



Evaluation of the impact of the CAP on generational renewal, local development and jobs in rural areas

Final Report

Written by CCRI, OIR and ADE S.A.
August 2019



EUROPEAN COMMISSION

Directorate-General for Agriculture and Rural Development
Directorate C – Strategy, Simplification and Policy Analysis
Unit C.4 – Monitoring and Evaluation

Contact: AGRI Evaluation

E-mail: AGRI-EVALUATION@ec.europa.eu

*European Commission
B-1049 Brussels*

Evaluation of the impact of the CAP on generational renewal, local development and jobs in rural areas

***Europe Direct is a service to help you find answers
to your questions about the European Union.***

Freephone number (*):

00 800 6 7 8 9 10 11

(*) The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

LEGAL NOTICE

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

More information on the European Union is available on the Internet (<http://www.europa.eu>).

Luxembourg: Publications Office of the European Union, 2019

ISBN 978-92-76-09261-2
doi: 10.2762/364362
KF-01-19-655-EN-N

© European Union, 2019
Reproduction is authorised provided the source is acknowledged.

Evaluation of the impact of the CAP on generational renewal, local development and jobs in rural areas

Authors: **Janet Dwyer**, Evgenia Micha, Katarina Kubinakova, CCRI ; Patrick van Bunnem, ADE ; Bernd Schuh, Ambre Maucorps, ÖIR ; Francesco Mantino, CREA.



University of Gloucestershire
Francis Close Hall Campus
Swindon Road
Cheltenham GL50 4AZ (UK)



Austrian Institute for Regional Studies
Franz-Josefs-Kai 27
A-1010 Wien/Vienna (Austria)



Rue de Clairvaux 40, Bte 101
B-1348 Louvain-la-Neuve (Belgium)
Tel: +32 10 45 45 10
Fax: +32 10 45 40 99
E-mail: ade@ade.be
Web: www.ade.be

Date: August 2019

ACKNOWLEDGMENTS

This study was undertaken between June 2018 and August 2019 by CCRI, University of Gloucestershire, ADE and OIR. The study was led by Janet Dwyer of CCRI, and the principal authors of this report are listed on the previous cover page.

In addition, the study team would like to thank the following persons for their valuable contributions to the study:

Merit Mikk and Argo Peepson, CEET, Estonia

Katarzyna Zawalinska, IRWIRPAN, Poland

Barbara Forcina, Barbara Zanetti, Andrea Arzeni, Andrea Bonfiglio, Francesca Varia, Alessandra Vaccaro, Dario Macaluso, Fabio Pierangeli and Serena Tarangioli, CREA, Italy

Szabolcs Biro, Borbála Benedek and Eszter Hamza, AKI, Hungary

Thomas Dogot, ULg Gembloux Agrobio Tech, Belgium, for France

Arndt Munch and Helene Gorny, Mailin Gaupp-Berghausen, Roland Gaugitsch, Florian Fasching, OIR

Monika Beck and Patrick van Bunnem, ADE

John Powell, Nick Lewis and Imogen Young, CCRI.

Finally, we would like to thank all the members of the Commission Steering Group for their valuable time and efforts in commenting and reviewing earlier drafts, supplying new reports and data, and contributing to the workshop.

"The information and views set out in this evaluation study are those of the authors and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use which may be made of the information contained therein."

ABSTRACT

Strengthening the socio-economic fabric of rural areas is a key CAP objective, including generational renewal (GR). This evaluation assessed how the current CAP affects GR in rural Europe, also local development and jobs. It examined Young Farmer (YF) and other CAP measures aiming to attract young people to farm, live and work in rural areas. Methods included literature review, EU survey, interviews and workshops, data analysis using correlation, multicriteria, comparative econometric and CGE modelling, and case studies in seven contrasting Member States (MS). It concluded CAP GR measures have a positive impact on YF numbers, business performance and local employment, varying from very minor to significant according to local context. For Pillar 2 aids, impacts and causes are clear, but it is too early to judge Pillar 1 YF supplements. Aids are most effective and efficient delivered in mixed-measure packages combining planning, investment, collaboration and advice, and conditional on beneficiary training. Impact is enhanced where institutional and fiscal policies ease access to land and capital. In very marginal areas, aid for rural diversification and services is also vital. The study recommended a more holistic, flexible and strategic approach to GR in the future CAP, also increased MS emphasis upon new entrants, innovation and rural quality of life provision.

RÉSUMÉ

Le renforcement du tissu socio-économique des zones rurales est un objectif clé de la PAC, en ce compris le renouvellement des générations (RG). Cette évaluation a couvert les effets des instruments et mesures de la PAC sur le renouvellement des générations en Europe rurale, ainsi que sur le développement local et l'emploi. Les aides aux jeunes agriculteurs et d'autres mesures de la PAC visant à inciter les jeunes à s'installer en agriculture, à vivre et à travailler dans les zones rurales ont été examinées. L'évaluation a été basée sur une revue de la littérature, une enquête en ligne à l'échelle de l'UE, des entretiens et des groupes de travail, une analyse de données utilisant des corrélations, des techniques d'analyse multivariée, des comparaisons économétriques et des modèles d'équilibre général calculable (CGE), ainsi que des études de cas dans sept États membres présentant des situations contrastées. L'évaluation a conclu que les mesures de la PAC portant sur le renouvellement des générations (RG) ont des effets positifs sur le nombre de jeunes agriculteurs, la performance des entreprises et l'emploi local, allant de très mineurs à significatifs en fonction du contexte local. Concernant les aides du Pilier II, les impacts et les causes sont clairs, mais il est encore trop tôt pour juger du supplément aux Jeunes agriculteurs accordé dans le cadre du Pilier I. Les aides sont jugées plus efficaces et efficientes lorsqu'elles sont fournies par un ensemble combinant plusieurs mesures de planification, investissement, collaboration et conseil agricole, ainsi que lorsqu'elles sont conditionnées à la formation des bénéficiaires. L'impact est renforcé lorsque les politiques institutionnelles et fiscales facilitent l'accès à la terre et au capital. Dans les régions rurales marginalisées, les aides à la diversification et les services ruraux sont également essentiels. L'évaluation a recommandé une approche plus systémique, flexible et stratégique du renouvellement des générations dans la future PAC, également en mettant davantage l'accent de la part des États membres sur les nouveaux entrants, l'innovation et la qualité de vie en milieu rural.

TABLE OF CONTENTS

ACKNOWLEDGMENTS

ABSTRACT

RÉSUMÉ

LIST OF ABBREVIATIONS

EXECUTIVE SUMMARYI

RÉSUMÉ EXÉCUTIFIX

1.	INTRODUCTION – SCOPE OF THE REPORT, STUDY CONTEXT AND FOCUS	1
1.1	Purpose and scope of this report.....	1
1.2	Describing the study topic: generational renewal in rural Europe	1
1.3	The developing role of the CAP in generational renewal	4
1.4	Description and inventory of measures.....	6
1.5	Study Focus and Scoping	7
1.5.1	Scoping of relevant measures, for use in the study	7
1.5.2	Scope of the study and rationale for a nested approach, with case studies	13
2.	INTERVENTION LOGIC AND ANALYSIS OF THE EVALUATION STUDY QUESTIONS.....	15
2.1	Intervention logic diagrams and details	15
2.2	Evaluation Study Questions (ESQs) – logical sequence and approach to answering.....	17
3.	METHODOLOGY – GENERAL APPROACH, INFORMATION SOURCES, MAIN METHODS, CASE STUDIES AND SELECTION APPROACH.....	21
3.1	General Approach to the study	21
3.2	Information sources	22
3.3	Process of the study.....	23
3.4	Brief summary of main tasks and deliverables.....	23
3.5	Identification and assessment of EU level datasets, clustering and case study selection	24
3.5.1	Use of EU level secondary datasets	24
3.5.2	Use in the EU-level data analysis	24
3.5.3	First analysis: clustering exercise and typology of NUTS 3 areas.....	26
3.5.4	Justification for case studies, and case study selection	29
3.6	Principles of validation and triangulation.....	31
4.	SUMMARY OF EVIDENCE GATHERED AND RESULTS OF ANALYSIS.....	32
4.1	EU literature review	32
4.1.1	Issues facing Young Farmers in Europe.....	32
4.1.2	Impact of CAP support targeting young farmers.....	34
4.1.3	Challenges of assessment and Policy enhancement	37
4.2	EU level survey of Member State administrations.....	37
4.2.1	Introduction	37
4.2.2	Findings.....	37
4.3	EU level data analysis	40
4.3.1	Data availability and relevance	40
4.3.2	General overview of relevant context and expenditure in local areas (NUTS 3) of the EU	41
4.3.3	Correlation analysis.....	49
4.3.4	Multivariate, multi-criteria analysis (MCA).....	52
4.4	Case Studies – comparative analysis.....	59
4.4.1	Effectiveness of CAP GR measures	59
4.4.2	Comparative review of efficiency in case studies	64

4.4.3	FADN counterfactual analysis	72
4.4.4	Regional CGE analysis	85
4.4.5	Examples of good practice	89
5.	ANSWERS TO THE EVALUATION STUDY QUESTIONS	97
5.1	Explanation of the format and order of answering	97
5.2	Effectiveness and Relevance – ESQs 2, 3, 4; 5, 13, 15; 12 and 16.....	98
5.2.1	ESQ2: To what extent have the relevant CAP measures/instruments focusing on generational renewal contributed to fostering innovation and inter-generational knowledge transfer?.....	98
5.2.2	ESQ 3: To what extent have the CAP Young Farmer measures been effective in supporting generational renewal?	108
5.2.3	ESQ 4: To what extent have the CAP measures/instruments relevant for generational renewal contributed (directly and indirectly) to improving rural areas’ development?.....	120
5.2.4	Overall assessment of ESQs 5-13-15.....	130
ESQ 5:	To what extent have the CAP measures/instruments relevant for generational renewal impacted directly and indirectly the maintenance/creation of jobs in rural areas?	130
ESQ 13:	To what extent have the respective CAP measures/instruments focusing on the generational renewal been relevant in fostering rural development by maintaining/creating jobs?	130
ESQ 15:	How have the relevant CAP measures contributed to enhancing sustainable employment in rural areas, especially activities in up- and downstream sectors related to agriculture?	130
5.2.5	Overall assessment of ESQs 12-16	141
ESQ 12:	Relevance of CAP Measures/instruments focusing on generational renewal in enabling generational renewal in agriculture - Extent to which the Measures correspond with identified needs and extent to which they enable access to: Land; Capital and Knowledge.....	141
ESQ 16:	Impact of relevant CAP Measures/instruments on land mobility (change in land ownership, or in other type of land management such as renting): On direct beneficiaries; and on other stakeholders	141
5.3	EFFICIENCY – ESQs 6 and 8.....	154
5.3.1	ESQ 6: Efficiency of the CAP Measures/instruments in fostering generational renewal.....	154
5.3.2	ESQ 8: Assess the administrative burden of relevant CAP Measures/instruments linked to generational renewal at each of the following levels: Programme/Measure beneficiaries; MS administration (e.g. MA & PA; local delivery); EU level.	157
5.4	COHERENCE – ESQs 9 and 10, 11 and 14	162
5.4.1	ESQ 9: Extent to which CAP Measures/instruments linked to generational renewal are coherent with each other	162
5.4.2	ESQ 10: The level of coherence between the relevant CAP Measures/instruments on generational renewal and other EU policies and actions	166
5.4.3	Overall assessment of ESQs 14-11.....	171
ESQ 14:	External factors affecting CAP Policies related to generational renewal	171
ESQ 11:	The impact of external factors on the relevant CAP Measures/instruments linked to generational renewal, taking account of Policies and actions at local /regional /national levels including those beyond the agricultural domain that may impact generational renewal.	171
5.5	Overall effectiveness, indirect efficiency for Quality of Life, and added value – ESQs 1, 7 and 17.....	180
5.5.1	Overall assessment of ESQs 1-17	180
ESQ 1:	To what extent have all CAP measures/instruments had an effect on fostering generational renewal in rural areas?	180

ESQ 17: What is the added value contributed by CAP Measures/instruments to generational renewal	180
5.5.2 Evidence from other ESQ	183
5.5.3 Impact of the whole CAP on GR in agriculture and rural areas of Europe	183
5.5.4 EU Added Value	188
5.5.5 ESQ 7: Efficiency of all CAP Measures/instruments in fostering generational renewal indirectly, by improving quality of life in rural areas	189
6. CONCLUSIONS AND RECOMMENDATIONS	193
6.1 Conclusions - effectiveness and relevance of CAP GR measures	193
6.1.1 Overall impact of the whole CAP on Generational Renewal	193
6.1.2 Impact of GR measures upon inter-generational knowledge transfer and innovation	195
6.1.3 Impact of the CAP Young Farmer measures on Generational Renewal	196
6.1.4 Contribution of CAP GR measures to fostering social capital, infrastructure and good governance in rural areas	198
6.1.5 CAP GR measures' impacts upon rural employment, its quality and durability	199
6.1.6 CAP GR measures and access to land, capital and knowledge	200
6.2 Conclusions on efficiency and the administrative burden	202
6.2.1 Efficiency	202
6.2.2 Administrative burden	203
6.3 Conclusions on coherence	204
6.4 Conclusions on EU Added Value	205
6.5 Recommendations	207
6.5.1 Summary of recommendations from National Workshops in CS countries	207
6.5.2 Recommendations from the EU level workshop with Commission officials	210
6.5.3 Recommendations arising from the ESQ findings	210
7. REFERENCES	213

LIST OF FIGURES

Figure 1. Theoretical model of succession decisions	3
Figure 2. Specific intervention logic for CAP goals and instruments	16
Figure 3. logical sequence and clustering of ESQs	18
Figure 4. Mind-map to understand linkages between policies and GR in Europe	20
Figure 5. Logic of the study approach	21
Figure 6. Study Process	23
Figure 7. clustering – distribution of clusters by within-group variability	27
Figure 8. Map of Clusters	29
Figure 9. Online survey: respondents' views of the most common entry routes into farming	38
Figure 10. EU online survey: views about young people's strongest motivations to live in rural areas (ave. score, maximum 5)	39
Figure 11. SHARE OF FARMERS UNDER 35	38
Figure 12. SHARE OF FARMERS OVER 65	41
Figure 13. Change in the share of young farmers in the total farming population, 2013-2016 (in percentage) and 2003-2013 (graph)	42
Figure 14. POPULATION TRENDS 2002-2017	40
Figure 15. GDP PER CAPITA, 2016	43
Figure 16. PILLAR 1 YF SUPPLEMENT PER PRINCIPAL FARMER <35, 2016	41
Figure 17. TOTAL DP PER PRINCIPAL FARMER < 35, 2016	44
Figure 18. PILLAR 2, M7 (RURAL SERVICES) PAYMENT PER CAPITA,	42
Figure 19. EARLY RETIREMENT SCHEME SPEND, 2007-2013	45
Figure 20. PLANNED SPEND ON FOCUS AREA 2B, PER FARM 2014-2020	43
Figure 21. TOTAL PLANNED SPEND FOCUS AREA 2B, 2014-2020	46
Figure 22. PERCENTAGE WORKFORCE EMPLOYED IN PRIMARY SECTOR	44
Figure 23. GVA IN AGRICULTURE (both 2016)	47

Figure 24. CHANGE IN TOTAL GDP FROM 2006-8 TO 2013-15, in percentage	48
Figure 25. Pillar 1 Young Farmer Payments 2015 and 2016 and Change in number of farms managed by under 35s, 2013 to 2016	49
Figure 26. Total Direct Payments received by YF, € per farm 2015+2016 and change in YF numbers 2013-2016	50
Figure 27. Total expenditure planned under Pillar 2 Focus Area 2B over 2014-2020, Change in the number of farms managed by under 35s (in absolute numbers) between 2013 and 2016	51
Figure 28. Division of NUTS3 regions into clusters in the MCA	56
Figure 29. Which policies are considered most important for GR (beneficiaries' views)?	64
Figure 30. Different types of Pillar 2 delivery models supporting young farmers in GR	65
Figure 31. Public costs (in Euro) of delivery per application in different regions and by delivery phase	66
Figure 32. Times necessary for each phase of the measures for YF (no. of months)	69
Figure 33. AWU per farm and UAA per farm, rate of change between 2012 and 2016 by type of farming and typologies of farms	78
Figure 34. Hired labour on-farm, change between 2012 and 2016 by type of farming and typologies of farms	79
Figure 35. Net capital per UAA and net investment per UAA, rate of change between 2012 and 2016 by type of farming and typologies of farms	80
Figure 36. Total output per farm and per AWU, rate of change between 2012 and 2016 by type of farming and typologies of farms	81
Figure 37. Composition of subsidies by type of farming and typologies of farms, rate of change between 2012 and 2016 by type of farming and typologies of farms	83
Figure 38. A suggested rural typology of Poland's NUTS 2 regions	85
Figure 39. CAP GR measures impact upon GDP and employment, all Poland, % change 2014-2020	86
Figure 40. Predicted employment impacts of CAP GR measures, by sector, 2014-2020	87
Figure 41. Estimated impact of GR measures on regional GDP, 2014-2020	88
Figure 42. Impacts of GR measures upon the case study region, 2014-2020, % change	88
Figure 43. Agricultural training of farm managers, 2013	100
Figure 44. Educational attainment in rural areas compared to urban areas, trend over time	100
Figure 45. Numbers of rural inhabitants with tertiary education, 2016	100
Figure 46. Targets for the number of EIP operational groups (OG) planned in the 2014-2020 RDPs	101
Figure 46 a. Operational Groups by type in the EIP AGRI database (May 2019)	94
Figure 47. Age group of farmers and trends since 2003	111
Figure 48. Young farmers	112
Figure 49. Broadband cover by MS, total and rural 2017	123
Figure 50. Percentage of rural population benefiting from new or improved services /infrastructures (ICT)	124
Figure 51. Number of holdings and SMEs to be supported for non-agricultural investment /business set-up in rural areas	134
Figure 52. Jobs to be created in supported projects (Leader) (focus area 6B)	134
Figure 53. EU land prices, arable land	143
Figure 54. EU Land rental prices, 2016	143
Figure 55. (i) % of farm managers with basic or higher training, compared to (ii) share of young farmers under 35 in total farm managers, 2016	144
Figure 56. Difficulties experienced in the previous year (% responding yes)	147
Figure 57. Farmers' experience in seeking loans from banks	148
Figure 58. Key reasons given by the bank for refusing the application	148
Figure 59. People at Risk of poverty or social exclusion by degree of urbanization (%)	172
Figure 60. Poverty risk by types of area	173
Figure 61. Relative GDP levels	173
Figure 62. Rural Residents' Perception of their quality of life	174
Figure 63. Health care	174
Figure 64. Internet access	175
Figure 65. Multi-modal accessibility, EU NUTS 3 regions, 2016	175

LIST OF TABLES

Table 1. Current CAP: logic for instruments and measures affecting generational renewal ...	9
Table 2. Legend to figure 2 – measure codes	17
Table 3. DG Agri data sets provided	25
Table 4. Case study selection and characterisation	30
Table 5. EU online survey: specific policies cited as helping GR in each Member State	39
Table 6. Indicators used in the multivariate analysis, measurements units and description	54

Table 7.	Results of the PCA and correlation strength of the indicators for each component	55
Table 8.	Average planned expenditure on key Pillar 2 measures, 2014-2020 (in €millions)	57
Table 9.	OLS results by cluster, impact of CIs on change in no. of farmers < 35 years old.	58
Table 10.	Priority 2 Competitiveness Focus Area 2B: Planned expenditure CS, 2014-2020...	60
Table 11.	Estonia's Financial Instruments for rural development, 2014-2020	61
Table 12.	National schemes for GR, with funding where this is noted	61
Table 13.	Costs related to the preparation of a single application, different countries.....	67
Table 14.	Eligibility requirements in terms of economic size of farms supported by YF measures by country	67
Table 15.	Categories and factors influencing efficiency of YF aids in different CS	70
Table 16.	Farm types distribution in FADN dataset	76
Table 17.	Structural characteristics of farms by typologies of farm production and ageSource: CREA elaboration from Italian FADN-constant sample	77
Table 18.	Key differences by farm type	81
Table 19.	Impacts on farm employment of each variable of the GMM model	84
Table 20.	Impact of GR measures on household consumption, Poland, 2014-2020	87
Table 21.	ESQs and main evidence sources used to answer them.....	97
Table 22.	RDP Spend on relevant GR measures, NUTS 3 level, illustrating high territorial variation	101
Table 23.	Average age of farmers, and trends over time	111
Table 24.	Relevant Indicators available at NUTS3.....	112
Table 25.	Case Study Comparison of YF payments under Pillar 1 of CAP.....	116
Table 26.	Polish workshop % of participants, views on influence of CAP GR measures	130
Table 27.	Inheritance/Inheritance laws and land transfer	145
Table 28.	Land availability to purchase/lease	145
Table 29.	Capital availability for land purchase/lease	145
Table 30.	Schemes that support land transfer.....	145
Table 31.	Estimated impact of CAP spending 2014-2020 on land prices in Polish regions....	149
Table 32.	Results of the PCA and correlation strength of indicators for each component, total CAP P1 analysis	185
Table 33.	OLS results by cluster, impact of CIs on change in no. of farmer/managers < 35 years old.....	186

LIST OF ABBREVIATIONS

ANC	Areas of Natural Constraint
CAP	Common Agricultural Policy
CEJA	European Association of Young Farmers
CGE	Computable General Equilibrium (type of econometric model)
CI	Composite indicator
COMAGRI	The Agriculture Committee of the European Parliament
COPA-Cogeca	European Farmers and Co-operatives Association
CS	Case Study
EAFRD	European Agricultural Fund for Rural Development
EESC	European Economic and Social Committee
EIP-Agri	European Innovation Partnerships for Agriculture
ELO	European Landowners Organisation
EP	European Parliament
ERDF	European Regional Development Fund
ESF	European Social Fund
ESQ	Evaluation study question
FA	Focus Area
FADN	Farm Accountancy Data Network
FAS	Farm Advisory System
GAEC	Groupement Agricole d'Exploitation en Commun (French model, farm partnership)
GDP	Gross Domestic Product
GR	Generational Renewal
MCA	Multi-Criteria Analysis
MS	Member State of the European Union
OG	Operational Group
OP	Operational Programme (funded by EU and/or national funds)
RDP	Rural Development Programme
ToR	Terms of Reference
YF	Young Farmer

EXECUTIVE SUMMARY

Aims and Approach

The aim of this evaluation was to assess how different Common Agricultural Policy (CAP) measures and instruments affect generational renewal (GR) in rural areas, with a secondary focus on local development and rural jobs.

The evaluation focused on CAP instruments and measures having both direct and indirect impacts on GR in rural areas. In particular, it assessed the impact of young farmer (YF) supplements to Direct Payments in Pillar 1; YF business start-up aid in Pillar 2 (Measure 6.1), Pillar 2 investment measures when modulated in favour of YF (e.g. M4.1), supporting measures which are tailored to accompany them (e.g. M1 training, M2 advice, M16 co-operation); and brief comparison of the 2007-2013 early retirement measure. It also covered CAP measures promoting wider rural GR, wherever this goal is explicit in targeting or selection /eligibility criteria (e.g. under LEADER, Measure 7, or Measures 6.2-6.3). In overview, the 'CAP measures relevant to GR' vary between countries and regions according to the specific choices of Programming Authorities. The evaluation covers the programming period 2014-2020 (earlier evidence is also cited, where relevant), in all EU-28 Member States (MS).

The challenge to foster 'balanced territorial development' is enshrined in EU policy in the Lisbon Treaty and Europe 2020 Strategy. Within this, rural vitality – 'a living countryside' – has been an increasing concern of structural and agricultural policies since the 1970s. The EU has an ageing population and in the farm sector, this is more visible: older people account for 31% of the farming population and 55% of EU farmers are 55 or older. The Commission Communication 'The Future of Food and Farming', 29 November 2017 states **strengthening the socio-economic fabric of rural areas** as a key objective of the CAP post-2020, in two main aspects: 1) growth and jobs; and 2) generational renewal; in rural areas.

The *methodology* adopted a mixed-method, triangulated approach with five main elements:

- **EU level informed opinion** - literature review, selected key stakeholder interviews and an online survey of Member State administrations via ENRD contact points;
- **EU level data analysis** - exploring relations between context, inputs and impacts, including: maps of key variables; correlation analyses; econometric multicriteria analysis (MCA); and generating two rural typologies at NUTS 3 level which influenced case study selection and supported identification and estimation of certain impacts;
- **Case-based detailed analysis** of causal effects, delivery approaches and their impacts, efficiency and added value in case studies (CS) covering **seven contrasting Member States** (France, Belgium-Flanders, Italy, Estonia, Hungary, Poland, Ireland);
- **Additional, focused quantitative analyses:** counterfactual analysis of FADN panel data in France and Italy to assess the impact of YF aids upon farm performance; and CGE modelling to examine the impact of GR expenditure upon rural employment, based in Poland but considering its wider EU relevance;
- **Triangulation** via comparative analysis of CS findings; EU level evidence and modelling results; and **validation** in seven workshops at national level, and three workshops at EU level involving stakeholders and policy officials - two hosted by ENRD.

Case studies analysed material at national, regional and local (NUTS 3) levels. This included secondary sources (previous evaluations, research), interviews with policy officers, experts, stakeholders and beneficiaries, and primary data on delivery and beneficiary impacts, plus examples of good practice in policy design/delivery, innovation and coordination.

The study provided answers to 17 Evaluation Study Questions (ESQs) specified in the Terms of Reference. ESQs were grouped under the following themes: Effectiveness and Relevance; Efficiency; Coherence and EU Added Value, as well as overall performance.

Effectiveness covered the impact of YF measures on GR (ESQ 3); and impacts of CAP GR measures upon factors including: intergenerational knowledge transfer and innovation (ESQ 2), social capital, infrastructure and governance (ESQ 4); rural jobs, their quality and durability (ESQs 5, 13 and 15); and access to land, capital and knowledge (ESQs 12, 16).

Efficiency addressed the efficiency of delivery of CAP GR measures and the nature of administrative burdens (ESQs 6, 8). Coherence included the internal coherence of CAP GR measures (ESQ 9); coherence with other CAP and non-CAP EU policies (ESQ 10) and with external factors (ESQs 11, 14). Overall performance included the effectiveness of the whole CAP in promoting GR (ESQ 1), the efficiency of its indirect impacts upon Quality of Life, and EU added value (ESQ 7, 17).

Study Findings

Conclusions on overall effectiveness and relevance

Overall impact of the whole CAP upon GR: The study found evidence that the whole CAP has a positive effect in fostering generational renewal, particularly in agriculture, which varies in extent from significant to only weakly effective between different MS and territories. Differences in the magnitude of impact are determined by a combination of the underlying socio-economic and cultural context, also CAP instrument selection and measure design, as well as delivery choices and financial provision. The best evidence of sustained and positive impact is in MS and regions in which a variety of measures and instruments is used in complementary ways, including funding and investment aids for business start-ups, advice and training, incentives for collaborative institutional, legal, financial and/or fiscal arrangements easing inter-generational transfer, also broader support for rural services and infrastructure. FADN counterfactual analysis in Italy and France demonstrated the additionality of CAP YF aid in enhancing farm performance and business resilience. Modelling and evidence from CS indicates positive impact of YF aids upon farm and rural employment which can be locally significant but is estimated as modest at MS and EU levels.

In respect of non-agricultural GR (encouraging young people to live and work in rural areas), the study found less evidence overall concerning CAP impacts, which is likely because this specific goal is less prioritised, despite significant need being evident in many situations, and because of the strong influence of non-CAP factors. However, where CAP resources were focused upon non-farm GR, principally through LEADER and other Pillar 2 measures including M7 and non-farm elements of M6; significant, positive impacts at local level were found.

The CAP measures most relevant for GR vary between countries and territories within countries, reflecting the different barriers and opportunities for GR, as well as the choices of managing authorities. Case studies and econometric analysis suggest that CAP YF measures have some ability to promote rural vitality in marginal rural territories suffering economic and demographic decline, poor infrastructure and services, with low economic diversification and little value-added in agriculture and forestry; particularly when they are delivered with good supporting advice. However, in some situations the impact of CAP YF aid is constrained by these other limitations, often compounded by wider economic and cultural disincentives to farm. Where this is the case, farmers, experts and policy makers in CS, also previous research and EU level evidence, suggest that parallel approaches which support broader rural development, more diverse economies and quality of life are needed.

The study found that CAP GR measures in agriculture are very effective in cases where complementary national, regional and local policies support and enhance GR. These include institutional mechanisms and fiscal incentives to increase land mobility and ease the process of inter-generational transfer for older, as well as younger, generations. Examples include creating farm partnerships; incentivising share-farming and other collective business models; providing help with retirement income planning and tax breaks for the gradual transfer of assets; and using land banks or creating new non-profit organisations to consolidate and re-let landholdings to new entrants. Older farmers may be disincentivised to transfer their farms to a younger generation if their access to income and a reasonable quality of life depends upon continuing receipt of CAP pillar 1 aids. Initiatives using 'soft' approaches including awareness-raising, advice and planning for successful handover have also proven effective.

It is too early to identify clear evidence of the impact of the YF supplement to direct payments under Pillar 1, introduced in 2015. This 'top-up' has very different significance to farms in different MS, and its pattern of distribution is very different to that for planned spending on GR in Pillar 2 RDPs. CS highlight situations where this aid supports GR in complementary ways to Pillar 2, but it requires careful design of the delivery approach which is not widespread.

This study gathered much evidence which supports the adoption by MS of a multifaceted and co-ordinated approach to GR in agriculture, in which various CAP (and non-CAP) measures operate together in a coherent way. In proven effective and long-established cases, co-ordination means the promotion and integrated delivery of a 'package' of aids, information and incentives to YF and their farms, with a single point of application and a jointly-devised budgetary and assessment process. This reflects the role and responsibilities of Member States having made certain policy choices in designing and calibrating CAP aids. Comparative evidence from CS suggests this is a most cost-effective approach. However, the current logic of programming by single measure is not best designed for using integrated packages, as the financial requirements and selection criteria are specific to individual measures.

Considering support for new entrants to farming, evidence from most CS suggests that current measures and delivery approaches are not optimally tailored to their needs. This group generally faces a greater diversity of challenges than farm successors who inherit from their parents. Stakeholders and experts report that they tend to be older and to lack knowledge about the aids and how to apply for them. The kinds of holding that they typically take on are smaller (maybe part-time) and less conventionally viable than many farms, also their (novel) business plans may involve more risk or be unfamiliar to agricultural assessors. Thus they more often fall short of eligibility or selection criteria, despite potential to make a positive contribution to GR and rural innovation. Without inheriting a farm, they face particular difficulties from rigidity in the land market and tough credit rules for people who lack financial collateral. Finally, they may lack farmer support networks and integration into the knowledge and information system, which leaves them more vulnerable than successor YFs. New entrants in CS agreed that CAP YF aids were more difficult and costly for them to access.

There remain important obstacles to successful agricultural GR in many MS which are probably more efficiently addressed through institutional and fiscal arrangements than direct funding of beneficiaries. These include some types of access to land, and helping older farmers with a gradual transition process in transferring to a younger generation. New Financial Instruments (which case studies suggest have not been widely used for YF) should offer opportunities to address the significant challenge of start-up access to credit.

The balance of impacts of current support in Pillar 1 of the CAP upon rural quality of life depends upon wider socio-economic conditions and other economic and social policies, which vary considerably between countries and regions (case studies). So, the efficiency of spending money on Pillar 1 income support, as a way to promote GR indirectly through enhanced quality of life, will vary in space and over time, as conditions change. Nevertheless, MCA analysis suggests that on a per-Euro basis, for the EU as a whole, putting money into general Pillar 1 support will have a weaker impact in increasing YF numbers than if the same amount of funding were devoted to CAP GR measures.

Conclusions on more specific impacts of CAP GR and YF measures

Pillar 2 measures relevant to GR show a positive, but relatively limited, connection to fostering knowledge exchange and innovation within agriculture. A significant proportion of farmers, experts and policy makers in case studies and EU interviews cited improved knowledge, skills and innovation occurring through CAP GR-supported farm transfers. Across the EU, access to Pillar 2 YF aid is conditional upon beneficiaries having an adequate level of training and this condition is also applied in nine Member States or regions to the receipt of the Pillar 1 YF DPs supplement. CS show how these conditions indirectly promote knowledge exchange, improve YFs' technical and business skills and increase skills in the farming population. The value of delivering advice and business planning in a coherent process, throughout the installation period, was also demonstrated. LEADER has promoted innovation by offering support to new entrants to farming and to non-farm business start-ups, which are seen as increasingly important for rural GR. Positive impact on innovation is anticipated from EiP-Agri operational groups; some embrace GR goals, but impact is not yet assessed (2019).

On the impact of CAP YF measures: a range of evidence suggests these aids have a positive impact upon GR in agriculture, supporting YF incomes, performance and employment. MCA of EU data, also FADN counterfactual analysis of farms in France and Italy, and CGE modelling of the regional economy in Poland, all provide quantified evidence

for this. Case study evidence for significant impact from CAP YF measures, directly or indirectly, is weak in some MS (Flanders, Estonia), strong in others (France, Italy) and intermediate in a third group (Hungary, Poland, Ireland). Stakeholders (farm and non-farm) and policy makers are generally strongly in favour of these aids and most YF are keen to use them, but many also face barriers to access land, capital, and information which are not easily addressed by funding. Some MS have developed additional approaches to tackle barriers. It is widely agreed that CAP YF aids support succession more than new entry, but with evidence of additionality.

Particularly in marginal or remote areas, the impact of CAP YF measures may be dwarfed by negative influences including socio-cultural and wider economic disincentives to farm or live in rural areas. In more prosperous agricultural areas, the YF aids enable GR when the amount of aid offered and the conditions of the offer are significant in relation to farm business size, land values and knowledge provision, but there are also case study examples where aid is either too small or too costly to access, reducing its GR impact.

Big differences in MS decisions concerning rates of aid, maximum eligible areas and links to national reserve entitlements¹, mean that the Pillar 1 YF supplement is reportedly having little effect in some regions, while in others it is felt to have significant, positive impact on farm GR. These views are shared by policy makers, farmers organisations and experts. Pillar 2 YF aids are assessed as effective in a variety of situations, but low additionality was found in cases lacking sufficient advisory and technical assessment support (Poland, Estonia).

CAP YF aids and their value should not be assessed in isolation from wider socio-economic conditions. Even the best YF packages will be ineffective if farming cannot offer a sufficient standard of living or quality of life to attract a younger generation. Rural areas lacking basic infrastructure and services will struggle to retain young people even if returns to farming compare well to other sectors. If economies are buoyant and unemployment low, rural exodus is favoured whenever city living offers young people a better quality of life. Conversely, when economies are in recession and unemployment high, returning to the family farm can be more attractive than subsisting on short-term, low-pay jobs in a city. The YF share in total farmer numbers increased in the early years of the recent global recession, in many MS.

It is possible to design YF packages which give appropriate and significant additionality by tailoring aid rates and delivery to local conditions, using measures in a co-ordinated way and co-ordinating them with non-CAP policies, with support from specific institutions and processes at local level. Through creative use of the Pillar 2 menu of measures, many of these elements could already be CAP-funded.

In fostering social capital, infrastructure and good governance in rural areas, CS evidence suggests CAP GR measures have a limited, mainly positive direct and indirect impact. It found that measures targeting rural services and diversification (notably Pillar 2 M7 and LEADER) have more significant impact in this respect, and that when co-ordinated with YF aids and initiatives, benefits to both arise (in Italy, France and Hungary). RDP evaluations 2007-2013 found that investment in rural services, infrastructure and economic diversification boosted rural vitality and promoted positive social and governance outcomes in CS areas.

CAP GR impacts upon rural employment, its quality and durability: evidence suggests CAP YF measures have a positive impact on employment, relative to the counterfactual. In some MS regions, the reported impact is significant. The MCA indicated that CAP GR spending has a small but positive impact upon numbers of YFs in most EU rural areas, which implies a positive impact upon employment in agriculture, although this depends upon the rate of retirement of older farmers being lower than the rate of recruitment. CGE modelling indicated positive net employment impacts for both CAP Pillar 1 DPs and CAP YF aids (both pillars), in agriculture and in related up- and downstream sectors. It suggests the relative impact of Pillar 2 YF aid upon up- and downstream sectors is greater than the impact of CAP Pillar 1 aid on these sectors (both total Direct Payments and the YF DPs supplement), while total CAP Pillar 1 aid stimulates greater employment in agriculture than Pillar 2 YF aids. This finding, although based on Polish data, is consistent with EU literature and expert opinion in other CS.

¹ In those MS using the Basic Payment Scheme, not those adopting the SAPS where these entitlements don't apply

Regarding non-farm employment impact, great variation between MS was indicated in CS and the MCA. Some cases reported increases in young people employed in rural areas as a result of CAP aids, others indicated decline but found no evidence linking this to CAP funds. Trends in rural employment are strongly influenced by EU-wide economic phenomena, of which CAP resources are only a small part. Broadly, rural employment depends on particular provisions of national legislation and the economic climate. It can be favoured indirectly by CAP funds to provide facilities for young people in small towns and villages, also business start-ups and farm diversification: several CS provided evidence.

To the extent that CAP GR measures promote more robust farm succession, they are likely to increase the socio-economic sustainability of farm businesses. The FADN analysis provides quantified evidence from France and Italy. The study found little evidence for whether non-farm jobs promoted with CAP funds were sustained. In CS the impact of CAP GR aids on both farm and non-farm rural jobs was widely judged positive, although hard to estimate, due to multiple intervening and often much stronger influences from wider economic policies (e.g. national growth plans, public spending cuts), market trends and conditions. Against these, it is likely CAP-induced employment changes are relatively modest: CGE results support this.

CAP GR impacts on access to land, capital and knowledge: Significant evidence from CS, EU survey and research literature confirms these as key factors for successful GR in EU agriculture. However, their causes, and therefore the best mechanisms for addressing them, vary considerably according to local context and farm types – from very marginal to highly productive areas, and from remote and declining regions to growing peri-urban areas.

In respect of their relevance to address access to land, capital and knowledge, CAP GR aids fall into three categories. Firstly, aids which provide funding to assist with the general costs following set-up (Pillar 1 supplement and M6.1) and early years investment (M4.1) have relevance and potential value but they will often be insufficient, on their own, to address these barriers because the funding cannot address wider issues which prevent a good functioning of land and credit markets. Secondly, aids which promote co-operation, innovation, training and advice may be highly relevant in helping YF gain knowledge and think about new ways to access land and capital and to overcome these barriers, also helping older farmers to manage transfers positively. Finally, aids which promote rural economic diversification, added value and better services, including broadband, may not appear directly relevant but they are potentially vital to create a wider economic climate, particularly in remote areas, in which the barriers of access to land and credit are reduced because there are alternative income and employment opportunities for YF and family members. Thus all CAP GR measures may be relevant and necessary if targeting and criteria are well-tailored to local conditions.

Overall, CAP GR measures appear to play only a modest role in enabling YF to gain access to land by impacts upon land mobility. Providing financial support to YF alone does not free up the land market (e.g. Poland, Estonia, Ireland). However, effectiveness is greatly enhanced if combined with appropriate national policies that support land transfers, favourable attitudes among agricultural banks, also financial instruments (interest-free loans, credit associations, loan guarantees) to reduce the cost of borrowing or make more resources available to YF. In these situations, it is a combination of national effort and CAP funding for start-ups, investments, advice, training and/or co-operation which provides a secure route to accessing land and capital. MS with the longest history of supporting agricultural GR under the CAP also tend to be those that have developed the most versatile and multi-faceted approaches to ease access to land and capital through national policies (Italy and France).

Conclusions on efficiency and the administrative burden

Empirical, comparative analysis showed that key efficiency factors include the ratio of applicants to available funds (a high ratio can swamp the delivery system and lead to long delays) and the quality of information (including transparent selection and eligibility processes). Making advice and support available to ensure high quality applications (to reduce delays and requests for more information); and ensuring adequate skills, resourcing and co-ordination of the public administration are also key. This facilitates swift and robust appraisals, enables funding to focus on cases offering best additionality, and eases associated permissions or checks. Operational continuity and frequent, high quality

communication between beneficiaries and administrative/ advisory personnel is vital, for trust and efficiency.

Case studies show efficiency is not necessarily inversely linked to the complexity of the delivery model. Although Pillar 1 YF aids have a low administrative burden because they are standardised aids, comparative analysis demonstrated that a package of Pillar 2 measures can be more efficient than an approach based on single measures. Efficiency in mixing different instruments to pursue GR is more evident in French and Italian cases, France able to combine RDP instruments and national policies accompanying installations, Italy mixing different instruments and simplifying applications in a "one-stop shop". Targeting by MS or regional administrations appears an efficient way to address instruments to particular goals, evidence shows that offering higher rates of aid or prioritising applications (in scoring) can facilitate significant public investments and impacts in the most fragile areas. Efficiency is strongly conditioned by State and regional institutions. Delivery models using an integrated set of CAP measures and national policies can stimulate positive learning in administrations and the private sector: they require more co-ordination effort among the different bodies responsible for policy management; and foster more holistic farm and development strategies among young entrepreneurs.

Conclusions on coherence

The evaluation found varied evidence of the coherence of CAP measures with each other. In most cases the GR measures are coherent but in some local situations Pillar I direct payments contribute to limit land availability and therefore, make it more difficult for Pillar 2 YF aids to have greatest effect. Conflicts and coherence of the CAP with particular national and regional policies were identified, particularly for land and capital availability.

Spatial planning and infrastructure policies in MS directly affect farm business development and also influence the wider rural economy. Insofar as these policies promote quality of life in rural areas, business opportunities and increased social capital, they should contribute to GR. Positive examples are cited in CS (Estonia, Hungary, Poland, France). Fiscal and legal elements in national policies are crucial for the successful implementation of CAP GR support. There are examples where coherent approaches on land laws, advisory provisions and effective monitoring enhance the implementation of CAP GR measures, but also examples where this does not happen. CAP-funded co-operation and institutional processes (land banks, financial instruments, partnerships, national reserves) help to reduce barriers to access land, capital and knowledge. Complex requirements for funding may cause reluctance of YF to participate (France), especially if linked to a lack of affordable advisory support (Poland).

Recommendations

For the YF supplement and Pillar 2 YF start-up aids, the study recommends adjustment to allow more MS choice in how they are designed and deployed between and within regions, to enable multi-measure packages and one-stop shops working in a streamlined way and tailored to local needs. In some situations it may be important to enable small, part-time and less highly-educated beneficiaries to access funding, with appropriate advice, so MS do not target support only to the most conventional businesses and don't establish eligibility and selection criteria that always favour big holdings or only young people with an agricultural background: these tactics reduce additionality. A general move away from just giving financial aid to successors on farms, and towards using support to build broader networks of farmer learning and collaboration, and a balanced transfer process which helps the older generation at the same time as encouraging the younger generation, could bring significant dividends.

For all CAP aids relevant to GR, we recommend that MS are encouraged to make more use of the co-operation measure to devise or enhance institutional mechanisms to aid GR, and also to provide adequate administrative support for an efficient delivery. Providing appropriate advice, networking and learning opportunities as part of the package also appears essential. For new entrants, in addition to these changes new approaches may be needed to reflect the more diverse needs of this group and their potential: for example, allowing more bottom-up co-design of projects for rural innovation through GR.

Facilitating improved access to land and capital may require changes to improve the coherence of national legal and fiscal policy with CAP GR goals. In addition, working to

enhance the application of financial instruments to support GR, building upon the 2019 EIB and Commission initiative to increase access to credit, appears worthwhile.

For non-farm GR, more attention to investment in rural services, broadband and quality of life measures is particularly needed. This point is especially important when overall CAP resources are reducing, as farm-level adjustment will be eased if families can access income from other sectors and have reassurance that basic services will be sustained.

There is considerable scope for MS administrations and managing authorities to learn from good practices in other MS – especially concerning the scope for more creative application of measures to enable institutional and social innovations, also to encourage new entrants, and to exchange experience about the types of non-CAP policy development that can assist GR.

The proposed holistic, cross-pillar and strategic approach to meeting the GR goals of the new CAP is a positive development which should promote enhanced policy performance, in future.

Experts, policy makers and farmers organisations agree that more practical help for innovation in land-based businesses is needed, particularly in the context of the global climate challenge. Support for broader self-help learning among farmers and other rural actors, for mentoring, facilitation and digital literacy, is widely favoured among contributors to this study.

RÉSUMÉ EXÉCUTIF

Objectifs et approche

L'objectif de cette évaluation était d'apprécier comment les différents instruments et mesures de la Politique agricole commune (PAC) ont un effet sur le renouvellement des générations (RG) dans les zones rurales, et dans une moindre mesure sur les emplois ruraux.

L'évaluation s'est concentrée sur les instruments et mesures de la PAC ayant des impacts directs et indirects sur le renouvellement des générations dans les zones rurales. Elle a notamment évalué l'impact de l'aide supplémentaire relevant du 1^{er} pilier accordés aux jeunes agriculteurs dans le cadre des paiements directs; l'aide au démarrage d'entreprises pour les jeunes agriculteurs du second pilier (mesure 6.1), les mesures d'investissement du second pilier lorsqu'elles sont modulées en faveur des jeunes agriculteurs (par exemple, M4.1), les mesures de soutien à leur accompagnement (par exemple, M1 formation, M2 conseil, M16 coopération); et une brève comparaison avec la mesure de retraite anticipée de 2007-2013. Elle couvre également les mesures de la PAC favorisant le renouvellement des générations en milieu rural au sens large, chaque fois que cet objectif est explicite dans le ciblage ou les critères de sélection / d'éligibilité (par exemple, sous LEADER, la mesure 7 (services de base en milieu rural) ou les mesures 6.2 et 6.3 (aide au démarrage d'entreprises). En résumé, les «mesures de la PAC pertinentes pour le renouvellement des générations» varient d'un pays et d'une région à l'autre, en fonction des choix spécifiques des autorités de gestion. L'évaluation couvre la période de programmation 2014-2020 (ainsi des éléments de la période antérieure, le cas échéant), et tous les États membres (EM) de l'UE-28.

Le défi de promouvoir un «développement territorial équilibré» est inscrit dans la politique de l'UE par le Traité de Lisbonne et la Stratégie Europe 2020. La vitalité rurale - une «campagne vivante» - constitue depuis les années 1970 une préoccupation croissante des politiques agricoles et structurelles. L'UE dispose d'une population vieillissante, ce qui est d'autant plus visible dans le secteur agricole : les personnes âgées représentent 31% de la population agricole et 55% des agriculteurs de l'UE ont 55 ans ou plus. La communication de la Commission intitulée "L'avenir de l'alimentation et de l'agriculture" du 29 novembre 2017 indique que le **renforcement du tissu socio-économique des zones rurales** doit être considéré comme un objectif clé pour la PAC post-2020, sous deux aspects principaux: 1) la croissance et l'emploi; et 2) renouvellement générationnel; dans les zones rurales.

La méthodologie adoptée consiste en une approche mixte, basée sur la triangulation de méthodes et sources d'information reposant sur cinq éléments principaux:

- **Avis éclairés collectés au niveau de l'UE** - revue de la littérature, entretiens avec les principales parties prenantes et enquête en ligne auprès des administrations des EM contactées via les points de contact du Réseau européen de développement rural (REDR) ;
- **Analyse de données au niveau de l'UE** - exploration des relations entre les indicateurs de contexte, des réalisations et des impacts du CCSE, notamment au travers de cartographies des variables clés ; d'analyses de corrélation ; d'une analyse économétrique multicritères (AMC); et l'établissement de deux typologies des zones rurales au niveau NUTS 3 qui ont déterminé la sélection des études de cas et ont soutenu l'identification et l'estimation de certains impacts ;
- **Analyse détaillée** sur les liens de causalité, les méthodes de mise en œuvre et de leurs impacts, de l'efficacité et de la valeur ajoutée **basées sur des études de cas** couvrant sept EM différents (France, Belgique-Flandres, Italie, Estonie, Hongrie, Pologne et Irlande);
- **Analyses quantitatives complémentaires ciblées**: analyse contrefactuelle des données du RICA pour la France et en Italie afin d'évaluer l'impact des aides aux jeunes agriculteurs sur les performances des exploitations agricoles; et utilisation d'un modèle d'équilibre général (CGE) pour examiner les effets des dépenses relatives au renouvellement des générations sur l'emploi rural en Pologne mais tenant compte de sa pertinence au niveau de l'UE
- **Triangulation** via une analyse comparative des résultats des études de cas; les éléments de preuves obtenus au niveau de l'UE et les résultats de la modélisation; et

validation dans le cadre de sept ateliers au niveau national et de trois ateliers organisés au niveau de l'UE auxquels ont participé des parties prenantes et des responsables politiques, dont deux ont été organisés par le REDR.

Les études de cas ont permis d'analyser les informations collectées aux niveaux national, régional et local (NUTS 3). Celles-ci comprenaient des sources secondaires (évaluations antérieures, recherches), des entretiens avec des fonctionnaires chargés des politiques visées, des experts, des parties prenantes et des bénéficiaires, ainsi que des données primaires sur la mise en œuvre et l'impact des mesures sur les bénéficiaires et des exemples de bonnes pratiques en matière de conception / mise en œuvre de politiques, d'innovation et de coordination.

L'étude a répondu à 17 questions d'évaluation (QE) définies dans les termes de référence. Les QE ont été regroupés sous les thèmes suivants: efficacité et pertinence; efficience; cohérence et valeur Ajoutée européenne, ainsi que performance globale.

