= Operational Group)

Phases of the process and critical factors of burden	Case studies							
	Veneto-IT	Umbria-IT	Flanders-BE	Lorraine-FR	Lower Saxony-DE	Estonia	Ireland	Poland
Call for applications								
a) Preparing call for innovation brokering /innovation projects	MA					MA		MA
b) Lack of adequate personnel for animation/information						MA		
c) Changes of implementing rules over time	OG							OG
d) Lack of adequate national guidelines								
e) Too few resources allocated	OG							
f) Too short deadline for the call			OG	OG			OG	
Applications' assessment								
g) Complex selection criteria and procedures		OG						OG
h) Documents supporting candidate eligibility (quality and quantity)		MA, OG				MA		
i) Complexity of OG's projects						MA		
j) High number of projects to be assessed						MA		
k) Long times of assessment		MA						OG
Projects' implementation								
l) Management of project by the lead partner (a farmer sometimes)	OG		OG	OG			OG	OG
m) Rigid structure of the partnership over time				OG				
n) Too constraining allocation by focus areas		MA						
o) Burdensome control and payment system (no simplified costs)			OG	OG		OG		OG
p) Administrative controls, not proportioned to projects financial size			OG					OG
q) Public procurement rules for external services		OG	OG	OG	OG	OG		
r) Documents supporting "de minimis" expenditures		OG						
s) Documents needed for payments claims	OG					OG		OG
t) Lack of advance payment		OG		OG	OG	OG		
u) More focus on financial issue than on results			OG					OG

Source: CREA elaboration from interviews and case study reports

Table 54: M2- Summary of critical factors of burden from the case studies (score higher than 3=intermediate difficulty) (MA=managing authorities; AB= Advisory bodies)

Phases of the process and critical factors of burden	Case studies						
	Veneto-IT	Umbria-IT	Flanders-BE	Lorraine-FR	Lower Saxony-DE	Estonia (M2.3)	Poland
Call for applications							
a) Complexity of EU regulation	MA			MA	MA		
b) Inadequacy of standard costs	AB	AB					
c) Low ceilings for expenditures	MA						AB
d) Lack of adequate national guidelines	MA						
e) Too short deadline for the call			AB				
f) Requirements and accreditation procedure for beneficiaries		AB					
g) Guidelines for applicants, including application forms	MA				MA		
Applications' assessment							
h) Complex selection criteria and procedures					MA	MA	AB
i) High number of projects to be assessed						MA	
Projects' implementation							
j) Too constraining allocation by focus areas		MA					
k) Changes of implementing rules over time					AB		
l) Burdensome control and payment system			AB			MA	AB
m) Administrative controls, not proportioned to projects financial size					AB		AB
n) Availability of IT support and personnel in MA			AB				
o) Efficiency of e-portal			AB				

Source: CREA elaboration from interviews and case study reports

ANNEX 10: STATE AID CASES INCLUDING KNOWLEDGE TRANSFER, ADVICE AND INNOVATION (2014-2018)

The set of tables below show the number of cases which include at least one article / section of the following:

- Art. 21 Aid for knowledge transfer and information actions
- Art. 22 Aid for advisory services
- Art. 31 Aid for research and development in the agricultural and forestry sectors
- 1.1.10.1 Aid for knowledge transfer and information actions
- 1.1.10.2 Aid for advisory services
- 1.1.11 Aid for co-operation in the agricultural sector

Table 55: Number of State Aid cases including knowledge transfer, advice and innovation (2014-2018)

Procedure type	2014	2015	2016	2017	2018	TOTAL
N - Notified	4	5	1	4	5	19
NN - case of unlawful aid				1		1
XA - Agriculture block exemption	100	163	113	85	85	546
TOTAL	104	168	114	90	90	566

MS	N - Notified	NN - case of unlawful aid	XA - Agriculture block exemption	TOTAL
Austria			6	6
Belgium			106	106
Bulgaria			1	1
Croatia			2	2
Czech Republic			14	14
Czechia	1		6	7
Denmark			6	6
Estonia			4	4
Finland			5	5
France	2		7	9
Germany	8	1	57	66
Hungary	1		1	2
Ireland	1		11	12
Italy	4		75	79
Latvia			5	5
Lithuania			6	6
Luxembourg			4	4
Netherlands	1		73	74
Poland			1	1
Slovenia			78	78
Spain			31	31
Sweden			5	5
United Kingdom	1		42	43
TOTAL	19	1	546	566

XA - agriculture block exemption ABER

MS	A 21	A 22	A 31	A21 & A22	A21 & A31	A21 & A22 & A31	TOTAL
Austria				5	1		6
Belgium	54	11	19		22		106
Bulgaria		1					1
Croatia			2				2
Czech Republic	6		2	2		4	14
Czechia	3	1	2				6
Denmark	1	1	1	1	1	1	6
Estonia	3			1			4
Finland		2	2		1		5
France	1	1	3	1		1	7
Germany	17	13	11	7	4	5	57
Hungary				1			1
Ireland	5	2	3		1		11
Italy	34	6	9	12	12	2	75
Latvia	4		1				5
Lithuania	2	1	3				6
Luxembourg	2	1	1				4
Netherlands	47	2	14	4	5	1	73
Poland			1				1
Slovenia	78						78
Spain	7	16	8				31
Sweden	1		1		1	2	5
United Kingdom	16	9	4	7	1	5	42
TOTAL	281	67	87	41	49	21	546

N, NN - Notifications under the Guidelines

MS	S 1.1.10.1	S 1.1.10.2	S 1.1.11	S1.1.10.1 & 2	S1.1.10.1 & 2 & S 1.1.11	TOTAL
Austria						
Belgium						
Bulgaria						
Croatia						
Czech Republic						
Czechia	1					1
Denmark						
Estonia						
Finland						
France		1	1			2
Germany	2	1	5	1		9
Hungary					1	1
Ireland	1					1
Italy	2	2				4
Latvia						
Lithuania						
Luxembourg						
Netherlands	1					1
Poland						
Slovenia						
Spain						
Sweden						
United Kingdom	1					1
TOTAL	8	4	6	1	1	20

Source: State Aid cases publicly available (scoreboard), July 2020

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