L'efficacité a couvert l'impact des mesures de soutien au JA sur le renouvellement des générations (QE 3); l'impact des mesures de la PAC sur des facteurs clés, tels que le transfert intergénérationnel de connaissances et l'innovation (QE 2), le capital social, les infrastructures et la gouvernance (QE 4); les emplois ruraux, leur qualité et leur durabilité (QE 5, 13 et 15); et l'accès à la terre, au capital et au savoir (QE 12 et 16). Les questions d'efficience portaient sur l'efficience des mesures prises dans le cadre de la PAC et sur la nature des charges administratives (QE 6 et 8). La cohérence comprenait la cohérence interne des mesures de la PAC portant sur le renouvellement des générations ainsi qu'avec l'ensemble de la PAC (QE 9); la cohérence avec les autres politiques de l'UE non liées à la PAC (QE 10) et avec les politiques et les facteurs extérieurs à l'UE (QE 11 et 14). L'appréciation de la performance globale comprenait l'efficacité de l'ensemble de la PAC dans la promotion du renouvellement des générations (QE 1), l'efficacité de ses impacts indirects sur la qualité de vie et la valeur ajoutée de l'UE dans le renouvellement des générations (QE 7 et 17).

Conclusions de l'étude

Conclusions sur l'efficacité et la pertinence globales

Impact global de l'ensemble de la PAC sur le renouvellement des générations:

L'étude a montré que la PAC dans son ensemble favorise le renouvellement des générations, en particulier dans le secteur de l'agriculture, dont l'effet positif varie de significatif à faiblement efficace selon les différents États membres et régions. Les différences d'ampleur de l'impact sont déterminées par la combinaison du contexte socio-économique et culturel sous-jacent, la sélection des instruments et la définition des mesures de la PAC, ainsi que des choix de mise en œuvre. La meilleure preuve d'un impact durable et positif se situe dans les États membres et les régions dans lesquelles une variété de mesures et d'instruments est utilisée de manière complémentaire, notamment des aides au financement et à l'investissement pour la création d'entreprise, des conseils et des formations, des incitations aux accords de collaboration institutionnels, légaux et/ou fiscaux facilitant le transfert intergénérationnel, ainsi qu'un soutien plus large aux services ruraux, aux infrastructures et à la qualité de la vie. L'analyse contrefactuelle basée sur le RICA réalisée en Italie et en France a démontré la contribution de l'aide de la PAC aux JA pour améliorer la performance des exploitations agricoles et la résilience de ces entreprises.

En ce qui concerne le renouvellement des générations dans les secteurs non agricoles (encourageant les jeunes à vivre et à travailler dans les zones rurales), l'étude a révélé moins de preuves globales concernant les impacts de la PAC, ce qui est probablement dû au fait que cet objectif spécifique est moins prioritaire, malgré qu'un besoin important apparaisse évident dans de nombreuses situations, et en raison de la forte influence de facteurs externes à la PAC. Toutefois, lorsque les ressources de la PAC sont axées sur le renouvellement générationnel dans les secteurs non agricoles, principalement par le biais de LEADER et d'autres mesures du 2nd pilier, notamment M7 et les éléments non agricoles de la M6; des impacts significatifs et positifs ont été constatés au niveau local.

Les mesures de la PAC les plus pertinentes pour le renouvellement des générations varient d'un pays et d'une région à l'autre, reflétant les différents obstacles et opportunités du renouvellement des générations dans chaque région, ainsi que les choix des autorités de gestion. Les études de cas et les analyses économétriques suggèrent que les mesures de la

PAC destinées aux JA ont une capacité à promouvoir la vitalité rurale dans les territoires ruraux marginaux qui connaissent un déclin économique et démographique, des infrastructures et des services médiocres, une faible diversification économique et une faible valeur ajoutée dans les secteurs agricole et forestier; en particulier lorsqu'elles sont mises en œuvre en liens avec des bons conseils d'accompagnement. Cependant, dans certaines situations, l'impact de l'aide de la PAC aux JA est contrainte par ces autres limites, souvent aggravées par des facteurs de dissuasion économiques et culturels plus larges qui constituent des freins à l'agriculture. Si tel est le cas, les agriculteurs, les experts et les décideurs politiques dans les études de cas, ainsi que des études antérieures et des évidences au niveau de l'UE, suggèrent que des approches parallèles soutenant un développement rural plus large, des économies plus diversifiées et la qualité de vie sont nécessaires.

L'étude a révélé que les mesures de la PAC pour le renouvellement des générations dans le secteur agricole sont très efficaces dans les cas où des politiques nationales, régionales et locales complémentaires soutiennent et renforcent le renouvellement des générations. Celles-ci incluent des mécanismes institutionnels et des incitations fiscales pour accroître la mobilité de la terre et faciliter le processus de transfert intergénérationnel pour les générations plus âgées et plus jeunes. Les exemples incluent la création de partenariats agricoles; l'incitation à « l'agriculture de partage » et à d'autres modèles d'entreprise collectifs; fournir de l'aide pour la planification du revenu de la retraite et des allègements fiscaux pour le transfert progressif d'actifs; et utiliser des banques foncières ou créer de nouvelles organisations à but non lucratif pour consolider et relouer des propriétés aux nouveaux entrants. Les agriculteurs plus âgés peuvent être dissuadés de transférer leurs exploitations à une génération plus jeune, si leur revenu et l'accès à une qualité de vie raisonnable dépend de la poursuite du bénéficiaire des aides du 1^{er} pilier de la PAC. Des initiatives utilisant des approches «douces», notamment de sensibilisation, de conseil et de planification pour un transfert réussi peuvent également être utiles.

Il est trop tôt pour identifier les effets précis du supplément JA aux paiements directs dans le cadre du 1^{er} pilier, introduit en 2015. Ce "paiement complémentaire" est d'une importance variable selon les exploitations des différents EM ; son modèle de distribution est très différent de celui des dépenses prévues pour le renouvellement des générations dans le cadre des PDR du 2nd pilier. Les études de cas mettent en évidence des situations dans lesquelles les suppléments encouragent le renouvellement des générations de manière complémentaire au 2nd pilier, mais cela dépend d'une conception précise des modalités de mise en œuvre, qui n'est pas répandue parmi les EM.

Cette étude a rassemblé de nombreux éléments en faveur de l'adoption par les États membres d'une approche multiforme et coordonnée pour le renouvellement des générations en agriculture, dans laquelle différentes mesures de la PAC (et hors PAC) fonctionnent ensemble de manière cohérente. Dans des cas révélés efficaces et établis de longue date, la coordination signifie la promotion et la distribution intégrée d'un «paquet» d'aides, d'informations et d'incitations destinées aux jeunes agriculteurs et à leurs exploitations, avec un guichet unique et un processus conjoint d'évaluation et de programmation budgétaire. Cela reflète le rôle et les responsabilités des États membres ayant fait certains choix politiques en matière de conception et de calibrage des aides de la PAC. La comparaison des études de cas suggère que cette approche est la plus efficace. Cependant, la logique actuelle de programmation par mesure unique ne convient pas à l'utilisation d'ensembles de mesures intégrés, car les exigences financières et les critères de sélection sont spécifiques aux mesures individuelles et ne sont pas efficaces pour un ensemble d'interventions coordonnées.

Dans le cas du soutien aux nouveaux entrants hors cadre familial dans l'agriculture, la plupart des études de cas suggèrent que les mesures actuelles ne sont pas adaptées de manière optimale à leurs besoins. Ce groupe est généralement confronté à une plus grande diversité de défis que les successeurs agricoles dans un cadre familial, qui héritent de leurs parents. Les parties prenantes et les experts ont déclaré que ces nouveaux entrants avaient tendance à être plus âgés et qu'ils manquaient de connaissances à propos des aides et de la manière d'y postuler. Les types d'exploitations qu'ils reprennent sont habituellement plus petits et probablement moins viables conventionnellement que l'exploitation agricole moyenne. De plus, leurs plans d'entreprise (souvent des créations) peuvent comporter plus de risques ou être peu familiers aux évaluateurs de ces plans. Ainsi, ils ne satisfont plus

fréquemment pas aux critères d'éligibilité ou de sélection, malgré leur potentiel de contribution positive au renouvellement des générations et à l'innovation rurale. Sans hériter d'une ferme, ils se heurtent à des difficultés particulières dues à la rigidité du marché foncier et aux règles de crédit strictes imposées aux personnes dépourvues de garanties financières. Enfin, ils risquent de ne pas disposer de réseaux agricoles de soutien et d'intégration dans le système de connaissances et d'information, ce qui les rend plus vulnérables que les JA reprenant une ferme dans un cadre familial. Dans toutes les études de cas, ces nouveaux entrants hors cadre familial considèrent que l'accès aux aides JA de la PAC leur était plus difficile et plus coûteux.

Il subsiste d'importants obstacles à la réussite du renouvellement des générations en agriculture dans de nombreux EM, problèmes qui sont probablement traités plus efficacement par le biais de dispositions institutionnelles et fiscales que par le financement direct des bénéficiaires. Ceux-ci incluent certains types d'accès à la terre et l'aide aux agriculteurs plus âgés pour transférer leur exploitation à une nouvelle génération grâce à une méthode de transition progressive. Les instruments financiers (qui, selon les études de cas, n'ont pas été largement utilisés pour les JA) peuvent offrir la possibilité de relever le défi majeur que représente l'accès au crédit pour les nouvelles entreprises.

L'équilibre des impacts du soutien actuel du 1^{er} pilier de la PAC sur la qualité de vie en milieu rural dépend de conditions socio-économiques plus larges et d'autres politiques économiques et sociales, variant considérablement selon les pays et les régions (études de cas). Ainsi, l'efficacité de dépenser de l'argent pour le soutien au revenu du pilier 1 de la PAC, en tant que moyen de promouvoir indirectement le renouvellement des générations en améliorant la qualité de la vie, variera dans l'espace et dans le temps, à mesure que les conditions changent. Néanmoins, l'analyse AMC suggère que sur une base « par Euro », pour l'ensemble de l'UE, injecter de l'argent dans le soutien général du 1^{er} pilier aura moins d'impact sur l'augmentation du nombre de JA que si le même montant de financement était consacré à l'ensemble des mesures JA de la PAC.

Conclusions sur les impacts plus spécifiques des mesures de renouvellement des générations et aides aux JA de la PAC

Les mesures du pilier 2 concernant le RG montrent un lien positif, mais relativement limité, pour favoriser l'échange de connaissances et l'innovation au sein de l'agriculture. Une proportion significative d'agriculteurs, d'experts et de décideurs politiques dans les études de cas et les entretiens avec l'UE ont fait état d'une amélioration des connaissances, des compétences et de l'innovation découlant des transferts d'exploitation soutenus par le RG de la PAC. Dans l'ensemble de l'UE, l'accès à l'aide du pilier 2 JA est subordonné à un niveau de formation suffisant des bénéficiaires. Cette condition est également appliquée dans neuf États membres ou régions pour bénéficier du supplément du 1^{er} pilier JA. Des études de cas montrent comment ces conditions favorisent indirectement l'échange de connaissances, améliorent les compétences techniques et commerciales des JA et renforcent les compétences de la population agricole. L'importance des conseils et de la planification des affaires dans un processus cohérent tout au long de la période d'installation a également été démontrée. LEADER a encouragé l'innovation en offrant un soutien aux nouveaux entrants hors cadre familial dans l'agriculture et aux nouvelles entreprises non agricoles, considérées comme de plus en plus importantes pour le RG en milieu rural. Un impact positif sur l'innovation est attendu des groupes opérationnels PEI-Agri; certains couvrent des objectifs de RG, mais leur impact n'a pas encore pu être évalué (2019).

Sur l'impact des mesures de la PAC destinées aux JA : un ensemble d'éléments suggère que ces aides ont un impact positif sur le RG en agriculture, soutenant les revenus, la performance et l'emploi des JA. L'AMC des données de l'UE, ainsi que l'analyse contrefactuelle des données du RICA d'exploitations de France et en Italie, et la modélisation (CGE) de l'économie régionale en Pologne, fournissent toutes des résultats chiffrés à cet égard. Les résultats des études de cas d'un impact significatif, direct ou indirect, des mesures JA de la PAC sont faibles dans certains États membres (Flandre, Estonie), importantes dans d'autres (France, Italie) et intermédiaires dans un troisième groupe (Hongrie, Pologne et Irlande). Les parties prenantes (agricoles et non agricoles) et les décideurs politiques sont généralement fortement en faveur de ces aides et la plupart des JA sont désireux de les utiliser, mais beaucoup rencontrent également des obstacles pour accéder à la terre, aux capitaux et aux informations qui ne sont pas facilement

couvertes par les aides. Certains États membres ont développé des approches supplémentaires pour répondre à ces contraintes. Il est largement admis que les aides aux JA de la PAC favorisent davantage la relève dans le cadre familial que les nouvelles entrées hors cadre familial, mais avec des preuves d'additionnalité.

En particulier dans les régions marginales ou isolées, l'impact des mesures JA de la PAC peut être atténué par des influences négatives, notamment des facteurs de dissuasion socioculturels et économiques plus vastes de l'agriculture ou de la vie en zone rurale. Dans les zones agricoles plus prospères, les aides JA favorisent le RG lorsque le montant de l'aide offerte et les conditions de l'offre sont significatives par rapport à la taille de l'exploitation agricole, la valeur des terres et l'acquisition de connaissances, mais il existe également des exemples d'études de cas où l'aide est soit trop faible soit trop coûteuse d'accès, ce qui réduit son impact sur le RG.

De grandes différences entre les décisions des États membres concernant les taux d'aide, le nombre maximal de zones éligibles et les liens avec les droits à la réserve nationale² signifient que le supplément du Pilier 1 JA aurait peu d'effet dans certaines régions, tandis que dans d'autres, il aurait un impact significatif et positif sur le RG agricole. Ces points de vue sont partagés par les décideurs politiques, les organisations d'agriculteurs et les experts. Les aides JA du Pilier 2 sont jugées efficaces dans diverses situations, mais une faible additionnalité a été constatée dans les cas où l'assistance d'appui en matière de conseil et d'évaluation technique était insuffisante (Pologne, Estonie).

Les aides de la PAC aux JA et leur importance ne doivent pas être évaluées séparément des conditions socio-économiques plus vastes des zones rurales. Même les meilleurs ensembles d'aides aux JA seront inefficaces si l'agriculture ne peut offrir un niveau de vie et une qualité de vie suffisants pour attirer une génération plus jeune. De plus, les zones rurales dépourvues d'infrastructures et de services de base auront des difficultés à conserver les jeunes, même si les revenus de l'agriculture sont globalement comparables à ceux d'autres secteurs. En règle générale, si les économies nationales sont dynamiques et que le chômage est faible, l'exode rural est privilégié partout où la vie urbaine offre aux jeunes une meilleure qualité de vie. Inversement, lorsque les économies sont en récession et que le chômage est élevé, le retour à la ferme familiale peut apparaître comme une alternative intéressante à la subsistance grâce aux allocations sociales ou aux emplois à court terme et faiblement rémunérés dans une ville. La part de JA dans le nombre total d'agriculteurs a augmenté au cours des premières années de la récente récession mondiale dans de nombreux États membres.

Il est possible de concevoir des ensembles d'aides aux JA qui apportent une additionnalité appropriée et significative en adaptant les taux et la distribution des aides aux conditions locales, en utilisant des mesures complémentaires, et en les coordonnant avec les autres politiques (hors PAC). Les meilleurs exemples d'efficacité des aides aux JA dans les études de cas apparaissent lorsque les mesures de la PAC sont conçues pour fonctionner parallèlement à d'autres dispositions législatives et fiscales, avec le soutien institutionnel et de processus spécifiques au niveau local. À travers une utilisation créative du menu du 2nd pilier, bon nombre de ces éléments pourraient déjà être financés par la PAC.

En favorisant le capital social, les infrastructures et la bonne gouvernance dans les zones rurales, les études de cas suggèrent que les mesures de RG de la PAC ont un impact limité, principalement positif, direct et indirect. Elles indiquent que les mesures ciblant les services ruraux (notamment le 2nd pilier, m7 et LEADER) ont un impact plus significatif à cet égard en particulier lorsqu'elles sont appliquées en synergie avec les aides et incitants en faveur des JA (en Italie, en France et en Hongrie). L'évaluation des PDR 2007-2013 a montré qu'un investissement dans l'infrastructure, la diversification économique et les services ruraux peut stimuler la vitalité rurale et promouvoir des résultats sociaux et de gouvernance positifs.

Impacts du RG de la PAC sur l'emploi rural, sa qualité et sa durabilité: les mesures de la PAC destinées aux JA ont un impact sur le maintien de l'emploi dans l'agriculture par rapport au scénario contrefactuel. Dans certains États membres, l'impact est significatif. L'analyse AMC a indiqué que les dépenses de la PAC ont un impact faible mais positif sur le

² Dans les États membres utilisant le régime de paiement de base, et non ceux adoptant le RUPS (régime de paiement unique à la surface) où ces droits ne sont pas d'application.

nombre de JA dans la plupart des zones rurales de l'UE, ce qui implique un impact positif sur l'emploi total dans le secteur de l'agriculture, bien que cela dépend du taux de départs à la retraite des agriculteurs plus âgés étant plus faible que le taux de recrutement des jeunes. La modélisation polonaise sur base du CGE a montré des impacts nets positifs sur l'emploi, tant pour les aides du 1^{er} pilier de la PAC que pour les aides de la PAC aux JA, dans l'agriculture et dans les secteurs connexes en amont et en aval de l'économie. Elle suggère que l'impact relatif de l'aide du 2nd pilier aux JA sur les secteurs en amont et en aval est supérieur à l'impact de l'aide du 1^{er} pilier de la PAC sur ces secteurs (tant l'impact du total des paiements directs que celui du supplément aux JA du 1^{er} pilier), tandis que l'aide totale du 1^{er} pilier de la PAC stimule davantage l'emploi dans l'agriculture que les aides du 2nd pilier aux JA. Cette constatation est cohérente avec la revue de littérature et l'avis des experts dans les études de cas.

En ce qui concerne l'emploi non agricole, de grandes variations entre les Etats membres ont été indiquées dans les études de cas et d'après les résultats de l'AMC. Certains CS font état d'une augmentation du nombre de jeunes employés dans les zones rurales comme étant la conséquence des dépenses de la PAC, tandis que d'autres indiquent une diminution, mais n'ont trouvé aucune preuve établissant un lien entre celle-ci et les fonds de la PAC. Les tendances de l'emploi rural sont fortement influencées par les phénomènes économiques à l'échelle de l'UE, dont les ressources de la PAC ne représentent qu'une infime partie. De manière générale, l'emploi rural dépend des dispositions particulières de la législation nationale et du climat économique. Il peut être favorisé indirectement par les fonds de la PAC en fournissant des installations aux jeunes des petites villes et des villages, ainsi qu'en favorisant la création d'entreprises et la diversification des exploitations agricoles: plusieurs CS fournissent des preuves.

Dans la mesure où les mesures de la PAC en matière de RG promeuvent une succession d'exploitations plus robuste, elles sont susceptibles d'accroître la durabilité socio-économique des entreprises agricoles. L'analyse RICA fournit des éléments quantifiés provenant de France et d'Italie. L'étude a révélé très peu de preuves quant à la viabilité des emplois non agricoles promus par le financement de la PAC, mais dans des études de cas, l'opinion des parties prenantes (experts et bénéficiaires) était positive. L'impact des mesures de la PAC concernant le RG sur les emplois ruraux agricoles et non agricoles a été largement reconnu comme positif, bien que difficile à estimer, dans les études de cas. Cela est dû aux influences aux multiples intervenants et souvent beaucoup plus fortes des politiques économiques plus larges (par exemple les plans de croissance nationaux, les réductions des dépenses publiques), des tendances et des conditions du marché. Dans ce contexte, il est probable que les modifications de l'emploi induites par la PAC seront relativement modestes: les conclusions de l'analyse de la CGE en Pologne le confirment.

Impacts du RG de la PAC sur l'accès à la terre, aux capitaux et aux connaissances: des preuves significatives tirées d'études de cas, d'enquêtes de l'UE et de travaux de recherche confirment que ces facteurs sont essentiels à la réussite du RG dans l'agriculture de l'UE. Cependant, leurs causes, et par conséquent les meilleurs mécanismes pour les aborder, varient considérablement en fonction du contexte local et des types d'exploitation – des zones les plus marginales aux plus productives, des régions reculées et en déclin aux zones périurbaines en expansion.

En ce qui concerne leur pertinence pour aborder l'accès à la terre, au capital et au savoir, les aides de la PAC en matière de RG se répartissent en trois catégories. Premièrement, les aides fournissant un financement destiné à soutenir les coûts généraux conséquents à la mise en place (supplément du 1^{er} pilier et M6.1) et les investissements des premières années (M4.1) sont pertinentes et présentent un intérêt potentiel, mais elles seront souvent insuffisantes, à elles seules, pour surmonter ces obstacles, car le financement ne permet pas de résoudre des problèmes plus vastes empêchant le bon fonctionnement des marchés fonciers et du crédit. Deuxièmement, les aides qui encouragent la coopération, l'innovation, la formation et les conseils peuvent être très pertinentes pour aider les JA à acquérir des connaissances et à réfléchir à de nouvelles manières d'accéder à la terre et au capital et de surmonter ces obstacles, aidant également les agriculteurs plus âgés à gérer les transferts favorablement. Enfin, les aides qui favorisent la diversification économique rurale, la valeur ajoutée et de meilleurs services, y compris le haut débit, peuvent ne pas sembler directement pertinentes, mais elles sont pertinentes et potentiellement vitales pour créer un climat économique plus vaste, en particulier dans les régions reculées, où la barrière de

l'accès à la terre et au crédit est réduite car il existe d'autres possibilités de revenus et d'emplois pour les JA et les membres de la famille. Ainsi, toutes les mesures de la PAC en matière de RG peuvent être pertinentes et nécessaires si le ciblage et les critères sont bien adaptés aux conditions locales.

Dans l'ensemble, les mesures de la PAC en matière de RG ne semblent jouer qu'un rôle modeste pour permettre aux JA d'accéder à la terre par leurs impacts sur la mobilité de la terre. Fournir un soutien financier seul aux JA ne libère pas le marché foncier (par exemple en Pologne, en Estonie et en Irlande). Cependant, leur efficacité est considérablement améliorée si elles sont associées à des politiques nationales appropriées soutenant les transferts de terres, les attitudes favorables au sein des banques agricoles, ainsi que les instruments financiers (prêts sans intérêt, associations de crédit, garanties de prêt) pour réduire le coût d'emprunt ou mettre plus de ressources à la disposition des JA. Dans ces situations, il s'agit d'une combinaison d'efforts nationaux et de financement de la PAC pour les nouvelles entreprises, les investissements, les conseils, la formation et/ou la coopération, qui fournit un moyen sécurisé d'accéder à la terre et au capital. Les États membres qui soutiennent depuis le plus longtemps le RG agricole dans le cadre de la PAC ont également tendance à être ceux qui ont développé les approches les plus polyvalentes et multiformes pour faciliter l'accès à la terre et au capital par le biais de politiques nationales (Italie et France).

Conclusions sur l'efficacité et la charge administrative

L'étude a rassemblé de nouveaux éléments sur ces points. Les principaux facteurs d'efficacité incluent le ratio demandeurs/fonds disponibles (un ratio élevé peut submerger le système administratif et entraîner des retards importants) et la qualité de l'information (y compris des processus de sélection et d'éligibilité transparents). Mettre à disposition des conseils et une assistance pour garantir des candidatures de haute qualité (afin de réduire les délais et les demandes d'informations supplémentaires); et assurer des compétences adéquates, des ressources humaines et la coordination de l'administration publique sont également essentiels. Cela facilite les évaluations rapides et robustes, permet au financement de se concentrer sur les cas offrant la meilleure additionnalité et facilite les autorisations ou les contrôles associés. La continuité opérationnelle et une communication fréquente et de haute qualité entre les bénéficiaires et le personnel administratif/consultatif sont essentielles pour la confiance et l'efficacité.

Des études de cas montrent que l'efficacité n'est pas nécessairement inversement liée à la complexité du modèle de mise en oeuvre. Bien que les aides du 1^{er} pilier aux JA aient une charge administrative faible car il s'agit d'aides standardisées, une analyse comparative a démontré qu'un ensemble de mesures du 2nd pilier peut être plus efficace qu'une approche fondée sur des mesures uniques. L'efficacité du mélange de différents instruments pour atteindre l'objectif du renouvellement des générations est plus évidente dans les cas français et italien, la France étant en mesure de combiner les instruments des PDR et les politiques nationales qui accompagnent les installations, l'Italie combinant différents instruments et simplifiant les candidatures dans un «guichet unique». Le ciblage par les EM ou les administrations régionales semble être un moyen efficace d'adapter les instruments à la réalisation de certains objectifs. Il a été démontré qu'offrir des taux d'aide plus élevés ou prioriser des candidatures (sur base de notations) peut faciliter des investissements publics importants et des impacts dans les zones les plus fragiles. L'efficacité est fortement conditionnée par l'Etat et les institutions régionales. Les modèles de mise en oeuvre utilisant un ensemble intégré de mesures de la PAC et de politiques nationales peuvent stimuler l'apprentissage positif dans les administrations et le secteur privé: ils nécessitent davantage d'effort de coordination entre les différents organismes responsables de la gestion politique; et encouragent des stratégies agricoles et de développement plus holistiques chez les jeunes entrepreneurs.

Conclusions sur la cohérence

L'évaluation a globalement mis en évidence la cohérence interne des mesures de la PAC. Dans la plupart des cas, les mesures sont cohérentes, mais dans certaines situations locales, les paiements du 1^{er} pilier contribuent à limiter la disponibilité de terres et limitent donc l'importance des effets des aides du 2nd pilier aux JA. Des conflits et des cohérences de

la PAC avec les politiques nationales et régionales particulières ont été identifiées, principalement en ce qui concerne la disponibilité des terres et des capitaux.

Les politiques d'aménagement du territoire et d'infrastructure dans les EM ont une incidence directe sur le développement des exploitations agricoles et sur l'économie rurale au sens large. Dans la mesure où ces politiques promeuvent la qualité de vie dans les zones rurales, des opportunités professionnelles et un capital social accru, elles devraient contribuer au RG. Des exemples positifs sont cités dans des études de cas (Estonie, Hongrie, Pologne, France). Les éléments fiscaux et juridiques des politiques nationales sont déterminants pour la réussite de la mise en œuvre du soutien de la PAC au RG. Il existe des exemples où des approches cohérentes en matière de législation foncière, de dispositions consultatives et de suivi efficace améliorent la mise en œuvre des mesures de la PAC en matière de RG, mais également des exemples où cela ne se produit pas. La coopération financée par la PAC et les processus institutionnels (banques foncières, instruments financiers, partenariats, réserves nationales) contribuent à réduire les obstacles à l'accès à la terre, au capital et à la connaissance. Des critères complexes d'accès au financement pourraient provoquer une réticence de la part des JA (France), en particulier s'ils sont liés à un manque de conseil à prix abordable (Pologne).

Recommandations

Pour le supplément d'aide du 1^{er} pilier aux JA et les aides au démarrage du 2nd pilier destinées aux JA, l'étude recommande l'ajustement de manière à permettre aux États membres de disposer de plus de choix pour leur conception et leur déploiement entre les régions et au sein de celles-ci, afin de permettre de définir des ensembles multi-mesures et aux guichets uniques de fonctionner de manière rationnelle et adaptée aux besoins locaux. Dans certaines situations, il peut être important de permettre aux bénéficiaires de petite taille, à temps partiel et moins formés, d'accéder au financement, avec des conseils appropriés, afin que les EM ne ciblent pas uniquement le soutien aux entreprises les plus conventionnelles et ne définissent pas de critères d'éligibilité et de sélection qui privilégient toujours les grandes exploitations ou uniquement les jeunes issus du milieu agricole: ces stratégies réduisent l'additionnalité. S'écarter des pratiques courantes, consistant à fournir uniquement des aides financières aux successeurs dans les exploitations agricoles, en vue d'utiliser l'aide pour développer des réseaux plus larges d'apprentissage et de collaboration entre agriculteurs, et un processus de transfert équilibré qui aide la génération plus âgée tout en encourageant la jeune génération, pourrait apporter des atouts importants.

Pour toutes les aides de la PAC concernant le RG, nous recommandons que les EM soient encouragés à utiliser davantage la mesure de coopération pour élaborer ou renforcer les mécanismes institutionnels d'aide au RG, ainsi que pour fournir un soutien administratif adéquat pour une mise en œuvre efficace. Fournir des conseils appropriés, des opportunités de mise en réseau et d'apprentissage dans le cadre d'un « paquet » de mesures apparaît également essentiel. Pour les nouveaux entrants (hors cadre familial), outre ces changements, de nouvelles approches peuvent être nécessaires pour intégrer les besoins plus diversifiés de ce groupe et leur potentiel: par exemple, permettre une co-conception plus ascendante de projets d'innovation rurale par le biais du RG.

Faciliter un accès amélioré à la terre et aux capitaux peut nécessiter des changements pour améliorer la cohérence de la politique juridique et fiscale nationale avec les objectifs de la PAC concernant le RG. En outre, il semble utile de chercher à renforcer l'application d'instruments financiers pour soutenir le RG, en s'appuyant sur l'initiative de la BEI et de la Commission de 2019 pour accroître l'accès au crédit.

Pour le RG non agricole, une plus grande attention portée aux investissements dans les services ruraux, les connexions à haut débit et la qualité de vie est particulièrement nécessaire. Ce point est surtout important lorsque les ressources globales de la PAC diminuent, dans la mesure où l'ajustement au niveau de l'exploitation sera facilité si les familles ont accès aux revenus d'autres secteurs et ont l'assurance que les services de base seront maintenus.

Les administrations des EM et les autorités de gestion ont une marge de manœuvre considérable pour apprendre des bonnes pratiques d'autres EM, en particulier en ce qui concerne les possibilités de mise en œuvre plus créative de mesures destinées à permettre des innovations institutionnelles et sociales, à encourager les nouveaux entrants et à

échanger des expériences à propos des types de développement de politiques non liées à la PAC pouvant favoriser le RG.

L'approche holistique, stratégique et intersectorielle proposée pour atteindre les objectifs de la nouvelle PAC en matière de RG est une évolution positive qui devrait promouvoir l'amélioration des performances politiques à l'avenir.

Les experts, les décideurs politiques et les organisations d'agriculteurs s'accordent à dire qu'une aide plus concrète à l'innovation dans les entreprises agricoles et rurales est nécessaire, en particulier dans le contexte de l'enjeu climatique mondial. Le soutien à l'apprentissage plus autonome des agriculteurs et d'autres acteurs ruraux, au mentorat, à la facilitation et à l'alphabétisation numérique, est largement privilégiée par les contributeurs à la présente étude.

1. INTRODUCTION – SCOPE OF THE REPORT, STUDY CONTEXT AND FOCUS

1.1 Purpose and scope of this report

This is the final deliverable for the Evaluation 'Impact of the Common Agricultural Policy upon generational renewal, local development and jobs in rural areas - Opportunities and challenges for generational renewal in rural areas'. The overall aim of this evaluation is to assess how different Common Agricultural Policy (CAP) measures and instruments affect generational renewal in rural areas. In the context of this study, generational renewal (GR) is a broad concept that touches upon many aspects and sectors. It relates to the various forms of support for YF available under the CAP Pillar I and II, as well as to other CAP and non-CAP measures and conditions that make rural areas more attractive for people to work and live in. The study had four phases, as follows:

1. Structuring (June to September 2018)
2. Observing (October to December 2018)
3. Analysing (January to April 2019)
4. Judging (March to August 2019).

This deliverable fulfils the specification for final reporting set out in the study Terms of Reference (ToR). Together with annexes (including all case studies), abstract, leaflet and presentation summarising the evaluation and its main findings, this report concludes the work of the evaluation team.

1.2 Describing the study topic: generational renewal in rural Europe

The challenge to foster 'balanced territorial development' is enshrined in EU policy in the Lisbon Treaty and Europe 2020 Strategy. Within this, ensuring rural vitality – 'a living countryside' – has been an increasing concern of structural and agricultural policies, since the 1970s.

'Generational renewal' is a broad concept touching many subjects and sectors. The EU has an ageing population: the proportion of people of working age (65% in Jan 2016) is constantly shrinking while the share of retired people (20% in Jan 2016) is expanding. In the agriculture sector, this is even more visible: older people (65 years and over) account for 31% of the farming population, and 55% of EU farmers are 55 or older. The Commission Communication 'The Future of Food and Farming' of 29 November 2017 states that **strengthening the socio-economic fabric of rural areas** is a key objective of the Common Agricultural Policy (CAP) post-2020. This concerns two main aspects: 1) growth and jobs in rural areas; and 2) generational renewal in rural areas.

The European Court of Auditors in its special report 'EU support to young farmers should be better targeted to foster effective generational renewal' (29 June 2017) addressed concerns with respect to GR focusing on the CAP young farmers (YF) measures. EU Commissioner for Agriculture and Rural Development, Phil Hogan, told the European Committee of the Regions' on 9 February 2017: 'generational renewal is an issue that goes far beyond a reduction in the average age of farmers in the EU. It is also about empowering a new generation of highly-qualified young farmers to bring the full benefits of technology to support sustainable farming practices in Europe'. A new financial initiative for YF was presented by Commissioner Hogan in April 2019³ aiming to ease their access to finance.

Looking beyond agriculture, GR within the goals of the CAP also includes ensuring viable communities and economic activities in rural areas, countering the threat of decline and abandonment of rural settlements as well as farmed and forested land.

The CAP addresses GR in various measures and instruments, including income supplements and investment aids for YF, support for co-operation, investment in new rural businesses, knowledge transfer and innovation, advisory services and incentives for farm restructuring. The previous CAP regulations (for 2007-2013) also provided an early retirement measure to encourage older farmers to transfer farms to a new generation. As

³ <https://www.fi-compass.eu/publication/brochures/joint-initiative-improving-access-funding-european-union-young-farmers>

the Commission has said: 'Facilitating generational renewal in the agricultural sector is a proposed focus area for Rural Development policy in the period 2014-2020. Already in previous programming periods, "Setting up of young farmers" and "Early retirement" measures aimed to achieve similar objectives. Furthermore, the proposed new rules for direct payments include additional income support aimed specifically at YF, 'who could otherwise miss out on payments based on historical reference periods' (EU Agricultural Economic Brief no.6, 2012).

It is important to understand the reasons underlying the CAP's focus upon GR, which are based on observation and development theories. In the process of economic and social development, many countries face a specific challenge to maintain rural vitality. Over time, growth in the manufacturing and service sectors of the economy tends to lead to a lagging effect for the primary sector where, despite structural change and capital investment, incomes in agriculture fall behind those of workers in other sectors and jobs in agriculture decline, in both absolute and relative terms.

In rural areas with good accessibility and infrastructure, it is possible for rural economies to diversify away from traditional reliance on agriculture and rural incomes, so jobs and quality of life may be sustained through local economic diversity and/or multifunctionality/pluriactivity within agriculture and among farm family households. However, it is also relatively common to find rural areas that, for reasons of relative remoteness or other structural or socio-economic disadvantage, remain heavily dependent upon agriculture at a time when jobs and incomes in the sector are steadily declining, relative to other economic sectors. This phenomenon is often associated with the twin features of rural depopulation and an ageing farm population, as young people turn away or move away from farming to seek a better quality of life through employment in other sectors – most commonly, urban industries and services. The phenomenon is not confined to Europe: Asian economies including Japan and South Korea struggle with more extreme conditions than those found in the EU, with an ageing farm population and steep decline of young people, growth and jobs in rural areas. The average age of farmers in selected OECD countries, is: Japan **67**⁴; South Korea **65**⁵; USA **58.3**⁶ compared to **51.4** for the EU-28⁷.

Farm transfers are a key component of structural change in the farm sector. However, the transfer of farms to younger generations in the EU is judged as too low, according to the European Commission⁸. In its latest YF briefing (EC, 2017), these main points were made:

- The agricultural labour force in the EU is ageing; and the share of YF is decreasing across the EU. YF on average have much larger farms than older farmers (around 25 ha for those under 35, compared to 7.5 ha for over 65 year-olds, 2016), so more than 2.5 older farmers would have to retire for every new YF installation, on average. YF have a higher share of rented land than farmers in other age categories.
- Young farmers are better trained, invest more and tend to get a higher return on assets than older farmers, but have the lowest average income/AWU of all age groups.

This helps to explain the CAP goal of providing support for inter-generational transfer of farm businesses and to counter declining numbers of YF. The literature acknowledges that the transfer to a younger generation is highly beneficial for the agricultural sector, because:

- In general, it is crucial for maintaining the competitiveness of the sector;

⁴ 2015 census, MAFF Japan

⁵ 2018, at: <https://www.todayonline.com/world/young-south-koreans-craving-jobs-and-slower-pace-life-turn-farming>

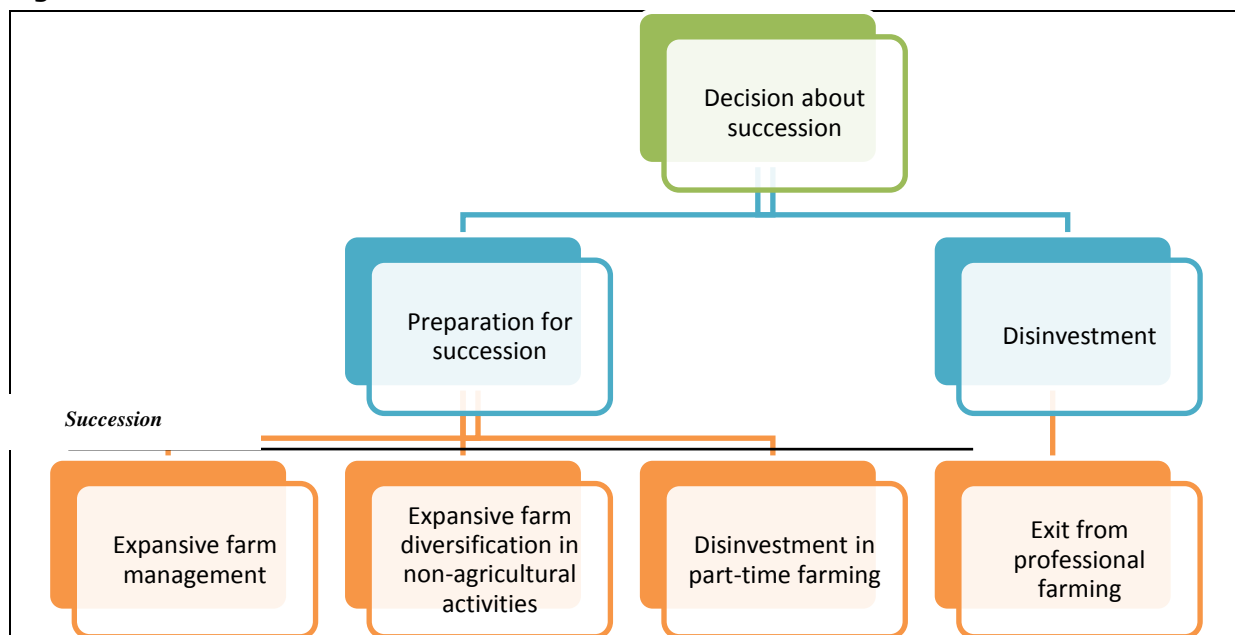
⁶ 2014, at: <https://www.usnews.com/news/blogs/data-mine/2014/02/24/us-farmers-are-old-and-getting-much-older>

⁷ 2014, at: <https://www.euractiv.com/section/agriculture-food/news/farmers-are-ageing-younger-generations-see-agriculture-negatively>

⁸ European Commission, 2012. Generational renewal in EU agriculture: Statistical Background, Brief n° 6, June, p. 10.

- Inherited farms tend to show better performance than non-inherited, although some studies outline 'improvement' may be controversial in some circumstances;
- Effects of transfer are reflected in short term farm performance and also structural change over time (e.g. via new and more sustainably-oriented investments);
- Even before the transfer, the presence of a successor tends to influence performance, structural change and future farm strategies.
- Decisions about succession must be seen as a dynamic process. Following Mann et al⁹, the discussion about farm succession takes place and shapes farm management decisions even before formal take-over of the farm. This implies that the rational strategy within a family farm can be entirely different in cases where a successor is present and interested to take over the farm as a full time business (Figure 1).

Figure 1. Theoretical model of succession decisions



Source: CCRI elaboration from Mann et al, 2013

Across the EU, there is wide variation in rural conditions and thus in relative levels of rural vitality and rural challenges like depopulation, ageing farmers and low standards of living or poor access to services. In some Member States and regions, rural areas outperform urban areas in respect of GDP and employment levels, while in others there are persistent problems of rural decline.

The relationship between wider rural decline and farms' economic development is not simple: there are examples where small farms co-exist with high rural standards of living and economic vitality, and also places where most farms are large, employing relatively few people and highly specialised in commodity production but the rural economy is healthy, diverse and vibrant. Conversely, economic problems can co-exist with challenges of small-scale and semi-subsistence agriculture that is declining, where farmers are ageing. Equally, problems can also be found in situations where farms are very large and specialised, creating relative economic 'deserts' from which the majority of economic value is rapidly extracted via capital-intensive and export-oriented production, and there are relatively low levels of employment on-farm, also upstream and downstream in rural areas.

It is against this broader context of rural change and the challenge of sustaining rural vitality that a focus upon GR in agriculture and the rural economy assumes particular prominence. This is important: without such a broader view, a study examining only the rate of replacement of principal farmers or rural entrepreneurs lacks a clear link to EU

⁹ Mann, S., Mittenzwer, K., Hasselman F., The importance of succession on business growth. A case study of family farms in Switzerland and Norway, YSA 2013, 109-137.

policy. The CAP does not have an objective to keep the same number of people in the sector, over time, and EU regional and social policies do not assume that rural employment should not shift into new sectors and roles as some markets expand and others shrink. The broad goal of **rural vitality** is therefore a primary 'point of reference' for this evaluation.

Considering the specific meaning of *generational renewal in agriculture*, the study defines this as a situation: where there are sufficient young people, willing and able to take on farms and farming as a business choice, to enable agriculture to make a positive and enriching contribution to the local economy and community in which the farms are situated.

In respect of (non-agricultural) GR in rural areas, the study will define this as: where rural communities are stable or growing in population, and there is a sufficient range of rural businesses and employment opportunities for young people, to sustain them. The judgement of what is 'sufficient' is context-dependent: there is no universal threshold for all EU rural territories.

Tests for whether generational renewal (GR) is successfully achieved must concern both **institutional** and **attitudinal** factors, which are inter-related.

- **Institutional factors** in farm GR include the key practical conditions to enable smooth transfer of assets from older farmers to new entrants (including their children but also people from other backgrounds who wish to enter farming) – such as access to land, capital, knowledge and skills. In respect of wider rural GR, factors include the support to enable rural business innovation, entrepreneurship and growth and to provide adequate facilities for people to live and work successfully in rural locations and occupations. This could include practical infrastructure provision such as adequate broadband and mobile phone coverage.
- **Attitudinal factors** in agricultural and wider rural GR include whether the prospect of a career in farming or living in a rural community, working in rural business, is attractive to young people. This will depend upon its anticipated balance of costs and benefits, its status and the relative quality of life that it is considered to offer, compared to other options.

1.3 The developing role of the CAP in generational renewal

The CAP's goals as enshrined in the Treaty of Rome (1957) acknowledged the challenge to support 'a fair standard of living' for farmers, and this goal underpinned the intervention logic of early measures for market stabilisation in the main commodity sectors via guaranteed prices, intervention buying and market management. However, these same measures were equally concerned to stimulate production in agriculture and increase food supply and thus the focus of market management in the first decade of the CAP (1962-1972) was predominantly on creating the conditions necessary to attract investment and promote modernisation and mechanisation in farming. In this context, generational renewal was not a significant focus for policy attention.

The CAP's earliest structural and investment measures – in the so-called Mansholt Plan of 1972 – promoted structural change as a mechanism to drive modernisation and efficiency gains in farming, releasing labour to other sectors and facilitating farm enlargement and specialisation. The increasing capital-intensity of agriculture that was encouraged via this process, throughout the 1970s, had the effect of accelerating decline in farm employment as farms grew, mechanised and increased their labour productivity. Even as late as the 1980s (and notwithstanding the creation of a broader suite of CAP accompanying measures to promote environmental management, economic diversification and targeted support to 'Less Favoured Areas' during this period), increasing productivity via specialisation, farm enlargement and technological investment remained an important focus of policy. Thus, in the first major EC-funded study of this topic, taking stock of the CAP's likely impact upon rural and regional development from 1970 up to the year 2000, Shucksmith et al (2004¹⁰, 2005)¹¹ concluded that the policy

¹⁰ ESPON Project 2.1.3 The Territorial Impact of CAP and Rural Development Policy Final Report, August 2004. At: <https://www.espon.eu/programme/projects/espon-2006/policy-impact-projects/territorial-impact-cap-and-rural-development>

had probably worked more against cohesion goals than in support of them, over the preceding decades. The substantial body of EC data analysis and other evidence presented in that study suggested that the CAP had accelerated rural depopulation and done little directly to prevent rural community and social decline, as farms became ever larger, managed by a continually shrinking workforce and increasingly supplying raw materials to distant and industrial-scale food companies.

Explicit policy measures to support YF under the age of 40 were first introduced to the CAP in Council Directive 81/528/EEC on the modernization of farms (OJ L 197, 20.7.1981, p. 41). Conceived as an aid to modernisation and improving productivity, their use expanded and became linked to broader rural development within regionally-targeted programmes (notably Objective 5b) during the 1994-1999 period. Particularly since then, with the Cork Declaration (1996), the Buckwell report on a Common Agricultural and Rural Policy for Europe (1998), and Agenda 2000 reforms, the CAP has increased its focus upon generational renewal and rural vitality.

After 2000 and the creation of a two-Pillar and more diverse CAP, the policy has offered an increased range and complexity of instruments and measures designed to target rural economic diversification and development; also rural 'quality of life' in respect of services, infrastructure and new opportunities for employment. Within this context, GR both within and beyond agriculture has been a focus of policy support in many MS and regions.

In respect of agricultural GR, the synthesis of all EU Rural Development Programme 2007-2013 mid-term evaluations (OIR et al, 2011) reported that 14 MS offered a capital grant or premium to YF and new entrants. At least five offered a premium and an interest rate subsidy reflecting the maximum permitted amount. In addition, a majority of MS using these aids offered applicants additional investment support. Some countries provided a higher rate of support if the applicant was female or farms were in a Less Favoured Area. The average support per YF was around 50% of the maximum allowed (of €55,000 then, increased to €70,000 in the Health Check reforms, 2009).

With a focus upon broader rural GR, a range of Measures in Pillar 2 RDPs 2007-2013 could be used to target services and employment opportunities for young people and new migrants into rural areas. Entrepreneurial activity, supported by investment in training, advice, co-operation and business investment aid, was also a central focus of many RDPs.

Reflecting these changes, more recent studies examining the role of the CAP in territorial and rural development have identified a wider range of impacts upon rural vitality, jobs and generational renewal in a broad sense. Their variety of conclusions reflects both differences in the methodologies adopted and the scope and scale of the studies, with some reporting broadly positive contributions to EU territorial cohesion goals (e.g. World Bank, 2017¹²) and others being more mixed. For instance, in a systematic review of studies concerning the CAP's impacts upon rural employment, the authors conclude that both negative and positive impacts can be identified but a trend towards more positive impacts over time can be detected, as the focus of CAP has shifted more towards rural development and Pillar 2 spending (Vigani et al, forthcoming).

With the reforms of 2013, renewed emphasis was placed upon ensuring support for YF and promoting GR in agriculture. As one EC briefing puts it, placing YF at the heart of the policy is: 'one of the greatest achievements of the reform which was adopted in 2013' (EC, 2014). Within Pillar 1 of the CAP, the creation of an obligatory supplement for YF within the Direct Payments provisions from 2015 'affirms a commitment to fostering generational renewal within agriculture' (ibid). In Pillar 2 of the CAP, Focus Areas (that were created to clarify the underlying purpose of different measures) include a range which are relevant to GR within and beyond agriculture. For agriculture, key instruments in RDPs, identified by the Commission, are:

- business start-up aid for YF granted on the basis of a business plan and which can represent an EU contribution of up to €70,000;

¹¹ CAP and the Regions -Territorial Impact of Common Agricultural Policy. Edited by M Shucksmith, University of Newcastle upon Tyne, UK, K Thomson, University of Aberdeen, UK, D Roberts, University of Aberdeen, UK

¹² Thinking CAP – supporting agricultural jobs and incomes in the EU. World Bank, 2017, Washington DC.

- a higher support rate for investments in physical assets (plus 20%);
- an obligation for the farm advisory services to provide specific advice to farmers setting up for the first time.

Also, if the Member State wishes, a thematic sub-programme can be included in the programmes specifically to address the needs of YF. The intervention logic for these measures is explained in the EC's document (2014):

'The combined effect of higher direct payments and specific help with setting up a farm business will make it easier for young people to enter the profession. This is very much in Europe's interest - young farmers are dynamic and innovative. They will keep European farming progressive and competitive. Farming will continue to provide nutritious food at affordable prices - something all European citizens need to stay healthy. At the same time, it will contribute to keeping the countryside alive and in good environmental condition.'

The CAP Regulations for the period 2014-2020 also affirm a commitment to help address the challenge of balanced territorial development, particularly in respect of strengthening the social fabric of rural areas, supporting rural jobs and growth, and promoting GR. In this context, the policy goals clearly extend beyond agriculture.

1.4 Description and inventory of measures

The current CAP includes many instruments and mechanisms that can be used by MS and regions to encourage successful GR in agriculture and broader rural vitality, via the maintenance or creation of rural jobs and growth, and support to diversify the economy and ensure a good quality of life for rural residents. In brief, we highlight key instruments having both direct and indirect effects upon generational renewal.

- Within Pillar 1, **direct payments** provide significant income support to agriculture, benefiting 7 million farms across the EU. This can be especially important sustaining farms in areas where productivity is low. The **young farmer supplement** to direct payments also aims to encourage young people to build a future within agriculture by providing additional support to incomes in the first years after they take on a farm. **Specific coupled measures** can also be designed to help retain farming systems of socio-cultural and environmental significance, which may also promote continuing rural vitality.
- Where market management still plays a significant role in market stabilisation – e.g. fruit and vegetables, poultry or pigmeat – these, and the **Operational Programmes of Producer Organisations** which support this management, may help create the conditions to encourage young people into these sectors.
- Within Pillar 2, **aid for young farmers' start-up** is intended to promote GR. The contractual continuation of some **early retirement aids** from the 2007-2013 RDPs offered support to older farmers to release holdings to a younger generation. And **targeted measures for small farms** include a similar measure to aid restructuring which might, or might not increase GR, depending upon how it is used.
- Pillar 2 support for **knowledge, training, advice, co-operation and business planning** can help to foster a more professional approach in farming which may attract a new generation of business leaders into the sector. Aid targeted **at rural business start-ups and farm diversification aids** can also offer farmers and other young people in rural areas opportunities to increase their incomes, provide greater added-value and/or resilience to their businesses and employment for other family members or rural residents.
- Pillar 2 investments in rural infrastructure: to improve basic rural services, stimulate village renewal or support the development of tourism, heritage and craft sectors; can help directly to support business start ups and growth in rural jobs, and also improve rural quality of life and indirectly help to retain rural population and community spirit. Aid for Broadband is perhaps the measure of most direct relevance to rural business viability but other measures may also be relevant in specific local or regional circumstances. These kinds of aid can make

the choice to stay within, or move into, rural areas more attractive to young and older people.

- Other land-based payments such as Agri-Environment-Climate Measures (AECM) and aid for Areas of Natural Constraint (ANC) provide targeted incentives to sustain farming which may promote it as a career option for young people, thereby an indirect stimulus to GR. Under the Horizontal regulation of the CAP, support for **farm advisory services**, or payments made under the **small farmers scheme**, could also affect GR indirectly.

The scope and scale of these impacts depend critically upon MS or Regional choices concerning the design and delivery of CAP measures at local level. Impacts also depend upon how these interact with the underlying context of each area, including national (non-EU-funded) policy instruments and measures. For example, fiscal policies to promote or prevent easy inter-generational transfer of farmland or businesses may directly affect the pace of GR. Demand for land for non-farm uses and/or spatial planning policies influence the relative attraction of inter-generational transfer. CAP instruments operate alongside the influence of market conditions and trends, governance and regulatory frameworks and the shifting expectations and capabilities of people and communities.

In this study the Terms of Reference require a CAP intervention logic to distinguish instruments and measures having either direct or indirect impacts upon GR. Combining this with a distinction between agricultural and broader GR generates four categories:

- 1) Measures and institutional devices which are intended to have a direct effect upon **GR in agriculture** and farm households, targeting farming as the principal activity and helping (more) young people to succeed – identified here as Young Farmer measures
- 2) Measures and institutional devices likely to have a relatively important indirect effect upon agricultural GR by enhancing the viability and relative attraction and accessibility of agriculture, compared to other career options or life choices
- 3) Measures and institutional devices which target **rural vitality** directly through provision to help people gain a direct economic return from rural activities (e.g. supporting rural jobs, entrepreneurship and income generation outside farming and targeting youth /rural migrants)
- 4) Measures and institutional devices which help to create the conditions to enhance rural quality of life, playing an indirect role in promoting rural vitality by retaining rural population, or attracting people to move to rural areas (infrastructure for communities, social facilities, services and amenity for rural inhabitants).

An inventory of these measures and devices within each of the CAP regulations, indicating direct and indirect impacts, based upon their intervention logic, is in Table 1 overleaf.

1.5 Study Focus and Scoping

1.5.1 Scoping of relevant measures, for use in the study

The Terms of Reference use three different terms when describing the overall CAP analysis and specifying the Evaluation Study Questions (ESQ): 'young farmer measures', 'measures relevant to GR', and 'all of CAP'. It is therefore important to define clearly how the study interprets and applies these terms. The terms represent an increasing scope: 'young farmer measures' are a sub-set of 'GR-relevant measures', which is in turn a subset of 'all of CAP'. In making definitions, both the Focus Areas (FA) and the numbered measures and sub-measures of Pillar 2 of the CAP (Regulation 1305/2013) are used to provide clarity on interpreting each term. Focus Areas are of particular relevance because they clarify from the perspective of the programmes' design, how different measures contribute to specific goals. Whilst just a few sub-measures are explicitly connected to GR, others have a broader definition and could therefore be used for a wide variety of purposes, only some of which would be relevant to this study – their primary purposes are revealed via the Focus Area categories under which they are programmed. The choices for the definitions draw on reasoning and information from other relevant

literature (most notably, studies commissioned by the European Parliament on CAP implementation plans and on young farmer support, in recent years – see references).

Table 1. Current CAP: logic for instruments and measures affecting generational renewal

Regulation	Measures with potential GR impacts	Measures/Sub-measures	Focus Areas	Direct GR impacts (agricultural / wider rural)	Indirect GR impacts
1307/2013(Direct Payments –DP)	Coupled support DP - Basic payments to increase/maintain income ANCs ¹³ Young farmer supplement to DP Small farm scheme (SFS)	CAP pillar I DP Title III, chapter 5. Payment for young farmers	NA	The specific additional funding to young farmers which gives an income boost to this group relative to others, in their first years of operation.	Apart from the YF payment, all other DP measures listed in column 2 increase the relative financial return from agriculture compared to other options, which may help to retain younger generations (or keep older farmers in business). The SFS supports viability of very small holdings, may help young people stay in rural areas
1305/2013 (Rural development-RD)	Young farmers ¹⁴ direct targeted measures in RD which includes the specific measure in Article 19 (6) but also higher rates of aid for measures concerned with certain investments under Article 17 (3), compared to the aid rates available to older farmers using these investment aids.	6.1. Business start-up aid for young farmers 4.1. Investments in agricultural holdings 4.2. Investments in processing/marketing or product development Sub-programmes targeted to YF (<i>Just Hungary has a specific one</i>)	Mainly Priority 2, FA 2B: Generational Renewal	6.1 offers direct aid for generational renewal in farming & increased viability for young farmers; Investment measures may offer enhanced rates to young farmers which improve performance. Sub-programmes may offer targeted support to young farmers	These measures may help to create a climate in which there are more business and employment opportunities for young people in rural areas more generally, thus encouraging broader non-farm GR, indirectly.
1305/2013 (Rural development-RD)	Farm and business development (Article 19) 19(a) Business start-up	6.2. start up aid for non-farm rural businesses 6.3. small farm business	Priority 2 (FA: 2A: Restructuring and 2B. GRI); Priority 3 (FA 3A:	May offer direct aids for generational renewal; promote rural vitality & non-farm GR either by	Some aid under these measures may be more generally focused on business diversification, in which case there may be

¹³ ANC can be supported by the 1st and 2nd pillar, although few MS choose the option to support under Pillar 1.

¹⁴ There is 1 young farmer measure: M6.1.

Regulation	Measures with potential GR impacts	Measures/Sub-measures	Focus Areas	Direct GR impacts (agricultural / wider rural)	Indirect GR impacts
	aid for: (ii) Non-agricultural activities in rural areas 19(c) Annual payments or one-off payments for farmers eligible for the small farmers scheme Article 20 (c) – Broadband infrastructure	development 6.4. creation and development of non-farm businesses 6.5. small farmers' transfer scheme M7.3 : Broadband	Better integrating producers in food chain); Priority 5 (FA 5C: Renewables) and Priority 6 (FA 6A: Diversification). FA 6c ICT	direct investment in these businesses or provision of essential business infrastructure (broadband) The small farmer support scheme may directly assist GR in agriculture where transfers to younger farmers occur from it.	no direct impact on GR but indirect impacts via e.g. job creation which offers opportunities to young and older people alike.
1305/2013 (Rural development-RD)	Cooperation for economic enhancement and innovation (Article 35)	16. Cooperation 9. setting up producer organizations_(Art.27)	Measure 16 contributes to all Priorities, Measure 9 contributes to Priority 3 FA 3A: Integrating producers in food chains		Help for collaborative action, learning, innovation/successful adjustment to new market or environmental conditions, indirectly increasing attraction or resilience of farm futures
1305/2013 (Rural development-RD)	Other investments Art. 17 (3). Investment in physical assets Art. 21. Investment in forest area development Art. 25. Investments in improving resilience Art. 26. Investments in forestry technologies	4.1 – 4.3. Investments in physical assets_(agricultural holdings, processing and marketing/ product development, modern infrastructure) 8.1., 8.2., 8.6. Forest investments (afforestation, agro-forestry and forest product valorisation)	Contributes to Priorities 2, 3, 4 & 5. Priorities 4, 5 (FA 5C: renewable energy and 5E: Carbon) and 6 (FA 6A: Diversification)	Some RDPs incorporate these measures targeted in ways which directly promote GR in rural areas, helping young people or new in-migrants to set up in business, develop new enterprises, access job opportunities etc.	Most of these measures in RDPs will indirectly promote rural vitality by making rural areas more active, generating growth and jobs and thus improving quality of life
1305/2013 (Rural development-RD)	Knowledge transfer and information actions (Article 14)	1.1 training and skills 1.2 demonstrations and information actions 1.3 exchanges and visits	Contributes to Priorities 1 (FA 1A: Fostering innovation and 1C: Training), also 2, 3, 4, 5 & 6.	Where specific to young farmers or new businesses, can directly promote successful intergenerational transfer	Help for all farmers, via technical and management knowledge, collaboration and innovation, may indirectly help GR

Regulation	Measures with potential GR impacts	Measures/Sub-measures	Focus Areas	Direct GR impacts (agricultural / wider rural)	Indirect GR impacts
1305/2013 (Rural development-RD) 1306/2013 (Horizontal reg)	Advisory services, farm management and farm relief services (Art. 15)	2.1. Advisory services 2.3. Advisory services	Measure 2 contributes to Priority 1 FA 1A: Fostering innovation		Help to support all farmers including young farmers to increase their capabilities for success
1305/2013 (Rural development-RD)	AECM and ANC aids (Articles 28 and 32)	10.1 Agri-Environment-Climate commitments 13.1-13.3 Areas of Natural Constraint	Mainly priority 4, FA 4.1 Biodiversity, 4.2 water management, 4.3 soil erosion and management		Measures may play a particular role supplementing farm incomes in marginal areas, supporting farm viability, indirectly helping to retain young people in the area.
1305/2013 (Rural development-RD)	Basic services and village renewal in rural areas (Article 14) LEADER / CLLD (Art 42: Leader)	7. Basic services – all types (except broadband, already covered above) 19. LEADER – all types	Contribute to Priority 6 – FA 6.1 diversification, job creation and SMEs, 6.2 local development	Some RDPs incorporate these measures targeted in ways which directly promote GR, helping young people or new entrants set up business or access employment.	Most of these measures will indirectly promote rural vitality by making rural areas more active, generating growth and jobs and thus improving quality of life
1698/2005	Early retirement measures (Title IV, chapter 1, art 23)	113. Early retirement	Not relevant – no focus areas in 2007-2013 RDPs	May aid GR by helping retirees transfer land to new farmers, transfers to neighbours creating larger farms may work for or against GR	
1308/2013 (CMO)	Quality policy	Section 2 – designation and promotion of quality products (PDO, PGI etc.)	Not relevant, no FA in this regulation		For both these types of action: Help for collaboration, product differentiation and better business performance may indirectly increase attraction of farm futures
1305/2013 (Rural development-RD)	Quality measure Article 16 (4)	3.1 new participation in quality schemes 3.2 info and promotion	Priority 3 (FA 3A: Better integration into food chains)		

Source : CCRI and al elaboration, derived from relevant legal documents

1. 'Young Farmer (YF) measures' comprise those making explicit, targeted provision to young farmers only:

- CAP Pillar 1 Direct Payment supplements to YF (in Chapter 5 of Reg. 1307/2013);
- CAP Pillar 2 (Reg. 1305/2013) Sub-measure 6.1 Business start-up aid for YF;
- Pillar 2 investments which enable a higher rate of aid for YF, in respect only of those payments made using the higher rate (sub-measures 4.1 and 4.2);
- All the sub-measures used within any Pillar 2 sub-programme that is specifically and explicitly targeted at YF (only used by Hungary, we believe);
- Other RDP measures **programmed under FA2B** 'to facilitate the entry of adequately skilled farmers into the agriculture sectors and in particular, young people'.

This is consistent with the approach adopted in the EP study (Caputo, 2018) on YF.

2. 'Generational Renewal (GR) measures':

For measures relevant to GR (both agricultural GR and non-farm GR), a wider range of CAP Pillar 2 Focus Areas is relevant, because broader objectives covering farm and non-farm situations and going beyond measures which only target one type of beneficiary, are covered. However, measures most relevant to GR are those with a direct impact – i.e. able to directly stimulate generational renewal through job creation, business start ups and providing essential services and skills to young entrepreneurs and employees (e.g. transport, communications). Measures with only an indirect impact are excluded. Compared to YF measures, this definition includes a few more measures / sub-measures which could potentially be targeted at GR. However, they would be included only where the Pillar 2 measures are programmed under a **relevant Focus Area having a direct impact upon GR, in farming or non-farming rural activities (see section 1.4)**. So – it includes all of the YF measures as defined above, plus:

- Other relevant measures in Chapter 1 and 2 of Title III of the 'Rural development regulation' (1305/2013), covering:
 - Farm and business development (sub-measures 6.2, 6.3, 6.4 and 6.5),
 - Co-operation for economic enhancement and innovation (all of measure 16 except sub-measure 16.5, also measure 9),
 - Other investments (sub-measures 4.3, 8.1, 8.2, 8.6, all of measure 19),
 - Knowledge transfer and information actions (sub-measures 1.1-1.3),
 - Advisory services, farm management and farm relief services (sub-measures 2.1-2.3),
 - Basic services and village renewal in rural areas (all of measure 7), including 7.3 ICT, which includes funding for Broadband connections and services;and mainly where measures are programmed in Focus Areas 2B, 2A, 2C, 6A, 6B and 6C.
- Comparison with early retirement measures under Regulation 1698/2005 is relevant to GR, so is included. In addition, this definition covers Financial Instruments used for GR. The study also includes examination of where the European Innovation Partnerships (EiP-Agri) may contribute to GR goals, e.g. through establishing groups and networks promoting innovative farming or agri-food approaches among YF or new entrants to rural areas.

3. All CAP measures:

This means all measures, including aids and institutional arrangements, under Pillar 1 or Pillar 2 and including relevant CMO provisions which may directly or indirectly affect rural areas' vitality in terms of jobs and livelihoods, and the sustaining of (sufficient) people employed in agriculture and forestry to ensure a good management of the territory. The study is required to evaluate the impact of the CAP upon GR in rural areas, so we must also define what is meant by 'rural areas'. A variety of definitions of rural territory is used by different EU and MS administrations and researchers. In this study it is important to capture the widest possible range of CAP impacts upon GR, so the

definition, making reference to Eurostat's classification¹⁵, embraces 'predominantly rural' and 'intermediate' areas at NUTS 3 level. Both types of area contain significant recipients of CAP aid, while relatively few CAP beneficiaries live and work in 'predominantly urban' areas (the final category in the classification).

1.5.2 Scope of the study and rationale for a nested approach, with case studies

As explained in the Terms of Reference (ToR), the study covered more than just YF aids in CAP Pillar 1 and Pillar 2; it also considered how to make rural areas a more attractive option for young/new people, as well as other non-CAP influences upon GR in rural areas. The period of focus is the 2014-2020 programme period but in addition, elements from 2007-13 RDPs, were considered where they provide important evidence of impact. In view of Member States' unique competences in areas affecting GR in agriculture such as land regulations, taxation, inheritance law and territorial planning, assessing the impact of national policies, schemes and other relevant factors on GR was also key.

It was necessary to look at the relative and absolute deployment of all relevant CAP instruments and measures across the EU-28, in order to gain an overview of the patterns, scale and balance of application in different rural contexts and make some overall assessment of these and their likely impact, using general analytical techniques.

Given the complexity of interactions between socio-economic and structural and institutional factors, and the selection and application of specific CAP measures and other instruments to address the challenges of GR in rural areas (discussed in section 1.4), there was a need to make detailed analysis of specific situations. This enabled understanding of causal relations between the mix of measures and their impacts in different contexts, which was key to assessing effectiveness and efficiency, and generating ideas for enhancement.

These considerations led to the choice of a 3 or 4-tier 'nested' approach to the study, combining analysis of EU level information and data with more focused work in a selected case study sample of MS or Regions and, within these, a further selection of local area studies. More detail on the overall approach is given in section 3 of this report and the process for selecting case studies is also described there.

¹⁵ <https://ec.europa.eu/eurostat/web/rural-development/methodology>

2. INTERVENTION LOGIC AND ANALYSIS OF THE EVALUATION STUDY QUESTIONS

2.1 Intervention logic diagrams and details

In respect of **GR in agriculture**, the logic of relevant CAP measures is centred upon differentially supporting or privileging YF or new entrants over other potential recipients of aid, to provide specific incentives to attract or retain young people in agriculture, to attract new people, and/or to speed or strengthen succession. The incentives include financial aids paid direct to YF as well as support to enhance their skills, business knowledge and confidence, also their decision-making via advice, innovation and information. Also, aid may be given to incentivise older farmers to release land to younger farmers and new entrants, or to enable farm amalgamations so as to offer more viable holdings to them.

In respect of **wider GR in rural areas**, the logic of CAP measures is broader. It includes aid to encourage, attract and help (young) people and newcomers to set up rural businesses and funding to provide rural services and infrastructure to support rural businesses, enhance quality of life, and maintain or increase rural populations.

The project team analysed the most relevant regulatory documents [Regulation (EU) 1307/2013 and Regulation (EU) 1305/2013], in order to establish a link between direct and indirect factors and programme intervention logic. Precise measures or instruments, focus areas and priority areas, and output/result/target/impact indicators as well as relevant context indicators, were considered. It was a requirement in the ToR to start from a theory-based analysis of the effects of the CAP regulations on GR in rural areas and apply it to develop an intervention logic showing relevant linkages and short-to-long term effects.

Figure 2 illustrates a specific intervention logic for GR and the CAP in detail, showing the linkages between relevant measures, focus areas, CAP strategic goals contributing to GR, and their intended impacts.

The most prominent, direct measures for agricultural GR (YF supplement under Pillar 1, investment support, young farmer business start-up support, training and advisory services under Pillar 2) aim to strengthen the agricultural sector by bolstering the economic viability of farm holdings with YF (successors or new entrants). Through these interventions the “pull factor” of leaving the sector to enter other economic sectors within or outside rural areas should be counterbalanced. The Pillar 2 co-operation and innovation measures, as well as investments in other rural business start-ups and other sectors development including forestry, tourism and heritage, aim to enlarge the economic base by supporting the growth and co-ordination of several sectors (along the agricultural value chain, but also outside it). These interventions may lead to a more balanced and resilient sector mix and thus tackle GR by increasing the economic attractiveness of regions.

Basic service and infrastructure aids including ICT target regional endowments and human potential of rural areas and address GR by increasing the quality of life and the knowledge base, as well as providing employment. This means on the one hand an enlargement of opportunities, on the other hand an increase in the quality of services, which strengthen the basis for providing general economic services (a prerequisite for sufficient income and improved working conditions) and facilitating social ties and networks.

Figure 2. Specific intervention logic for CAP goals and instruments

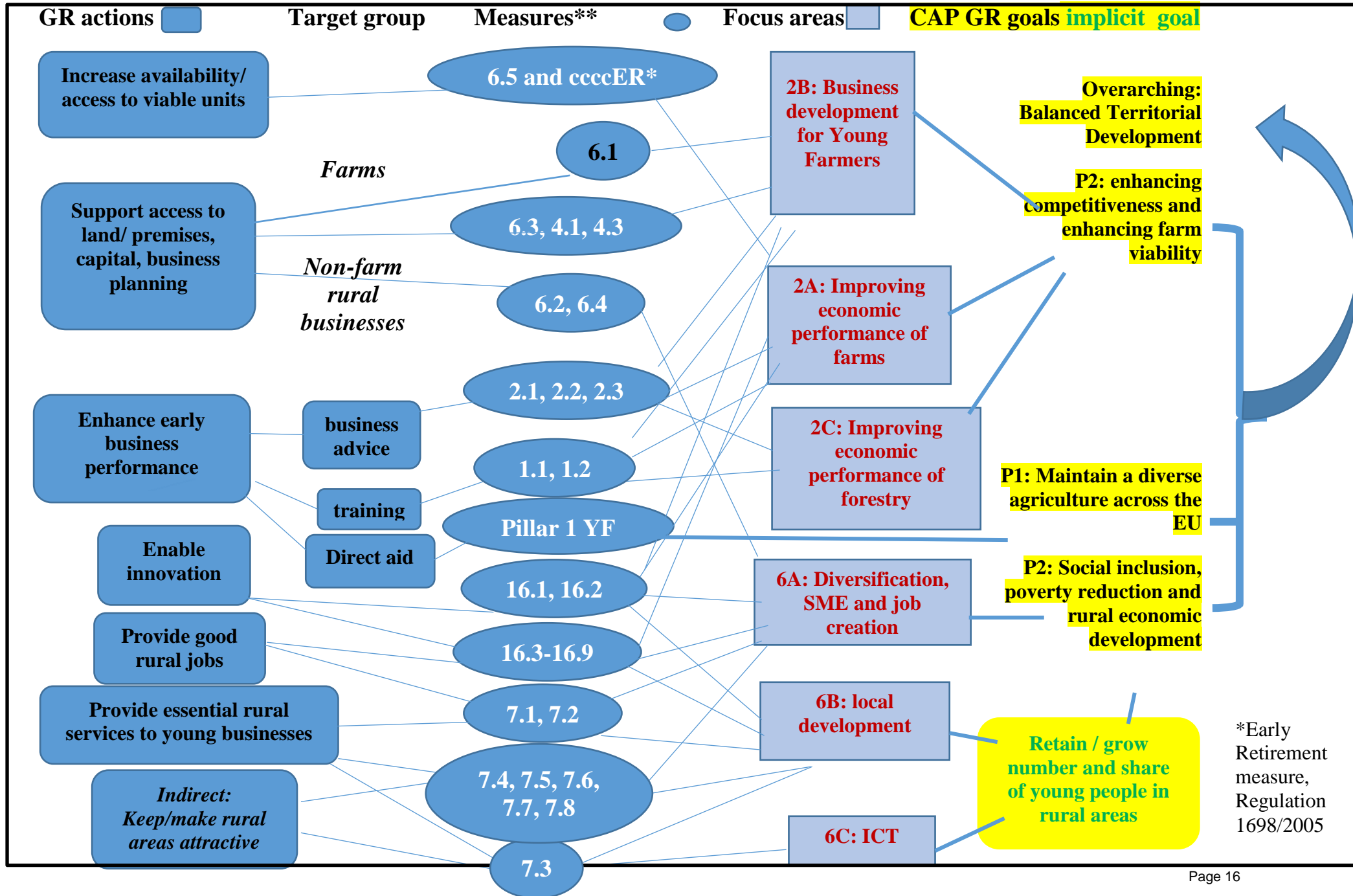


Table 2. Legend to figure 2 – measure codes

Measure code	Sub-measure number	Purpose of aid
M6	6.1	Start up aid for young farmers
	6.2	Business start-up aid for non-farm businesses
	6.3	Business start up aid for small farms' development
	6.4	Investments in creation and development of non-farm businesses
	6.5	Payments for small farms scheme permanent transfers
M4	4.1	Investment in modernisation of farms
	4.3	Investments in infrastructure related to farm or forestry development, modernisation or adaptation
M1	1.1	Training and skills in agriculture and forestry
	1.2	Demonstration and information actions in agri/forestry
M2	2.1	Advisory services benefits
	2.2	Setting up advisory services
	2.3	Training advisors
M7	7.1	Preparing plans for village and municipality development and services
	7.2	Small-scale infrastructure including renewable energy
	7.3	Broadband infrastructure
	7.4	Basic services for the rural population
	7.5	Recreational, tourist and tourism investments
	7.6	Investment in cultural and natural heritage
	7.7	Relocations and building conversions
	7.8	Other basic services and village renewal activities
M16	16.1-16.10	Support for setting up different kinds of cooperation
Pillar 1 YF aids		Income support supplement to young farmers

Source : Dwyer et al, 2016

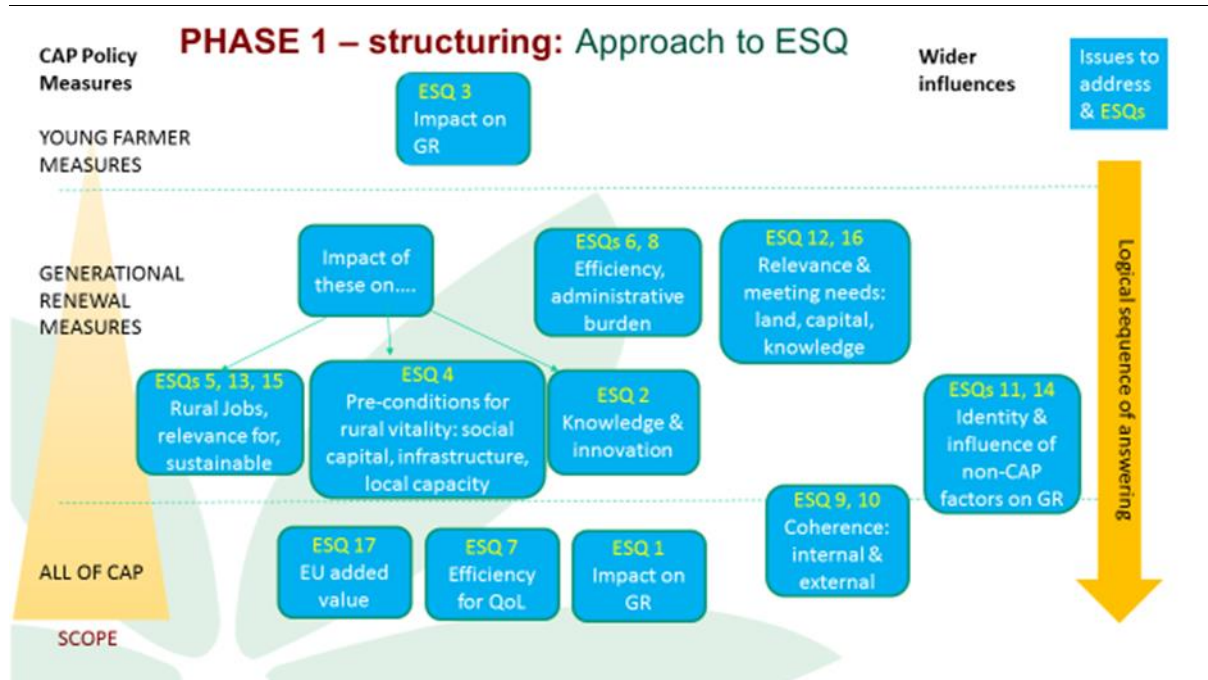
2.2 Evaluation Study Questions (ESQs) – logical sequence and approach to answering

The study has identified a logic to the sequence of ESQs and the connections between them, which has implications for how best they should be answered (Figure 3). There is a significant degree of interaction between the individual ESQs. A recognition of these interactions is important for determining the most cost-effective approach to answering them. A sequence for this work has been developed so that it enables policy learning and summative evaluation during the study.

THEME: Effectiveness and relevance – ESQs 2-5, 13 and 15, 12 and 16

Effectiveness: The extent to which objectives pursued by an intervention are achieved. An effectiveness indicator is calculated by relating an output, result or impact indicator to a quantified objective. (EC, 2017). In the technical handbook on the monitoring and evaluation framework of the CAP 2014 – 2020, effectiveness is an assessment of the expected and actual impacts of a measure. This means being able to identify and where possible quantify changes as a result of the application of CAP measures to a particular situation, over a given period and in the context of multiple intervening factors. Key challenges concern the tasks of measuring change, and of attribution - identifying what has changed, pinpointing the role of the measures under scrutiny in stimulating the change, and seeking to understand how, why and to what extent this role has operated in different contexts and over periods of time. Difficulties can include finding a robust way to measure the scale and scope of change, establishing the counterfactual, and assessing deadweight and displacement.

Figure 3. logical sequence and clustering of ESQs



Source: CCRI et al

The temporal focus of the study is the post-2013 CAP, a relatively short period in which to be able to identify impacts. This limits the extent to which change can be measured from secondary data. Many impact indicators are not monitored annually, and many socio-economic indicators are insufficiently differentiated to be able to identify rural economic and social change, as opposed to broader regional change. 2014 onwards is a period in which many EU Member States and regions were affected by volatile intervening factors, and the 2007-2013 period spanned the global financial crisis, which may have fundamentally changed inter- and intra-sectoral relationships in the agri-rural economy. So 'background noise' will be considerable (i.e. other things happening which can obscure the impacts that we seek to identify). This highlights the importance of using a combination of quantitative and qualitative techniques and building validation into the process.

Relevance concerns whether and how far it can be established that measures are appropriate for the territories and contexts in which they are applied. This requires a kind of SWOT approach, cross-checking and contextualization against different data sources, combined with knowledge from those best-placed to offer an informed judgement. This is territorially and temporally sensitive, i.e. answered differently in different places and times. Sampling different territories and examining at different scales is therefore necessary.

THEME: Efficiency and administrative burdens (ESQs 6 and 8)

The relative efficiency of CAP measures in promoting or achieving GR depend upon the balance between the outputs and outcomes of measures and the costs, in resources and time, required to deliver those outputs and outcomes. Efficiency depends upon processes at all levels of the public administration – EU, national, regional and sub-regional, and it may also be assessed in respect of the experience of beneficiaries or target groups. The main challenge in measuring efficiency is data availability. Many public administrations do not monitor the precise costs of delivering certain elements in policy, as both staff and procedures commonly cover multiple responsibilities and processes and overheads (buildings rental, telephones, etc.) are also often common to many individual delivery tasks and processes. Thus we constructed plausible costs through interviews and secondary data analysis (a form of 'business process review') in CS, to map administrative processes and apportion costs. Specific examples of difficulties

encountered or slow or cumbersome procedures were noted, in order to illustrate common problems identified by interviewees.

THEME: Coherence (ESQs 9 and 10, and 11 and 14)

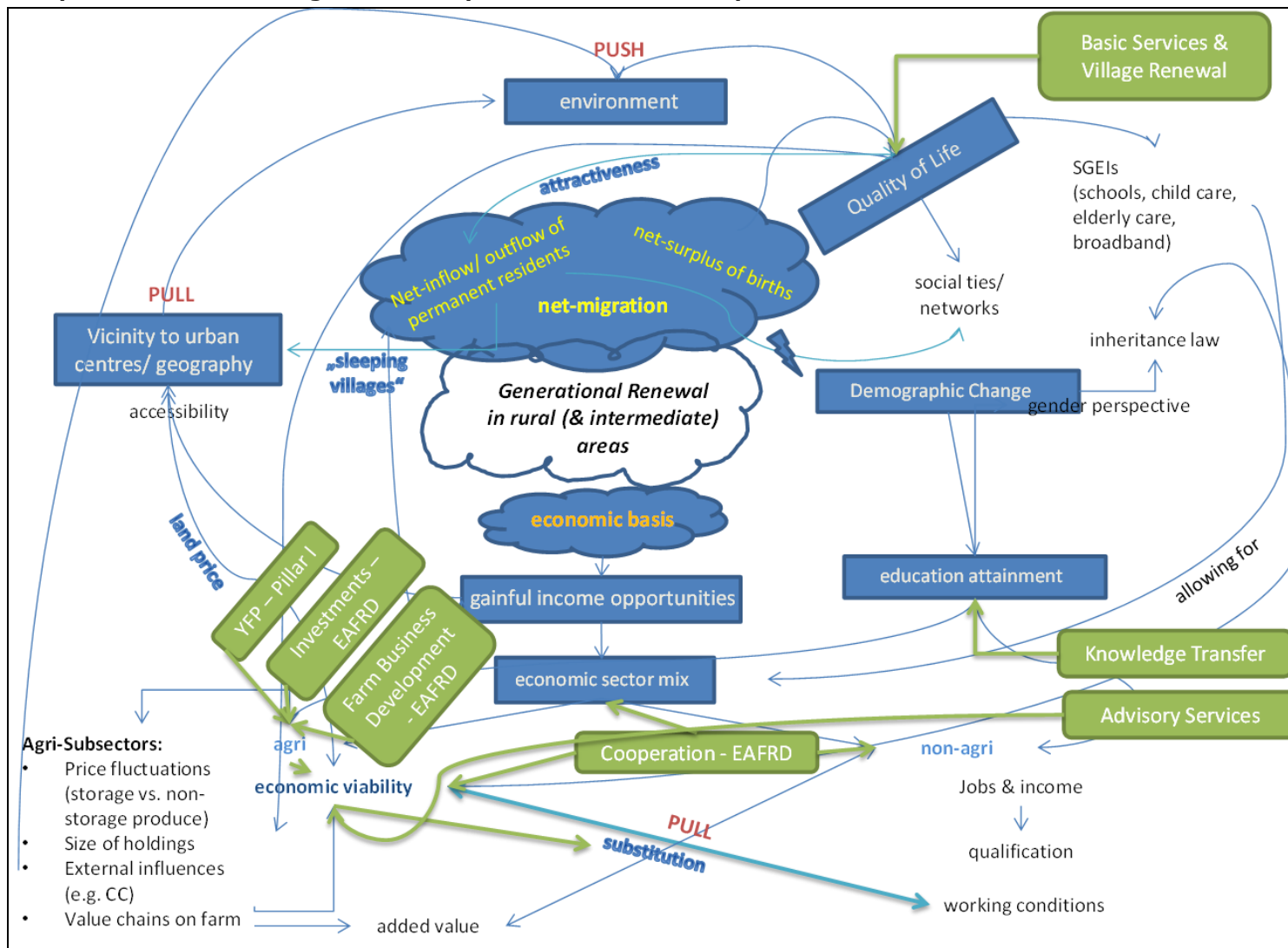
Coherence refers to the extent to which a particular CAP measure, or group of measures acting together, produce(s) effects that are coherent with other CAP measures and provisions, also with wider EU policies, and finally also with non-EU policies; so not conflicting or confusing, for the groups for whom they are designed and for those who are responsible for delivery. This requires the application of clear logic and a process of cross-checking and contextualization against different data sources, gathering expert knowledge from those best placed to offer an independent judgement concerning how they sit alongside other EU policy measures, approaches and goals. The question of whether an approach or a group of measures is coherent and relevant may be answered differently in different places and at different times. To assess these qualities at EU level, secondary data and expert opinion in CS across time periods was used e.g. to check whether measures appear to have become more or less coherent as policy has been revised.

THEME: EU Added value

This theme seeks to distil the extent to which the measure(s) under scrutiny have achieved tangible results and impacts over and above what could have been achieved with national or regional policies alone. EU policy applies a principle of providing added value to MS policies – for example, tackling issues that cross national borders in a co-ordinated way. It is important to be clear about how far CAP measures achieve new results and how far they may simply substitute EU-funded measures for pre-existing national policies (a kind of 'displacement' impact). The challenge for an effective evaluation of EU value-added is to establish what national or regional policies might have done in the absence of these EU measures, and what the changes in impact are likely to have been, under those circumstances. This is similar to the measurement and evaluation of effectiveness and must overcome a similar range of challenges.

Figure 4 presents a conceptual mapping of the complex relationships between the operation of the Common Agricultural Policy and the topic of Generational Renewal in rural areas, as defined in this study.

Figure 4. Mind-map to understand linkages between policies and GR in Europe



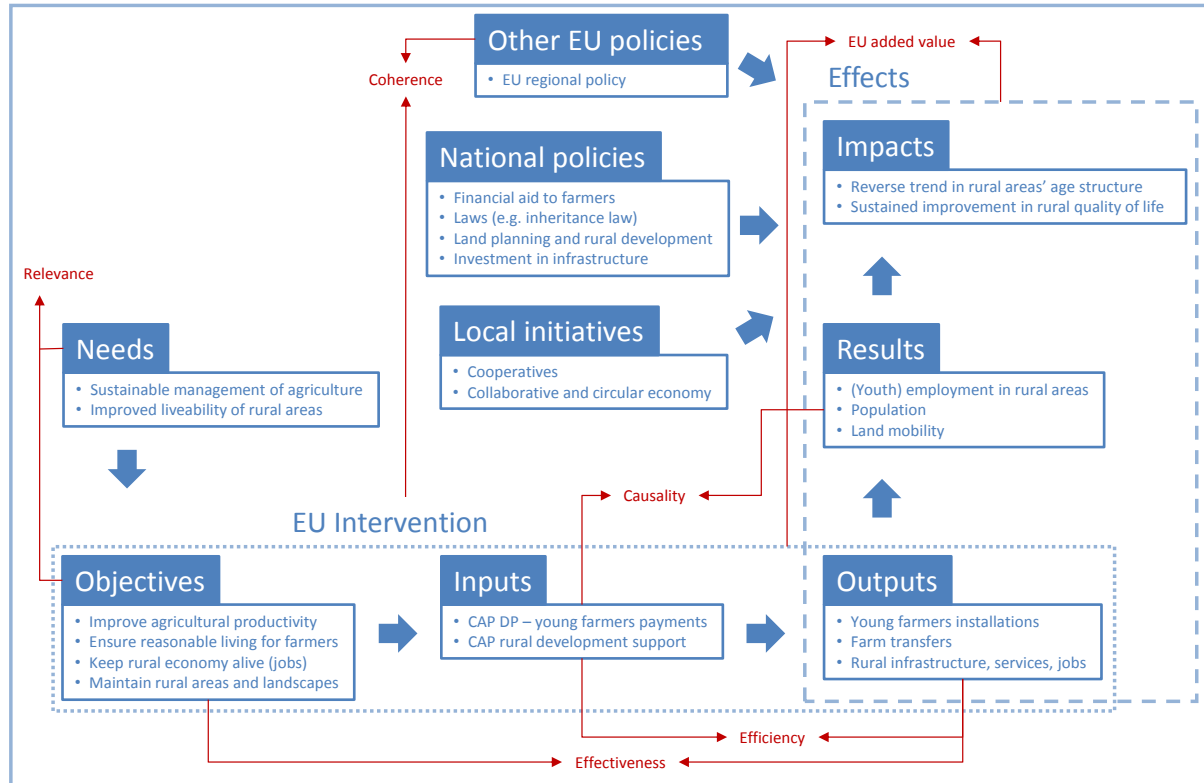
Source: OIR brainstorming session

3. METHODOLOGY – GENERAL APPROACH, INFORMATION SOURCES, MAIN METHODS, CASE STUDIES AND SELECTION APPROACH

3.1 General Approach to the study

Figure 5 provides a high-level overview of the logic of the study approach, showing how different elements of the study and evaluation themes inter-connect in a coherent system.

Figure 5. Logic of the study approach



Source :OIR

The study required gathering of relevant data and information from EU, as well as national and more local, levels in order to answer the ESQs, as examined in section 2. Bearing in mind the timing and resources available, an efficient design was required to avoid duplication and focus on those key activities which provide the best explanatory power. The overall approach therefore combines **three main sources and types of evidence**.

1. EU level data and information gathering, review and analysis comprised:

- Early, qualitative information to generate an enhanced programme theory and intervention logic from literature review, also key EU stakeholder interviews, and an online survey targeted at national administrations' ENRD contacts. Later qualitative refinement where study team members participated in 2 one-day workshops on GR challenges and the CAP hosted by the ENRD in December 2018 and February 2019. In March 2019, the team hosted a half-day workshop with Commission officials in DG Agri, to discuss, refine and validate the emerging study findings.
- Quantitative analysis of EU indicators (mainly context) and available CAP expenditure data at NUTS 3 level, including an initial examination of EU variation through mapping; then a cluster analysis to create a typology of regions to aid case study selection. A further phase of analysis included testing for correlations between potential causal factors and spending patterns, for current CAP GR measures and the 2007-13 early retirement measure.

- A multivariate, multicriteria (MCA) analysis to allow the identification of composite indicators for types of NUTS3 regions, with Principal Components Analysis followed by regression analysis to estimate the impact of these indicators on the number of YF.

2. Case studies in selected Member States, chosen to cover the range of territorial types identified in the cluster analysis, to ensure a good balance of older and newer MS and broad geographical and socio-political spread. Case studies use 2 or 3 levels of analysis:

- National, or national and regional (for federal countries) level – initial context analysis, collection of information on national policies and non-policy GR influences, institutional mapping and business process reviews covering delivery efficiency of all YF and selected GR measures; key stakeholder interviews, literature review/document analysis, and a final workshop to validate impact of GR measures;
- Local area level, for secondary evidence and interviews of an illustrative range of beneficiaries in each local area; interviews of local delivery agents; validation of national-level CS findings, and description and analysis of good practice examples.

3. Quantitative analysis of farm- and regional-level CAP impacts comprised:

- a) Matched farm-based estimation of YF measures' impact on farm business performance and structural change, using FADN panel data in a longitudinal counterfactual analysis, in 2 Member States which have sufficiently large-scale and long-established use of these measures – Italy and France;
- b) Discussion and extrapolation of estimated impacts of GR measures on rural employment, by reference to detailed CGE modelling undertaken in Poland, then using the typology of areas developed to consider its implications at EU level.

3.2 Information sources

From the three types of evidence in the overall approach, the study generated and used:

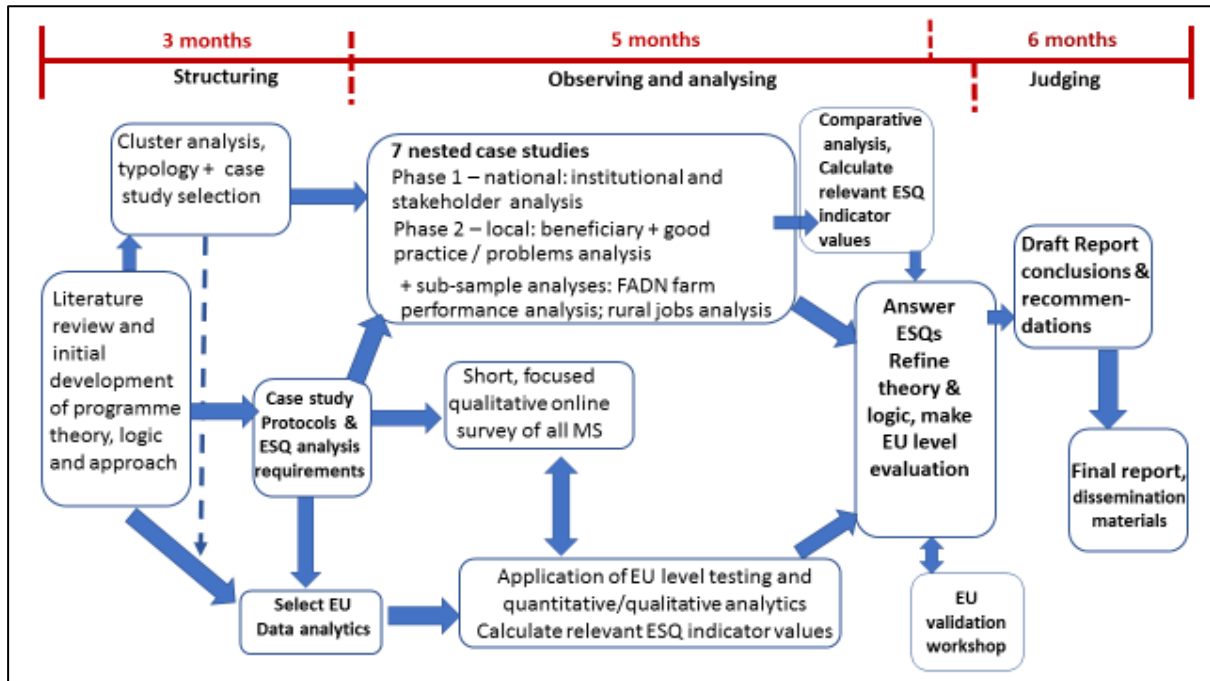
- 1) Data collated by the Commission concerning the CAP planned and executed expenditure by Regulation and measure, for all years for which it is available in the 2014-2020 period, at the lowest possible scale (e.g. NUTS 2 or NUTS 3), as well as output and result indicators for this expenditure, from the common monitoring and evaluation framework (CMEF);
- 2) Statistical context information collected by the Commission including the Farm Structure Survey, FADN (Farm Accounting Data Network) data, at comparable scale to the expenditure data (NUTS 2 or NUTS 3). This included relevant context indicators included in the CAP 2014–2020 common monitoring and evaluation framework (CMEF) and Rural Development indicator set;
- 3) Information from relevant policy and scientific literature, e.g. Court of Auditors special report(s), EP ComAgri report(s), relevant completed or on-going studies on CAP reform and CAP impacts;
- 4) Information provided by MS officials via an online survey developed for this evaluation;
- 5) Data and information about CAP policy design, delivery and impact (including good practice examples) at national/regional and local levels via case studies, chosen to represent the key axes of variation among the EU-28;
- 6) Other, targeted consultation responses including 7 national and 3 EU stakeholder and policy-maker workshops, expert and stakeholder interviews at case study and EU level, as well as managing authority/delivery agency and beneficiary interviews at case study level.

The team used quantitative and qualitative data and mixed methods approaches to meet the goals of the study in a cost-effective and robust way. The work involved elements of both *ex-post* and ongoing evaluation. Comparative analysis of CS tested relevance of initial intervention logics and claimed, suggested or predicted outcomes from EU-level analyses.

3.3 Process of the study

Sources and methods were assembled in a logical, hierarchical and temporal framework (Figure 6). A careful sequence of steps in each of the four phases of the study enabled feedback in some stages so that tools applied later on were informed by the findings of earlier phases. As indicated in the figure, a 'toolkit' of methods and analytical tools is applied together in ways which optimize the range and types of evidence informing the evaluation (effectiveness, efficiency, etc.).

Figure 6. Study Process



Source : CCRI et al

3.4 Brief summary of main tasks and deliverables

Task 1 Structuring

This was the focus of the inception report, summarised in **sections 1 – 3 of this report**.

Task 2 Observing

The observing phase was the data collection phase of the study. A set of procedures was developed to ensure that high quality data was collected, for both quantitative and qualitative data. Data collection included checks on validity, as appropriate to the form of data collected. This task had only one sub-task: 2.1 – collecting the data and reporting on it. This entailed: collecting the data necessary to furnish the analysis and calculate indicator values as relevant; specifying and carrying out literature review, case studies, interviews, online survey, and FADN and jobs analyses, as detailed under task 1.6; assessing the validity of information used via appropriate means, and reporting the results of all the collection and analysis. Deliverable 2 reported on all these steps, summarised in **section 4 of this report**.

Task 3 Analysing

The analysing phase analysed all information gathered through previous tasks, in order to enable the drafting of answers to the specific ESQs. Through this process, causality was hypothesized, tested, validated and refined in an iterative way, using all available insights from the evidence and analytical results produced. In this phase, stakeholder workshops were held in each CS country, as well as a half-day workshop in Brussels bringing together Commission officials, in order to discuss emerging findings and validate their significance and relevance to the study. The study team also attended two ENRD workshops on GR.

The analysis used established evaluation methods following EU Guidance (EENRD, CMEF guidelines). ESQ answers describe the reasoning followed, indicate underlying hypotheses and discuss evidence and conclusions. Answers are presented in **section 5 of this report**.

Task 4 Judging

Task 4 required synthesis of all evidence in order to arrive at a balanced assessment on which conclusions and recommendations were based. They are presented in **section 6**.

3.5 Identification and assessment of EU level datasets, clustering and case study selection

3.5.1 Use of EU level secondary datasets

The study required a detailed review of the context within which the CAP operates across the EU-28, informed by gathering and analysing the background data on economic and social conditions and trends in different territorial situations. In addition, data which is already extant concerning the extent, scope and geography of implementation of the various CAP measures was gathered and analysed.

These data were used to test for potential relationships between known inputs or process-related variables and the recorded outputs, results and impacts/outcomes of funding. Strong correlations do not in themselves guarantee causal linkages, but a clear understanding of where relations seem closely interwoven can help in considering the degree of causality, and identifying whom it may involve among relevant actors and institutions. The data that could be used included farm structure survey, FADN and EEA datasets, EC rural development statistical compendium and other socio-economic and CAP expenditure data provided by Eurostat and the Commission. Many datasets cover values for all territories in the EU-28 except outermost regions; these areas could not be included in this analysis and were not covered in case studies, as agreed with the Commission.

The chosen analyses were based upon the kinds of causal relationship discussed in sources identified in the literature review or interviews, and/or those inherent in the expanded intervention logic as identified in this report. The analytical approaches comprised:

- Simple correlations between potentially linked dependent and independent variables;
- Multivariate analysis (including clustering), as logic suggested that multiple factors might influence outcomes simultaneously and/or through non-linear relationships.

This EU level data analysis contributed to the case study selection through a clustering exercise, and statistical and econometric analysis informing many ESQ answers.

3.5.2 Use in the EU-level data analysis

Context indicators

To identify the most appropriate context indicators for this study, a rapid literature search and review was carried out. Contextual factors related to the **preconditions, drivers and obstacles** to generational renewal in rural and intermediate areas were identified and listed. Preliminary findings highlighted the importance of a large number of factors explaining the presence (or absence) of YF and young people in rural areas. These include: access to land, land prices; access to funding; knowledge and training; infrastructure (accessibility and connectivity); environmental quality and social capital. These are significant influences on YF' and new entrants' ability to live and work in rural areas.

Other factors include, *inter alia*, access to insurance, qualified labour, material and equipment, diversification of the local economy, natural resources, sustainable development and rural image. Furthermore, the possibility for older farmers to retire comfortably is an integral part of generational renewal in rural areas. Contextual policy factors such as national law on inheritance and holding transfers, state subsidies and local development policies also have a significant impact. However, lack of complete, accurate and harmonised datasets for such factors at EU level constrain their use in this

analysis. Annex 1 Table A2 indicates the selection of variables and/or proxies representing the contextual factors that were included in the initial data analysis, also the data source, along with the spatial disaggregation and year for which complete data was available.

CAP expenditure data

CAP support inputs and outputs, as well as results and context data, is a crucial source. Table 3 lists data sets delivered by DG AGRI and included in the analysis. More details are provided in Annex 1.

Regional granulation

The regional granulation of NUTS3 was used because:

- The EU/ OECD typology (urban, rural, intermediate regions) is established on this basis;
- It is the finest possible territorial granulation with respect to data availability (both for context data and CAP information (expenditures, outputs));
- It is too large to pinpoint every single cause-effect chain of GR, but sufficiently detailed to distinguish territorial patterns of performance and endowments;
- It is a unit for which robust estimations are possible to address data gaps (in dates or territories).

For data sets provided at a higher level of regional granulation than NUTS 3, a method of applying **proxies** was used to estimate data at the level of NUTS 3. Two types of proxies were mostly used - one for agricultural-specific data and one for general/context data¹⁶.

Table 3. DG Agri data sets provided

CAP Pillar	Scheme/Measure (M)	Indicator	NUTS level	Year
1	All schemes	Total value determined	NUTS 3	2015 2016
1	Young farmers scheme	Total value determined	NUTS 3	2015 2016
1	Young farmers scheme	Share of total value for young farmers scheme in total value for all schemes	NUTS 3	2015 2016
2	M 06: Farm and business development	EAFRD amount in the Financing plan	NUTS 0/ NUTS 2	2018
2	M 16: Cooperation	EAFRD amount in the Financing plan	NUTS 0/ NUTS 2	2018
2	M 04: Investment in physical assets	EAFRD amount in the Financing plan	NUTS 0/ NUTS 2	2018
2	M 01: Knowledge transfer & information actions	EAFRD amount in the Financing plan	NUTS 0/ NUTS 2	2018
2	M 02: Advisory services, farm management & farm relief	EAFRD amount in the Financing plan	NUTS 0/ NUTS 2	2018
2	M 07: Basic services and village renewal in rural areas	EAFRD amount in the Financing plan	NUTS 0/ NUTS 2	2018
2	Focus Area 2B: Entry of skilled farmers into the agric sector	EAFRD amount in the Financing plan	NUTS 0/ NUTS 2	2018
2	Focus Area 2B: Entry of skilled farmers into the agric sector	EAFRD declared eligible amount	NUTS 0/ NUTS 2	2018
2	Focus Area 2B: Entry of skilled farmers into the agric sector	Share of EAFRD amount for Focus Area 2B in total amount in the financing plan	NUTS 0/ NUTS 2	2018

Source : OIR

For some other indicators, no scientifically sound regionalisation technique could be applied as these indicators either depict shares (breaking down a share within a region

¹⁶ For agriculture-specific data at NUTS 2 level, the proxy was the number of agricultural workers in the primary sector, available at NUTS 3 level without gaps and providing the best picture of the distribution of agricultural production. Indicators regionalized via this proxy include number of farms with more than 50 ha and number of farmers under the age of 40. For broader data, the proxy chosen was the total population in the region, available without data gaps at NUTS3 level.

will lead to the same result for every sub-region) or are too complex to be assigned a fitting proxy (e.g. quality of governance). In such cases, the value for a NUTS 3 region has been set the same as the corresponding NUTS 2 region.

3.5.3 First analysis: clustering exercise and typology of NUTS 3 areas

A first clustering analysis was carried out to support the selection of case studies for in-depth analysis of policy implementation and impacts, helping to ensure that selected case study regions were representative of the territorial diversity of EU rural areas in terms of socio-economic context and CAP implementation. The approach comprised three steps:

1. Based on findings of the literature review, selection of **contextual factors** (drivers and socio-economic conditions) of GR in rural areas, identification of associated variables/proxies and collation of corresponding data sets (see Annex 2);
2. **CAP expenditure data** harmonisation (at NUTS 3 level);
3. **Factor analysis** to select 20 key variables of most interest (i.e. having high, non-redundant explanatory power for GR in rural areas) from the initial combined data set of 42 indicators, reducing the number of indicators to ensure that some factors are not overweighed and with consideration to sample size (around 1,400 NUTS 3 regions across the EU).

Factor analysis and clustering

Factor analysis provided the set of variables that became the input data for clustering. Indicators were manually grouped into categories where common factors were expected. The first group of indicators covered **sectors of the economy**, and included:

- % GVA in Primary sector (gvaprim),
- % GVA in Secondary sector (gvasec),
- % GVA in Tertiary sector (gvatert),
- % Employment in Primary sector (prim),
- % Employment in Secondary sector (sec),
- % Employment in Tertiary sector (tert),
- Change of Employment in Primary sector in % (changeprim),
- Change of Employment in Secondary sector in % (changesec),
- Change of Employment in Tertiary sector in % (changetert),
- Annual growth of the primary sector (average over 2009-2015) (primgrow).
- The second group contained indicators for **population density** and included:
 - Population density (podens2015),
 - Change in population density over 2007-2015 (podenst~0715),
 - Total population (pop3).
- The third group contained indicators on **farm managers** and included:
 - Number of farm managers in 2013 (FarmMgr2013),
 - Number of farm managers in 2016 (FarmMgr2016) ,
 - Change in number of farms, 2010-2016 in % (FarmNrChange_perc_10_16).

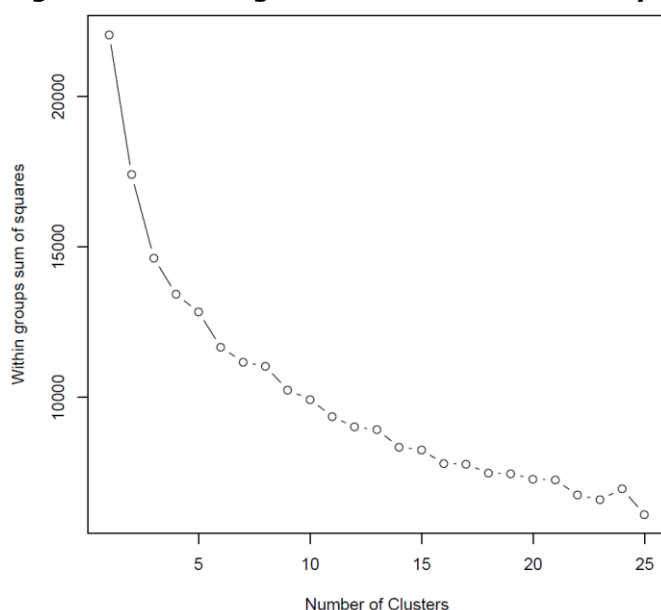
The variables not grouped were not subject to dimensionality reduction.

STATA was used to perform the statistical tests. Parallel analysis (30reps, 50reps, 500reps) was applied to determine the number of factors to be retained in each group. Following parallel analysis, factor analysis was performed applying the number of factors identified. Factors were rotated (varimax orthogonal rotation and promax oblique rotation), blanks were set at 0.3 (as well as at higher for comparison). Uniqueness was assessed. The findings resulted in the reduction of the indicators gvaprim, gvasec, gvatert, prim, sec, and tert to two factors: sec_sect; prim_sect. The indicators changeprim, changesec, changetert, primgrow, were excluded from the data set. Further, the indicators podens2015, podenst~0715, pop3 were reduced into one factor: density. In the third group of variables, while factors were identified it was decided that farm manager indicators are of high relevance to the study and therefore they were not further reduced.

For **Clustering**, to facilitate a meaningful characterisation of clusters, a subset of 24 'input indicators' was used. This subset consisted of the CAP Pillar 1 and 2 expenditure indicators (3 indicators from the list in Annex 2), unreduced indicators (18 indicators from the list) and 3 reduced factors resulting from the factor analysis, namely *sec_sect*, *prim_sect* and *density*. These 24 input indicators are given in Annex 1.

The principle of clustering is to group regions together based on the similarity of their 'behaviour' against each of the input indicators (intra-cluster homogeneity and extra-cluster heterogeneity). The method used is 'k-means clustering' which has been adapted to overcome data gaps¹⁷ (not all regions had a complete dataset for all 24 indicators). Clustering was done using R. The 'within group sum of squares' is displayed in figure 7, which shows that having more than five clusters yields a decent level of accuracy in terms of intra-cluster homogeneity. However, having too many clusters (more than 15) would reduce their utility. The number of clusters to be produced was thus set at 10. Figure 8 shows the geographic distribution of these clusters and we describe the main differences between them as characterised by the indicators used.

Figure 7. clustering – distribution of clusters by within-group variability



Source : OIR

Cluster 1 – strong agricultural performers with big CAP support: this cluster includes large parts of Ireland, Spain, France and Denmark. It mainly consists of rural to intermediate NUTS 3 regions (following Eurostat's rural/urban typology) with a high number of large farms (i.e. larger than 50ha) and receiving high levels of CAP payments under Pillar 1 direct payments, compared to other regions.

Cluster 2 – diversified rural areas with low P2 GR support: this cluster encompasses the majority of Western Germany and large parts of Austria, Denmark and the largest island of Malta. Its regions are characterised by low unemployment rates, and receive fairly low Pillar 2 funding for Focus Area 2B (generational renewal), compared to other regions.

Cluster 3 – regions under diverse competition: this cluster is geographically very diverse and includes large parts of Finland, Portugal, France, N Italy and Slovenia, with a high number of border regions. It shows no clear determinant and should be regarded as a "residual" cluster, combining two groups: rural areas with relatively poor agricultural performance in Western Europe but strong CAP support (e.g. Portugal); and rural areas with strong competing sectors such as services (tourism) and/ or industry (e.g. N Italy).

¹⁷ See Jocelyn T. Chi, Eric C. Chi, and Richard G. Baraniuk, *k-POD, A Method for k -Means Clustering of Missing Data*, <https://arxiv.org/pdf/1411.7013.pdf>

Cluster 4 the agricultural “periphery”: this covers some parts of Portugal and the bulk of Eastern Europe with all or very large parts of the Baltic countries, Poland, Hungary, Bulgaria as well as some parts of Slovakia, Croatia and Romania. These are mainly rural (low density) and intermediate regions with fairly low GDP/capita levels.

Cluster 5 the diversified tourist regions: this cluster covers coastal and Alpine regions mainly in Spain, France, Italy and Croatia. These are strongly tourism-oriented regions with high levels of bed places.

Cluster 6 diversified rural areas with low support for farm succession: this cluster covers large parts of the UK, Sweden, Eastern Germany, Czech Republic and Slovakia. They receive relatively low Young Farmer payments as a share of total Pillar 1 payments.

Cluster 7 the “traditional” agriculture-dominated rural regions with young farmers: this cluster includes some parts of Eastern Poland and the majority of Romania. These regions are characterised by a prominent primary sector, a high number of farms in general, low levels of education attainment for farmers and fairly low GDP/capita levels, but high GDP increase in recent years. There is a high number of farmers aged below 40 and a high number of young farmer managers aged below 35. These regions plan relatively high Pillar 2 funding for Focus Area 2B, but with large variation between them.

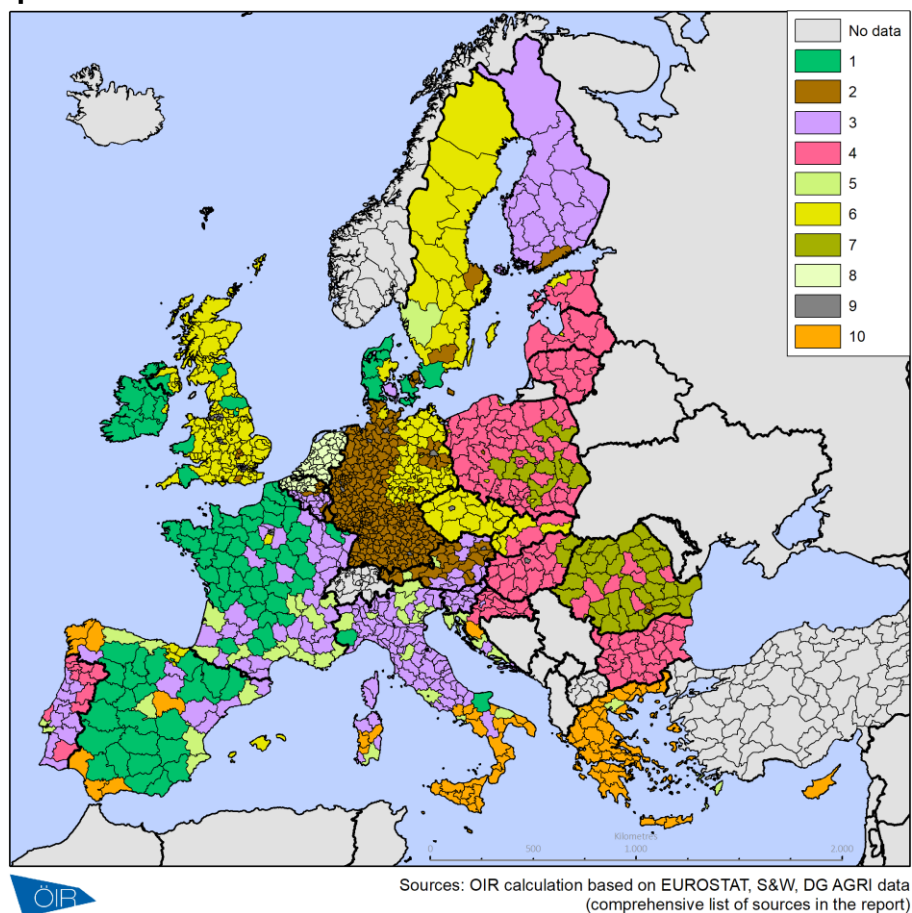
Cluster 8 young farmer supporting regions (not necessarily the regions with YF): this cluster contains the Netherlands and the Belgian regions of Flanders. These regions receive particularly high Young Farmer payments as a share of total Pillar 1 payments.

Cluster 9 the urban areas (and pull centres): this cluster corresponds to urbanised, densely populated cities (mainly capital cities across Europe). They have high levels of multimodal transport accessibility, low representation of primary and secondary sectors (and therefore a low number of large farms), but high levels of land use. These regions receive low levels of direct payments under Pillar 1.

Cluster 10 the southern European periphery: this cluster covers Cyprus, the majority of Greece, large parts of Southern Italy and some parts of Spain. The regions in this cluster have high unemployment rates and increasing unemployment rates for the most part, and usually decreasing GDP. They also have fairly low indices of quality and accountability of government services.

The representation of clusters in each MS is summarised in Annex 2, table A3.

Figure 8. Map of Clusters



3.5.4 Justification for case studies, and case study selection

Justification

The particular value of territorial case studies is their ability to consider systemic relationships between CAP policy and non-CAP influences upon GR in specific contexts, which gives them greater explanatory power than more generalised analysis. In this study, case studies were 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. The complexity of study issues covered and the extent of interplay between the different ESQs favour methods which combine qualitative and quantitative assessment *in situ*; meaning that case studies must play a central role. Cases also provide specific examples of good and bad practice in the application of measures relevant to GR.

In order to maximise the contribution of case study findings to answering the ESQs for the whole EU, it is necessary to understand the representativeness of each case and to determine how cases can legitimately be used to illustrate or estimate potential EU level performance. A structured and rationally-driven approach to case study selection ensured that the maximum range of relevant information and insights was captured from only a small number of situations. 'Nesting' case study elements within each other minimized the need for large amounts of additional contextual material to be produced for each case.

Case studies included observation and analysis at national; regional (for countries where RDPs are regional); and local (sub-regional) levels. In countries with one national RDP there were two levels: national and local. In countries with regional RDPs, the regional level is relevant because decisions on YF measures and measures relevant to GR are

taken by regional administrations. Detailed CS methods and protocols are given in the Annexes.

Selection of Case Studies

Member States (MS) in which to conduct case studies were selected on the basis of:

- A balanced distribution between new/old EU MS and with regional or national RDPs;
- A broad range of relevance of YF and GR measures within CAP implementation, with a specific need to include one territory applying a Pillar 2 YF sub-programme (Hungary);
- The ability to cover all relevant Clusters of NUTS 3 area, also to 'weight' the coverage to give more sub-regional cases representing the most common types, than those representing more rare types (only cluster type 9 was excluded, as it is wholly urban);
- The known presence or absence of specific national policies for GR, and contrasting legal and fiscal approaches to land and property ownership, tenure and inheritance (simplified to focus upon how land is inherited, following the CESifo Database, 2018¹⁸);
- Overall study resources and need for sufficient time to conduct case studies thoroughly.

This resulted in the selection of seven Member States: France, Italy, Belgium- Flanders, Ireland, Poland, Estonia, and Hungary (Table 4).

The selection of regional case studies (for countries with regional RDPs) took into account the delivery models applied by regions in implementing GR measures, and known best practices. Either 2 regions per country were selected with one local area in each (Italy), or one region was chosen (France) from which 2 local areas were selected.

At local level, two NUTS 3 areas were selected for each MS. A combination of cluster type and qualitative elements was used to choose these: e.g. types of delivery, uptake of innovative packages and/or good practice examples. For Italy, regions adopted different Pillar 2 GR packages, either a "basic" package of farm business start-up and investment support for the business plan, or a "composite" package including other measures such as diversification or afforestation. Also considering innovative practices and financial resources, Marche and Sicily were selected.

Table 4. Case study selection and characterisation

Member State	Clusters covered	Regional/single RDP	Range of GR measures	National policies	Inheritance / transfer rules
France	1, 3, 5	Regional	Broad	Many, institutional	Equal shares
Italy	3, 10, 5, 1	Regional	Broad	National, institutional	Hybrid
Belgium	8, 2 (Flanders)	Regional	Narrow	Unknown	Single heritor if agreed
Ireland	1	Single	Narrow	A variety of new Pilots	Hybrid – case law claims
Poland	4, 7	Single	Broad	Unknown	Hybrid
Estonia	6 and 4	Single	Narrow	Unknown	Single heritor OR hybrid
Hungary	2, 3	Single: sole MS with a dedicated YF sub-programme	Broad	Many – national and more local	(reduced) Equal shares

Source : CCRI et al

¹⁸ Succession law in Europe: inheritance and inheritance tax, 2014

3.6 Principles of validation and triangulation

Triangulation recognizes that the broad mix of data and analytical techniques applied will generate varied and potentially conflicting insights into policy performance. They therefore require calibration and cross-checking, to understand better, why results differ and how they can be brought into a consistent diagnosis and narrative concerning policy operation and impacts. Triangulation in this study involved identifying and minimizing overall bias in findings by taking evidence from a wide range of sources which were expected to have contrasting biases, so that the impact of bias upon results could be better identified, thus informing a balanced interpretation of findings. A high level of triangulation was built into the full study design, ensuring that all ESQ answers combine a range of data and information in judgment.

Validation entails finding ways to feed-back the emerging results of analysis to actors and institutions with in-depth and direct knowledge of policies and measures, their application and impact, to see how they react to these implications and test how far they coincide with experiential knowledge. In this study, we used validation as a key element in the analysis and judgement phases of the study, holding workshops with key individuals at EU and case study levels, and discussing with the steering group.

4. SUMMARY OF EVIDENCE GATHERED AND RESULTS OF ANALYSIS

4.1 EU literature review

The literature review aimed to summarise and synthesise key conclusions of studies and analyses concerning issues and topics directly relevant to the ToR of this evaluation.

Materials for review were sourced with the assistance of national experts as well as officials from the Commission (for EC publications and reports), identified via experts' review of relevant areas using snowballing techniques to follow lines of enquiry. We also conducted web-based searches of scientific databases and prominent policy and policy-linked sources. Key sources of insight came from pre-existing evaluation studies commissioned by the Commission and the European Parliament in recent years, as well as a large number of evaluation studies made at MS and regional level, responding to the requirements of CAP legislation. There is also a growing scientific literature examining various aspects of these themes and measures, in different regional contexts. Searches used a variety of international Library/science databases and search engines, as well as targeted web-searches of key sites e.g. Europa, Council of Europe, OECD, etc.. Materials reviewed covered both scientific literature published in international peer-reviewed publications within the past 10 years; as well as documents from the policy arena. The latter included reports from European bodies – the Commission's Directorates-General, the Parliament, the ECA and the Committees, also the ENRD, EENRD and EiPAgri – and from notable European stakeholders including the CEJA, ELO, Copa-Cogeca and Rural Youth Europe. Notable International documents were covered, by bodies including OECD and World Bank.

The material was analysed according to the main themes of contextual analysis presented in the study inception report, sections 1.2-1.3. Evidence was examined concerning issues of generational renewal as relevant to agricultural GR and broader rural GR, as well as the impact of CAP measures on these issues, respectively.

Key points

- Many studies provide evidence of need in respect of the challenges of GR in farming and rural areas, in the EU.
- There is generally positive evidence concerning the value of a range of Pillar 2 CAP aids in promoting GR goals; although the importance of sound design/targeting that fits local contexts, and simple/accessible delivery systems, are highlighted.
- There is partial evidence suggesting that Pillar 1 CAP aids can increase barriers to GR in agriculture, via their effects upon the land market.

4.1.1 Issues facing Young Farmers in Europe

The majority view across all studies examined was that in Europe as a whole, the ratio of old to YF was too high, and therefore generational renewal in the sector is an issue that needs to be addressed. However the notion that there is not a 'young farmer problem', and that instead, structural adjustment and higher technological efficiency in agriculture mean that there is simply a decreasing need for farmers, appears in two studies (Milne & Butler, 2014; World Bank Group, 2017).

Delayed succession

Late succession was a concern covered in nine papers. In these studies, farmers were found to be reluctant to retire for financial and/or emotional reasons (ADAS Ltd, 2004; Conway et al., 2016; Leonard et al., 2017; Zagata et al., 2017). One UK report (ADAS Ltd, 2004) found that only about 2% farmers over 65 said they were unable to retire for financial reasons, and a far greater factor in their decision making was an enjoyment of the lifestyle that came with being a farmer. Likewise, Conway et al. (2016) found that Irish farmers' attachment to the lifestyle, personal identity and social status prevented them passing on the farm.

One issue with late succession is that it results in considerable time when the successor is away from the farm, either in other employment or education. Often after time away, successors are reluctant to return to the hard and financially unrewarding life on the farm (Carillo et al., 2013; Milne and Butler, 2014; Conway et al., 2016). Only one national scheme was found to have an effective measure for encouraging retirement; the Farm

Partnership Scheme in Ireland which required full transfer of the farm within 3-10 years of joining the scheme (Leonard et al., 2017b). Interestingly, this was one of only two studies that discussed the need for continued support to old, exiting farmers, in the form of housing and an adequate pension. Milne and Butler (2014) also mention this, and observe the positive effects of ensuring that succession supports the elderly to stay in the same community as the young, allowing for the young to care for older relatives thus reducing social care costs.

The Irish study from Conway et al. (2016) was the only one to acknowledge the emotional difficulties relating to succession, finding that the human dynamic is disregarded in many Early Retirement policies in favour of economic incentives, and suggesting that this limits their effectiveness.

Despite the reported 'questionable impact' of early retirement schemes (Davis, Caskie and Wallace, 2013a; 2013b; Caputo, 2018), two papers found a need for effective policy in this area to increase the rate of generational turnover (Leonard et al, 2017a; Caputo, 2018).

Training, mentoring, knowledge acquisition and exchange

Around half of the papers discussed the importance of training and mentoring support for YF and new entrants to farming. It was commonly found that training, support and mentoring services were lacking for new farmers. Finance, IT and business skills (ADAS Ltd, 2004; CEJA, 2017; Caputo, 2018), as well as farm diversification (De Rosa and McElwee, 2015) and succession planning (Williams, 2006) were found to be the main areas where this support was needed. One Scottish study (Milne and Butler, 2014) observed that this is especially important as older, experienced farmers are encouraged to exit the sector. Flanking support measures, such as farm labour relief, is also needed to enable farmers to attend training (Milne and Butler, 2014).

- There was divided opinion on the importance/effect of formal education upon GR in agriculture. The European Network for Rural Development (2016) reported a view that the standard syllabus offered in many schools and colleges does not address the specific needs of rural young, so leads to relatively higher numbers of school drop-outs in rural areas (i.e. students failing to complete or continue to tertiary education). On the other hand, findings from Carillo et al. (2013) and McDonald et al. (2013) show that in some specific situations, those YF with formal educational qualifications had better technological and financial management skills than those who received only on-farm, informal education.
- Networking and informal peer support is as important as formal training programmes (Zagata et al., 2017), especially for new entrants from non-farming backgrounds (Davis, Caskie and Wallace, 2013a). The Directorate-General for Agriculture and Rural Development (2015) held it would be beneficial for YF to be involved in the organization of training programmes directed at them, as they know their own needs best. They suggest there would be increased participation in these schemes if the knowledge offered was deemed important and relevant.

Several studies presented examples of education programmes in place. A LEADER Group in Extremadura (Valle del Jerte) is working to tackle school drop-outs through an integrated plan of complementary educational and training activities negotiated with parents, teachers and students. A LEADER project in Scotland provided personalized support to young people to acquire skills and confidence that may eventually lead to better integration into the labour market (ENRD, 2016). In Ireland, in addition to receiving milk quota through the New Entrants Scheme, there are compulsory extension modules whereby successful new entrants attend three to four days of intensive lectures and farm walks, provided by Teagasc, in relation to dairy farm management and set-up. The extension modules also provided participants with an introduction to the services and information available to dairy farmers, and where they could source further help if required (McDonald et al 2014).

- In the Basque Country, support to YF under M6.1 demonstrated that mentoring support can be used to accompany entrepreneurs through the various stages of the development of a business idea (ENRD, 2017).

4.1.2 Impact of CAP support targeting young farmers

22 papers drew specific conclusions about the impact of young farmer support upon GR in agriculture. Of these, eight studies found explicitly positive effects:

- Caputo (2008) found grants are widely perceived as enabling a new generation to enter the farming sector across Europe. McDonald et al. (2013; 2014) found evidence that this was indeed the case in Ireland.
- RDPs and grants were cited as supporting innovation and entrepreneurship in Finland and Slovenia (ENRD, 2017), Italy (De Rosa and McElwee, 2015), Greece (Kontogeorgos et al., 2014) and Poland (Adamowicz and Szepeluk, 2016).
- Diversification investment support helped farmers in Belgium find other sources of income to supplement farm revenue (Buyse, Verspecht and Van Huylenbroeck, 2011).
- Investment support helped farming sector competitiveness by reducing costs (ibid.)

A few studies and reports observed sub-optimal impacts of aids, as follows.

- Subsidies ineffectively targeted: DG Agriculture and Rural Development (2012) and Carbone and Subioli (2008) indicated potentially low additionality; and concluded that money targeted at YF support went to many farmers that either didn't need this support or would have settled in agriculture anyway without such support. In another report, the CEJA (2010) argued for a strengthened and mandatory definition of 'active farmer' in order to better target EU these support measures. Some concluded that subsidies and grants may prop up unviable farm businesses (Directorate-General for Agriculture and Rural Development, 2012; Davis et al., 2013b).
- The European Court of Auditors (2017) found little evidence to demonstrate that the schemes support generational renewal or provide an economic return. This was also the conclusion of Carillo et al. (2013), for Italy, and ADAS Ltd. (2004) for the UK. Karcagi-Kovats and Katona-Kovacs (2012) found that aids targeted within RDPs were ineffectual in the face of much larger global factors influencing GR in agriculture (i.e. structural adjustment, economic fluctuations), which have far greater impact on the socio-economic situation in rural areas.

Several studies found evidence to suggest that the current level of support was too small to have real impact, as follows.

- Three studies looking across Europe (Directorate-General for Agriculture and Rural Development, 2012; Rovný, 2016; Zagata et al., 2017) and one focused in Italy (Carbone and Subioli, 2008) found grants were too small to provide an incentive for new entrants. Caputo (2018) found that across MS, financial support was insufficient to overcome the barrier of accessing capital; additional financial support needed to be sourced privately.
- With strong demand, some reports noted that these schemes were oversubscribed in many countries (DG for Agriculture and Rural Development, 2012; Zagata et al., 2017)

Two studies emphasized that CAP targeted aids alone were not enough, and that other needs of YF besides income support need to be addressed, such as mentoring and training (CEJA, 2017; ECA, 2017). Three studies, all conducted on the island of Ireland, found that alternatives to a flat-rate grant model could be more effective. These included tax relief schemes (Leonard et al, 2017b) and interest rate subsidies – or interest free loans – for farm development purposes (Davis, Caskie and Wallace, 2013a; 2013b).

Two studies criticised the varying definitions of 'young farmer' applied under different CAP policies (Zagata and Sutherland, 2015; Leonard et al., 2017a), as it created confusion for potential beneficiaries and for monitoring purposes. The European Council of Young Farmers CEJA (2010; 2017) called for a better targeted definition of 'active farmer' in order to ensure that appropriate people receive the support.

New Entrants

Some studies differentiated between New Entrants (those entering farming from other sectors) and YF who come from a farming background and generally enter via succession. Discussions around New Entrants covered the following issues:

- New Entrants generally have higher start-up costs than successor farmers, and so greater financial support is needed in order to compete (Milne and Butler, 2014; Zagata et al., 2017);
- Findings are divided about whether non-farm entrants to farming are less experienced and therefore less equipped to farm competitively (Williams, 2006), or whether they are better educated, more motivated and more innovative than those who succeed their parent(s) (Carillo et al., 2013; McDonald et al., 2013; EIP-AGRI, 2016).

An EIP-AGRI focus group (2016) outlined how innovative models for entry have been developed by new entrants and older farmers to reduce economic barriers. These include:

- career-ladder farming and contract farming,
- crowd funding and crowd sourcing to raise capital,
- community supported agriculture, social enterprise models and workers' cooperatives to offer new opportunities to those who lack their own access to land,
- equity partnerships, farm incubators, and a variety of partnership models such as junior-senior partnerships, land partnerships and share farming, in which older farmers provide such opportunities to non-relatives.

The main message of this document is that barriers to farming can be overcome by individual or collective innovation, rather than specific government/EU support.

Bureaucracy and costs associated with accessing aid for GR

There were mixed findings across the studies as to the impact of bureaucracy. Some found excessive administration and strict requirements to be a barrier to farmers accessing support (Carbone and Subioli, 2008; Directorate-General for Internal Policies of the Union, 2012; Adamowicz and Szepeeluk, 2016; EIP-AGRI, 2016; Zagata et al, 2017; Caputo, 2018). Others reported cases where requirements – specifically, the need to submit a business plan – were judged positive as they discouraged less entrepreneurial farmers and taught new skills to those who persevered (Carbone and Subioli, 2008; McDonald et al, 2014; Zagata et al, 2017). Some found that farmers were only able to complete the paperwork with mentoring support, which was costly if not provided by government, but which had positive outcomes in skills gained (Carbone and Subioli, 2008; ENRD, 2017).

Access to Land

Access to land was cited by many studies as a major, if not the biggest, barrier to entry for new farmers (ADAS, 2004; Williams, 2006; Carbone and Subioli, 2008; CEJA, 2010; European Commission, 2012; Carillo et al., 2013; Milne and Butler, 2014; DG Agriculture and Rural Development, 2015; Zagata and Sutherland, 2015; Adamowicz and Szepeeluk, 2016; Directorate-General for Internal Policies of the Union, 2016; EIP-AGRI, 2016; World Bank Group, 2017; Zagata et al, 2017; Caputo, 2018). Several of these express explicitly that subsidies and grants have been insufficient to overcome this barrier (Carbone and Subioli, 2008; Carillo et al., 2013; Milne and Butler, 2014; Zagata et al, 2017).

Close to 70% of YF in Europe work on farms smaller than 10 ha. (European Commission, 2012). Almost half of young sole holders in Europe operate farms of less than 2 ha. (Zagata and Sutherland, 2015).

Only one paper that mentioned access to land as a barrier found there was no issue in their studied country. Zagata, Hádková and Mikovcová (2015) found that YF in the Czech Republic were not concentrated on small farms: average farm size for under-35-year-old farmers was 90.3 hectares. Williams (2006) cites a policy that attempted to overcome the issue of access to land by not only providing funding: Scotland's Agricultural Holdings

legislation (2003) aimed to improve the relationship between landlord and tenant and free up the market for let land; however, this study found that it had been ineffective.

The influence of Pillar 1 Direct Payments

The system of direct payments under Pillar 1 of the CAP was frequently cited as directly contributing to either high land prices or late retirement across Europe. The financial support provided by Pillar 1 was apparently seen by old farmers as a substitute for their pension, making it more economically beneficial to delay transfer of farm until death (Leonard et al, 2017a; Leonard et al, 2017b; Zagata et al, 2017; Caputo, 2018). One paper explicitly highlights that farmers are able to simultaneously receive a state pension and CAP direct payments (Leonard et al, 2017a). Another issue linked to direct payments is that they may have caused the price of land to increase, relative to its value without subsidy, which then acts as an increased barrier to YF seeking access to land (ADAS Ltd, 2004; CEJA, 2010; Kontogeorgos et al., 2014; World Bank Group, 2017). It is argued in some studies that this has encouraged investors rather than active farmers into the land market (World Bank Group, 2017). This may disincentivise land owners to put land into sale or rental markets (Leonard et al, 2017a; Caputo, 2018). All these factors were thought to increase the pressure on land and make accessing land difficult for new entrants.

No studies made the point that the availability of Direct Payments providing income support to the sector might increase its attractiveness to potential YF and new entrants.

The role of infrastructure to promote broader GR in rural areas

The need for better infrastructure and services in rural areas was addressed in several papers. All found that improving infrastructure would be beneficial to rural development (Strano et al., 2010; Directorate-General for Internal Policies of the Union, 2012; Carillo et al., 2013; Michalewska-pawlak, 2013), or to on-farm development (CEJA, 2010; EIP-AGRI, 2016), or both (Adamowicz and Szepeluk, 2016). Strano et al. (2010) suggest that availability of high-speed broadband can tempt young people back into an area. The need for broadband to assist on-farm development was reported as increasingly significant with the rise of digital agriculture; to be innovative, it is argued, farmers need good internet.

Rural Vitality

Two studies concluded that EU subsidies were too focused on fostering competitiveness in the agricultural and forestry sectors, thus marginalising issues important for wider GR such as depopulation, education, culture, human and social capital, as well as non-agricultural rural economic activities and rural services (Carbone and Subioli, 2008; Michalewska-pawlak, 2013). These aspects were found to be central to preventing youth out-migration (Michalewska-pawlak, 2013). Zagata and Sutherland (2015) judged that focusing YF supports on less productive areas would reduce youth out-migration. The Directorate-General for Internal Policies of the Union (2016) also stated that low standards of living and limited access to basic resources in rural areas hinder broader GR in the EU-10.

Adamowicz & Szepeluk (2016) found that in Poland, EU rural development schemes contribute to rural vitality by supporting the creation of new jobs, technical and social infrastructure, and maintaining cultural heritage. Karcagi-Kovacs & Katona-Kovacs (2012) looked at national sustainable development strategies and RDPs across Member States and found that, while they address rural vitality aims, it is unclear how effective they are. The World Bank report (2017) suggested that the CAP supported the reduction of poverty in the countryside by supporting the creation of better-paid agricultural jobs, although it seems this was sometimes in association with labour moving out of agriculture, so impact on rural vitality would be ambiguous depending upon where this labour moved to.

Some studies note differences in impact because some RDPs focus Measure 6 (business development) exclusively on farming (UK-Scotland, ES-Basque Country and PT-Mainland), while others support non-agricultural businesses and activities. In Slovenia RDP aids target green tourism, natural and cultural heritage, social entrepreneurship, social care services, treatment of organic wastes, and energy and heat production from renewable sources. In Finland-mainland the RDP offers grants to support experimental

and innovative entrepreneurs under M6.2 and M6.4, as quick and flexible 'innovation vouchers', reducing the administrative burden on beneficiaries. (ENRD, 2017).

It is concluded that better education (beyond agriculture) for members of the rural population as a whole is important in order to tackle rural unemployment and to offer a wider variety of opportunities to people who do not wish to pursue a career in farming (Strano et al., 2010; Directorate-General for Agriculture and Rural Development, 2012; Michalewska-pawlak, 2013).

4.1.3 Challenges of assessment and Policy enhancement

A recurring theme in the studies was either issues with assessing the impact of these measures, or challenges in creating measures that can suit the broad variety of situations across the EU-28. Two EU reports flag up the lack of follow-up or monitoring (Directorate-General for Agriculture and Rural Development, 2012; ECA, 2012), while three comment on poorly defined, or lack of, indicators for measuring impact of many of these programmes (Directorate-General for Agriculture and Rural Development, 2012; Karcagi-Kovacs and Katona-Kovacs, 2012; Zagata and Sutherland, 2015). Carbone and Subioli (2008) observed that it is impossible to say with certainty the impact of the EU support policies as there is no way of knowing how beneficiaries would behave in their absence. Three papers criticised lack of robust, quantitative assessment of CAP pillar 2 policies (Buysse, Verspecht and Van Huylenbroeck, 2011; Davis, Caskie and Wallace, 2013a; World Bank, 2017).

4.2 EU level survey of Member State administrations

4.2.1 Introduction

This section reports the findings of a short online survey designed to seek information and views from across the whole EU, concerning key factors influencing GR in rural areas, within and beyond agriculture. It was circulated to the named ENRD contacts in each MS administration that are identified as leads for the National Rural Networks. In fact, as well as these individuals, contact persons circulated the survey more widely, which resulted in multiple responses from several MS. For Member States that deliver RDPs at Regional level, the survey was passed on to named individuals at regional level, for all regions. Thus between 1 and almost 40 responses were received per MS, and from 24 MS (see below).

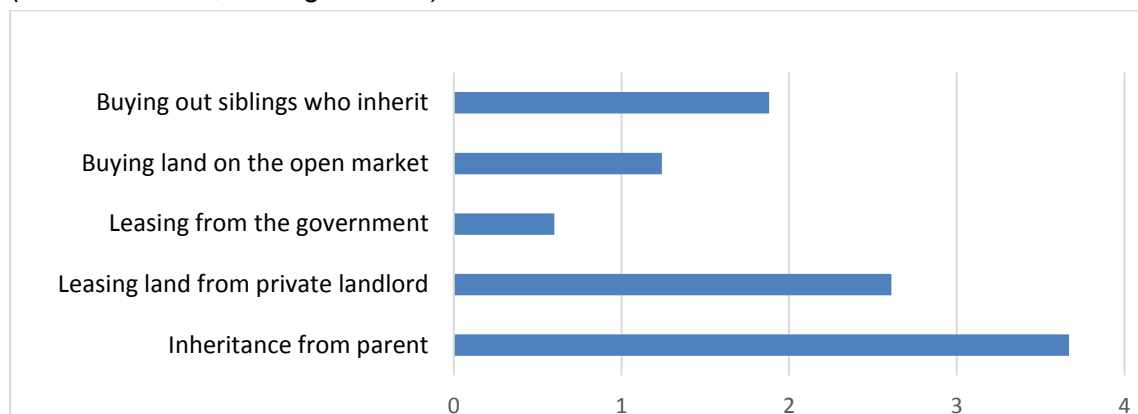
4.2.2 Findings

As many organisations typically operate across a range of administrative levels, survey respondents covered all from the local to the international level and represented a mix of public, private and voluntary sectors (including retired people).

Across the EU, the most common way to enter farming is perceived by respondents to be to inherit the holding from a parent. Partnership arrangements were mentioned as important in Spain, Italy and Ireland. Working previously abandoned or public land was identified as a key route in Italy and Spain. Renting part of a farm to YF was identified as common in Greece and Austria, while purchasing a farm at below the full market value was cited as relevant in Finland. Special arrangements to assist farmers who do not have successors was mentioned in Slovenia.

Figure 9. Online survey: respondents' views of the most common entry routes into farming

(scored out of 5, average scores)



Source : EU online survey designed by CCRI et al

Respondents in many Member States (IE, EL, ES, IT, AT, SI, SK, SE) commented that the productive areas were more sought after by people wanting to begin farming: typically, arable or horticultural/high value crops, as appropriate to the respective Member State. A number of responses referred to dairying areas being more attractive (SI, EL, IE) while a few mentioned intensive livestock production. Several respondents commented on the high price of agricultural land (SE, SK, DK), in their answers. A shortage of YF was reported in less productive areas (CZ, IE, EL, ES, IT, AT, RO, SI) and in many cases, in mountainous regions. However, even farms in productive areas were also cited in some Member States (FI, SI, EL) as lacking successors.

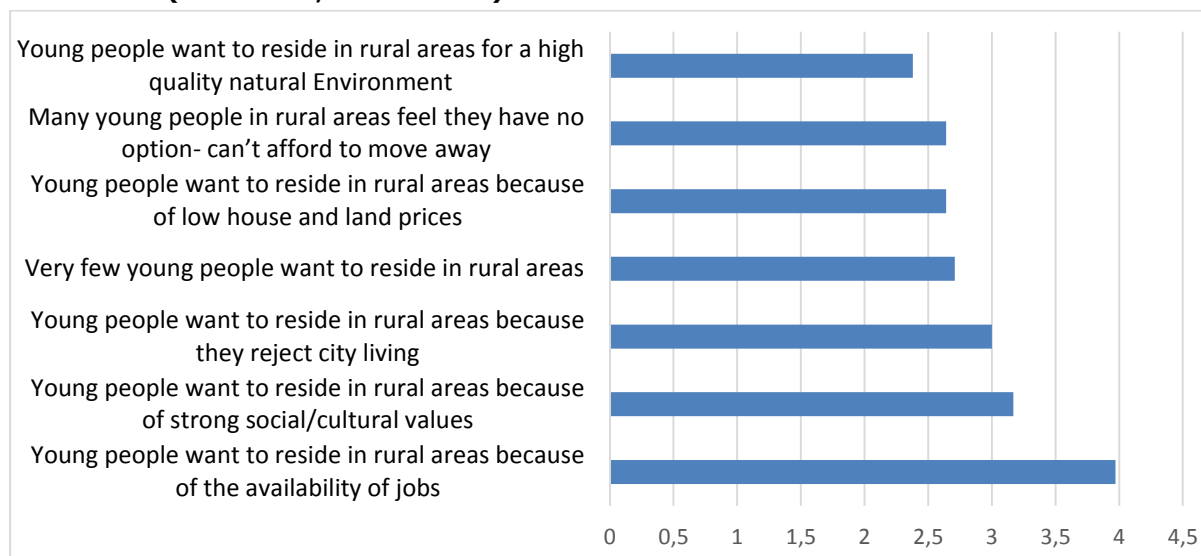
Across the sample, high investment costs were considered the most significant barrier to GR in agriculture, closely followed by the sector being seen as unattractive to young people. Older farmers' uncertainty/reluctance to retire, and low availability of appropriate land were also considered significant. Taxation related to inheritance was felt important (NL; ES; EL; IE; UK-NI; FI; BE). A number of respondents commented upon supportive measures, which provide direct or indirect incentives of a financial nature (DK; CZ; IT; AT; EL). In Italy, there are specific regional laws *"in our region we have a specific law that supports Generational Renewal"*. Measures that furthered the fragmentation of farms were referred to in two instances, (ES; IT) in Slovenia measures to prevent fragmentation were deemed unsupportive of GR.

There was consensus on the level of policy that was most supportive of GR. All considered EU policy was most beneficial, with regional being the least beneficial. Concerning specific national policies that support GR, a few examples were received. Member states may offer small incentives or support mechanisms which are often indirect. Examples include: "tax free income when leasing land for greater than 5 years" (IE); "loans with subsidised interest rate", "tax relief", "reduction of retirement payments...if the farmer continues agricultural occupation after retirement" (EL); "Specialised education for future farmers...public land offers" (ES); "pension system/social security" (AT); "Business start-up aid for young farmers" (SI); "Mainly tax relief and loans with low interest" (FI).

Typically GR was seen as favoured in rural areas close to urban areas that have the lifestyle benefits of living in a natural environment but with reasonable infrastructure and amenities (CZ; DK; EL; IT; LV; AT; UK). Some respondents (IT; EL; CZ; DK) said the economic crisis of 2008 had elicited a change, with people moving away from urban areas. Areas being deserted were typically characterised as remote, not close to urban areas and economically poor (IE, EL, ES, IT, NL, RO, SI, SK). In some Member States, mountainous areas were specified (CY, EL, ES, IT). A number of respondents stated this pattern was worsening (CZ, ES, SI, SK, FI), but others said a more complex or changing picture was occurring: "this has changed in recent years with young people returning" (UK - Northern Ireland); "out-migration seems to decrease slightly or directions alter" (AT); "there has been some limited return to agriculture by young people" (IT); "rural exodus is now more selective thanks to advances in communication" (ES); "from the

urban centres, we have returned to the region” (EL). A few respondents cited young people seeking work abroad (IE, EL, UK).

Figure 10. EU online survey: views about young people’s strongest motivations to live in rural areas (ave. score, maximum 5)



Source : EU online survey designed by CCRI et al

Lack of services in rural areas was universally considered the most significant barrier to GR, with entrepreneurial opportunities rated as the second most significant barrier. Many frequent concerns related to services and infrastructure within rural areas: they are deemed less attractive as places to live due to poor communications, services and opportunities. A number of respondents commented that general policies within their country failed adequately to cater for or consider rural areas (ES, SI, SK). More specifically, issues related to housing and/or spatial planning were raised by respondents in DK, IE, UK and EL. Taxation was an issue identified by respondents in EL, FI, SE and IE.

Table 5. EU online survey: specific policies cited as helping GR in each Member State

CZ	Regional - buying land for building houses by villages and selling under price -Support for kindergardens and schools
EL	Policy at municipality level/Producer groups (translated).
ES	A subsidy for the rural unemployed (translated). Europe is developing the Smart Villages project that for many of the inhabitants of rural areas is an opportunity for them and their children to live in the place where they want.
AT	Programmes like LEADER support raised awareness about opportunities and enhanced initiatives to live in rural regions.
SI	Municipal management and improvements in infrastructure probably also play a role
SE	Newly established rural policy (approved in parliament 2018)
UK	New legislation requires Central & Local Government to have due regard to Rural circumstances when devising, reviewing and implementing policies and programme/ service delivery. Outside this, rural areas have been supported by various local programmes – e.g. Tackling Rural Poverty & Social Isolation NI (TRPSI), Village Regeneration, Economic Programmes targeting Rural Youth and Lottery-funded programmes specifically targeting Children & Young People & Supporting Communities.

Source : EU online survey designed by CCRI et al

Summary

Survey answers provide useful information on the context for GR in each Member State and how it appears to relate to other indicators. The information suggests that in farming, underlying profitability has an important influence on GR but that other factors may confound this general pattern. More broadly, the key influence of Quality of Life / business infrastructure such as good broadband and services emerge as significant influences upon non-agricultural rural GR and in this context, a number of national and regional policies are relevant in supporting or hindering effective GR in rural areas.

4.3 EU level data analysis

This section has 4 elements:

- A commentary on the availability of EU level data and its use in this analysis;
- General overview of situation across the MS, as depicted in maps at NUTS 3 level;
- Clustering of NUTS 3 areas, and correlation analysis looking for patterns potentially linking CAP expenditures to proxy indicators of relative need for GR interventions;
- Multi-Criteria Analysis (MCA) and regression to identify EU-wide potential causal relationships between territorial characteristics and GR targeting.

4.3.1 Data availability and relevance

The study required a detailed review of the context in which the CAP operates across the EU-28, by gathering and analysing background data on socio-economic conditions and trends in different territories, also financial data on the implementation of CAP measures. Where a consistent quality and coverage of data exists, it was used to test for correlations or consistent patterns between inputs or process-related variables and measured outputs, results and impacts of funding. Strong correlations do not in themselves guarantee causal linkages, but a clear understanding of where relations seem closely interwoven can help in considering the degree of causality, and identifying whom it may involve, among relevant actors and institutions. The available datasets covered indicators for all territory in the EU-28 except for the outermost regions; hence these areas could not be included in this analysis. They were also not covered in case studies, in agreement with the Steering Group (as these areas were selected using clusters identified via the EU data analysis).

Context data was sourced from Eurostat and European Commission datasets. Most general rural data were available at NUTS3 level, whereas some agri-sector and specific socio-economic data was only available at NUTS 2, so values for NUTS 3 were estimated by allocation according to either the proportion of persons employed in the primary sector (for agri-related indicators), or the proportion of total population (for non-agricultural indicators). NUTS 3 was the preferred level of analysis because it allows a distinction between areas according to their degree of rurality – into ‘urban’, ‘intermediate’ and ‘rural’ territories. (the process is described more fully in section 3.5.2 of this report).

Expenditure data from three different source files was provided by the EC (DG Agriculture):

- Pillar 1 and Pillar 2 claimed and determined financial data for 2015, 2016, NUTS 3 level;
- Pillar 2 public expenditure based on output indicators for 2015, 2016, 2017, RDP level;
- Pillar 2 planned expenditure over the 2014-2020 programming period, by year, by whole measure, and separately by focus area, (i.e. not by sub-measure), RDP level.

Pillar 1 data (CATS) included YFP and total DPs data for both years, although total Direct Payments data was only used for analyses relating to whole CAP, not GR measures alone. Pillar 2 data retrieved from the first two sources appeared incomplete. Also, when compared, Pillar 2 data from the first two sources was inconsistent with each other, as well as with the planned expenditure data from the third file for the years considered. Therefore, **for Pillar 2, input data from the third source was relied upon – using figures for planned expenditure over the whole 2014-2020 programming period, recorded by programme, by measure, and by focus area.**

4.3.2 General overview of relevant context and expenditure in local areas (NUTS 3) of the EU

Figure 11. SHARE OF FARMERS UNDER 35

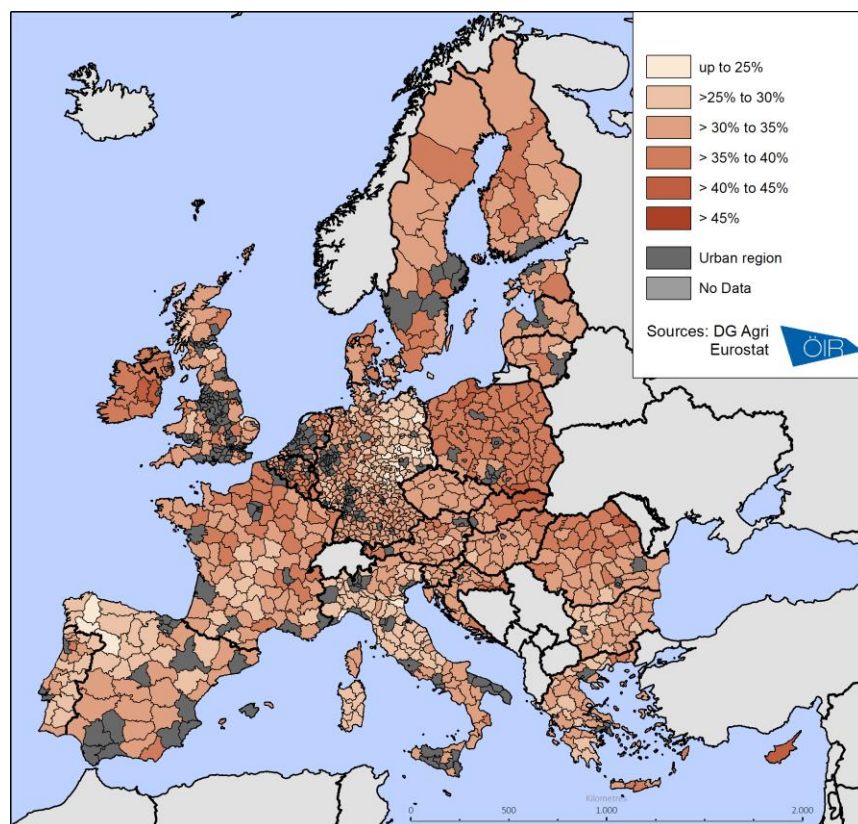
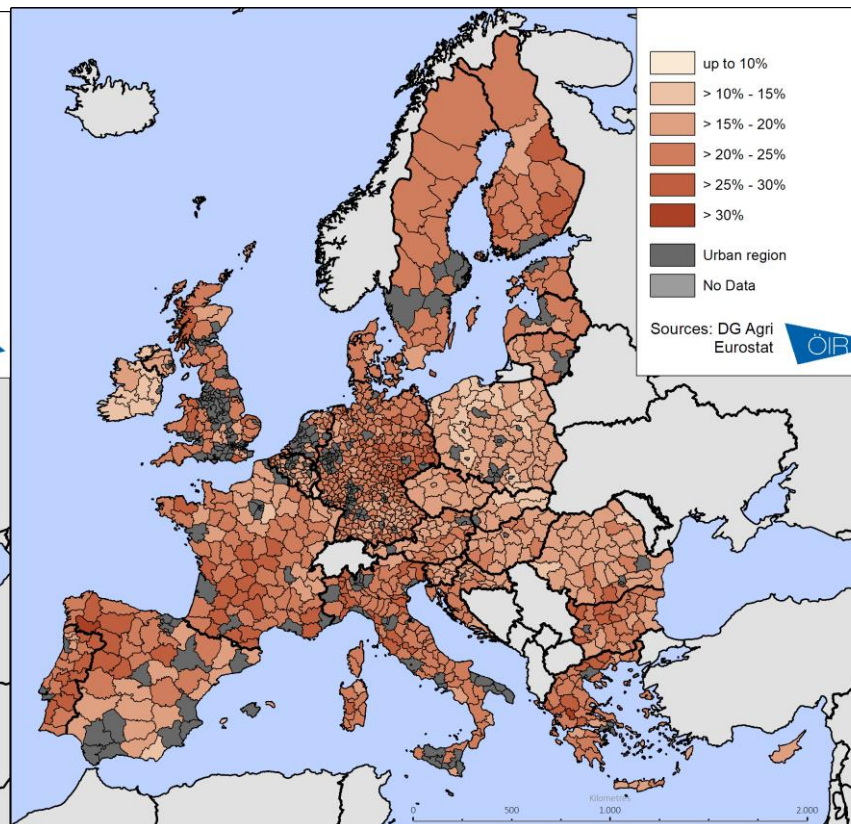
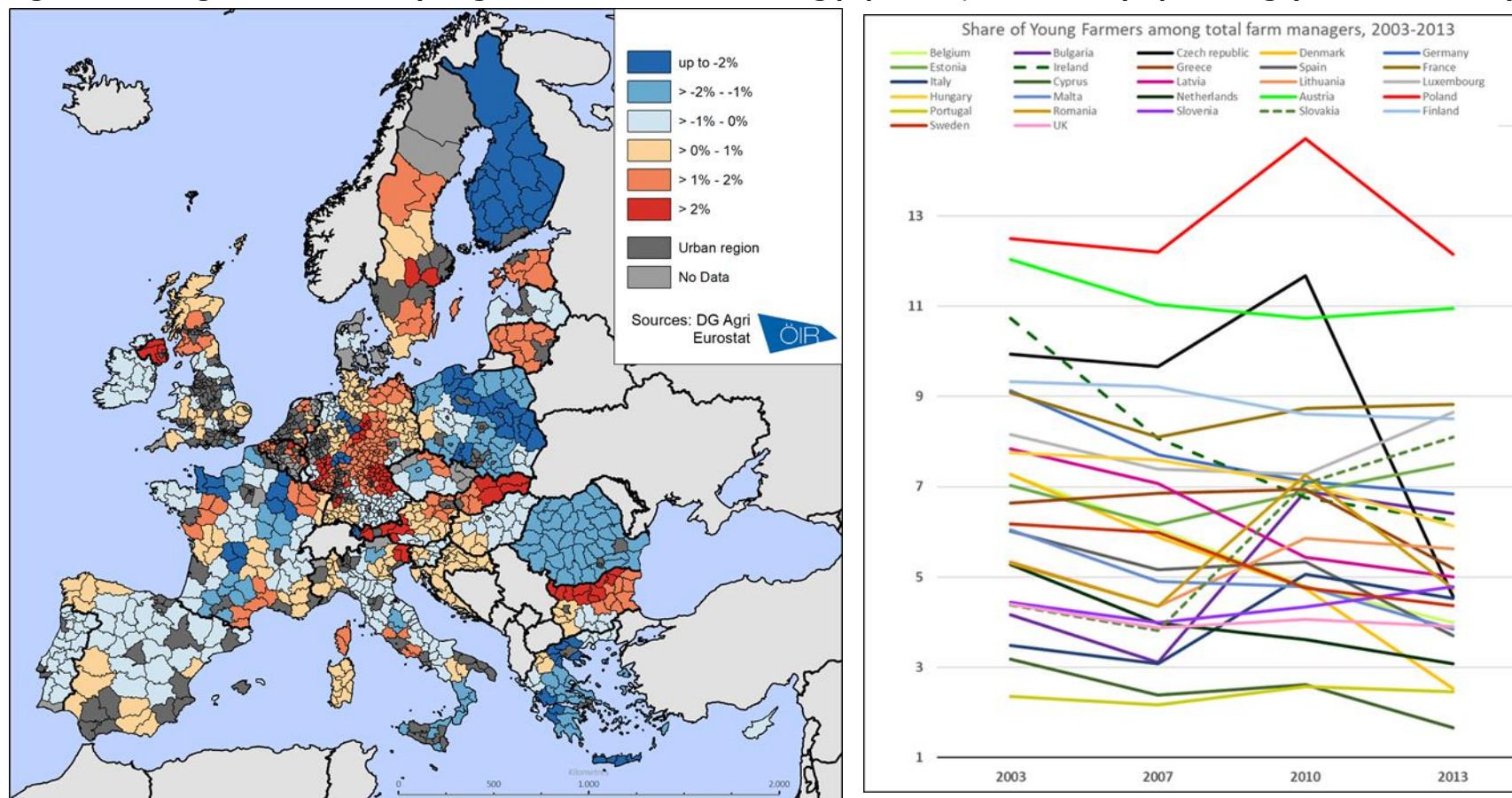


Figure 12. SHARE OF FARMERS OVER 65



We consider that regions with the smallest share of farmers under 35 and the largest share of farmers over 65 are those which may face the greatest **challenges of GR in agriculture**. These include central France, northern Spain and much of Portugal, many regions in Italy, eastern regions in Germany, many parts of Greece and Romania, the hilly areas of the UK, also some eastern parts of Finland. **Coincidence with agricultural marginality** is apparent.

Figure 13. Change in the share of young farmers in the total farming population, 2013-2016 (in percentage) and 2003-2013 (graph)



The map shows whether the trend in farmer ages is worsening, in recent years, or whether YF are becoming a more significant element in farm population. The regions of the EU are fairly evenly split. Worsening trends over 1% are seen in a variety of places including Greece, Bulgaria, Poland, Finland, and some parts of France and Italy – often the more remote areas. Most marked positive trends occur in Romania, parts of Germany, Slovakia and western Austria, and Northern Ireland. To examine a longer period we consider data at MS level, over 10 years, 2003-2013 (graph). This sets trends in a wider economic context, as a positive impact (increasing share of YF) seems to coincide with global recession, 2007-2010, although negative trends are apparent either side of that, for many countries. A few MS see sustained upturn in YF up to 2013 – Slovakia, Slovenia, Estonia, Luxembourg. For a few MS, the recession appears to have had no impact upon farmer age balance which has declined fairly steadily for the full decade: Latvia, Cyprus, Sweden, Ireland and Germany.

Figure 14. POPULATION TRENDS 2002-2017

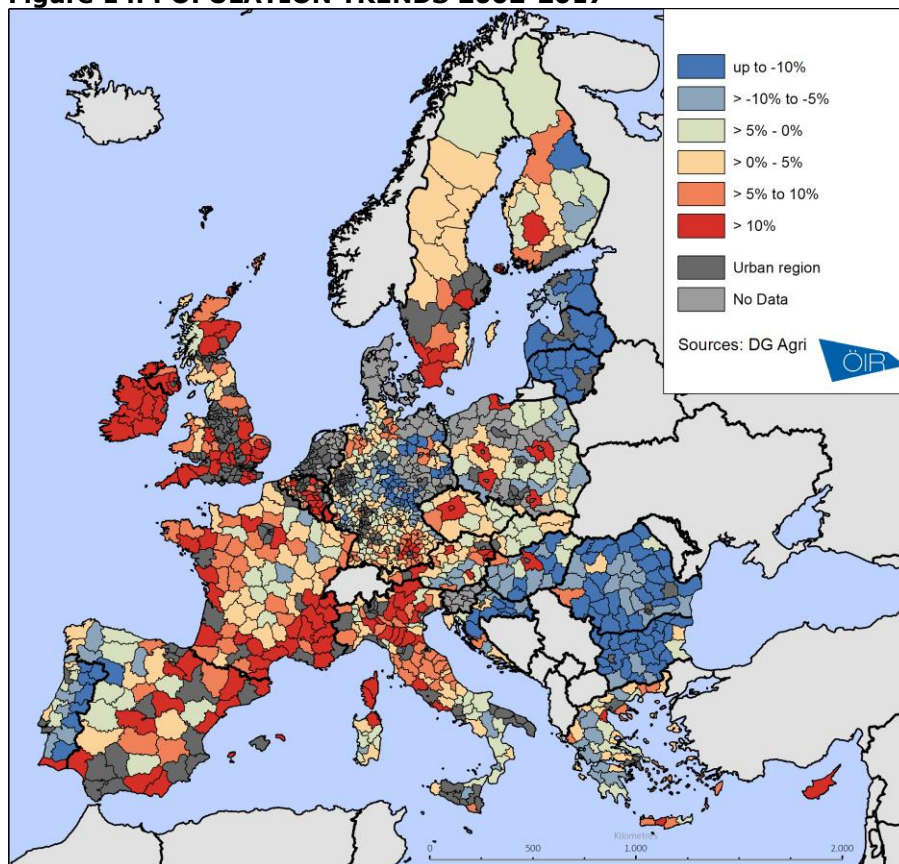
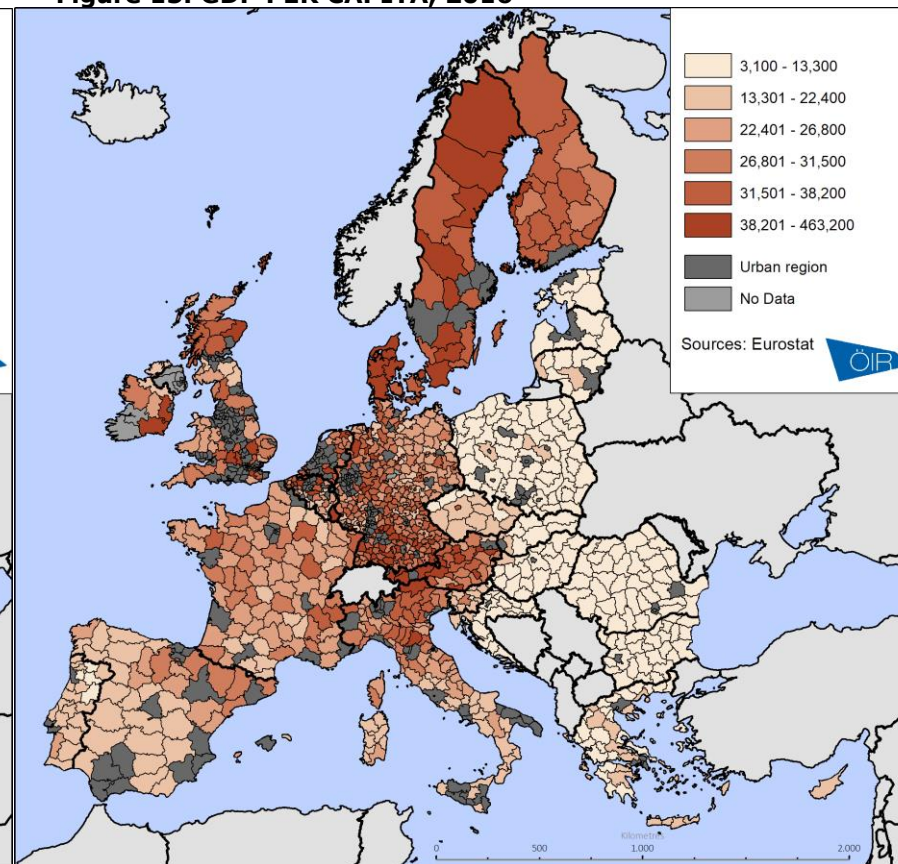
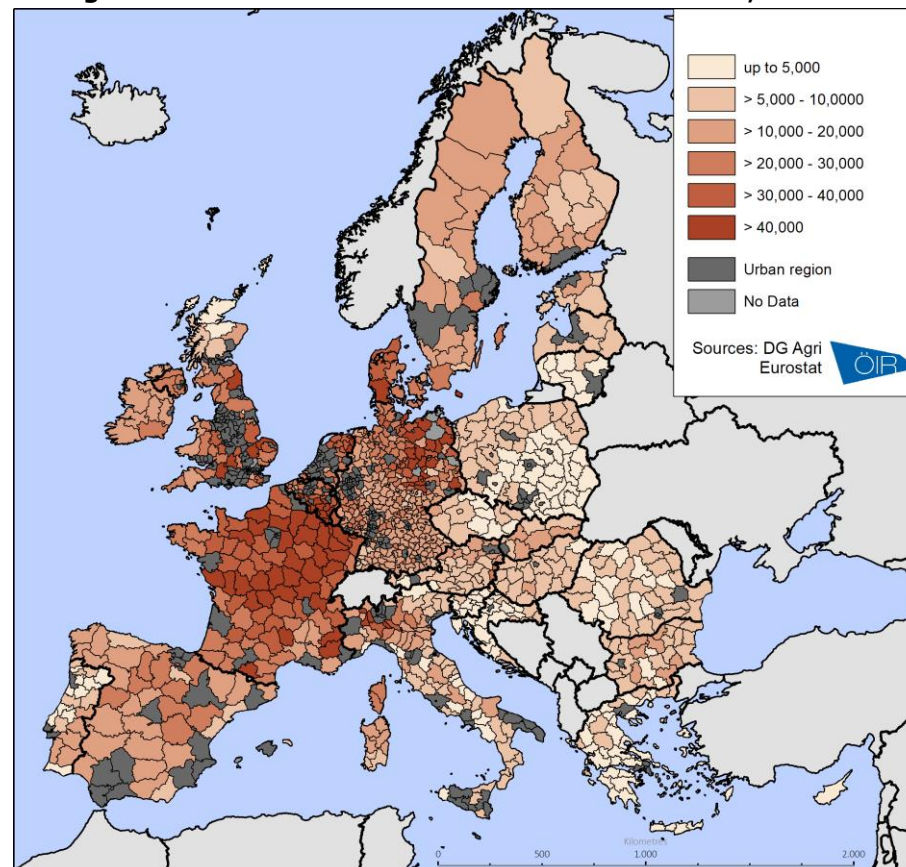
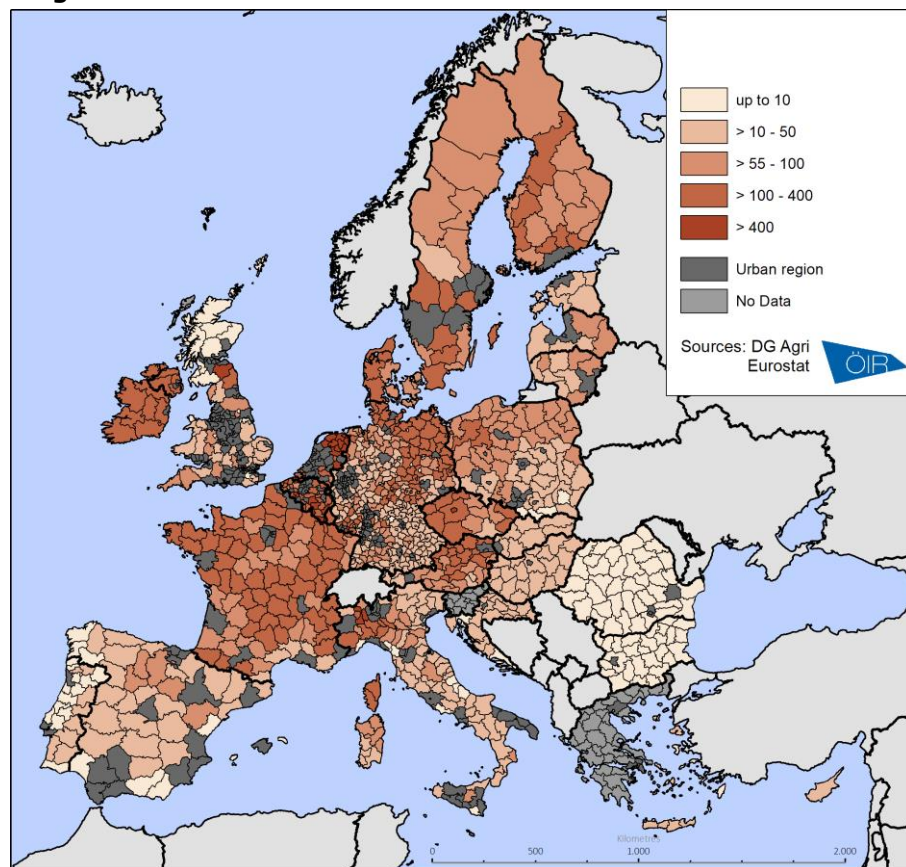


Figure 15. GDP PER CAPITA, 2016



These maps give some of the simplest indicators of **the challenge of broader rural GR – loss of people and low incomes**. Areas of greatest population decline include Portugal, the Baltics, Bulgaria and Romania as well as significant parts of Hungary and Poland, also Croatia, eastern Germany and south-east Austria, southern Italy and Greece. With the exception of SE Austria, many such areas are also those with low GDP/capita, relative to the EU average.

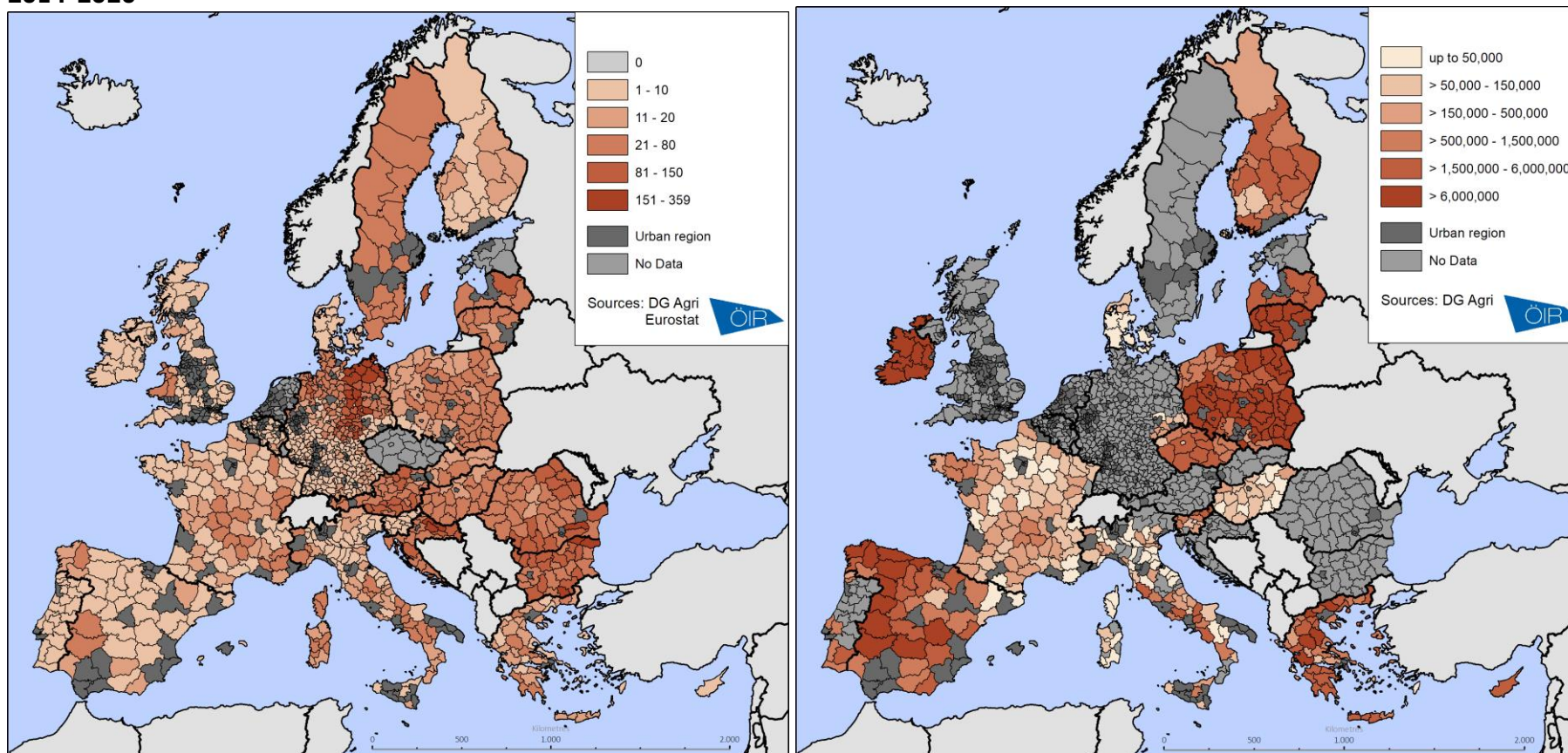
Figure 16. PILLAR 1 YF SUPPLEMENT PER PRINCIPAL FARMER <35, 2016¹⁹ Figure 17. TOTAL DP PER PRINCIPAL FARMER < 35, 2016



These maps indicate the intensity of income support reaching YF in the EU through CAP Pillar 1. The first map shows how **the pillar 1 YF supplement** represents a much higher amount per beneficiary for YF in some areas than others - highest in the Netherlands, Belgium, Denmark. The second map shows how the **total P1 decoupled direct payment to YF** (basic aid plus YF supplement) varies between areas with highest payments in France, Belgium, Denmark, northern Netherlands, eastern England and Germany. **These do not tend to coincide with areas of agricultural or economic marginality** (indicated in figures 9-12).

¹⁹ Calculated using ESTAT YF numbers under 35 and AGRI data on YFP top-up covering farmers up to 40 years (see Annex 1 for methodology).

Figure 18. PILLAR 2, M7 (RURAL SERVICES) PAYMENT PER CAPITA, 2014-2020 **Figure 19. EARLY RETIREMENT SCHEME SPEND, 2007-2013**



The first map shows relative spending per capita on rural services and infrastructure within Rural Development Programmes, with highest spends in eastern Germany, Croatia, Austria, Bulgaria and Romania. This measure is the closest proxy we can identify for **spending that is focused upon non-agricultural GR – there is some coincidence with economic marginality**. The second map shows that few MS used the early retirement measure 2007-2013, notably Spain, Ireland, Poland, Lithuania and Greece – just some of which show greatest need for GR in agriculture today, as suggested by figures 9-10.

Figure 20. PLANNED SPEND ON FOCUS AREA 2B, PER FARM 2014-2020

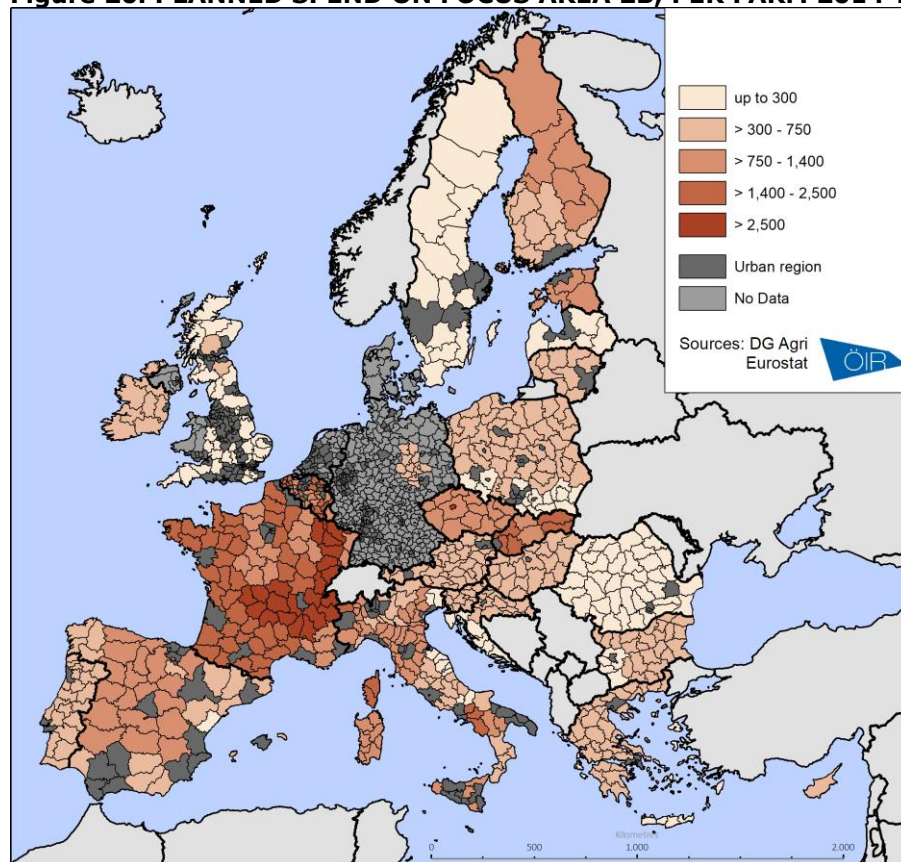
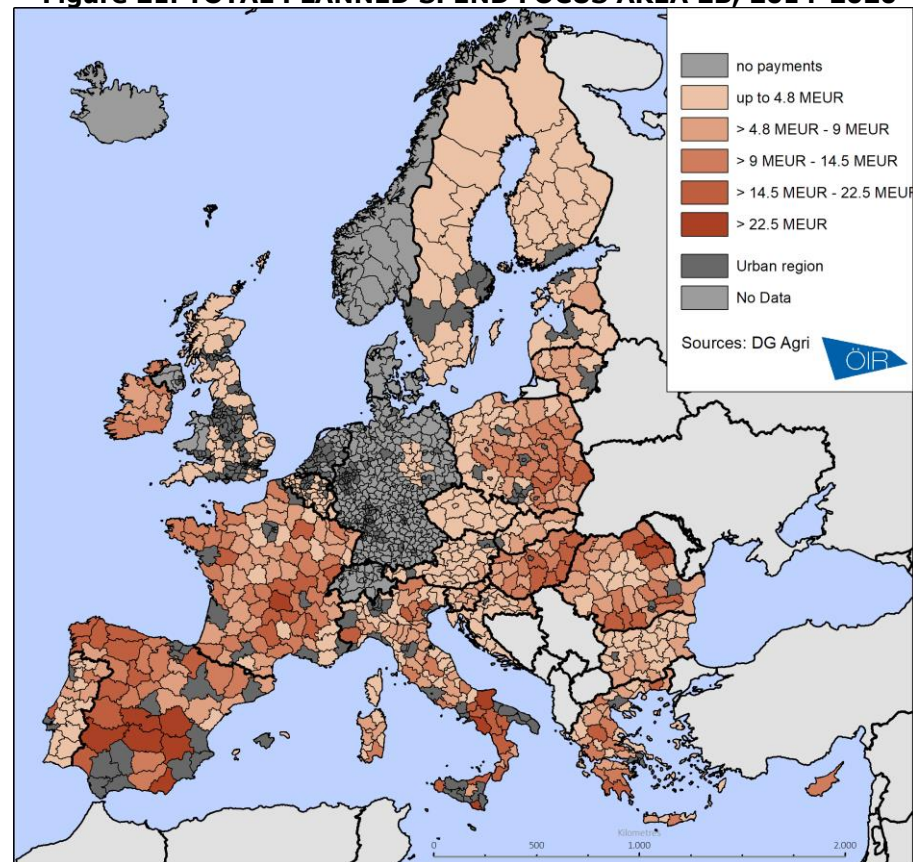


Figure 21. TOTAL PLANNED SPEND FOCUS AREA 2B, 2014-2020



The first map shows that, among Member States in which these aids are available, **France and Slovakia and a few regions in Italy and Belgium plan to spend the most per farm on measures to assist GR in agriculture.** When expressed as total funding, the **highest concentration of funds is found in regions of Spain, Italy, Greece, Bulgaria, Hungary and Poland, as well as some areas in France.** These maps indicate the areas **where GR in agriculture is prioritised, and suggest some coincidence with areas of greatest need** (except in Poland) as suggested in figures 9 and 10.

Figure 22. PERCENTAGE WORKFORCE EMPLOYED IN PRIMARY SECTOR

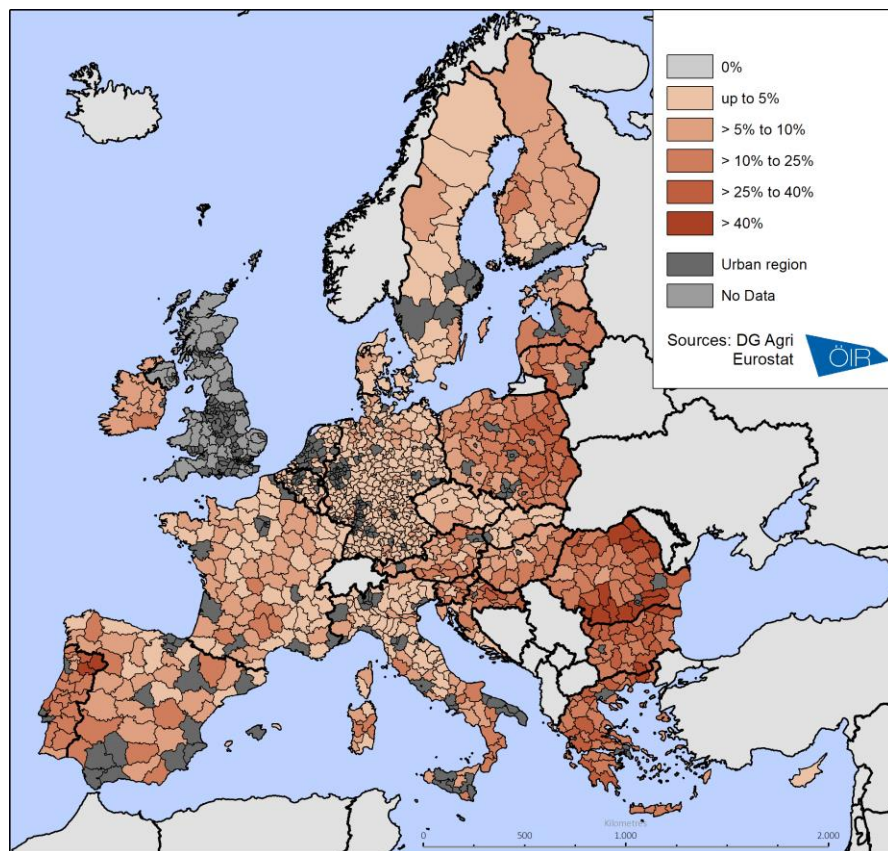
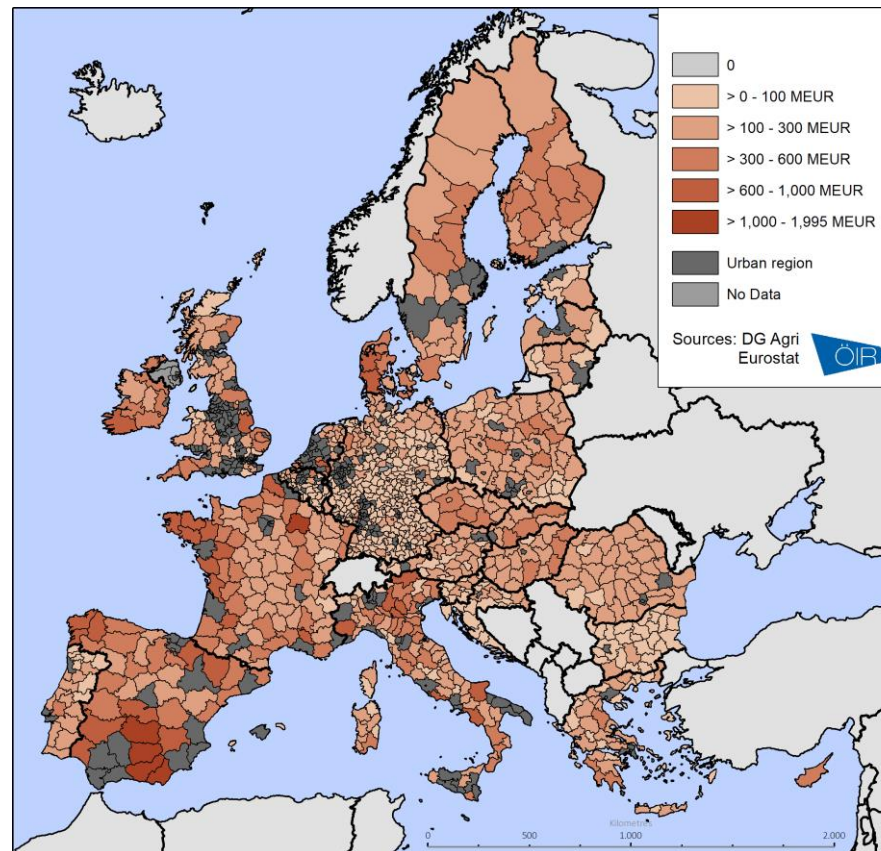
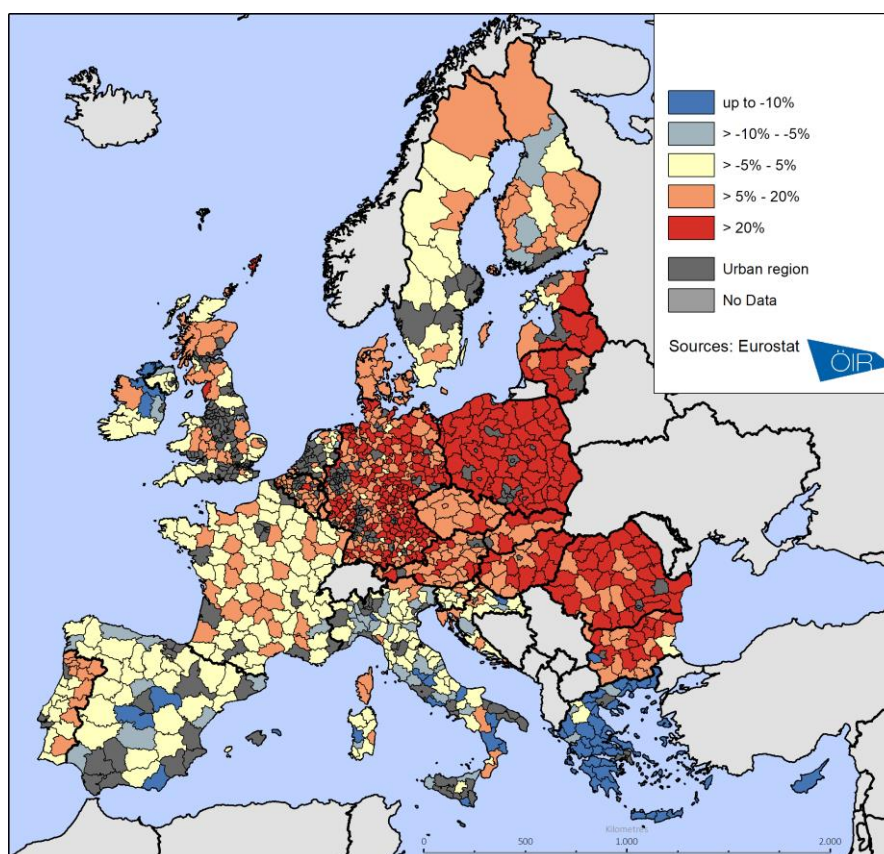


Figure 23. GVA IN AGRICULTURE (both 2016)



These maps show that generally, countries in the east – Bulgaria, Romania, Poland, Greece, Croatia and Lithuania – have higher shares of their labour force in farming; while the most 'productive' farming in terms of added value is measured in Southern Spain, Denmark, northern Italy, southwest Ireland and eastern England.

Figure 24. CHANGE IN TOTAL GDP FROM 2006-8 TO 2013-15, in percentage



This map shows the great contrast between those European regions which have bounced back from the global recession of 2007-8 – mainly in the east of the EU and in many regions of Germany – and those which continue to see a net decline in wealth almost a decade later, including Greece, the Spanish interior, and some regions of Italy and Ireland. Figures 22 and 23 showed the relative economic importance of agriculture by region, in employment and productivity, which emphasise how the areas employing more people do not generally tend to be the most productive agricultural regions.

This adds some additional understanding to the context within which Member States and regions are seeking to address GR as a challenge, as it may be more difficult for agriculture to remain an attractive employment option if other sectors of the economy are growing fast – this could perhaps explain the concern for GR in countries like Poland, with a high share of YF but not high productivity in farming. On the other hand, if wider economic conditions are negative and/or stagnant, as in Greece, then using quite modest amounts per farmer to retain people in agriculture may be a rational response to a situation where the strongest case for public investment may be in other economic sectors that are the targets of EU funding beyond the CAP (such as ERDF and ESF).

[Summary of indications from map-based regional indicator analysis](#)

The maps indicate that **CAP funds in Pillar 2 show some coherence of spending with simple indicators of relative need for GR** in agriculture and in rural areas more broadly. This coherence with need is less apparent for Pillar 1 aid (where the logic may differ).

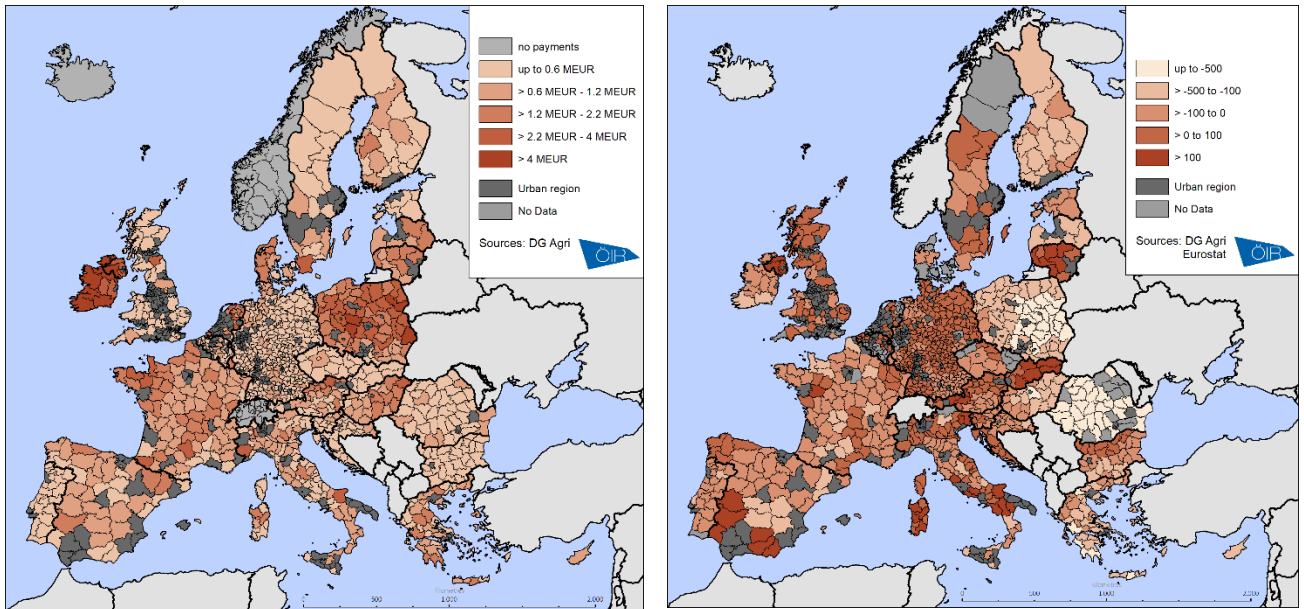
4.3.3 Correlation analysis

The use of correlation analysis applied to EU-wide expenditure and context datasets aims to contribute to the evidence base for answering the ESQs. Visual representation of the distribution of European regions (in maps and charts) and the correlation values computed depict potential **relationships between input indicators** (i.e. Pillar 1 and Pillar 2 expenditure data) **and context/impact indicators** (i.e. data representing drivers of or trends in GR).

A range of GR-related impact indicators was used. The main impact indicator was the number (or change in number) of farms managed by farmers under 35 years old. Through the following sections of this chapter, this indicator is interchangeably referred to as farms managed by farmers under 35 years old and farm managers aged under 35, assuming the two variables are equal (or close to equal).

At NUTS 3 level, Figure 25 illustrates the total Pillar 1 Young Farmer supplements received in 2015 and 2016 and change in the number of farms managed by farmers aged under 35 (considered equal to the change in young farm managers' population) from 2013 to 2016. Figure 26 considers total Direct Payments received per young farmer, compared to change in number of farms managed by those under 35, for the same dates.

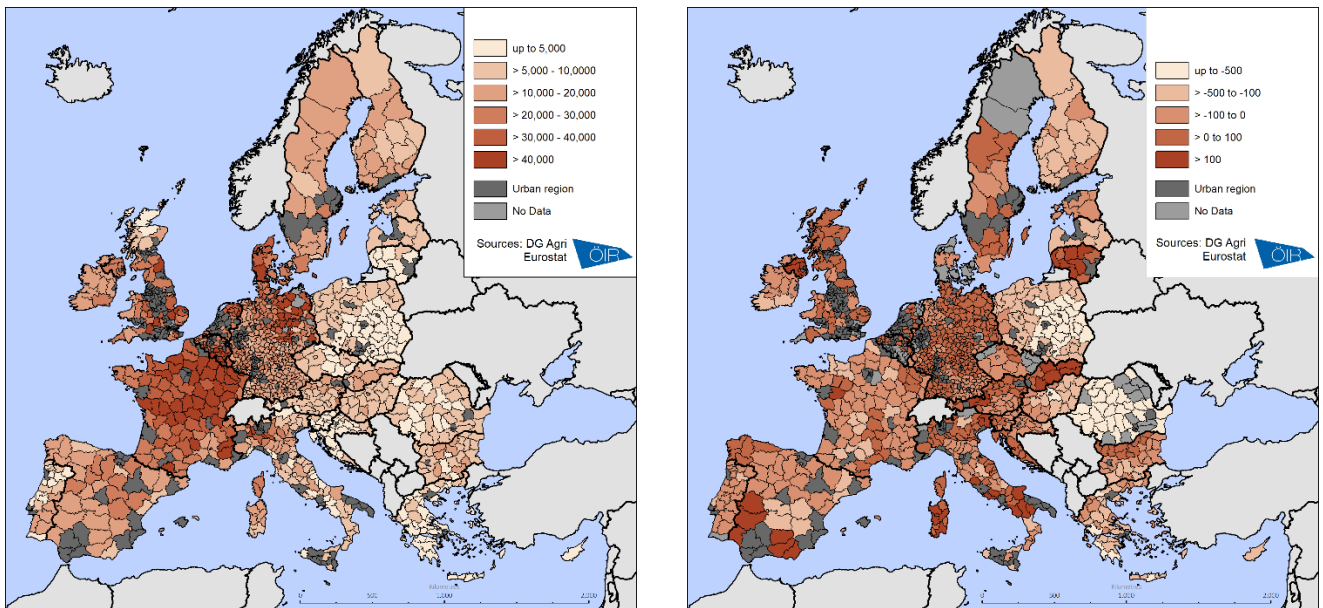
Figure 25. Pillar 1 Young Farmer Payments 2015 and 2016 and Change in number of farms managed by under 35s, 2013 to 2016



There is **no obvious correlation** to be detected at first sight between these two maps, as regions with high YFP in 2015 and 2016 (in e.g. Ireland, Poland) show a decrease in YF' population 2013-2016²⁰, while other regions (e.g. South Sweden, Lithuania) had both high levels of YFP and increases in the number of young farm managers over this period.

²⁰ Note that as we compare a trend over a period of time with an expenditure amount, there is no requirement for the dates to be the same: 2013-2016 represents a period in which the new YFP began to be used, so effects might be seen.

Figure 26. Total Direct Payments received by YF, € per farm 2015+2016 and change in YF numbers 2013-2016



As with Figure 25, there is no clear correlation between these two maps – areas gaining most YF are not coincident with those receiving the highest levels of Direct Payments per beneficiary (e.g. Lithuania, Slovakia).

Estimation of correlation between YFP and change in number of YF

The vast majority of NUTS 3 regions are located around the 0 value on the y axis and between €0 and €2 million on the x axis. Romanian and Polish regions are clearly outliers, with sharply decreasing young farm managers' populations. Because the sample was not normally distributed, the **Kendall correlation coefficient (R)** was calculated. The analysis indicated indicating a **very weak correlation** between Pillar 1 YF Payments in 2015-2016 and change in young farm managers' populations.

The same process was repeated for a sub-sample excluding all Romanian and Polish regions (outliers), to investigate the significance of correlation on a more homogeneous sample. The Kendall correlation coefficient R was statistically significant (based on its p-value), but even smaller (-0.067), indicating an **absence of correlation** between Young Farmer Payments in 2015-2016 and change in young farm managers' populations at EU level (excluding Romania and Poland).

At NUTS 2 level: Some, especially agri-focused NUTS 3 level data was estimated from NUTS 2 level data on the basis of primary sector employment. Investigating correlations between input and impact indicators using NUTS 2 (unaltered) data could lead to (slightly) different results; however, no distinction can be made between rural and non-rural areas at this scale. Romanian regions were again outliers (as expected from the NUTS 3 level distribution), and the relationship between YF Payments and the change in young farm managers' populations (in absolute terms) seems, for the other European regions, more linear than at NUTS 3 level. The Kendall correlation coefficient is very close to zero (-0.15), including again a **very weak correlation** between YFP and change in young farm managers' populations. When Romanian regions (outliers) were excluded from the sample, the Kendall coefficient is still very close to zero (-0.16), indicating again a **very weak correlation** between Pillar 1 YFP and change in young farm manager populations.

When looking at absolute numbers of population change, countries where agriculture plays a significant economic role stand out, even where changes *in proportion* were no larger than in other Member States. Romania is a striking example of this phenomenon: with an agricultural sector representing 26% of total domestic employment in 2015 (the EU average is 4%), Romanian regions are unsurprisingly outliers in all the charts depicting changes in the absolute number of young farm managers. Investigating correlations between shares and proportions – eliminating any scale effect between regions of different agricultural importance – yields different results. Using ratios of YF

population to the whole farming population puts YF trends in the wider context of agricultural decline or revival.

The next two sections explore the relationship between average Pillar 1 YF Payment per farmer aged under 35 and change in YF' population (in %) between 2013 and 2016; and YF Payments as a share of total Pillar 1 payments and change in the share of YF in total farmer population (in %) between 2013 and 2016.

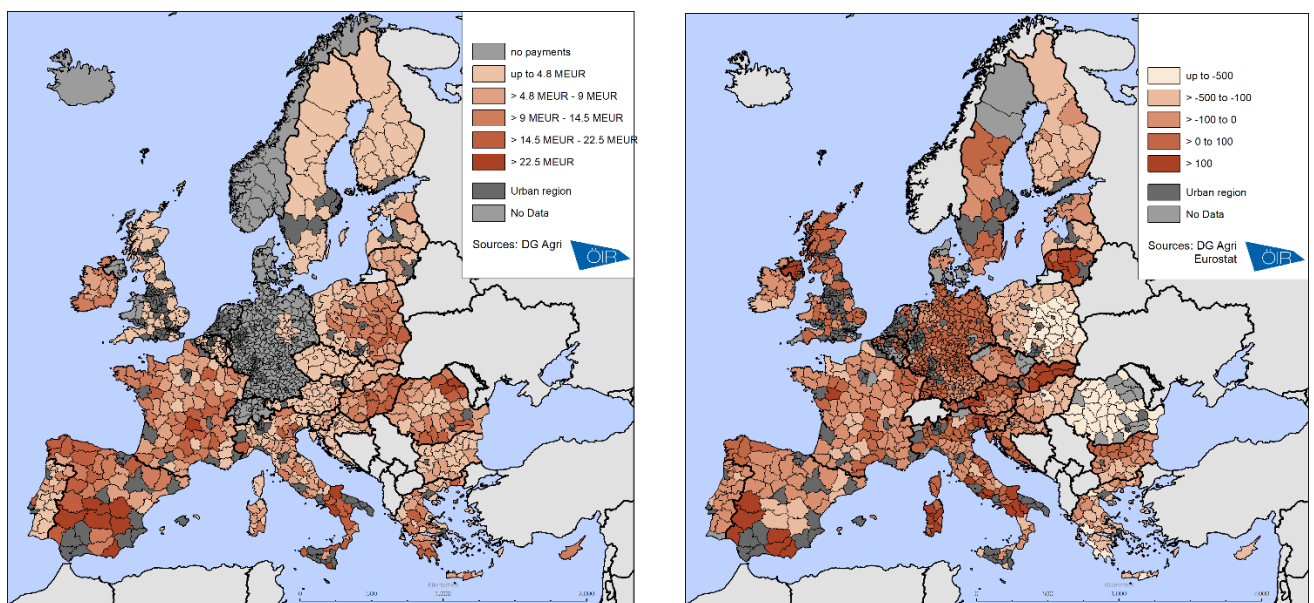
Average Pillar 1 Young Farmer supplement per farmer aged under 35 and change in YF (in relative terms - %) between 2013 and 2016: With a coefficient of only 0.18 (and a p-value of 9.5e-05), there is a statistically significant **absence of correlation** between these variables.

YF supplements as a share of total Pillar 1 payments and change in the proportion of YF in total farmer population (in percentage points) between 2013 and 2016: With a coefficient of only 0.034 (and a p-value of 0.46), there is a statistically fairly significant **absence of correlation** between these variables.

[Correlation to test for a link between planned expenditure under CAP Pillar 2 Focus Area 2B with change in young farmer population 2013-2016 \(in absolute terms - individuals\).](#)

At NUTS 3 level: The maps below illustrate total expenditure planned under CAP Pillar 2 Focus Area 2B and the change in the number of farms managed by farmers aged under 35 (considered equal to the change in young farm managers' population) from 2013 to 2016.

Figure 27. Total expenditure planned under Pillar 2 Focus Area 2B over 2014-2020, Change in the number of farms managed by under 35s (in absolute numbers) between 2013 and 2016



There is **no obvious correlation** detected at first sight between these two maps, as some regions with high planned expenditure under Focus Area 2B (in e.g. Eastern Poland, Eastern Hungary) show a decrease in YF population, while other regions (in e.g. Andalusia (Spain), Gargano (Italy)) have high levels of planned expenditure under Focus Area 2B and increases in YF numbers. Correlation analysis aimed to test whether any trend (or not) observed in maps is statistically verified at EU level or on a smaller sample of EU regions.

After excluding both Romanian and Polish regions as outliers, the Kendall correlation coefficient was close to zero (-0.169), and the distribution of other EU regions according to Pillar 2 FA2B planned expenditure was still non-normally distributed, impeding simple calculation of Pearson coefficients. All regions not planning Pillar 2 FA 2B funding over 2014-2020 were thus excluded from the sample to normalise the distribution. The Pearson coefficient is not statistically significant (p-value of 0.728) and its explanatory power (R^2) is consequently very low (0,026%). This indicates an **absence of**

correlation between Pillar 2 FA 2B funding planned over the period and changes in YF numbers in recent years.

Hence, both methods yield similar results: the **weakness (or even absence) of correlation** between CAP Pillar 2 FA 2B funding planned over the entire MFF period and the change in YF' population (in absolute terms) for the years considered.

Correlation analysis for the 2007-2013 CAP Early Retirement Scheme

Correlation analysis was also carried out using Early Retirement Scheme (ERS) payment data from the previous programming period (2007-2013). The potential correlation between 2007-2013 ERS payment data and 2013-2016 farmer managers' age data can be investigated as a potential impact analysis, as ERS payments could trigger generational renewal in the supported farming population which could potentially be observed during the 2013-2016 period.

At NUTS 3 level: the sample focused exclusively on rural and intermediate areas. This sample of ERS expenditure observations is significantly smaller than the samples used for the current period Pillar 1 and Pillar 2 analyses due to a change in geographic delineation of many NUTS 3 regions between 2007 and 2013 (only those areas which remained constant between both periods could be used).

With a coefficient of only -0.22 (and a p-value of 4.6e-09), there was a statistically significant **very weak negative correlation** between ERS payments over 2007-2013 and the 2013-2016 change in the number of young farm managers. In Polish regions a relatively important decrease of young farm managers' population, despite receiving comparatively large amounts of ERS payments, was found. Excluding all Polish regions from the sample, the Kendall correlation coefficient was closer to zero and lost statistical significance: therefore, **no clear relationship between the 2007-2013 Early Retirement Scheme and GR** in farm manager populations could be demonstrated²¹.

Conclusion of correlation analysis findings

It seems clear that there are no simple, consistent relationships across all EU NUTS 3 regions, between CAP funding for YFs, and YF numbers / trends. If relationships do exist between these variables, they may vary by context and therefore **a more sophisticated analysis which incorporates more contextual information is necessary. This is the MCA analysis**, described in the following section.

4.3.4 Multivariate, multi-criteria analysis (MCA)

This analysis aimed to contribute to the overall evaluation of the impact of CAP on GR in agriculture in rural areas and specifically reinforce answers to ESQs by providing quantified measures linking policy interventions to possible indicators of impact. This analysis explores the context and input differences between NUTS3 regions and the impact of certain context and input indicators on the number of YF in these regions. In policy terms, changes in the number of YF over time within a territory can be considered as a proxy indicator for GR in agriculture, in that territory; although its relevance varies with context.

Method

The analysis included three steps:

- 1) A Principal Component Analysis (PCA), to identify patterns in the data and uncorrelated composite indicators for characterising the NUTS3 regions;
- 2) 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 EU²²;

²¹ The data usable for this correlation analysis was limited to around a third of the EU rural regions because of 1) different regional delineations from one NUTS 3 coding to another and 2) data gaps for some regions.

²² Note that this clustering exercise is different from the one that was used to generate the typology for case study selection – here, we use a different method and produce a smaller number of clusters entirely based upon the logic of PCA.

- 3) An econometric analysis, to explore the impact of these indicators on the number of farmers/farm managers under 35 years old in each cluster.

Data and analysis

All NUTS3 regions²³ 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, produced as described in section 3.5.1-2 of this report, and presented in Table 6. Before running the PCA, the indicators were examined for their adequacy to be included through correlation analyses, following which, some of the indicators in table 6 were dropped. The indicators used to form the Principal Components were:

GDP/c (log)	Unempl. Rate (2016)	Multimodal access
Net migration	GVC quality account.	Tertiary education
GVA/c Primary	GVA/c Secondary	GVA/c Tertiary
Broadband access	Population	
YF P1 total (2015)	P2 total on Area 2B	

The 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 one is considered a composite indicator, comprised of the initial indicators that are highly correlated to it (for details see Annex 3).

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. After clustering, a statistical overview of the clusters was performed, to calculate the average values of the indicators in Table 6 for each cluster. The **five 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.

OLS regressions

For each of the clusters an OLS regression analysis with robust standard errors was performed to identify the correlation of the composite indicators with the number of YF/farm managers. The purpose of the OLS was to test the hypothesis that 'context and expenditure indicators have an impact on the number of farmers below 35 years old' in NUTS 3 regions that have the characteristics of a specific cluster. A few more indicators²⁴ were included (not included in the PCA) namely, **M07 expenditure, M01 expenditure and the number of farms over 50 ha**. Before use in the regression, the data was normalized using the standardization process, to ensure that all variables contribute evenly to a scale and to avoid interpretation errors due to different measurement units.

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 (named the **infrastructure indicator**) is positively associated with the index of broadband access, the index of government quality, the GDP per capita, the multimodal accessibility index and net migration, and negatively associated with the unemployment rate.

²³ 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, due to lack of essential data.

²⁴ M02 and M06 are highly correlated to M07, and M04 and M16 are highly correlated to M01

- The second CI (named the **payments indicator**) is related to population, tertiary education, total Pillar I YF expenditure, and planned expenditure on Focus Area 2B.
- The third CI (**employment indicator**) is associated with increasing GVA per capita from the tertiary sector and the unemployment rate, and reducing GVA per capita from the secondary sector (Table 7).

Table 6. Indicators used in the multivariate analysis, measurements units and description

Variable	Indicat or type	Unit type	Description
GDP/c (log)	Context	Number	Log of GDP per capita
Unempl. Rate (2016)	Context	%	Total region unemployment rate
Unempi. Rate change	Context	%	Change in unemployment rate, 2010 – 2016
Multimodal access	Context	Index	Potential multimodal accessibility (road/rail/air, 2014)
Net migration	Context	%	Crude rate of net migration in the region
GVC quality account.	Context	Index	Quality + accountability of government services (2017)
Tert_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
No farms	Context	Number	Number of farms (2016)
No farms change	Context	%	Change in the number of farms 2010 to 2016
Broadband access	Context	Index	Broadband access
Population density (2015)	Context	Number	Density of population
Population density change	Context		Change in population density 2015 to 2017
Farms over 50 ha	Context	Number	Number of farms over 50 ha
Farmers Below 35yrs	Impact	Number	Number of farmers/ farm managers under 35 years old
Farmers below 35 change	Impact	%	Change in no. of farm managers under 35, 2013 – 2016
Pillar 1 total expend.	Input	€ value	Total Pillar 1 expenditure for 2015 and 2016
YF P1 total (2015)	Input	€ value	Total expenditure on Pillar 1 YF payments (2015)
P2 total on Area 2B	Input	€ value	CAP Pillar 2, Focus Area 2B (GR in agriculture) *Planned expenditure 2014-2020
M01 Pillar 2	Input	€	Expenditure on measure 1 (KE and training)*
M02 Pillar 2	Input	€	Expenditure on measure 2 (advisory services)*
M04 Pillar 2	Input	€	Expenditure on measure 4 (investments)*
M06 Pillar 2	Input	€	Expenditure on measure 6 (business start-up)*
M07 Pillar 2	Input	€	Expenditure on measure 7 (rural services)*
M16 Pillar 2	Input	€	Expenditure on measure 16 (co-operation)*

Source : OIR

Table 7. Results of the PCA and correlation strength of the indicators for each component

	CI1: infrastructure	CI2: payments	CI3: employment
Broadband access	0.868		
Quality of governance	0.861		
GDP/capita (log)	0.823		
Accs_Multimodal	0.798		
Net migration	0.764		
Unempl. Rate	-0.704		
GVA/c primary			
Population		0.918	
Tert. Education		0.897	
Pillar 1, young farmers		0.578	
P2_Area_2B		0.562	
GVA/c secondary			-0.969
GVA/c tertiary			0.967

Source : CCRI et al

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 5 distinct clusters and the K mean clusters analysis defined these as shown in the map²⁵ and described below²⁶ - note that these clusters are not the same as those in section 3.5.4, they have a different logic and application, suited to this particular analytical method :

MCA Cluster 1: non-agricultural developed regions with low CAP expenditure

This cluster includes regions in Germany and Austria, and parts of Sweden and Finland. In total it includes 199 NUTS3 regions, 94 predominantly rural and 105 intermediate. They are densely populated areas, with positive net migration. The unemployment rate is low and decreasing and the GVA per capita is balanced between the secondary and the tertiary sector. They are characterized by high indices of tertiary education, multimodal accessibility, broadband access and governance quality. These areas have a very small GVA from the primary sector, a small number of large farms, and a low number of YF that is declining. Following that, expenditure from both CAP pillars on farming and on YF in particular is also relatively low. 47% of the regions in this cluster use the Pillar 2 GR measures and the average expenditure is as shown in table 8.

As seen in Table 9, the regression analysis for this cluster showed that the number of YF in this cluster of regions is likely to increase where the values for the first CI (infrastructure indicator) increase. This means that that as *infrastructure indicator* increases by 1%, the number of YF in these areas is likely to increase by 0.86%. Similarly, as the *payments indicator* increases by 1% the number of YF in these areas is likely to increase by 1.24%. An increase in the expenditure on M07 and in the number of large farms by 1%, are likely to increase the number of YF by 0.43 and 1.48% respectively. Finally, the number of YF is likely to decrease by 2.97% if no changes are made to the context or input indicators.

MCA Cluster 2: Agricultural developing regions with rapid restructuring / abandonment

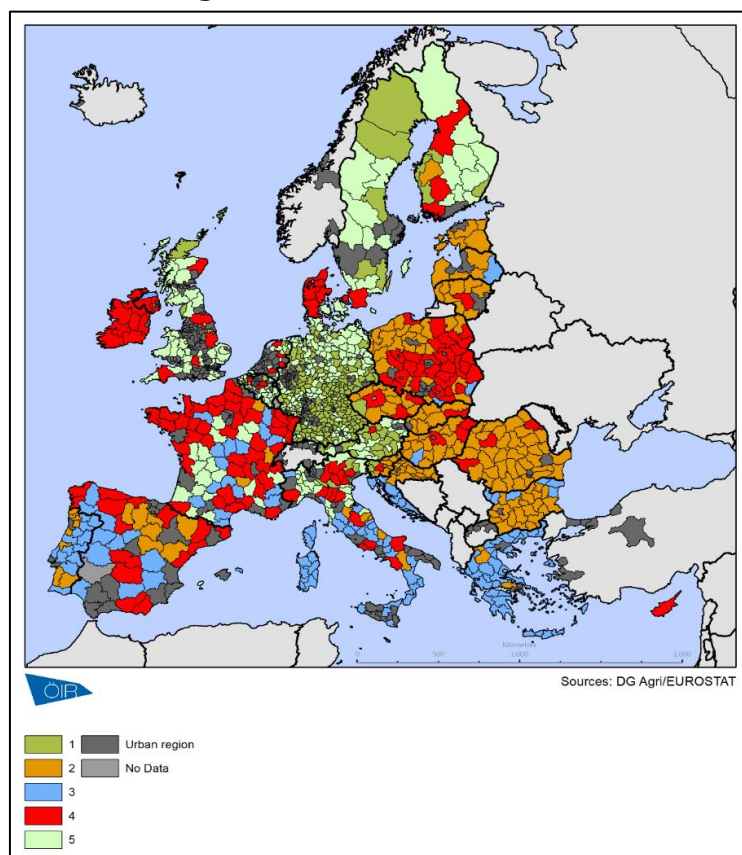
This cluster includes the biggest parts of Bulgaria, Romania, Czech Republic, Hungary, Slovenia and Slovakia, Northwest Poland, Latvia, Lithuania and Estonia, and some regions in Portugal and north-east Spain. In total, it includes 172 NUTS3, 94 predominantly rural and 78 intermediate regions. They are moderately populated areas but with low population density and very high negative net migration. The

²⁵ The characterizations low, moderate and high are based on the comparison with the other clusters.

²⁶ For the average numeric values of all the indicators across the clusters see annex 3

unemployment rate is low and declining and the GVA/c is balanced between the secondary and the tertiary sector, but with a greater percentage of GVA/c coming from the primary sector, compared to MCA Cluster 1. They are characterized by low indices of tertiary education, multimodal accessibility, broadband access and governance quality. These areas have many large farms, and a very high number of YF, which however is decreasing very rapidly. Compared to other clusters, the expenditure from CAP Pillars I and 2 overall and specifically for YF is moderate to high. 91% of these regions use Pillar 2 GR measures, and the average expenditure is as shown in Table 8. As seen in table 9 the regression analysis for this cluster indicated that an increase in the *payments indicator* by 1% would cause a potential increase of YF by 0.5%, and an increase in expenditure on M07 would lead to an increase of the number of YF by 0.9%. On the other hand, an increase in the employment indicator (related to decreasing secondary and increasing tertiary sector) would cause a decrease in the number of YF by 0.34%.

Figure 28. Division of NUTS3 regions into clusters in the MCA



MCA Cluster 3: Sparsely populated, less developed areas with many small farms

This cluster includes almost all regions of Greece, Croatia and Portugal, big parts of Italy and Spain and some areas in France and northern Bulgaria. In total, it includes 137 NUTS3 regions, 80 predominantly rural and 57 intermediate regions. They are sparsely populated areas with low population density without, however, very high negative net migration. The unemployment rate is very high and keeps increasing steadily; with most GVA/c coming from the tertiary sector (this will include tourism and tourist services). They are characterized by low indices of tertiary education, multimodal accessibility, broadband access and governance quality. These areas have large numbers of small farms and moderate numbers of YF, which however is decreasing rapidly. CAP expenditure levels differ, with the overall Pillar I expenditure being at moderate levels (compared to the other clusters) but expenditure on Pillar I YF is very low. On the other hand, in these areas, expenditure from Pillar 2 is very high. 88% of these regions use Pillar 2 GR measures and the average expenditure is shown in Table 8.

As shown in table 9, the regression analysis for this cluster showed that a 1% increase of the *payments indicator* is associated with an increase in number of YF by 2.18%. In

addition, a 1% increase of M01 expenditure and of the number of large farms, would lead to an increase of YF by 1.32% and 0.54% respectively.

MCA Cluster 4: Agricultural regions of large farms, high CAP expenditure, ageing farmers

This cluster includes all areas in Ireland and Denmark and Cyprus, and great parts of France, Spain and Poland; also, some areas in northern Italy and the UK, and a few regions in Czech Republic, Slovakia and Finland. In total, it includes 153 NUTS3 regions, 51 predominantly rural and 102 intermediate. They are densely populated areas with increasing population and positive net migration. The unemployment rate is low and decreasing; GVA/c is mostly generated from the tertiary sector but a good share comes from the primary sector as well. These areas are characterized by high indices of tertiary education, multimodal accessibility, broadband access, but moderate governance quality. They have high, stable numbers of large farms, and high numbers of YF, which however is decreasing rapidly. CAP expenditure across both Pillars, and particularly for YF, is high. 66% of regions use Pillar 2 GR measures and average expenditure is shown in Table 8.

The regression analysis results (table 9) indicate that an increase of the *infrastructure indicator* and the *employment indicator* each by 1% correlates with a negative impact on YF numbers by 4.95% and 1.81% respectively, meaning that further infrastructure development and increase of the tertiary sector is negative for keeping YF in these areas. Given growing population in these areas, a possible explanation for this result is that young people would stay in the area if infrastructure and employment opportunities increased, but would not occupy themselves in farming. However, an increase in expenditure on M01 and M07 would have a positive impact on YF numbers, by 0.51% and 0.88% respectively.

MCA Cluster 5: Developed rural areas where other sectors dwarf the impact of agriculture

This cluster includes areas in Belgium, Germany, the biggest part of the UK and much of Finland and Sweden, western France, northern Italy and Austria. In total, it includes 302 NUTS3 regions, 106 predominantly rural and 196 intermediate. These are high- and densely- populated areas with increasing population and very high net migration. The unemployment rate is low and decreasing; GVA/c is primarily generated from the tertiary sector with minimal contribution by the primary sector. The indices for multimodal accessibility, broadband access and governance quality are high, but tertiary education rates are at a moderate level. These areas have few and very large farms, and very low numbers of YF, which is also decreasing. Consequently, CAP GR expenditure across both Pillars in this cluster is low. 51% of the regions in the cluster use Pillar 2 GR measures, and the average expenditure is as shown in Table 8. For this cluster, the regression analysis (table 9) showed that a 1% increase in the payments indicator would cause an increase in the number of YF by 1%. Similarly, small increases in the numbers of YF (0.2% and 0.4%) may result from an increase in expenditure for M01 and in the number of large farms. Finally, there is a decline by 0.3% of the numbers of YF if no changes are made to the CIs.

Table 8. Average planned expenditure on key Pillar 2 measures, 2014-2020 (in €millions)

	MCA Cluster 1	MCA Cluster 2	MCA Cluster 3	MCA Cluster 4	MCA Cluster 5
M01	0.69	1.13	0.93	1.56	0.94
M02	0.42	0.69	1.37	1.24	0.56
M04	7.37	37.4	31.2	39.2	7.80
M06	1.47	13.8	8.45	18.7	1.75
M07	5.22	13.2	4.43	10.4	4.55
M16	0.97	1.35	1.73	2.37	1.48

Source : CCRI et al

Table 9. OLS results by MCA cluster, impact of CIs on change in no. of farmers < 35 years old

Indicator	Impact on change in the number of YF (%)				
	MCA Cluster 1	MCA Cluster 2	MCA Cluster 3	MCA Cluster 4	MCA Cluster 5
Infrastructure indicator	0.86***	-0.44	0.23	-4.95***	0.18
Payments indicator	1.24***	0.50***	2.18***	0.62	0.98*** ²⁷
Employment indicator	0.10	-0.34	0.24	-1.81***	-0.66***
M07	0.43***	0.90***	0.72	0.51***	0.009
M01	-0.08	0.09	1.32**	0.88***	0.19***
Number of farms over 50 ha	1.48**	0.01	0.54*	-0.55	0.37***
Constant	-2.97**	-0.53	-0.26	1.96	-0.31***

Source : CCRI et al

Discussion

It is evident from the multivariate analysis that NUTS3 regions can be classified according to their structural and institutional infrastructure, in combination with planned and actual GR expenditure from the CAP. This indicates a considerable diversity in contexts for GR, across the EU. Correlation analysis (discussed in section 4.3.3) showed that there is little simple correlation between CAP support for GR and GR across Europe as indicated by changes in YF. However, by using composite indicators (CI) to segment regions into MCA clusters, **we are able to identify emerging patterns in regional behaviour that affect the relationship between CAP GR spending and GR in agriculture.**²⁸

Despite large differences in infrastructure and expenditure between MCA clusters, we see from the OLS regression that **CAP GR spend is positively correlated with increases in the number of young farmers** in almost all clusters, even those where agricultural activity is dwarfed by other sectors. The only exception is MCA cluster 4 (agricultural developed regions with large farms, high CAP expenditure and ageing farming population), where they appear to have no impact on YF numbers. Note, however, that here: a) Pillar 2 spending on rural services and training has a positive impact on YF numbers; and b) total CAP expenditure is already quite high, so the impact of GR funds on YF could be relatively less significant.

In contrast, **changes to infrastructure and employment patterns (between sectors) do not always have a positive effect on YF**, and impacts are dependent on existing conditions. The most clear example for this case is MCA cluster 4, where although it has low indices of infrastructure (broadband, government efficiency etc.), improvement to these would apparently decrease YF numbers. A possible explanation for this result is that as infrastructure improves here, it facilitates access to alternative employment opportunities.

There is an interesting link between sector shares of GVA and YF in MCA clusters 4 and 5. In the former, where agriculture is declining rapidly, an increased productivity share in the tertiary sector causes a further decrease in YF. On the other hand, in other areas with relatively low value agricultural activity, as tertiary sector GVA increases so does the number of YF. This can be explained drawing upon the study's qualitative results (interviews and case studies): **areas that have relatively marginal agricultural activity but which invest in good rural services and offer employment opportunities for other family members, are more attractive to young people who want to engage in agriculture.** Another interesting result is that an increase in the number of large farms suggests an increase in YF in MCA clusters 1 and 5, which

²⁷ Indicates statistical significance at *** 1%, ** 5%, *10% level

²⁸ NOTE: Farm structures data are proxy data for NUTS 3 regions disaggregated from original datasets at NUTS 2 level (as described in section 3.5.2). Some NUTS3 regions appear as outliers from the rest of the dataset. This has to do with contextual differences: these are mainly NUTS3 regions in Romania and Poland where rural areas have high numbers of farmers but their numbers are decreasing rapidly. Results for these areas should be examined with caution, taking into account the wider context in these countries and the internal drivers of rural depopulation which may be beyond the scope of the CAP.

consist of areas with low value agriculture and well-developed infrastructure. Again, from our qualitative analysis we can identify how ***in marginal areas younger people are often strongly motivated to seek farm enlargement*** through collaboration or amalgamation, as a way to improve the income-earning potential of choosing to farm. For the answering of ESQs, the MCA described here was principally designed to help answer ESQ 3 concerning the impact of Young Farmer measures on GR in agriculture. For answering ESQ1, the MCA was re-run to examine the impact of total Pillar 1 CAP payments upon young farmer numbers, which generated slightly different results but from the same basic clusters of regions. The results of this analysis are reported in the answer to ESQ 1.

4.4 Case Studies – comparative analysis

This section contains 3 elements

- 1) Comparing the use and effects of CAP GR measures in the case studies
- 2) Examining the efficiency of delivery and comparing across case studies
- 3) Describing and analysing good practice examples from the cases.

A more general background text which gives contextual information on all seven case study territories, is given in Annex 4 to this report.

4.4.1 Effectiveness of CAP GR measures

4.4.1.1 Use of CAP measures for GR

Table 10 summarises the Planned use of Pillar 2 GR measures in the case study countries, based upon data collated centrally by the Commission from RDPs. As can be seen, the different countries and regions make quite varied use of Focus Area 2B measures.

Table 10. Priority 2 Competitiveness Focus Area 2B: Planned expenditure CS, 2014-2020

Country	Target	Measure	€Total public	%
BE-F	5.6% farms with support for young farmers	01 Knowledge	8 990 556	0.97
		02 Advisory services	9 848 567	1.07
		06 Farm and business development	58 330 251	6.31
EE	2.8% farms with support for young farmers	01 Knowledge	500 000	0.10
		02 Advisory services	400 000	0.00
		06 Farm and business development	22 100 000	2.20
F-Auvergne	10.09 % farms run by YF receiving support	06 Farm and business development	85 543 769	4.77
F- Rhône-Alpes	7,64 % farms run by YF receiving support	06 Farm and business development	98.962.500,00	5.76
HU	0.61% farms with support for young farmers	01 Knowledge	6 984 284	0.17
		02 Advisory services	2 521 958	0.06
		04 Investments	125 077 081	3.00
		06 Farm and business development	121 720 316	2.92
IE	2.86% of holdings with RDP supported investments for YF	04 investments	114 000 000	2.75
		16 cooperation	3 250 000	0.08
IT- Marche	0.67% of holdings with RDP supported business development plan/ investments for YF	06 Farm and business development	22 000 000	3.03
IT- Sicily	0.74% of holdings with RDP supported development plan/ investments for YF	01 Knowledge	2 480 495	0.11
		02 Advisory services	700 000	0.03
		04 Investments	160 000 000	7.33
		06 Farm and business development	85 661 157	3.92
PL	1.91% farms, 28,715 beneficiaries receiving support	06 Farm and business development	1 910 000	5.27

Source: : https://ec.europa.eu/agriculture/rural-development-2014-2020/country-files_en

Financial Instruments and their relevance

Estonia is notable for making use of Financial instruments to incentivise investment on farms, which is partly designed to address GR goals in rural areas (table 11). Among other Case Study MS, financial instruments are also a feature of national and regional RDPs in Italy (although not used in the regions selected for detailed analysis, in this evaluation). France has also made use of financial instruments to assist investments, but in the region covered by our case study some use has been discontinued. Loans with interest subsidies (LS) covered part of the loan interest enabling the acquisition and implementation of equipment, but were abandoned in 2017 due to the decline in bank interest rates which had reduced its attraction to YF. The amounts originally allocated to loans have now been reallocated in the RDP to fund higher aids for those implementing more ambitious installation plans. In 2019 the Auvergne-Rhone-Alpes region will launch a new loan fund as part of the AITA²⁹ national programme, for non-family transfers not eligible for M6.1 but involving small investment projects (of 5,000–25,000 EUR). Financial instruments generally include credit guarantees and low or fixed interest loans (fi-compass, 2019).

²⁹ Accompagnement a l'Installation-Transmission en Agriculture

Table 11. Estonia's Financial Instruments for rural development, 2014-2020

	Growth loan, micro- and small enterprises	Long-term investment loan
4 year target	€14.2 million	€16.1 million
Target group	micro- and small enterprises	SMEs
Amount of loan	5 000 – 100 000, direct loan or co-lending	250 000 – 1 000 000 (250 000 – 3 000 000 for producer groups), co-lending at least 50%
Duration	up to 5 years (+ up to 3 years' grace period)	1 to 15 years (+ up to 5 years' grace period)
Collateral	at least 50%	at least 80% (30% for producer groups)
Interest	6%+ECB refinancing rate (lower than market)	market conditions (bank interest)
Other conditions	lower interest for start-ups and microenterprises, disabled people, women (4%+ECB); young farmers and producer groups (2%+ECB)	lower interest for start-ups and microenterprises, disabled people, women (2% + ECB); young farmers and producer groups (1%+ECB)

Source: DG Agri presentation to ENRD workshop December 2018

National measures

Table 12 shows the range of national measures relevant to GR discussed in case studies.

Table 12. National schemes for GR, with funding where this is noted

Country	Support/policy	Total planned	Financial resources spent (by territory)
FR	Accompaniment Programme for Installation and Transmission in Agriculture which includes 6 components and 19 actions (AITA) Partial exemption from MSA (social security) contributions for 5 years Tax rebates and reduction of registration fees		RHA + AUV regions: EUR 2,110,000 (2017) Not known for CS area Not known for CS area
HU	Farmstead Development Programme-non-refundable subsidy -75-90% of the eligible cost age dependent "Benefit for family home" Lump-sum, non-refundable housing subsidy Family Tax Benefit (Act No. CXVII of 1995 on Personal Income Tax)		
IE	Rural regeneration fund Future Growth Loan Scheme 100% YF stamp duty relief (max. age 35) for change of ownership 100% stock relief based on growth herd over the first four years of production Tax credit on Farm succession partnerships	Target €1 bn, 2019-27 €300 m	€315 million allocated on a phased basis 2019 - 22.
IT	Ministry Decree "Living lands" Terre vive" Ministry Decree "Free Field" – support for young entrepreneurs Foundation for the South, INVITALIA scheme (Sicily)		
PL	Farmers Social Security Fund (KRUS) "Family 500+"- family benefit (children) Preferential credits for farmers Pact for Rural Areas with national Strategy of Responsible Development (SRD)		

Source: Case study reports

Effects of the GR measures - overview

Main points of the Case Study evaluations of these measures are summarized below.

GR in agriculture is heavily dependent on the transfer of farm business within families and the case studies provide much evidence of how the CAP aids this process. Funding, advice and knowledge, and institutional types of intervention are all used in positive ways to support farm GR, in each of the countries and regions studied.

In general it is more difficult to enter farming if not born into it, partly because of the challenge of initially securing land or raising capital. New entrants may have additional needs for knowledge and information if not supported by the previous generation. Some do not qualify as YF due to non-compliance with basic criteria like qualifications, business size and/or age limit (e.g. Flanders, France, Hungary and Estonia examples). Many have non-conventional business plans or development patterns that are more challenging for authorities to assess or support effectively, so they can be overlooked by administrations: i.e. appropriate CAP tools exist and could be tailored better to these groups, but the effort has not been made.

It is clear from the results of CS that, although CAP measures are perceived as effective and there is evidence supporting their contribution to GR, performance is highly context-specific and depends on the requirements and needs of beneficiaries. For example, in areas with good infrastructure, low unemployment rates and sound economies, agriculture can be a less attractive option regardless of the CAP support available (e.g. Flanders). In addition, national and local barriers such as low land availability, lack of access to credit, and fiscal and legal costs may impede the adoption of CAP measures unless additional provisions are made to tackle these barriers (e.g. Italy, France and Ireland).

Both quantitative and qualitative assessments indicated that impacts depend on the characteristics of the area in which they GR measures are implemented, as well as key elements in the design and delivery. In areas with viable family farms, the measures more likely have a positive impact on GR, whereas in areas of declining, small-scale agriculture where there is significant rural exodus due to urban labour demand (e.g. parts of Hungary, Poland, Estonia) their effectiveness is more limited. However, when additional national initiatives and targeting tailor the CAP measures to specific conditions in those territories (e.g. Italy, France), they can be effective even in marginal areas. Only a very small proportion of the CAP is targeted on knowledge exchange and innovation. However, where GR measures are integrated in packages and training and advice is provided to YF alongside capital aid, the evidence of increased business success and innovation is stronger.

Poor rural infrastructure, services and social capital were identified as a GR challenge by all rural stakeholders, particularly for remote and scarcely populated areas. According to the case study evaluations, there is some direct impact of CAP GR measures on these aspects but it is small, as the CAP mainly focuses on supporting agricultural businesses. However, indirect impact was widely claimed (e.g. Ireland): by helping YF stay in rural areas, the vitality of the areas can be supported and this creates demand for infrastructure and services. At the same time, areas with developed infrastructure and services are clearly more attractive to YF, who are then more likely to avail of CAP schemes. This highlights the importance of a balanced approach towards fostering farm and non-farm GR through RDPs, rather than privileging the former at the expense of the latter.

As the CAP is primarily focused on agriculture, case study evidence suggests that it contributes relatively little to the creation or maintenance of non-farming jobs in most rural areas as a whole, by comparison with the impact of market conditions and national policies that affect the wider job market. However, there are clear examples in all cases where Pillar II supports diversification in employment by creating agriculture-related, non-farming jobs e.g. processing, direct sales or tourist activities, which can offer opportunities to young people. Some areas have benefited from LEADER initiatives and non-farm spending under M6 and M7, creating jobs in construction, services and tourism. LEADER's effectiveness depends significantly on local and national market conditions and lasting impacts are hard to quantify in robust and comparable fashion; but it seems these impacts may be more obvious in marginal areas where the local economy is not already diverse.

Access to land and access to credit are confirmed as major barriers for GR in agriculture across Europe, but it is apparent from contrasting situations explored in the case studies that the meaning of 'access' varies considerably. In some places, the main barriers to accessing land are primarily cultural (older farmers unwilling to release land, e.g. Ireland) while in others they are structural (holdings are highly fragmented so YF need to accumulate and consolidate them, e.g. France, Italy); or financial (younger entrants lack the assets to raise/make investments in land and equipment, e.g. Estonia). In each case, CAP funding may reduce these barriers but other supporting actions (education, provision for smooth retirement, institutions to ease legal transfer and consolidation) may be crucial.

In most Member States farmland is mainly inherited; two main complications arise from this: a) inevitably GR is related to inheritance and retirement laws, taxation and fiscal and legal issues, with which the CAP is not directly involved; and b) a very small proportion of agricultural land goes to the market, usually at very high prices which are easier for existing, established farmers to match than for YF and new entrants. CAP direct payments assist existing farmers to stabilize their income and create financial reserves, but for new entrants, the capital needed to acquire land remains a barrier. So, CAP measures alone may play a small role in supporting or facilitating access to land and credit, but if combined with tailored national policies their effectiveness is increased.

In conclusion, it is clear that the effectiveness of the CAP for GR cannot be examined in isolation, as its performance is highly context-specific. As rural areas vary across Europe, there is a need for measures that are tailored to the specific needs at MS and local levels. To effectively address GR in rural areas, CAP measures should be calibrated according to the requirements of the areas using them, but they should also be more integrated with other EU and national policies that support other aspects of rural development.

4.4.1.2 Comparison of findings from beneficiary interviews in CS countries' local areas.

Issues – all CS region beneficiaries said that older farmers are unwilling to release land for sale or rent. Farmers in Estonia and one Hungarian region reported a shortage of young people wanting to farm in view of a wide range of other job opportunities and a well educated workforce, also wealthy non-farmers buying land. Several noted that farms cannot provide sufficient income to support a family so second incomes are needed – via diversification or off-farm employment.

Access to credit was felt a 'number one need' in all CS territories except France and Poland, where land was more important. Lack of advice was an important need in Italy, Hungary and Estonia; as well as France and Flanders for new entrants. Over-regulation, compliance with rules and bureaucracy are a burden for many beneficiaries, especially in IT- Marche, HU and EE.

Beneficiaries say the most important GR policy is CAP YF aids, then other CAP aids, then other national or regional policies, and finally national or regional GR policies. In **IT** the Pillar 2 YF package provides much needed support for start-ups, retaining sustainability and creating added value. In **EE**, the CAP YF measures are seen as key 'triggers' to succession. In **IE**, respondents perceive the CAP as effective: Pillar 1 'pushing' YFs into partnerships, Pillar 2 an incentive to make improvements on the farm. In one region of **HU**, quality of life is seen as the most important factor.

In **FR**, farmers did not identify any policies relevant to wider rural GR as they felt they did not have a relevant overview. In **EE** EU regional policies, LEADER, national policies for economic development and policies on service provision were all highlighted as significant. LEADER was an important contributor in **IE** and in **IT**, ERDF and national financing of start-ups were regarded as important, in **IT** YF report lack of infrastructure and accessibility in some regions, while others have national schemes to address this. Broadband was universally considered a high-impact need for rural areas and young people. Road and transport infrastructure are also considered crucial. Other EU, national and regional economic development policies are important for these.

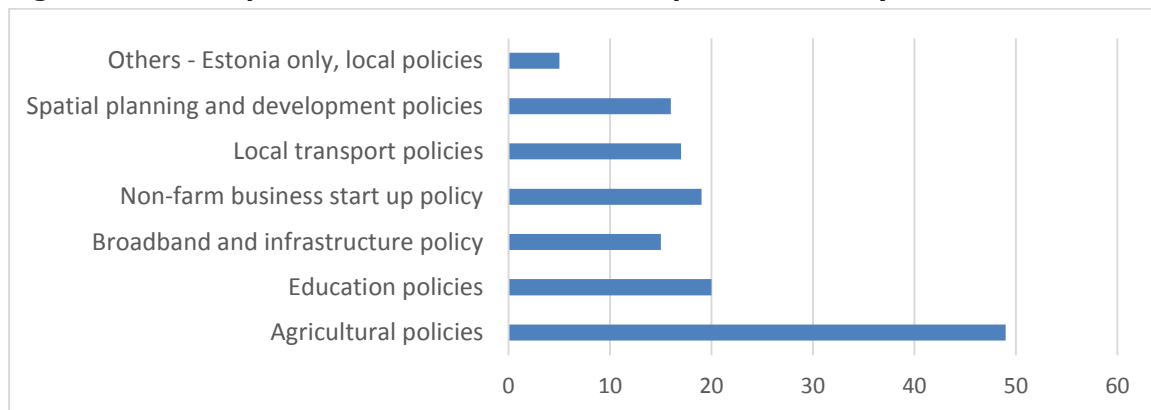
Main beneficiary delivery issues were cash flow and the cost of delayed payments – particularly for those that take out loans to make an investment before getting CAP aid. Information, training aid and advisory services were not easy to access in some areas. Administrative procedures and scoring schemes are very complex and business plan activities must be adapted to the priorities of the call, diverting from the initial strategy.

In **IT**, small farmers criticise their low financial support (especially Pillar 1), while experts cite financial viability and related criteria set by the regional RDP as challenging. Complex procedure is emphasized by all, citing multiple permissions/ authorisations to be gathered and long time to get intermediate and final payments.

All beneficiaries experienced positive income effects on the business: a majority from +11 to +33%, a small number 0 to 11%, one with >50% increase (France). Aids allow investment to set up and develop the business and give confidence to improve business planning. In all CS areas beneficiaries acknowledged a positive effect on farming GR. CAP aids are considered useful since they give the opportunity to innovate. In all cases CAP support was not the reason for taking over the farm, or living in rural areas. All the respondents pointed out that they would have become farmers even without the aid, however CAP support is unanimously acknowledged as a great help. Many said without it they would have set up slower, with reduced investments and modernisation.

Most think CAP measures have limited influence on networking and **co-operation**. EiP Agri OGs in **IE** were highlighted as potentially useful. CAP measures weren't felt to have impacted on the quality or availability of **rural infrastructure**, except in PL. Some specific national policies (e.g. Sicily, IT) were felt more accessible than the YF package and other CAP RD measures, promoting social inclusion for new entrants to rural areas and more technical support in project design and financial planning.

Figure 29. Which policies are considered most important for GR (beneficiaries' views)?



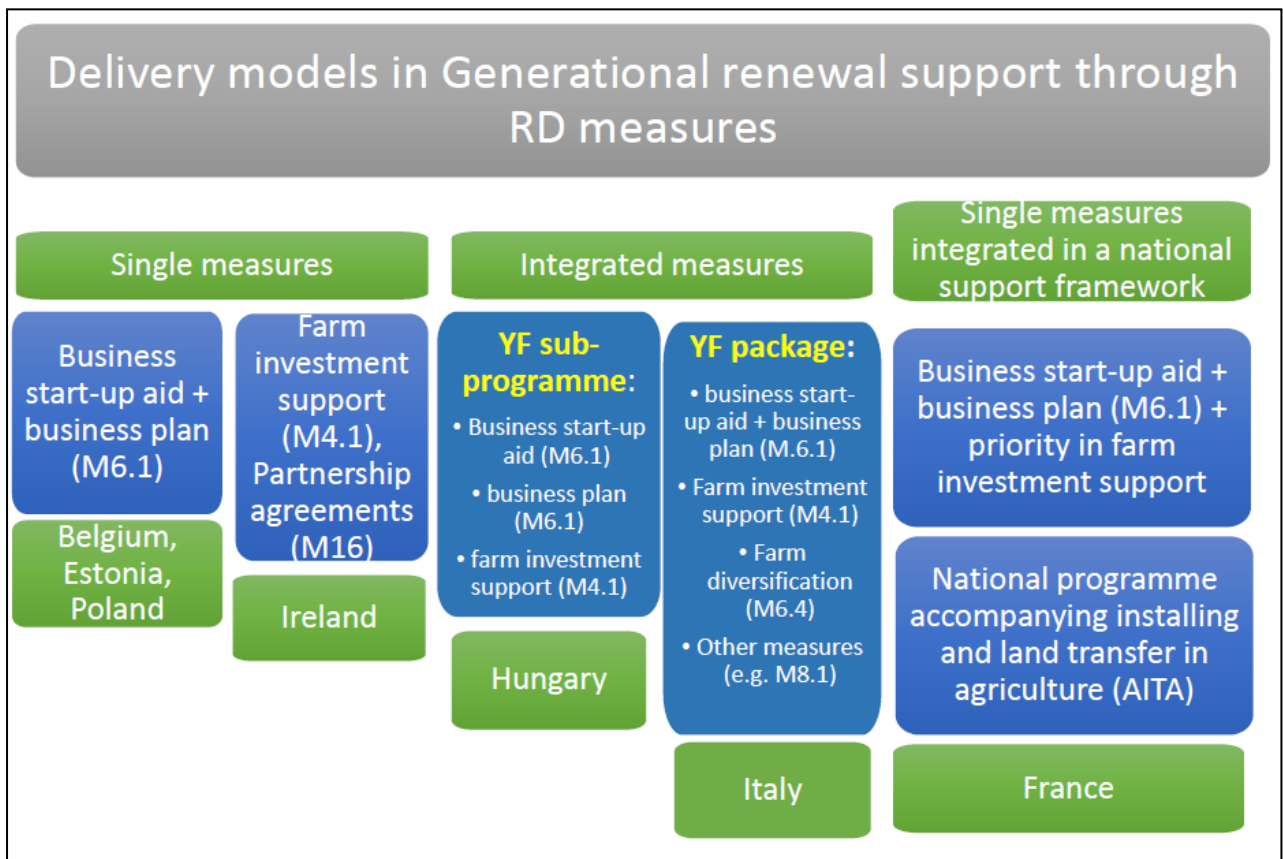
Source : Case study interviews, collated by CCRI et al

4.4.2 Comparative review of efficiency in case studies

The delivery process

There are different modes of delivering support for agricultural GR in the selected case studies. In addition to the YF supplement in Pillar 1 which is a standardised approach with similar (low) costs reported across the CS, the MS can select how they target farm GR using Pillar 2 measures: from the most simple to the most complex, as represented in figure 30. In addition to these options, some MS are beginning to use Financial Instruments to tackle local issues which may be highly relevant (as discussed more fully in the previous section 4.4.1). However, there was insufficient evidence on which to review the efficiency of Financial Instrument delivery within the case study MS (Italy, Estonia, France), as each has quite newly-implemented approaches (since 2018). This section therefore concentrates upon Pillar 2 delivery.

Figure 30. Different types of Pillar 2 delivery models supporting young farmers in GR



Source: CCRI elaboration from national case study reports

The most simple models only include the measure for business start-up aid for YF (M6.1) for which support is conditional on the submission of a business plan. This model is found in three case studies (Belgium, Estonia and Poland). Ireland is a unique case using farm investment support (M4.1) instead of set-up aid, plus the promotion of co-operation/partnership agreements (M19). These two aids can be combined, and being in a partnership gives the YF a higher level of aid for M4.1, so the latter is often a driver for forming partnerships.

A second model envisages the use of business start-up aid in conjunction with farm investment support and/or other similar measures. This is the case of the Hungarian sub-programme, where in reality only farm investment support is directly linked to business start-up aid. The Italian package is different, because it introduces innovation in two aspects: a single joint call for the set of measures and the option for YF to apply for different types of support in one application, adopting the principle of a «one-stop shop». The YF package is a delivery approach facilitating integrated mixes of measures to fit farm development needs.

The third model is implemented in France: it is based on a policy mix of business start-up aid (finalised in a business plan) and national measures accompanying generational change and land transfer of the farm, through a specific national programme (*Programme pour l'Accompagnement et la Transmission en Agriculture – AITA*). Although in other countries national measures are available as well, only France requires the functional linkage with CAP RDP measures, fostering efficiency.

Costs

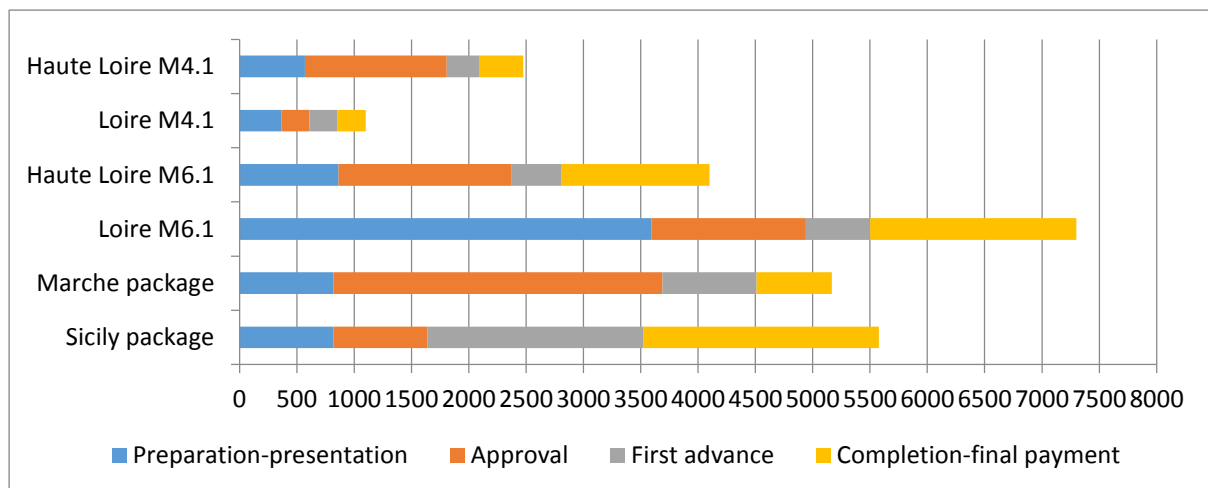
Costs of delivery have been estimated for main measures targeting YF: business start-up aid, farm investment support and in some cases also Pillar I YF supplement. While in most MS the cost is for each single measure, in Italy it refers to delivery of the whole package. Costs have been calculated on the basis of the time spent in preparing, approving and providing payments for an average application. Times taken to process a single application represent the actual working days spent by public officials to examine the application, prepare the necessary documents to make the payment, etc. Times were

surveyed for the different phases: from presentation to approval, from request of payment to first advance (where relevant), and from request of payment to the final payment. Estimates are based on the answers given by officials involved in the field work of assessment and control, and sometimes by high level public officials. Questionnaires were completed individually in direct interviews. Working times have been evaluated assuming the average salary (per day) that is relevant in the country/region under examination.

Estimates were evidently not possible and accurate in all case studies, due to difficulties of estimating or providing these types of information and the availability of basic information at regional/local level. Comparisons among countries/regions must therefore be considered with great caution, due to the fact that differences in the level of delivery costs can be strongly influenced by a range of factors which in reality have nothing to do with efficiency: e.g. typologies of farm investments, size and complexity of business plans, specific national/regional delivery models to access funds (single measures or packages of measures), etc.

Figure 31 compares costs in two French regions (Loire and Haute Loire) and Italian regions (Marche and Sicily).

Figure 31. Public costs (in Euro) of delivery per application in different regions and by delivery phase



Sources: CCRI elaboration from Italy and France case study report

Higher costs in Loire for measure 6.1 can be explained by times taken to advise YF in preparing the application, while Loire seems the most efficient in processing applications for M4.1. In both French regions the costs of the last phase (completion of projects-final payments) is likely underestimated, due to uncertainties in calculation of the final controls and project revisions. Costs of delivering business start-up aid in both French regions seem quite high compared to the total expenditure provided by the measure (about 18-20 % of total expenditures), but with strong differences by type of area (mountain area vs plain area). The costs of Italian YF aid packages seem reasonably low (between €5,000 and €5,500) if we consider that the package always includes at least two measures (sometimes three) and represents about 2% of the total public expenditure activated by packages in two regions: the average public expenditure of the package is €226,500 in Marche and €329,200 in Sicily.

Delivery costs do not include private costs for advice in designing/preparing the applications, that can be relevant in some countries, as shown in table 13. It is notable that in some countries the cost of filling applications has not been expensive in recent times as it is fully digitalised compared to the previous programming period. Main differences can be explained by the complexity and investment size of the application which is submitted.

Table 13. Costs related to the preparation of a single application, different countries

Country	Cost per application	Notes
Ireland	375 – 1,175 Euro	The highest cost is for the most complex application
Poland	375 – 500 Euro	For M6.1 or M4.1
Hungary	2,000 – 16,000 Euro	The lowest for M6.1, the highest for M4.1
Estonia	400 – 1,000 Euro	Only for M6.1

Source: National case study reports

Overall, from the analysis of delivery costs, we cannot deduce relevant inefficiency problems. Costs can be considered reasonably in line with the size and complexity of the projects, especially if implemented under the form of a package of measures.

Targeting methods

Business start-up aid and related investments by YF are usually targeted in different ways:

- Eligibility requirements set by Managing Authorities;
- Selection criteria used in assessing and approving applications;
- A mix of eligibility requirements and selection criteria.

Eligibility requirements generally focus on a minimum/maximum range of farm size, usually defined either in terms of agricultural land or, more frequently, gross farm output. Table 14 summarises main ranges of variability present in the case studies.

Table 14. Eligibility requirements in terms of economic size of farms supported by YF measures by country

Country/region	Unit of measurement	Minimum in Euros	Maximum in Euros
Hungary	Gross standard output	6,000	25,000
France	Gross standard output	10,000	1,200,000
Poland	Gross standard output Hectares	13,000 National/provincial average	150,000
Belgium (Flanders)	Gross income	12,000	No limits
Italy-Marche	Economic standard units	5,000 minor islands 8,000 other areas	8,000 minor islands 10,000 mountain areas 15,000 other areas
Italy-Sicily	Economic standard units	12,000 upland areas 16,000 other areas	200,000 all areas

Source: National case study reports

As we can see, upper and lower ranges can vary greatly by country and also by region within the same country. The general approach is to set a minimum size consistent with potentially viable farming. This minimum size is seen as strongly restrictive in Poland (where the agricultural area managed by a young farm must be equivalent at least to the national average or, in the case of holdings in a province with an average lower than the national average, equivalent to at least to the provincial average); and in Flanders, where 12,000 Euro of gross income is seen as penalising small-scale organic farms, new entrants and part-time farms.

Territorial modulation of the minimum size is used to make eligibility requirements less restricting in some specific areas. Selection criteria are also modulated to give more favourable access to:

- Areas with natural constraints, mountain areas and areas with low population densities (Marche, Sicily, Auvergne-Rhône Alpes);

- Specific types of farming (e.g. extensive livestock, fruits in Auvergne-Rhône Alpes);
- Investments related to specific objectives, such as innovation, environment and climate change adaptation (Marche, Hungary);
- Organic production, production with quality certification (PDO, PGI, etc.), healthy animal production and animal welfare, energy saving technologies (Sicily, Auvergne-Rhône Alpes);
- Agricultural employment impact and quality of employment.

Results from this targeting via modulation of selection criteria are not yet evident in all areas. In Italy there has been a clear targeting in favour of upland and remote areas: 60% of new business start-ups are allocated in these areas in Sicily, while in Marche the share of young farms in these areas is 46%.

Assessing the administrative burden on beneficiaries and the public administration

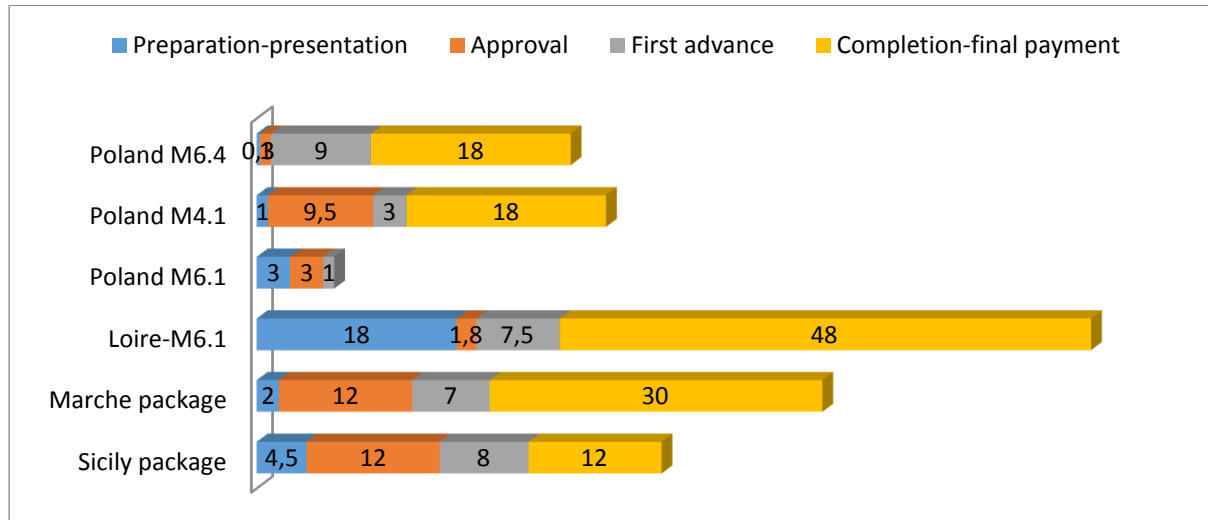
In order to explore administrative burdens, data on times of delivery are very helpful. These data were gathered through a semi-structured questionnaire with the same approach described above for the cost estimates. Interviews were with public officials in managing Authorities of the RDP and in provincial/local offices assessing single applications. Delivery times are average times per application in each delivery phase.

Even in this case, comparisons must be analysed with many caveats due to the strong influence of the composition of investments, the size and complexity of the business plan and the specific national delivery model. Figure 32 presents some comparisons among delivery times in Poland, Loire (France) and two Italian regions (using a package approach). In Loire the preparation of applications implies longer times than in other countries, due to the specific accompanying programme of supporting advice/training and planning. Italian packages are characterised by longer times of approval and, especially in Marche, too long times for completing projects. In the specific case of Marche these times are explained by the increasing difficulties of farms in covering investment costs with their own financial resources during the transition period before the new production is established and also in finding credit support from banks. On average, we must say that completion of projects and receiving the final payment represents the most critical phase. We will return to the most relevant factors of delay later in this section.

Usual complaints about bureaucracy by farmers need to be explored in detail and qualified. There are different factors influencing policy efficiency, often a combination of factors simultaneously. In order to understand the role of specific factors influencing YF measures and their relative importance, we define three categories:

- a) Policy/project design and implementation;
- b) Role of institutions and private sector;
- c) General socio-economic context.

Figure 32. Times necessary for each phase of the measures for YF (no. of months)



Source: CCRI elaboration from national case study reports

On the basis of interviews, case study reports and the evaluation of national experts, we defined a list of factors in each category and gave a score to each case study (* low importance; ** medium importance; ***high importance). Single scores for each factor were given after discussion with national experts. Table 15 shows how many factors can influence policy efficiency and scores in the different cases under examination.

The first set of factors (policy/project design) include those dealing with conditions set by RD plans (eligibility, selection criteria, financial allocation to measures, ceiling for investment, business plan requirements), which can change during the programming period: this can represent a further disturbing factor in some cases.

Eligibility conditions and selection criteria are quite relevant in most of case studies (see relevant scores within the highlighted area in table 15), but they have different meaning according to the context. Requirements in terms of physical/economic size are seen as restrictive for small-scale units managed by YF (Poland, Flanders), and this contributes to reduce the share of potential beneficiaries and hamper the full exploitation of the financial resources. The same happens in France, as it is pointed out that the age limit of 40 years is conflicting with the growing trend of new instalment by people coming from other sectors and outside the family context.

Selection criteria and financial allocation by measure create new constraints in the context of the package for YF in Italy (dotted area in table 15), where two specific problems arise for the application of the package approach:

- First, the definition of selection criteria for the whole YF' package has to include all selection criteria set in the RDP for the measures of the "package". This implies that the selection of the "package" is not carried out on the basis of its own set of criteria, but simply on the basis of sum of criteria derived from the constituent measures of the package. But making selection criteria a sum of criteria of the single measures, although in principle a procedure consistent with the RD regulation, might in fact cause conflicts between criteria themselves.
- Secondly, a major problem stems from the way the financial system of the package is organised. Albeit introduced to achieve objectives specifically set for the package, in both programming periods each measure was funded separately. Therefore, for each call the overall budget available is indicated with a clear division of financial allocation by measure, and applications positively ranked can be financed up to the limit of either a maximum available funding for the package, or a maximum available funding for single measures.

Table 15. Categories and factors influencing efficiency of YF aids in different CS

Categories and factors of efficiency	ESTONIA	FRANCE	IRELAND	BELGIUM - FLANDERS	POLAND	HUNGARY	ITALY- MARCHE	ITALY- SICILY
A. Policy/project design and implementation								
A. RDP rules and programming								
- Eligibility conditions	***	*		**	**			
- Selection criteria	**	**	**			*	**	***
- Financial allocations to measures			**				***	***
- Business plan (rigidity, complexity)		**		*		*		
- Ceiling for investment			**				*	
- Changes of implementing rules over time		***			**		**	**
B. Role of institutions and private sector								
- Communication/information on available aid			*	***		*		
- Public advice to project preparation				***	*	*		
- Completeness of application submitted			*	*	**	*	*	
- Complexity of projects					**	***	*	*
- Administrative capacity of regional/local offices			*		*	***	***	***
- Times to get permissions/authorisations from public authorities	**		*	**	**		**	**
- Times to get funds from Paying Agencies			*	***	*	***	**	**
- Times and procedures of controls		*	**		**		*	*
C. General socio-economic factors								
- Lack of capital/liquidity at farm level	***		**	**	**	**	**	**
- Credit guarantees and collateral	**	*	***		**	**	***	***
- Land shortage/land prices	***	*	***	***	***	***	*	*
- General trends in agricultural/input prices		**	**	**		***		

Source: CCRI elaboration from national case study reports and national experts' evaluation

- However, this results in a sub-optimal use of the package and has significant negative impacts on applicants: on one hand resources for some specific single measures are used up before all the beneficiaries on the ranking list are financed, on the other hand it is not possible to use all the funds designated for the purposes of the package. This allocation problem means that some applicants could not obtain aid because the resources intended for funding were exhausted for some of the measures activated, whereas the resources for other less popular measures remained unutilised and could be used only in other following calls, under their subsequent implementing provisions.

Changes in implementing rules (from one programming period to the next or even within the same programming period) often affect the speed of preparation/presentation of applications by potential beneficiaries: the changes modify the system of priorities and the scoring system within which farmers take their decisions to invest and local offices/private advisors, in turn, need time to apply the new rules.

When we move to the role of institutions and the private sector (category B in the table), there are a series of factors dealing with the capacity of these stakeholders to use the financial provisions planned by the set of measures, efficiently.

Within this category, factors of inefficiency are introduced by inadequate support to farmers in the preparation phase: this is a specific problem in Poland and Flanders (see

second dotted area in table 15): frequent incomplete applications are emphasized and, consequently, this causes delays in the approval process both on the beneficiary side (e.g. long time in bringing additional documents or making the necessary amendments) and in the public administration side. This critical point is strongly linked to problems of information and public advice in preparing applications: this has been pointed out everywhere, but in Flanders it is seen as a major critical variable, especially for small farms.

More complex projects, as we have already pointed out, usually require more time, both in assessment and in the implementing phase, due to business plans covering new buildings/restructuring of the already existent ones (Poland, Hungary, Ireland), or more innovative investments (Sicily, Marche), or diversification of farm activities (Hungary).

The administrative capacity of regional/local offices plays a crucial role in Hungary and Italy: this depends on the number of personnel involved and the ratio between technical officials and applications submitted. In Italy the package approach got a widespread consensus among YF and this explains the high number of applications submitted in both programming phases. Moreover, the available staff cannot be dedicated full-time to just one call on one measure, because there are simultaneous calls on different measures to be assessed/controlled at provincial level.

Times to get permissions/authorisations from public authorities and to get funds from Paying Agencies are the most common factors highlighted as causing inefficiency, in this category. The former is particularly relevant in more complex and innovative projects and also in those investments requiring intervention of public authorities outside the domain of the programme: e.g. municipalities, natural park authorities, forest bodies, authorities for arts and heritage, and others involved in the care and protection of land and resources. Fragmented responsibilities increase the coordination and execution costs of private investments, and very often cause delays.

Delays in receipt of funds from Paying Agencies were emphasized in Belgium, Hungary and Italy. In particular, in the Italian CS these delays are linked to the procedure of payment set up by the Paying Agency, designed to check payment claims for single measures. Consequently it does not fit the needs of integrated measures in a business plan.

Finally, times and procedures of controls, quite often considered as one of the heaviest components of pillar 2 measures, were highlighted as major factors in Ireland and Poland.

General socio-economic factors can strongly influence efficiency because they affect the decisions to invest, the financial resources necessary for the investment process, the opportunity to access available land and the level of income/farm viability of YF benefitting from policy measures. These factors have been highlighted in all case studies and generally are considered as highly relevant in all contexts.

Issues deriving from EU regulation and from MS or more local decisions

The three categories of factors described in the previous paragraph can help to distinguish between issues deriving from EU regulation and from Member States or local decisions.

EU regulation provides quite broad margins to adapt eligibility conditions, selection criteria, financial allocation and business plans to the specific needs of a country/region. Most of the problems in designing and implementing efficient policy measures for YF derive from:

- a) Inadequate analysis of needs, opportunities and constraints by programming authorities. This consequently requires them to revise implementing rules over the programming period, causing further delay and adaptation problems;
- b) A series of inefficiency factors related to institutions and private sector deficiencies, most of which are under the responsibility of the State or Regions as institutions governing the bodies that provide assessment, approval, control, permissions and authorisations for the completion of applications submitted by farmers;
- c) A series of general macro-economic or meso-economic factors, which create the contextual and structural conditions to access land and credit and provide income necessary to finance the private share of investments.

EU regulations are relevant in affecting efficiency in two different ways:

- a) The logic of programming by single measure is not fit for use of integrated measures, as in the package of support for YF, due to the financial requirements and selection criteria being designed for individual measures and not for a set of co-ordinated interventions at farm level;
- b) YF aids and conditions are designed particularly for farmers in the sector and may not be easily fulfilled by new entrants and small entrepreneurs (or potential entrepreneurs) lacking the necessary land, credit and knowledge.

Which approaches appear to be more efficient and why

- Efficiency has been measured in terms of costs and times to complete business start-up and related investments linked to the business plan. Analysis of the delivery process highlights how different models have been set up in the support of GR through CAP Pillar 2 measures. Efficiency is not necessarily linked to the complexity of the delivery model: a package of measures can be more efficient than the approach based on single measures. Efficiency in mixing different instruments to pursue the objective of generational change is more evident in the French and Italian cases, the former being able to combine RDP instruments and national policies accompanying the preparation of instalment, the latter mixing different instruments and simplifying the application process for the potential beneficiary in a “one-stop shop” approach. Targeting by modulating aid rates or selection criteria appears to be an efficient way to address policy instruments toward certain issues, in particular there is evidence that territorial differentiation of aid rates can focus public expenditures on the most fragile areas (mountain and remote areas) with positive results.
- Efficiency appears to be strongly conditioned by State and regional institutional organisation and every delivery model must be analysed taking account of external conditions hampering the type of delivery. This is vital in the process of evaluation: the different approaches cannot be assessed only in terms of costs and times; the risk is to attribute to costs and times an explanatory capacity that in reality they cannot provide.
- Models of delivery based on an integrated set of measures and national policies can stimulate a learning effect both in administering bodies and for the private sector: in fact, they require more co-ordination effort among the different bodies/offices responsible for policy management; they also require a holistic vision of the farm needs and development strategies of young entrepreneurs. Many GR instruments prove less efficient in facilitating access to new entrants – beneficiary evidence shows administrative burdens for applicants from this group are higher than for others. They may also face different and additional barriers to those covered (e.g. training which goes beyond that usually seen as ‘vocational’, or capacity building and networking because they are not already networked among farms and in supply chains).

4.4.3 FADN counterfactual analysis

This analysis aimed to estimate the economic impact of YF measures on farm performance and employment in France and in Italy, using statistical methods to evaluate the difference between farms and farmers that receive YF aid, and those who do not. In order to do this, comparisons were made between similar types of farms, bearing in mind that farm performance and employment levels are influenced by a range of factors.

France

The first part of the work entailed sorting EU FADN data in order to form 2 groups of YF, respectively those with and without CAP second pillar support. In the EU FADN dataset, installation aid for YF was not recorded as a separate variable. The first step was identifying the farms where effective GR occurred during the first half of the 2014-2020 programming period. The second step was to investigate whether YF did or didn't benefit from the support, during that period.

The design of the sample and the process used for analysis

GR in the FADN sample farm occurs when there is a change in the age structure of regular unpaid labour from 2013 to 2015. This change concerns the arrival of YF (<41 years old) as holder manager (HM), or as holder not manager (HNM) which in France is specific to the form of partnership between older and younger farmers: Groupement Agricole d'Exploitation en Commun (GAEC). Note that changes in age structure during the period 2015-2016 were not taken into account because this effect wouldn't be recorded in the accounting data of 2016. Farms where a generational change occurred were then divided into 2 groups: Group 1 – Farms supported by aid to YF; Group 2 – Farms not supported by aid to YF. Comparison between similar farms in the different groups would measure change net of the counterfactual – i.e. showing what difference the YF aid makes to changes in farm performance over the period.

Since 2014, specific EU FADN variables were introduced in "farm returns" to record CAP Pillar 2 subsidies received. A variable was created to record support to the setting up of YF during the transition from the previous to the current programming period but it was not used in 2015 and 2016. However, this measure is presently coupled with other measures, most frequently with farm investment support within a business plan, that supports YF by an increased rate of funding. Thus in order to capture the young farmer installation aid it is necessary to consider two other EU FADN variables: "Investment subsidies for agriculture" and "Grants and subsidies to rural development not included in other codes".

A Difference in Difference (DiD) analysis of farms was made after matching similar farms from Group 1 and Group 2. The following conditions were used for 2014 and 2015 in order to select farms where GR occurred from 2013 to 2015:

HM > 40 in year N-1 → HM <41 in year N OR HM > 40 in year N-1 and no HNM < 41 in year N-1
→ HM > 40 in year N and HNM <41 in year N

Farms for which the total subsidies received was over €1500 were labelled "Farms with YF support" and the others were labelled "Farms without YF support". This threshold was set to exclude farms receiving very low levels of support – an average of less than €500 per year of subsidies dedicated to YF.

FADN matched sample selection, France

Year	2013	2014	2015	2016
Farms in EU FADN database, France	7510	7557	7569	7482
	▼ First and second sets of conditions			
	▼ 446			
	▼ Third set of conditions			
Farms with generational change	Farms with YF support 202	Farms without YF support 244		

Source : ADE elaboration based on EU-FADN – DG AGRI

The objective of this analysis is to compare the pre- and post- generational change evolution of the two groups of farms in terms of: main structural and economic characteristics; labour use; type of farming; investment intensity; and economic performance. To control for size, variables were related to size expressed in UAA and labour. Thus, the performance indicators are indicators per ha and per AWU. By using constant samples, values can state the evolution from 2013 to 2016 in each group. The two groups of farms ought not be considered as structurally similar and present a high risk of selection bias; thus a matching process is necessary to reduce the risk of selection biases and to allow comparison between groups.

The analysis showed the following changes in each group over the period.

Changes in farm performance, French FADN sample, initial descriptive analysis

With YF support	Without YF support
An increase of economic size by 9%	A slight increase of economic size by 3%
An increase of total output by 5%	A decrease of total output by 4%
An increase of the farm capital by 8%	A slight decrease of the farm capital by 2%
A decrease in percentage of rented land by 10%	A decrease in percentage of rented land by 7%

Source : ADE

The “types of farming” distribution shows little change from 2013 to 2016 in the group of farms with YF support while around 10 farms changed from mixed crops-livestock to grazing livestock or field crops in the group of farms without YF support. The particular group of farms with YF support has fewer farms in field crops and mixed crops-livestock but more farms in permanent crops. This demonstrates the need to use matching methods when a comparison between the 2 groups is made.

The paired comparison showed the following differences between farms with and without YF support.

Differences in performance, French FADN sample farms, initial descriptive analysis

With YF support	Without YF support
An increase of total output by 5% and an increase of total cost by 4% while intermediate consumption increased by 3%	A decrease of total output by 4% and a decrease of total cost by 1% while intermediate consumption remained almost stable
An increase of total subsidies by 11% formed by a decrease of decoupled payment by 4% and an increase of subsidies on investment by 29%. In 2016 subsidies on investment form 18% of total subsidies	An increase of total subsidies by 1% formed by a decrease of decoupled payment by 9% and an increase of subsidies on investment by 33%. In 2016 subsidies on investment form 8% of total subsidies
A positive investment dynamic that is marked by an increase of the farm capital and a large change on the net investment on fixed assets An increase of the net value added by 12% and an increase of the farm net income by 21%	A weak investment dynamic that is marked by the slight decrease of the farm capital and modest change on the net investment on fixed assets A decrease of the net value added by 12% and a decrease of the farm net income by 18%

Source : ADE

So, this initial analysis suggests that farms in receipt of YF aids show better business performance than those that do not receive aids: they have grown more in respect of their scale of operations and their net value added and show a positive investment dynamic while farms without aids do not. But this analysis is only preliminary: bias still exists in the sample which should be removed by closer matching.

In order to limit selection biases, a propensity score procedure made it possible to match beneficiary and non-beneficiary holdings according to structural variables such as type of farming, type of area being or not in less-favoured areas (ANC), herd size, utilized agricultural area, total labour and standard output. 2013 values were used to pair farms on their structural characteristics, before generational change. Matching was performed using MatchIt package in the R software environment with the nearest 1: 1 neighbour method (the maximum allowed distance between 2 matched farms set by a threshold corresponding to 0.5 x standard deviation). For variables ANC and farm type, exact matching was requested. This stage led to a sample of 147 farms with YF support (out of the 202 identified above) and 147 farms without YF support (out of the 244).

Farms in matched sample	With YF aid*	Without YF aid*
Total matched farms	147	147
LFA or not?	Not in LFA 71 In LFA 76	Not in LFA 71 In LFA 76
Farm types: Field crops	18	18
Horticulture	0	0
Permanent crops	17	17
Grazing livestock	77	77
Granivores	5	5
Mixed cropping	1	1
Mixed livestock	9	9
Mixed crops-livestock	20	20

* as estimated by proxy, described above

After matching, it was evident that only the grazing livestock farms provided a large enough group for DiD analysis and even here, it was decided to run the analysis separately for LFA farms (54 out of the 77, in each case) in view of the big differences in farm systems between lowland and LFA (ANC). The two tables showing the results of this analysis are provided in full in Annex 2.1 (tables A9 and A10). In sum, the results show differences between the two groups but with a lower level of significance, generally, than the results from the preliminary analysis (p-values at <0.1% level, not at <0.05%).

LFA livestock with YF support	LFA livestock without YF support
An increase in standard output of 11% – the farms get bigger, more capital is invested	An increase in standard output of 5% – a smaller impact on scale
Increased productivity per hectare	Decreased productivity per hectare
An increase in intermediate consumption	A small decline in intermediate consumption
An increase in costs per hectare	A decrease in costs per hectare
So, overall, a small increase in NVA	So, overall a higher increase in NVA*

* but this difference is not significant at the 10% level (p=<0.1).

The pattern here suggests that farms of this particular type receiving YF aid may tend to invest beyond what is optimal for GVA, when measured only in short-term performance. However, the results should be treated with caution, especially in view of the period of sampling. New beneficiaries of YF aid, 2013-2015 would not have fully implemented their business plans during that same period, so we cannot expect impacts of the plans to be already evident, within this data (Annex 2.1 gives details). Ideally, GVA should be tracked over the following 5 years, to identify any differences between the groups more clearly.

Bearing in mind the limitations of the FADN sampling from the current programming period for France, it is also relevant to examine evidence from the previous RDP, 2007-2013, where FADN analysis was used on a sample of 119 farms, comprising specialist dairy (OTEX 'Bovins lait') and specialist beef farms (Otex 'Bovins viande'), (ADE & Epices, 2017), as follows.

Based on **FADN data analysis** (no paired samples but with comparison of means and a t-test of equality of means), YF beneficiary farms (of measure 112, installation aid) had more favourable farm structures and performed better than farms with managers younger than 50 years old that didn't receive YF support (in the period 2007 - 2014). The t-test of equality of means was done in 2007, 2010, and in 2013. Business size in LU (UGB total), and AWU (UTA total) were significantly larger for beneficiaries in 2013 (also for some in 2007); as were economic size (EBE – gross operating surplus); gross value added (VAFER); and intermediate consumption. In terms of productivity, reporting by labour (AWU), stocking (LU) and LU/AWU, the analysis found that beneficiaries did not yet perform better than non-beneficiaries, in most cases (except for some farms in the LFA). In the LFA, the increase in farm size of beneficiary holdings led to a significant improvement in gross operating profit, but not in gross value-added (ADE & Epices, 2017).

Overall, the combined results from France suggest a clear impact of YF aids upon farm performance, improving the scale of operations in the short and medium term, on assisted farms, as compared to similar farms which have not benefited from YF aids.

Italy

The design of the sample and the classification of farms

For Italy, the change of the holder/manager was considered over the period 2012-2016. The great part of the Italian sample is made up of family farms, although run under various different juridical forms. The analysis was based on a constant sample of 3,833 farms available in the Italian RICA (the FADN), 2012-2016.

GR, in a first step, was considered when a change in the age structure of the family labour occurred in the period 2012-2016. This change means that some members of the family farm under 40 years old have started to run the farm as holder manager or holder not manager. The classification considers both the generational change occurring within the farm, also the more general age structure of the family and the presence of young family members employed in the farm, according to the following typology:

Group 1 - Holder/manager > 40 years without young member

Group 2 - Holder/manager > 40 years with at least one young member

Group 3 - Holder/manager < 40 years without policy support

Group 4 - Holder/manager < 40 years with policy support

In order to consider realistically the term "support" to YF in Italy we have to take into account not only the business start-up aid, but also investment support and farm diversification support. This is due to the presence of the package approach in most regions. Obviously, only the RDP measures of YF support have been considered.

Comparing the typologies of family farms

Comparing the different farm types requires normalising the sample. In the following tables the whole constant sample (2,961 farms) is distributed by types of farming in 2016. In order to make significant comparisons between farm types, we consider the types of farming that are more relevant in the constant sample and in particular among farm holders/managers under 40 years old: specialist field-crops, specialist permanent crop and specialist grazing livestock. The total constant sample is reduced to 2,961 farms, of which 555 are young farms without policy support and 85 with policy support.

Table 16. Farm types distribution in FADN dataset

Farm Typologies	Specialist fieldcrops	Specialist permanent crops	Specialist grazing livestock	Total
Farm holder > 40:				
a) without young farmer	776	822	511	2109
b) with young farmer	65	67	80	212
Farm holder < 40				0
3) without support	148	206	201	555
4) with support	22	33	30	85
Total	1011	1128	822	2961

Source: CREA elaboration from Italian FADN-constant sample

When compared in terms of structural variables, young farms have much better structures than other farms (data for the 2016 year, table 17):

- YFs employ more labour units in all type of farming and more hired labour (in percentage terms);
- YFs are on average bigger than other farms and this difference is more positive in young farms with support, in all types of farm (they are almost double the average farm in field-crops and grazing livestock);

- Bigger farm sizes are reached thanks to rented land: this difference is quite clear especially in specialist field-crops (42% of land is rented in YFs with policy support) and to a minor extent in specialist grazing livestock;
- The presence of at least one young member on farms with holder/manager more than 40 years old means generally more labour employed and a farm size comparable to YFs with support. In certain aspects these farms are quite similar to YFs with support, especially in permanent crops.

Table 17. Structural characteristics of farms by typologies of farm production and age

	AWU per farm (annual working units)	% hired labor	UAA per farm (ha)	% rented land	UAA/AWU (ha)
Specialist fieldcrops	1,6	25,0	44,4	27,9	27,9
Holder/ manager >40 without young member	1,5	23,3	41,8	28,7	28,7
Holder/manager >40 with young member	2,9	36,6	54,6	18,5	18,5
Holder/manager <40 without support	1,7	22,9	48,2	28,8	28,8
Holder/manager <40 with support	1,9	28,9	80,3	42,2	42,2
Specialist grazing livestock	1,8	35,8	14,6	8,2	8,2
Holder/ manager >40 without young member	1,7	36,6	14,5	8,6	8,6
Holder/manager >40 with young member	2,5	31,4	14,0	5,7	5,7
Holder/manager <40 without support	1,8	33,5	13,8	7,6	7,6
Holder/manager <40 with support	2,5	43,8	24,8	9,8	9,8
Specialist permanent crops	1,9	18,8	49,8	25,6	25,6
Holder/ manager >40 without young member	1,8	20,4	46,0	25,7	25,7
Holder/manager >40 with young member	2,9	18,4	67,5	23,2	23,2
Holder/manager <40 without support	1,8	13,4	49,7	27,0	27,0
Holder/manager <40 with support	2,6	26,9	67,1	25,7	25,7

Source: CREA elaboration from Italian FADN-constant sample

Similar differences can be found in the analysis of other structural variables on net capital and net investments at farm level. Being bigger than average, YFs have generally more availability of capital and are able to make more investments both in absolute terms and per hectare of UAA. This is quite evident in specialist field-crop and grazing livestock for YFs with support and in permanent crops for farms with at least a young member. Net investments are facilitated by the policy support and by the presence of a young person in farming. They probably interact in determining structural characteristics over time.

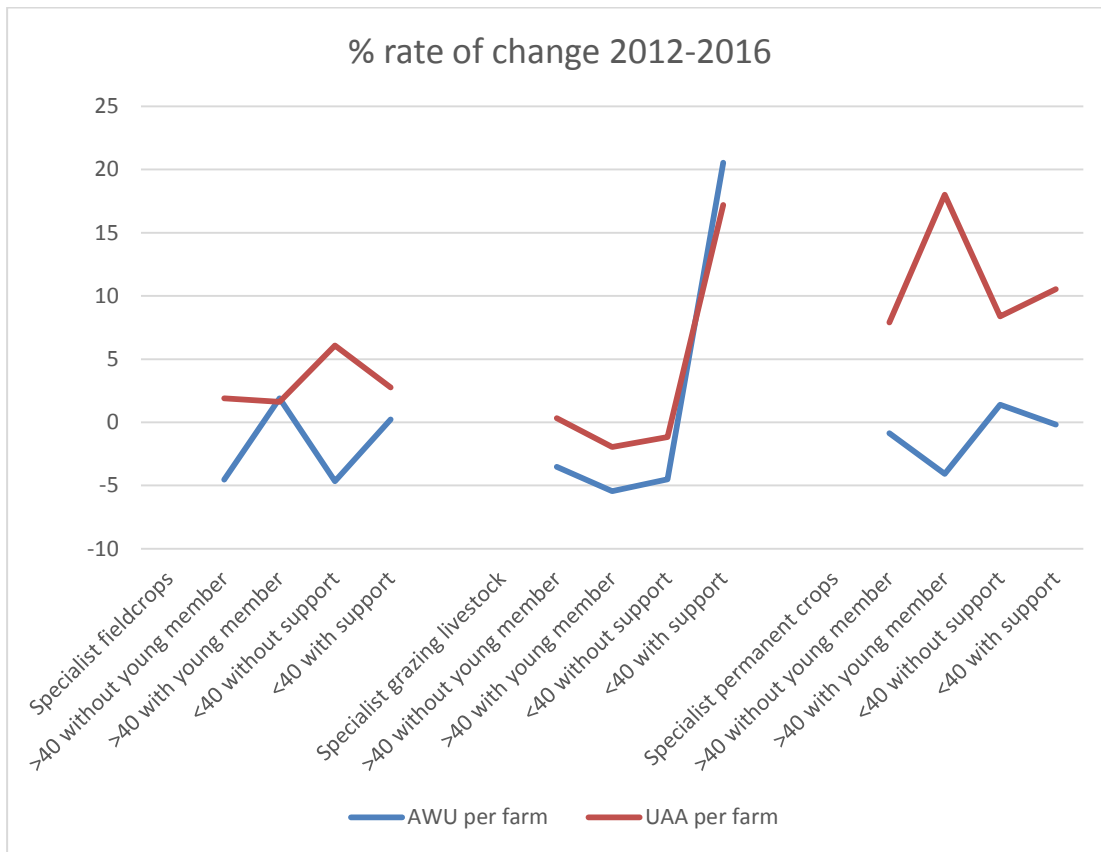
In order to understand what kind of dynamics there are in the different farm typologies it is interesting to observe structural change in the 2012-2016 period. This change is illustrated in figures 33 and 34, where the same variables are observed and their patterns of change between 2012 and 2016. The presence of a young holder/manager gives a positive dynamic to total labour employment and farm size in grazing livestock and permanent crops, while this effect is much less evident in field-crops.

The same pattern of change is evident in the employment of hired labour: in this case, even the presence of a young member can be a factor activating a higher use of hired labour, but the joint presence of a young holder and the support give a major impulse to use hired labour. A similar conclusion can be drawn for net capital and net investments, with the exception of permanent crops, where there must be some specific factors reducing investments and net capital.

Comparing productivity and incomes

Average productivity per farm is quite high in YFs with support in all type of farming, but in field-crops and permanent crops the best results are in farms with a young member and holder > 40 years old. Land productivity follows a similar pattern and it seems clearly the crucial factor explaining the average productivity. Net value added and net income per farm are generally better in YFs with support, this is probably due to better capacity to use variable and fixed inputs and thus better efficiency in these kinds of farms. The only exception is represented by permanent crops, where the most efficient typology seems to be farms with a young member, but without YF aids.

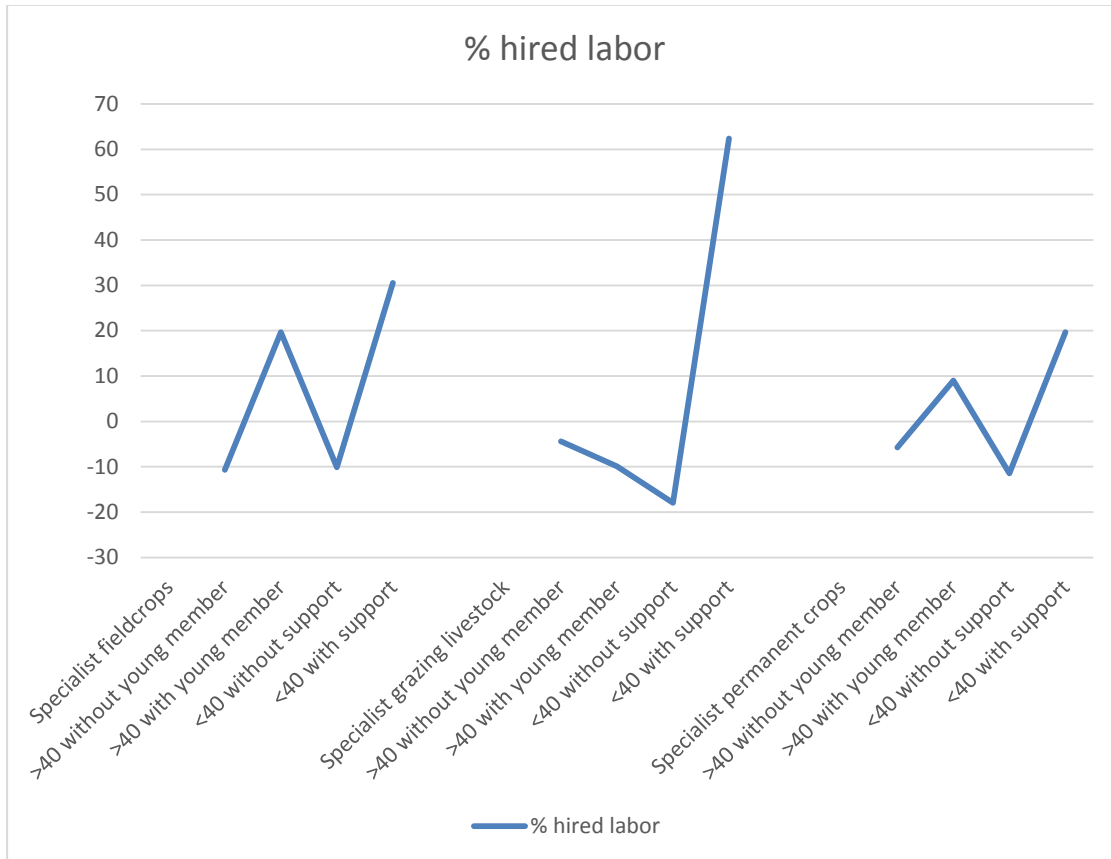
Figure 33. AWU per farm and UAA per farm, rate of change between 2012 and 2016 by type of farming and YF typologies



Source: CREA elaboration from Italian FADN-constant sample

Capital endowments and net investments by typologies of farm production and age

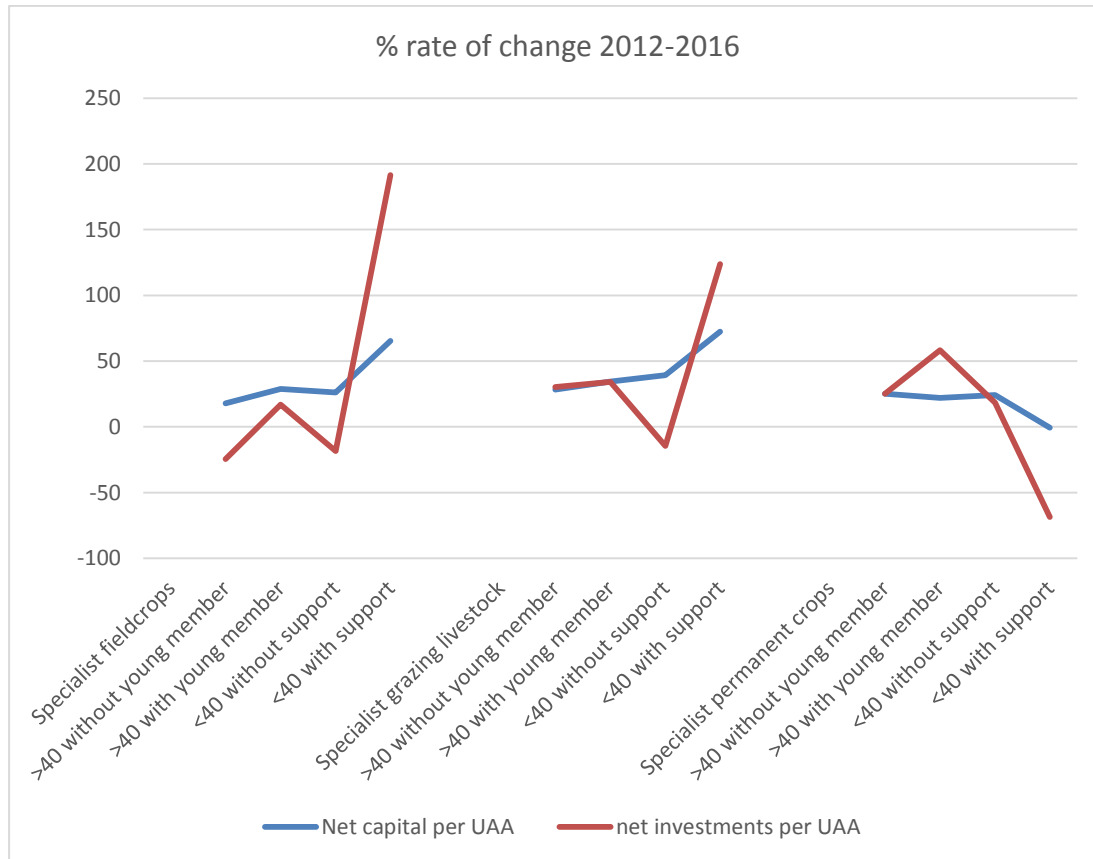
Figure 34. Hired labour on-farm, change between 2012 and 2016 by type of farming and typologies of farms



Source: CREA elaboration from Italian FADN-constant sample

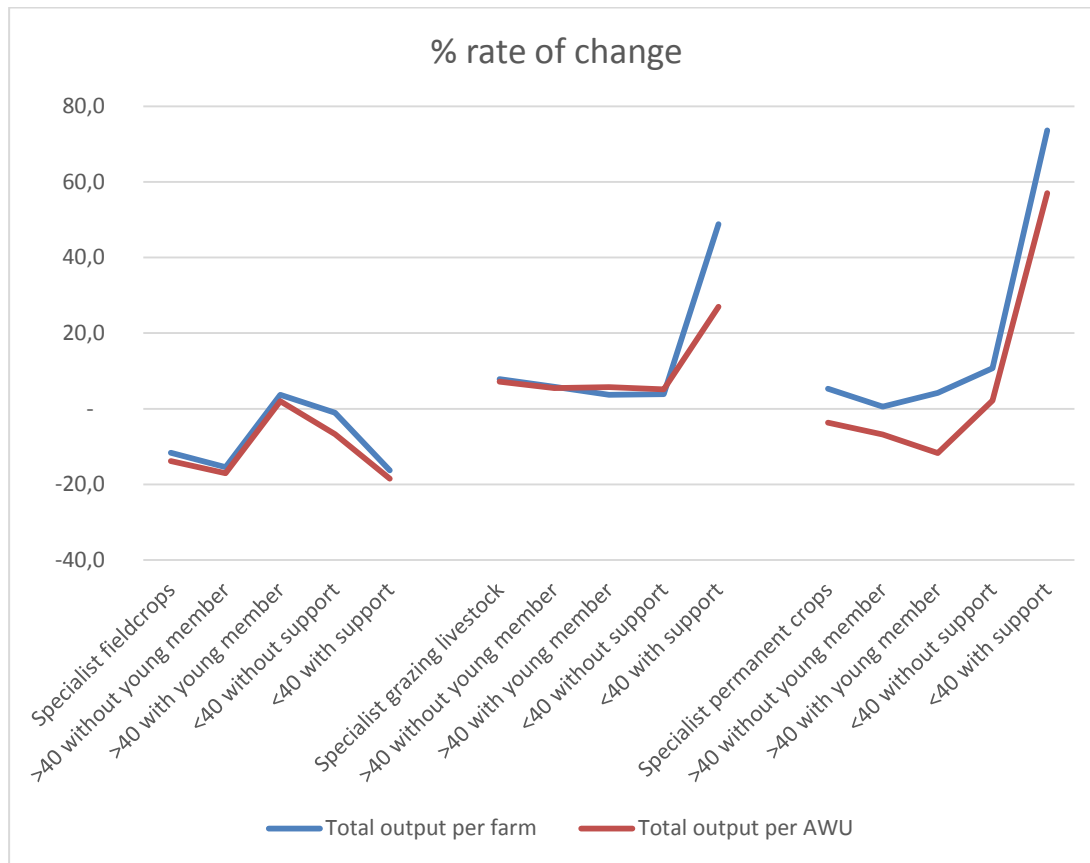
Figure 35 highlights the huge growth of productivity per farm and per ha of utilised land in YFs with support, in grazing livestock (+ 49%) and permanent crops (+ 74%). In field-crops, there was a strong decrease overall, with exceptions only for farms with young members. Considering income variables (figure 36), we see YFs with support improve performance over time in all situations and with the highest positive variation, confirming their ability to manage both variable and fixed inputs. Dynamics of productivity and incomes differ as well among typologies of farms.

Figure 35. Net capital per UAA and net investment per UAA, rate of change between 2012 and 2016 by type of farming and typologies of farms



Source: CREA elaboration from Italian FADN-constant sample

Figure 36. Total output per farm and per AWU, rate of change between 2012 and 2016 by type of farming and typologies of farms



Source: CREA elaboration from Italian FADN-constant sample

Comparing policy uptake

Policy uptake is measured by considering all kind of policies used by farms in the 2012-2016 period: CAP I pillar measures, II pillar measures and State aid measures. The following table shows key differences by farm type.

Table 18. Key differences by farm type

	total subsidies per farm (Euro, 2016)	Total subsidies/total farm output (%)
Specialised fieldcrops	126.345	21,3
Holder/ manager >40 without young membe	114.101	20,6
Holder/manager >40 with young member	177.459	19,1
Holder/manager <40 without support	145.974	23,6
Holder/manager <40 with support	275.135	33,0
Specialised grazing livestock	40.726	9,3
Holder/ manager >40 without young membe	36.971	8,9
Holder/manager >40 with young member	39.360	6,4
Holder/manager <40 without support	39.891	10,3
Holder/manager <40 with support	142.262	13,4
Specialised permanent crops	117.114	12,5
Holder/ manager >40 without young membe	96.016	12,6
Holder/manager >40 with young member	289.008	10,3
Holder/manager <40 without support	85.666	14,2
Holder/manager <40 with support	228.807	22,7

Source: CREA elaboration from Italian FADN-constant sample

Field-crops benefit from the highest level of aids, while grazing livestock are the least subsidised. In terms of share of total output, subsidies represent 21% of total in field crops for a single year, permanent crops about 12-13% and grazing livestock 9-10 %. The composition of these subsidies is quite different in relation to the type of farming. YFs are able to get the highest level of subsidies in all types of farm and this can explain their capacity to improve net capital and net investments over years. This implies that subsidies represent a relevant share of their output. This is true especially in field-crops and permanent crops. Among permanent crop farms, farms with at least one young member show the capacity to use high levels of subsidies.

YFs use a greater share of support for structural measures than other typologies of farms. Figure 37 highlights the following aspects:

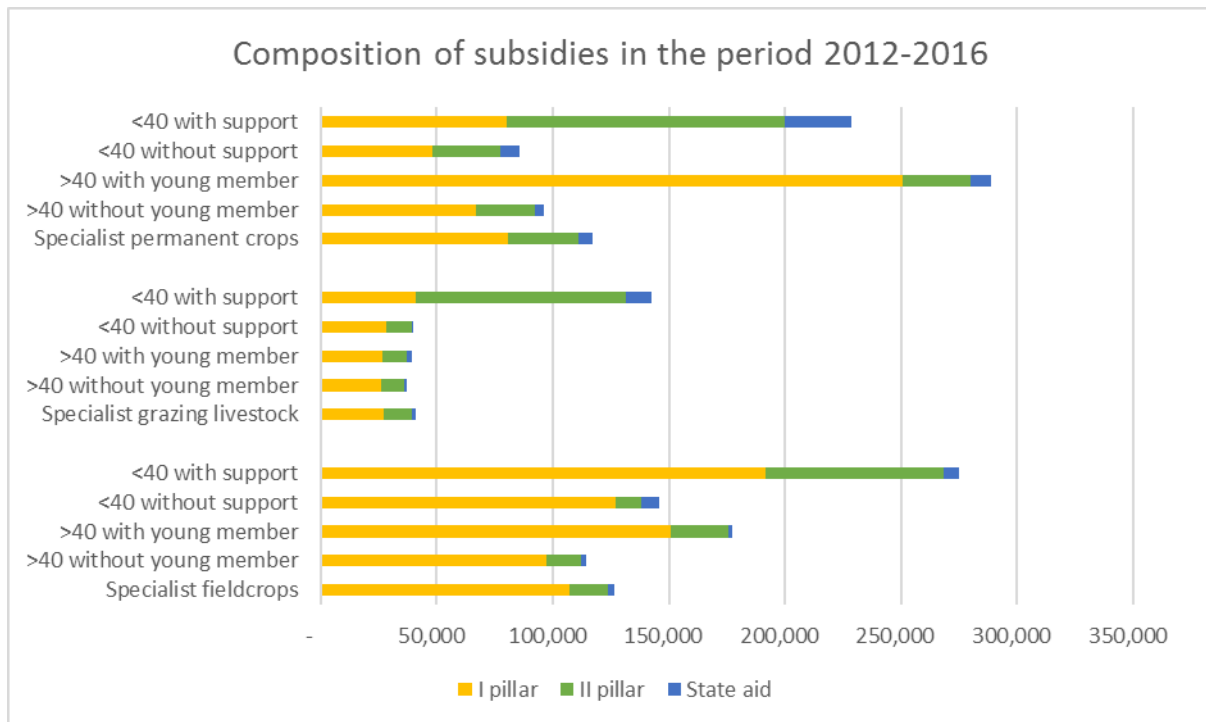
- In permanent crops and grazing livestock types of farming the weight of structural measures is even more important than I pillar measures;
- In field-crops, where the role of structural measures is usually less relevant than pillar 1 aid because the high level of support that this pillar can provide, YFs nonetheless use a good percentage of structural measures;
- The share of State aids is marginal almost everywhere, with some exception for YFs permanent crops farms;
- Policy uptake is influenced by the presence of a young member in the family farm, not only in terms of intensity of subsidies per farm unit, but also in terms of the higher share of structural measures in total support.

Policy impact on employment

An interpretative model was estimated on the basis of the Italian FADN sample, this model is based on the following assumptions:

- a) Employment in the farm depends on the structural characteristics of the farm (economic size, in ESU), demography (average age of the family, presence of a young son/daughter), farming specialization (horticulture, arable crops, livestock) and processing activities inside the farm holding, ratio between farm income and wage earnings outside the farm, technology (irrigated area), the level and the nature of policy uptake;
- b) Policy uptake is represented by the amount of payments received through main categories of policy instruments (direct payments, coupled payments, investment support-including young farmer start-up aid, agri-environment, natural constraint area payments);
- c) The support to farm investment is a variable not totally exogenous, but in turn depending on some relevant characteristics of the farm (farm income, non-farm income, propensity to invest, education level of the family farm, connections with relevant networks outside the farm).

Figure 37. Composition of subsidies by type of farming and typologies of farms, rate of change between 2012 and 2016 by type of farming and typologies of farms



Source: CREA elaboration from Italian FADN-constant sample

To take account of all variables and interactions among variables we used an econometric model in two stages, where in a first stage the influences on policy uptake are estimated and in the second stage the impact on farm employment is calculated. The Generalised Method of Moments (GMM) is used to implement regression through a STATA package. Results from this statistical method are presented in Table 19, where for each variable a specific coefficient of impact on employment is calculated with related statistical significance. The impact coefficient represents the % change of farm employment (dependent variable) related to 1% of change of each explanatory variable. As an example, an increase of 10% of the farm economic size means on average an increase of 3.3% of farm employment. This coefficient can be also interpreted as the average elasticity of farm employment in relation to changes in the single explanatory variable. Values of a t-test tell us how significant the coefficients are, statistically: three stars means high significance, while one star means the coefficient is significant but with a lower probability.

Structural and demographic variables contribute significantly to explain changes in employment. Farm economic size is the variable with the highest impact on farm employment; among demographic variables the presence of a young son/daughter contributes positively to increased farm employment, while as family age increases the impact on employment is negative. Specialisation in horticulture contributes to intensify farm labour, while livestock (usually strongly mechanised) contributes to reduce farm employment. Cereal specialisation has no significant impact on employment. Irrigation and processing agricultural products on the farm both have positive impacts on employment, but the relative size of the coefficient is quite small, so their contribution is less relevant.

For policy variables, we aggregated policy instruments as mentioned earlier into five categories, in order to capture their aggregate effects and get significant estimates (single measures are too small to provide significant estimates in the set of all variables: this means that measures specifically targeted to YFs are always not statistically significant). Moreover, very often in Italian RDPs YF have access to a package of measures as a normal rule, this makes it impossible to isolate the specific contribute of young farmer start-up aid separately to other aids in the package.

Table 19. Impacts on farm employment of each variable of the GMM model

Explanatory variable of fam employment	Unit of measurement	Impact coefficient (regression elasticity)	Value of t (statistical significance)
Farm economic size	Economic standard units (€)	0.333	***
Average age of the family	Age (Years)	-0.118	***
Presence of young son/daughter in farm labour force	Yes (1). No (0)	0.188	***
Specialisation in horticulture	Specialised Horticulture type of farming (yes=1. no=0)	0.046	***
Specialisation in cereals	Specialised cereals type of farming (yes=1. no=0)	-0.002	Not significant
Specialisation in livestock	Specialised livestock type of farming (yes=1. no=0)	-0.146	***
Processed output inside the farm	Agricultural output value processed inside the farm (€)	0.016	***
Irrigation	Irrigated area (hectares)	0.073	***
Farm investment support	Support to farm investments (M02, M03, M04, M06)	0.128	***
Agri-environmental measures	Agri-environmental payments (M10, M11, M12)	-0.005	Not significant
Natural constraints area	Payments for natural constraints areas (M13)	-0.002	Not significant
Direct payments	Basic payments+ greening + small farms + YF (since 2015, basic SFPs before)	-0.002	***
Coupled payments	Payments for different types of productions	-0.004	Not significant
Constant		2.538	****
R-Square index		0.366	
Number of observations		6,594	
Wald test		4572,33	

Source: CREA estimates from the Italian FADN sample through GMM modelling

The impact of the farm investment support is generally positive and highly significant in the Italian sample: 10% of increase of this type of support implies on average 1.3 percentage points more in farm employment. This is not irrelevant for RDP measures, when it is compared with other economic and demographic variables. The other RDP measures are not statistically significant in this sample. Direct payments have a negative

effect on farm employment, and this outcome is consistent with results from other studies on the CAP's impact on agricultural labour: this negative effect is perhaps due to the introduction of activities requiring lower labour input, or to risk-averse behaviour by farmers who benefit from direct payments, thus tending to limit farm development (EP, 2016a; Dupraz and Latruffe, 2015; Kaditi, 2013, Mantino, 2017).

Conclusions of FADN analysis

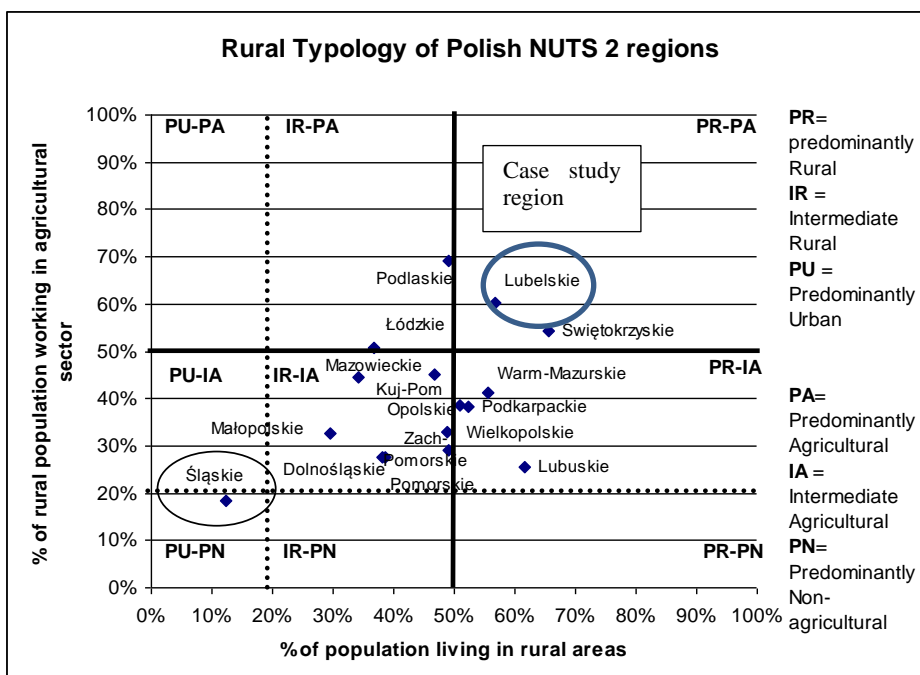
In conclusion, this analysis of both French and Italian farms provides clear evidence that, net of a counterfactual, CAP YF aids, in assisting younger farmers to take on a holding from the older generation (most often, their own parents) have a significant and positive impact upon farm performance and farm employment. This can be seen as evidence to counter the widely expressed assumption that if CAP YF aids mostly support the handover of farms between generations in the same family, they are of low additionality. The analysis supports the case that additionality is significant in France and Italy because the aids help YF to be more successful in their businesses than they would have been without the CAP assistance, and to create or sustain more jobs in farming than would have been sustained if they had not received YF aids.

4.4.4 Regional CGE analysis

The CGE analysis contributes to the evaluation of impact of CAP on employment and local development. It estimates the impact of Pillar 1 YF supplement, Pillar 2 Focus Area 2B and the total Pillar 1 payments at national and regional level in Poland. This is measured by such variables as: real GDP, its decomposition (consumption, investments, government expenditure), employment (aggregated employment; employment by division into primary sector, industry and services), rural households (income, expenditure, consumption), expansion of non-agricultural activities (production and employment in non-agricultural sectors such as: tourism - hotels & restaurants - construction, public administration, education etc.) and other indicators of development (see Excel file, Annex 5 for details).

The impact results are analysed at both national and regional (NUTS2) level in Poland. One of the regions – Lubelskie – is the Case Study region i.e. where two NUTS3 regions out of four were analysed. In a proposed regional classification based upon the share of population living in rural areas and the share working in agriculture, Lubelskie would be both a predominantly rural and predominantly agricultural region (PR-PA) - meaning that in this region, more than 50% of the population lives in rural areas and more than 50% of the rural population works in the agricultural sector (Figure 38)

Figure 38. A suggested rural typology of Poland's NUTS 2 regions



Source:

CCRI

et

alMethod

The model applied is a regional CGE model POLTERM, described in detail in Zawalińska K., Giesecke J., Horridge M (2013)³⁰. Three policy scenarios were designed to examine impacts, as follows:

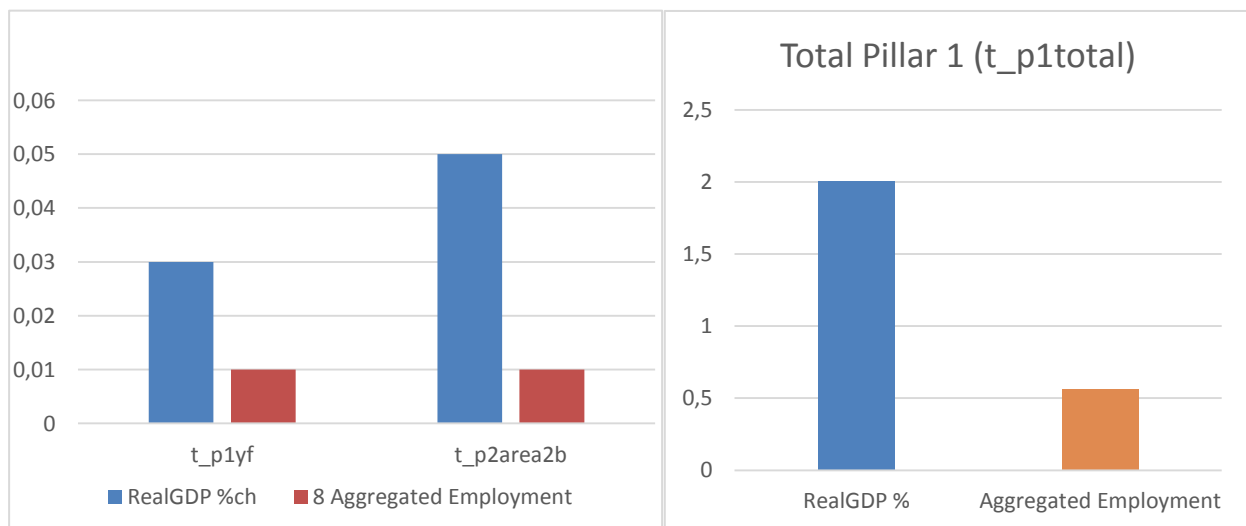
- *YF within Pillar 1* ('t_p1yf'): the data of the current spend in 2015 and 2016 was extrapolated for the entire 2014-2020 period and was linked to farm expenditure on production inputs (from interviews carried out in the Polish case study, it was found out that it was the main way that beneficiaries spend these receipts).
- *Focus Area2B within Pillar2* ('t_p2area2b'): the data on planned spend 2014-2020 was used and, based on case study information from beneficiaries about how this money is spent, it was assumed that it is spent in equal proportions on: farm modernization, agricultural machinery and production inputs.
- *Total Pillar 1* ('t_p1total'): the data was extrapolated from the current spend in 2015 and 2016 to the entire 2014-2020 period and its immediate effect was based on a previous national survey conducted with farmers in Poland concerning how Pillar 1 money is spent in each region (this found spending was used in different proportions for each region, for the following categories: production inputs, agricultural machinery, consumption, modernisation and other items).

Results

All the detailed results are presented in Annex 3. Key findings can be summarised as follows.

There is **a higher impact of Pillar 2 Focus Area2B spending on economic development than that for Pillar 1 YF supplement**, measured in terms of GDP, investment, consumption and production impacts. For the Pillar 1 supplement, GDP is increased by 0.03% while for Pillar 2 FA 2B it is by 0.05%, compared to the baseline³¹. That can be compared to the impact of the (much larger) total Pillar 1, in which case GDP in the long run is higher than the baseline by 2.01%. The impact on aggregate employment is similar for both YF instruments and much smaller than for Pillar 1 total aid, which is partly because there is much less funding for the YF measures compared to the scale of all Pillar 1 aid.

Figure 39. CAP GR measures impact upon GDP and employment, all Poland, % change 2014-2020



Source: CCRI et al

Whilst the overall magnitude is similar for jobs created, the composition of employment effects differs by instrument. From Pillar 1YF aid, in the primary sector

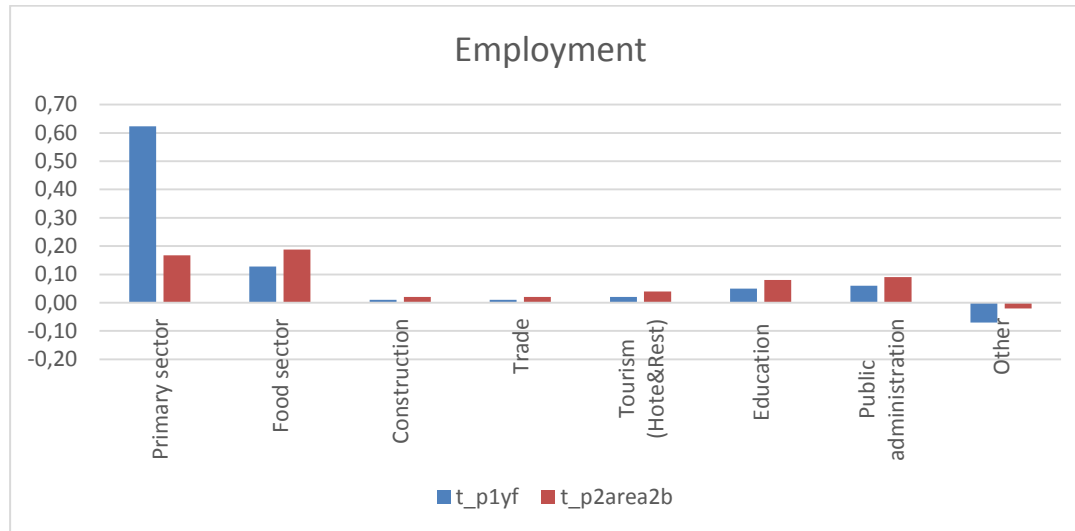
³⁰ <http://ojs.tsv.fi/index.php/AFS/article/view/7754/6305>

³¹ The 'baseline' here refers to the predicted outcomes for the farm sector and wider economy if the instruments are not used, over the full programme period: i.e. a counterfactual situation.

there are 0.62% more jobs compared to the baseline, while from Pillar 2 Focus Area2B there are only 0.17% more in this sector, but there is higher employment in industry and services by 0.15% and 0.03% respectively compared to the baseline, while for Pillar 1 YF aid this impact is much smaller, increasing by 0.10% and 0.01% respectively.

For both types of aid, the most positively affected sectors in terms of production and employment (apart from the primary sector) were: the food sector, public administration, education, tourism, trade and construction - see figure 40. below.

Figure 40. Predicted employment impacts of CAP GR measures, by sector, 2014-2020



Source : CGE results, CCRI et al

As for rural households, higher income impacts come from Pillar2 Focus Area2B than from the Pillar 1 YF supplement, and the higher income translates into higher consumption in rural households. There was also some impact of the policies on the price of agricultural land, the biggest in the case of Lubelskie, but also seen in other predominantly agricultural regions.

Table 20. Impact of GR measures on household consumption, Poland, 2014-2020

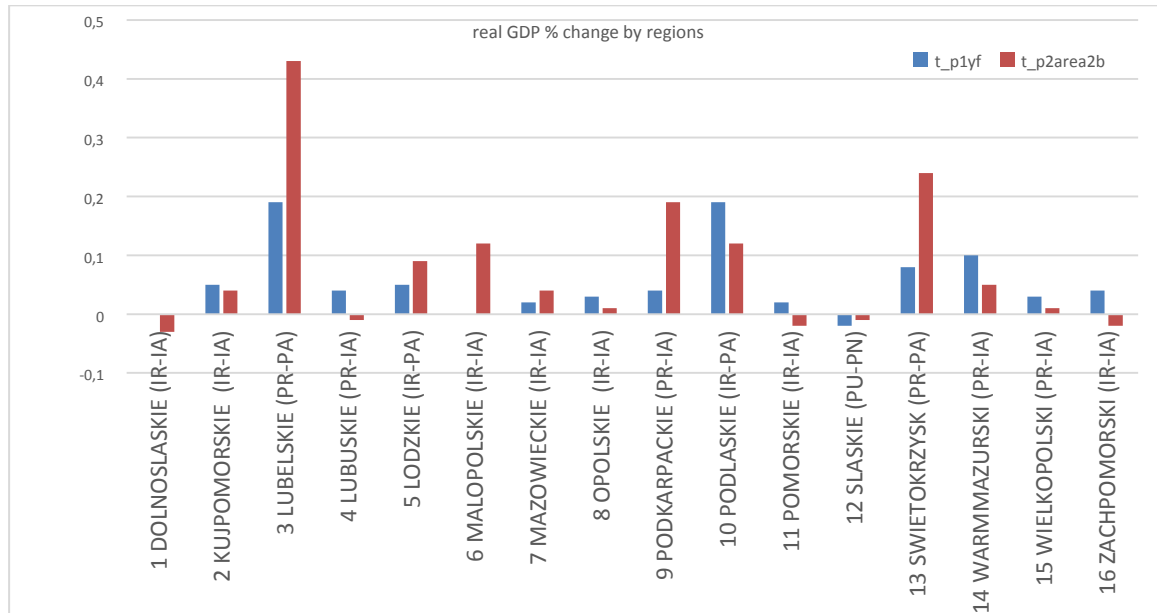
Household consumption	p1 YF aid	p2 FA 2B	Pillar 1 total
1 Rural	0.07	0.12	4.87
2 Urban	0.05	0.08	3.03

Source : CGE results, CCRI et al

As for **regional impact**, generally the highest influence of the policies was generally on predominantly agricultural regions, some of which were also predominantly rural.

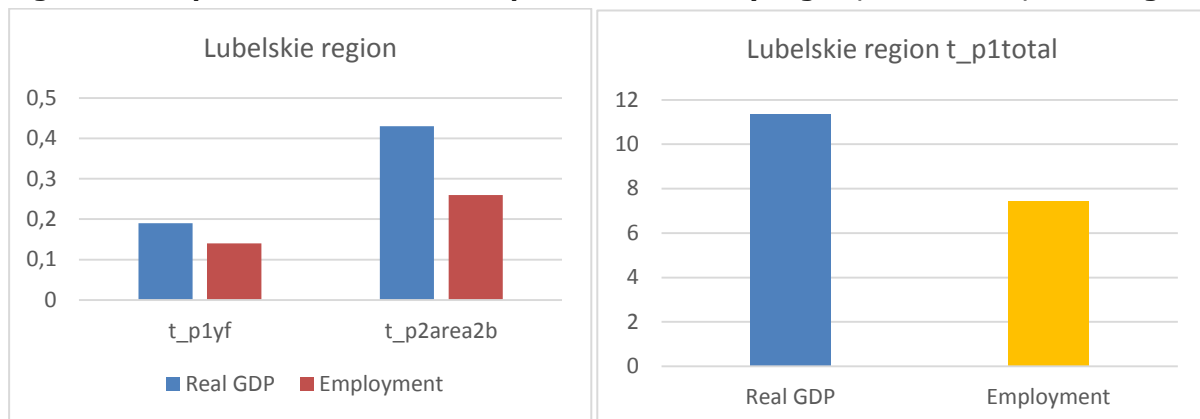
The impact on Lubelskie region (our case study region) was the biggest in terms of GDP and employment: they were higher than the baseline respectively by 0.19% and 0.14% due to Pillar1 YF supplement, and by 0.43% and 0.26% due to Pillar 2 Focus Area 2B measures. Rural household consumption increased compared to the baseline in the Lubelskie region by 0.31% from 1st pillar YF aid, by 0.58% from P2 Focus Area 2B aids, and 17.86% from the total Pillar1 spend. More results at national and regional level are presented in Annex 5.

Figure 41. Estimated impact of GR measures on regional GDP, 2014-2020



Source : CGE results, CCRI et al

Figure 42. Impacts of GR measures upon the case study region, 2014-2020, % change.



Source: CCRI et al

Conclusions from the modelling work

This small piece of indicative modelling using a NUTS2 regional CGE model of the Polish economy illustrates how such a technique can be used to estimate the impact of CAP measure spending upon growth, jobs and a range of other variables at regional level. From this work, we can see that different GR instruments of the CAP are likely to have different impacts on the wider economy because the funding is used to support different activities at farm level, which have different linkages to the wider economy.

This work suggests that the scale of CAP funding directly focused upon agricultural GR (i.e. represented by CAP Pillar 1 YF aids and Pillar 2 aid programmed under Focus Area 2B), even when considered over the full programming period 2014-2020, is likely to have only a very small impact upon GDP and employment at a NUTS2 regional level – the estimate for all Poland, over the full programme period, is less than 0.1% for GDP and only 0.02% for employment (which would be an increase of around 3,300 jobs across the country as a whole³²). Nevertheless, the overall impact for Poland is predicted to be positive, compared to the counterfactual, for both jobs and growth. The model results also suggest that this positive relationship persists in a wide variety of regional contexts, except for regions which are the most urban in nature.

³² Trading Economics, at: <https://tradingeconomics.com/poland/employed-persons>, accessed 7 July 2019

In Poland, the only region with fewer than 20% of the rural population working in agriculture AND fewer than 20% of the total population living in rural areas (so, less than 4% of total population working in agriculture), was predicted to see a small decline in both growth and employment resulting from the CAP funding devoted to YF in Poland (relative to the counterfactual) which is an effect of the migration of inputs towards regions with better returns. This was also the region which planned to spend the lowest sum on these measures, compared to all other Polish regions. Four more regions with under 30% of the rural population working in agriculture saw neutral or modest positive growth but a modest decline in aggregate employment from the spending on CAP GR measures. In all 12 other Polish regions, the impacts were positive for both growth and employment.

4.4.5 Examples of good practice

The case study sample highlighted a number of **good practice examples in policy design and delivery**³³. In general, the most effective support seems to come from the combination of several CAP instruments along with national policies and support systems. However, new approaches are also emerging from voluntary actions and local initiative.

Using the Pillar 1 YF supplement strategically to encourage succession and new entrants

The implementation of an income support supplement to YF starting agricultural activities under Pillar 1 of the CAP represents a new element introduced only in 2014. Its purpose is to provide additional income to support the structural adjustment of the business after initial set-up. The payment for YF is granted for a maximum period of five years, starting – following the approval of the so-called Omnibus Regulation in 2017 (Regulation (EU) n. 2017/2393) – from the first submission of the application for the YFP. Member States have been allowed to fix a percentage not higher than 2% of the national ceilings³⁴.

Only 8 Member States and 3 regions added additional eligibility criteria for receipt of the supplement with regard to appropriate skills and training (BE-F, BE-W, BG, IE, ES, FR, HR, AT, PT, SK and UK-Northern Ireland – case study countries in bold). Of these, BE-W, ES, FR, PT and SK implement both criteria related to skills and criteria related to training, mostly as either/or alternatives. In addition, IE, ES, HR, SK and UK-NI apply the additional eligibility criteria to all YF in control, over a legal person applying for YFP. It is suggested in these MS that the additional criteria add value to the application of this supplement.

Design and delivery of the YF supplement appears particularly effective as a direct inducement to GR when it is combined with the allocation of attractive entitlements from a National Reserve, as is the case in Ireland and France. The National Reserve enables allocation of BPS entitlements on a permanent basis, providing mandatory priority access to 'Young Farmer' and 'New Entrant to Farming' beneficiaries. This option is not relevant in countries implementing the SAPS approach for direct payments. In France, the YF supplement represents approximately €68 per hectare paid in addition to the basic payment (2015-2017) with a limit of 34 hectares per eligible young farmer (so a total uplift of around €2,000 per year).

In Ireland, the National Reserve payments are substantially higher. The Reserve is a maximum of 3% of the Irish direct payment envelope (€24 million) per annum. The scheme allows successful applicants an allocation of entitlements on land for which they currently hold no entitlements, and a top-up to the value of existing entitlements (on land owned or leased), wherever such entitlements have a value below the National Reserve [national] average. The national average value is currently €185 per entitlement; with the greening payment this increases to €270 per entitlement. There is a relatively generous maximum of 50 hectares of entitlement for receipt of the YF supplement. In areas of Ireland characterised by marginal farming conditions, the BPS rate for Pillar 1 is significantly lower than the average for Ireland as a whole, because it

³³ Note that this evaluation concerns policy enhancement, so 'good practice' is focused on policy approaches rather than YF actions or innovations

³⁴ https://ec.europa.eu/agriculture/sites/agriculture/files/direct-support/direct-payments/docs/young-farmer-payment_en.pdf

is historically linked to a low level of coupled support. Thus the YF supplement has offered a significant increase in Pillar 1 payments to farmers in these areas, effectively targeting areas of particular need for GR in agriculture due to economic disadvantage and historically low returns from farming. In future, if Pillar 1 payment rates converge nationally, the scope for this kind of targeting will diminish.

Whilst the Irish example of a kind of 'targeting' of the supplement has arisen only in connection with a short-term opportunity which is unlikely to be sustained due to Pillar 1 payment convergence towards a flat-rate payment; it raises the issue of whether some more explicit opportunities to target the supplement (e.g. by region, or by agricultural sectors or structures) could be applied in future, and whether this might offer enhanced cost-effectiveness.

Pillar 2: Targeted, integrated support via YF packages

The holistic approach adopted in Italy and France in respect of implementing integrated YF aids has been shown to be particularly effective. In both countries, the measures are offered in a combined and tailored way to fit farm development needs, combining CAP support with national programme measures.

The farm business start-up and transmission policy in **France** includes a set of financial incentives and institutional support. Despite the existence of regional RDPs since 2014-2020, the policy is based on a detailed national framework co-financed by EAFRD and national funds, but Regions can adapt it with complementary criteria. The approach is based on a personalized support system with a clear installation 'pathway' for each beneficiary:

- Eligibility criteria requiring evidence of proper training and professional capacity (a Diploma and validation of a Personalized Professionalization Plan (PPP));
- The completion of a Business Plan for the farm demonstrating the viability of the 4-year project and the achievement of revenue targets by the end of the period;
- Financial advantages: enhanced investment aids (as per the EU regulations), also social benefits (a partial exemption for 5 years from the Mutualité Sociale Agricole), tax benefits (a partial reduction of taxes on profits and land), and priority access to land, production rights or certain aids (as with National Reserve allocations).

The CAP, according to national and regional choices of implementation, contributes as follows:

- Installation aids (CAP Pillar2, M6.1) available at the beginning of the programme in two types of operation: (1) young farmer start-up aid (YFA), an endowment needed at the start of the installation and increased depending on different modulation criteria, and (2) Loans with interest subsidies (LS) which cover part of the interest on the loan, to enable the acquisition and implementation of production equipment. The second mechanism was abandoned in 2017 as commercial interest rates have fallen.
- Increased rates for farm modernization (Pillar 2, M4.1) within the framework of a 'Farm Competitiveness and Adaptation Plan' (PCAEA): 10 additional percentage points to YF and another 10 extra points if the project is located in the mountains. YF are also given priority for modernization aids.
- Compensation for Areas of Natural Constraints (CANHs) are an important component of the GR policy in France, particularly in mountain areas. CANHs do not specifically target YF but by partially offsetting extra costs, they ensure the viability of projects in areas where agriculture is often the primary economic activity.

These CAP aids are part of a broader set of national provisions and tools which contribute, together with a set of social or fiscal benefits, to the installation-transmission policy. Other provisions and tools are financed by the State and regional authorities. Some are included within a new **Accompanying Programme for Installation and Transmission in Agriculture (AITA)**. This national framework is adapted at the regional level and with regard to local context. It includes 6 components and 19 devices:

- **Component 1 - first contact** via 'Installation Reception Points' (PAI). PAI are the sole entry point in each Département. PAI ensure a first contact and information point for all candidates, the co-ordination of support and guidance towards the appropriate specialist structures (public or private) in accordance with their needs. They also guide applicants' pre-project information needs (*advisers or training organizations, accounting expertise, sector technical advisers, etc.*).
- **Component 2 - installation advisory service** to formalize the installation project. This partially bears the costs of advisory services for installation and skills acquisition, the assessment of farms to be transferred, or studies on feasibility and / or market trends. These can be carried out by anyone (public or private) authorized to provide advisory services (charging expert or consultant fees). They complement the guidance offered by the Chambres d'Agriculture under the PAI (see component 1).
- **Component 3 - Preparation for installation** covers preparation of the candidate's **Personalized Professionalization Plan** (PPP) offered to all installation candidates after consultation with a PAI. It aims to strengthen the skills of the candidates, based on their achievements and their project, through various forms of internship in France or abroad, individual or collective CPD or other action to gain the necessary agricultural professional skills. The completion and validation of a PPP is mandatory for all candidates applying for business start-up aid from the CAP.
- **Component 4 - Monitoring** supports follow-up actions after installation, to reinforce the professionalism of the new farmer and the viability of their project. It consists of technical-economic, legal, fiscal or organizational advice and continues throughout the implementation of the business plan. Installation projects outside family succession, those which are innovative, or enable diversification or imply significant modernization costs, are prioritised.
- **Component 5 - Incentive for transfer** can be particularly useful for a new entrant without a family connection to the farm. This includes various types of aid such as one for the assessment of the farm to be transferred, an incentive to register the farm in the "departure-installation directory" as well as aid for the overall transfer of land or for landlords to encourage them to sign a long-term lease with a young farmer, for land and/or farm buildings.
- **Component 6 - Communication - animation** aims to support animation, information and knowledge transfer actions for applicants, beneficiaries, transferors or landlords.

Other social or fiscal advantages:

- **50% tax rebate** for YF benefiting from the installation aid, during the first 5 years of operation;
- **Partial and degressive exemption from social security contributions** to the MSA for YF, for 5 years (exemption rate 65% in year 1, declining to 15% in year 5);
- **50% reduction in property tax** for non-developed land operated by a young farmer, for a maximum of 5 years (France has a tax levied on all non-developed land - 'foncier non-bati');
- **Reduction of registration fees** for the acquisition of agricultural land by a YF.

All these tax and social advantages can be combined with YF aids offered under the CAP. YF with an installation project are also given priority in the allocation of land or rights through the law on farm 'structural controls' (collective oversight of land holdings at local level) and SAFERs (regional agricultural land banks). Thus each prospective YF in France is able to access help and support for the preparation and first 5 years of taking on a farm holding, through a unified system operating at local level but drawing resources from local, national and EU policy provisions in a coherent way.

In **Italy** the main features of the "YF package" within the CAP can be summarised as:

- a) The preparation of a single application including set-up aid (M6.1) and a series of other RDP measures which vary from region to region (e.g. sub-measures of M4, some other elements from M6);

- b) The provision of a business plan (BP) considered as a mandatory tool to ensure the economic improvement of the farm after installation, and an investment plan supported through the measures of the RDP (in particular, measure 4.1).

In regions adopting the YF package, training and advisory services supported by RDP measures play a marginal role in package design and implementation and are secured independently from it. On the other hand, freely available advice and information from the public-funded advisory service, as well as national policies and provisions, are an important part of the overall approach. In 2014, national agricultural policy introduced new mechanisms to stimulate land mobility and access to land by YF. The Italian Government approved a decree "**Terre vive**", or "Living lands" to free up public land and make it available for YF in two ways: a) selling State-owned land through public and transparent calls; b) renting of State-owned land giving priority to YF, for at least 15 years.

In the case of land sale, YF with Italian citizenship and aged between 18 and 41 years can participate in a national call presenting a business plan of 5 years and, if successful, benefiting from a long-term loan (of up to 30 years) to buy the land at a low interest rate. In practice, YF become beneficiaries of a contribution covering the difference between the market rate and the subsidised rate.

A national institute (ISMEA), under the control and monitoring of the national Ministry, is in charge of acting as land agency, stipulating contracts with farmers and providing financial and technical advice. A specific advantage of this is that ISMEA buys the land and transfers it to farmers once they have passed the selection, without seeking guarantees. Until farmers finish paying the loan, land is considered as property of the land agency. Another form of support is implemented at national level through the "Land Bank", which stores public-owned land (by State, regions and public institutions) and private land (land given back to the land agency by farmers in conditions of insolvency). ISMEA sells the land through public auctions where the highest bidder wins. This is not a specific instrument for YF, but they can participate in auctions and pay for land in several instalments.

A third form of support is quite similar to the start-up aid of M6.1 and was conceived to complement incentives for generational change within the family farm, as offered by RDP policy. In fact, it is a sort of top-up aid, but with the following specific rules: a) the support is provided through a long term loan (up to 15 years) at zero interest rate; b) in southern regions farmers can mix a capital grant covering up to 35% of the eligible expenditures and an interest-free loan to cover up to 60% of the eligible expenditures; c) selection is based on a business plan; d) the maximum investment is 1.5 million Euros. Again, ISMEA is the public agency delegated by the Ministry to manage these support instruments.

[Examples facilitating transfer of farm businesses between generations, and access to land](#)

France - Groupement Agricole d'Exploitation en Commun (GAEC)

The GAEC is a specially-designed form of farm partnership which allows partners to work together under conditions that are comparable to those existing in family farms, generally with 2 to 10 named farmers. The aim of GAEC is to jointly manage farms in partnership, and to jointly develop farmers' skills ("industry" contribution), materials and livestock ("movable assets" contribution). They may also enable the joint sale of products by the partners. GAECs can enable two or more YF to set up a farm together, they can facilitate the progressive transfer of farms in or outside of a family context, and help the remuneration of labour instead of capital within a farm business (because all those working on the farm can be members of the partnership with a stake in its profits). GAECs benefit from economic and fiscal transparency (1 associate = 1 farmer) enabling the number of associates to be taken into account for YF set-up benefit thresholds and liabilities for capital gains taxes, e.g. for M6.1 thresholds are applied to each YF separately so a GAEC of 2 YF is eligible for twice the aid offered to a sole YF entrant.

Ireland – the Land Mobility Scheme

A three-year 'Land mobility service' pilot programme established by Macra na Feirme – the Irish rural youth organisation - operated successfully over the period 2014-16,

creating 282 'arrangements' across 25,000 acres of agricultural land (Land Mobility Service, 2017). The aim of the pilot was to develop and test what kinds of support services were required to increase access to land through collaborative farming arrangements (Land Mobility Service 2017). The three key functions of the service were:

- to create awareness and provide information to land owners and those seeking land,
- to deliver collaborative arrangements acceptable to both parties in the agreement,
- to provide support for the operation of the agreement.

The service facilitated linkages between land owners wanting to rent out land and YF seeking access to land; around 45% of these linkages were long-term leases. A reason given for the programme success was its insistence that any arrangement must be sustainable and fair, and work for all the people involved (i.e. in respect of the farm family, taxation liabilities, farm support payments, security, and feasibility). Various types of collaborative arrangement have been established including:

- The family option (i.e. a family farm partnership that works in conjunction with enhanced tax relief where partnerships are used as part of succession planning);
- Long lease (operates with tax relief schemes to make rental income exempt from income tax for up to €18,000 on leases of 5 or 6 years and up to €40,000 on leases of 15 years or more);
- Business partnerships to operate a farm;
- Share farming (enables the farm owner to step back from doing everything but to stay involved and have a real input into the business; the owner remains an active farmer);
- Farm-to-farm collaborations to enable economies of scale or scope.

The purpose of the service was to facilitate collaborative arrangements tailored to suit any specific situation. Following the success of the 3-year pilot, the service has been extended as an enhanced national service for the current programme period.

VLIF start-up aid for the development of small agri-businesses" BE-F

The Flemish Agricultural Fund (VLIF) reserves regional funding for smaller agricultural businesses which (due to their economic turnover) may not meet eligibility criteria tied to receiving M6.1 funding or direct payments under Pillar 1 of CAP. The support is "VLIF start-up aid for the development of small agri-businesses"³⁵. Applicants have to fulfil the same technical and educational criteria as they would for M6.1, the crucial difference is in terms of the lower economic turnover required to be eligible for funding. Farms can qualify for the VLIF support if their gross farm turnover falls between €20,000 and €39,999. Depending on the economic size of the farm, grants range between €7,000 to €11,000, but support can be up to €15,000 if gross turnover exceeds €30,000 and the farm is either a specialised cattle farm or includes cultivation or cattle in its business.

Eligible costs which can be covered by VLIF support:

- Company clothes;
- Purchase of at least 25% of shares of a natural person, farmer within the business;
- Purchase of livestock;
- Cultivation of rare (in the context of Flanders) plants;
- Purchase of necessary farm buildings which may not be older than 15 years;
- Construction and overhaul of farm buildings and acquisition of related farming equipment;
- Purchase of material and machines or the commercialisation of products via short supply chains.

This instrument serves to help small farms to grow, so that they will meet the eligibility thresholds of CAP aids. In the context of GR, whilst this measure doesn't directly target

³⁵ "VLIF-aanloopsteun voor ontwikkeling van kleine landbouwondernemingen"

YF it can often be helpful for those who are newly starting up in farming and cannot yet afford to take on a bigger business.

Transferring the Family Farm Clinics – Teagasc IE:

Teagasc has published a detailed [farm succession and inheritance guide](#) which outlines the key issues and considerations for farm succession but also has helpful checklists and a draft farm succession plan. This Workbook guide is to support farmers through the process of succession and farm transfer. It focuses strongly on “succession” and through self-complete exercises it helps farmers to consider all options, start discussion and work through the processes. The guide was developed using a co-creation process involving discussion and input from a number of key stakeholders.

Transferring family farm clinics are regularly organised by Teagasc in different locations throughout Ireland. The aim of these is to present a ‘direction of travel’ in relation to farm transfer and enable farmers and their families to discuss the issues with a professional team. There is an opportunity to engage one to one with accountants, solicitors, Citizen’s Information representatives, family mediation experts, social welfare representatives and Teagasc advisers.

De Landgenoten, Belgium, and similar institutions elsewhere

The Association Landgenoten was founded 2014 to improve access to agricultural land for organic farmers. It receives public support, among others from the Flemish government, and as part of RDP funding. De Landgenoten aims to provide access to agricultural land for professional organic farmers in Flanders. It is a co-operative and a foundation that buys farmland (using crowdfunded money as well as donations), and rents it to organic farmers.

The co-operative with social purpose (scrl-so) was founded in April 2014 and is recognised by the National Council for Co-operations (NRC). The co-operative unites farmers and citizens. It acquires financial resources through the sale of shares, buys land and makes it available for organic farmers. By enabling citizens to become involved through direct investment, the Co-operative promotes another founding principle of De Landgenoten: food sovereignty through democratic control over land as “commons”. The Co-operative is flanked by a foundation which was established in October 2014. As a shareholder in the co-operative, the foundation preserves its core values. It receives donations of land or money with which to acquire land; this land can be used for organic farming in perpetuity.

One of the selection criteria requests the project holder to “work for a local market”, i.e. establish a short supply chain and a direct or close connection with final consumers. Moreover, farmers associated with De Landgenoten have to form a bond with the local community. For example, De Landgenoten gives growth opportunities to sustainable companies with social and ecological added value. The mission of the association is to embed agriculture within the local social fabric and in sustainable local economy. As such, CSA schemes also find support from the association.

From the ENRD EU workshops on GR in agriculture, another similar web-based institution was highlighted, called ‘Terre de liens’, which operates in France as an NGO, raising funds, buying and regrouping land and then seeking YF to lease these holdings. Like the Flemish example, it favours environmentally friendly and ‘human-scale’ mixed and community-oriented farming. It was founded in 2003 and has grown to encompass more than 350 farmers managing 170 farms covering 4.2 thousand hectares, in different areas of France.

Anecdotally, the study has gathered indications of more such NGO institutions acting in other EU Member States and even globally: it appears that this is a growing phenomenon facilitated especially by internet access and usage. As yet, it is too early to assess the potential of these developments to change the barriers to access to land which are commonly faced by YF and new entrants to agriculture. Nonetheless, from the evidence of the current severity of barriers to access collected in the 7 case study countries, it appears this institutional approach has only a marginal significance, so far.

Related networks and promotional groups

Access to Land Network: The European Access to Land network brings together various civic organisations –mostly community and/or farmer-led initiatives - from across Europe

to share experiences and practical ways of assisting farmers in accessing land and also to promote the significance of land mobility for agroecological transition and GR. The network aims to facilitate farm succession and entry of newcomers in a number of ways:

- training and advising YF and future farmers,
- advising older farmers and landowners to facilitate farm transmission,
- acquiring farms to put them at the disposal of new entrants, particularly newcomers, on favourable terms,
- advocating for the preservation of existing farms and their transfer to a new generation,
- advocating for better support mechanisms to new entrants and progressive entry into farming.

The Network's recent report compiles analyses of the situation for new farmers and their access to land, with diverse case studies in Belgium, France, Spain, Italy, Romania and the United Kingdom.

https://www.accesstoland.eu/IMG/pdf/a2l_newentrants_handbook.pdf

HU: Agricultural and Rural Youth Association - AGRYA: AGRYA has played an important role in the more effective implementation of the young farmer measure, one of the main objectives of which is to represent the interests of YF and to promote the retention of young people in the countryside. The members of the organisation are primarily YF. **AGRYA's** 'Rural Adventure' programme, <https://rural-adventures.eu/> which deals with the organisation and deepening of co-operation, has also been launched, in which urban youth can spend a couple of weeks on farms operated by YF. Building on its experiences, they launched a 'This is how to harbour your dreams' entrepreneurial skills development programme, which is targeted at young people. In this framework, participants model the operation of an enterprise through examples of horticultural production, and theoretical and practical training for a year. In addition, AGRYA has a relationship with university students through the events of Young Farmer Clubs, which offer volunteering activities outside of the university hours.

A 'Tellu's education programme starts with a European initiative whereby groups of school children can visit young farmers to see farm work first-hand. In addition to increasing the interest of the target group in agriculture, these programmes also promote the role of agriculture in society. AGRYA's 'Take It Yourself' programme provides seed packages for schoolchildren who occasionally share their experiences with pictures and writing about their production. This educational program could attract new entrants later. Good examples also include the development of labour-intensive sectors in land-based businesses. Since access to arable land is almost impossible for young farmers, the choice of more asset-demanding sectors and development of added value and craft product ranges is very popular, as a way to achieve higher income from a smaller holding. This strategy is promoted by organisations such as AGRYA and supported by the administration.

5. ANSWERS TO THE EVALUATION STUDY QUESTIONS

5.1 Explanation of the format and order of answering

This report adopts a common 5-part structure to answering the Evaluation Study Questions (ESQs) as described in section 2 of the Inception Report:

- **Statement of the ESQ**, explaining the logic and using relevant sub-questions to clarify the meaning;
- **Sources of evidence used**: listing the main sources of evidence that have been pulled together to help address the question;
- **Conclusions** to answering the question;
- **Evidence**: referring to, summarising and analysing evidence from each of the main sources which include both quantitative and qualitative data;
- **Limitations of evidence** assessing the main challenges encountered in answering the ESQ.

To clarify the wide range of evidence sources used in this process, and demonstrate the principle of triangulation (using multiple sources to avoid bias) table 21 summarises how sources contribute to ESQs.

Table 21. ESQs and main evidence sources used to answer them

ESQs	Indicator analysis	Online survey and key EU interviews	Literature review	Quantitative analyses	Case study evidence*
2	Y	Y	Y		Y
3	Y	Y		FADN, MCA, CGE	Y
4	Y	Y	Y	MCA	Y
5	Y	Y		FADN, MCA, CGE	Y
13	Y	Y		CGE	Y
15	Y	Y		FADN, CGE	Y
12	Y	Y	Y		Y
16	Y	Y	Y		Y
6		Y			Y
8		Y	Y		Y
9	Y				Y
10	Y				Y
11	Y	Y	Y		Y
14	Y	Y	Y		Y
1	Y	Y	Y	MCA, FADN, CGE	Y
17	Y	Y	Y	All	Y
7	Y	Y	Y	All	Y

* includes national/regional and local interviews, secondary data review and analysis, national stakeholder workshop

Source : CCRI et al

The order in which these questions are answered here follows the logic as presented in Figure 3, section 2.2 of this report. The questions are divided into four main groups, dealing in turn with specific questions related to GR measures' EFFECTIVENESS and RELEVANCE; EFFICIENCY; COHERENCE and finally the CAP's overall impact, efficiency and EU ADDED VALUE for GR, local development and rural jobs.

5.2 Effectiveness and Relevance – ESQs 2, 3, 4; 5, 13, 15; 12 and 16

5.2.1 ESQ2: *To what extent have the relevant CAP measures/instruments focusing on generational renewal contributed to fostering innovation and inter-generational knowledge transfer?*

5.2.1.1 Our understanding of the question

This ESQ seeks to investigate the extent to which the CAP funding and measures that are focused upon GR in agriculture and rural areas may, at the same time or through this process, assist knowledge transfer between old and younger generations, and support innovation in farming and rural development. Subsidiary questions defined by the study team include:

- Do the measures encourage farmers to develop technical & business knowledge and skills?
- Do the measures improve the level of knowledge and skills in the farming population?
- Do the measures enable and promote farmer to farmer innovation by sharing and exchanging information and developing confidence to act?
- Do GR measures help business co-ordination and networking between farmers or along supply chains?

Evidence sources

- Indicator analysis;
- EU interviews and online survey;
- Literature review;
- Interviews and workshops in Case Studies at national and local levels.

The combined result of analysing all these sources is presented in the conclusions below. A summary of the evidence from each source then follows, ending with a note on the limitations of the analysis.

Conclusions

The Pillar 2 measures relevant to GR show a positive, but relatively limited, connection to fostering knowledge exchange and innovation, particularly within agriculture, from case studies and in earlier published evidence. Among stakeholders and beneficiaries, a significant proportion of those consulted in case studies and interviews cited examples of improved knowledge, skills and innovation occurring through the implementation of CAP GR measure-supported farm transfers.

Of the total planned resource focused upon agricultural GR in pillar 2 of CAP (€4,736 million over seven years), only a small proportion (5%, or around €34 million per year) is planned to be spent directly on KE and fostering innovation. Taken as a proportion of CAP spending altogether, the share is less than 0.05 per cent. It therefore seems likely that the impact of this CAP GR spending upon knowledge exchange and innovation at EU level will be very modest, especially compared to other EU and national funding for these services.

However, there is clear evidence to support a more significant, indirect link between GR as a process, and knowledge exchange in farming communities. In nine Member States or regions, the receipt of the Pillar 1 YF supplement is conditional upon beneficiaries having an adequate level of training, and this condition applies to all beneficiaries of Pillar 2 YF business start-up aid. Evidence from the case studies shows that these conditions indirectly promote knowledge exchange and training, primarily improving farmers' technical and business skills and thereby helping to improve levels of skills in the farming population more broadly.

The evidence suggests that when training and advice are provided to young farmers and new rural entrepreneurs because it is a condition of the process to access capital grants, installation aid and/or Pillar 1 YF supplement, the link between GR measures and increased inter-generational knowledge exchange is clear and positive. Secondary sources and stakeholder views further emphasise the added value of delivering advice

and business planning in a coherent process throughout the installation period. This was identified in four of our seven case study countries – Ireland, Italy, France and Hungary – and recommended for the future by stakeholders in two more: Estonia and Poland. In the EU online survey an integrated approach was also mentioned as relevant in 2 other MS (UK and Croatia). Integrated delivery of training/advice and non-agricultural investment aid through LEADER was also noted as having a positive effect upon GR in Spain and Ireland.

Evidence from case studies also shows how targeting and eligibility criteria are used to encourage a stronger link between other GR measure spending and levels of knowledge among the farming population. This is the case for M4 investment aids which help young farmers to enhance the productivity and competitiveness of their holdings.

The evidence for CAP GR aids directly supporting and promoting innovation is mixed. In several case studies (IE, FR, PO, EE), evaluation teams conclude that the GR measures support mainly conventional farming through transfer of farming businesses from one generation to the next, and innovation is not particularly emphasised. However, beneficiary views are more positive on this point, and early evidence concerning EiP Agri mentioned in case studies indicates that young people are specifically encouraged to engage in Operational Groups and some will have a GR focus (Ireland, Hungary).

LEADER is highlighted as one CAP mechanism which has promoted innovation by offering support to non-conventional new entrants to farming, as well as funding some rural training and information actions which improve KE among young people, and those starting new rural businesses. Stakeholders in several CS country workshops suggested that a greater focus within the CAP upon support for new entrants and non-farming entrepreneurial skills could enhance levels of rural innovation, and thus promote enhanced resilience in respect of rural GR.

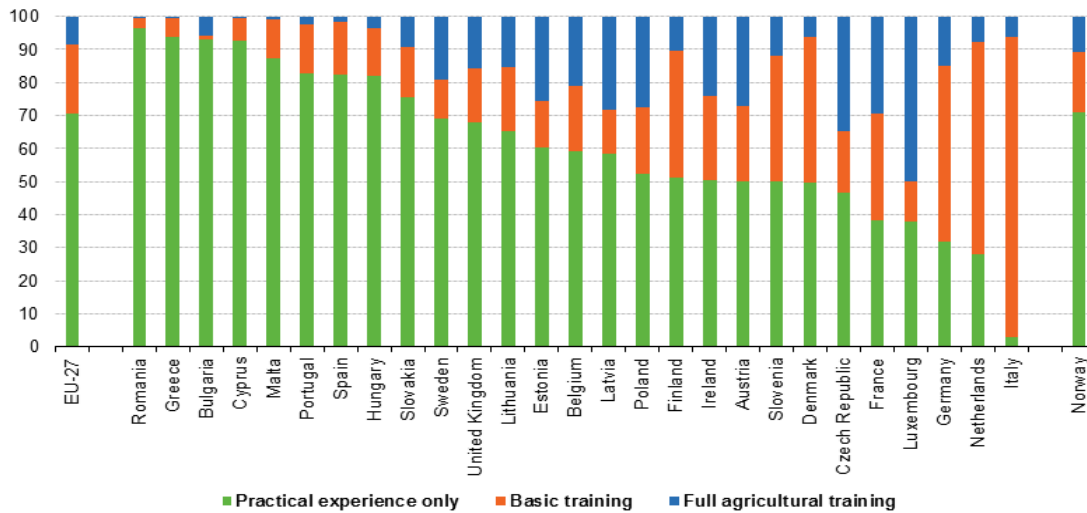
5.2.1.2 Indicator analysis

The context indicators examine the variation between MS in respect of the level of training attained by farm managers, and the level of training attained by EU rural inhabitants as compared to the urban population, over a ten-year period, to give some idea of which MS are leading and which lagging, in these respects.

These graphs show that across the EU, there is a big difference in the most common levels of attainment of farm managers, with very few farmers in Romania who have more than practical experience of farming whereas in Italy, almost all farmers have at least a basic level of formal qualification. However, over time the educational attainment levels in rural Europe have improved, such that the average situation now shows rural areas with around 70% of inhabitants having medium or high levels of education while urban areas have about 75% at this level, and these proportions have risen since 2009 from 63% and 70% respectively. This indicates also that rural areas are steadily closing the gap in respect of their differential in attainment levels, compared to cities and towns.

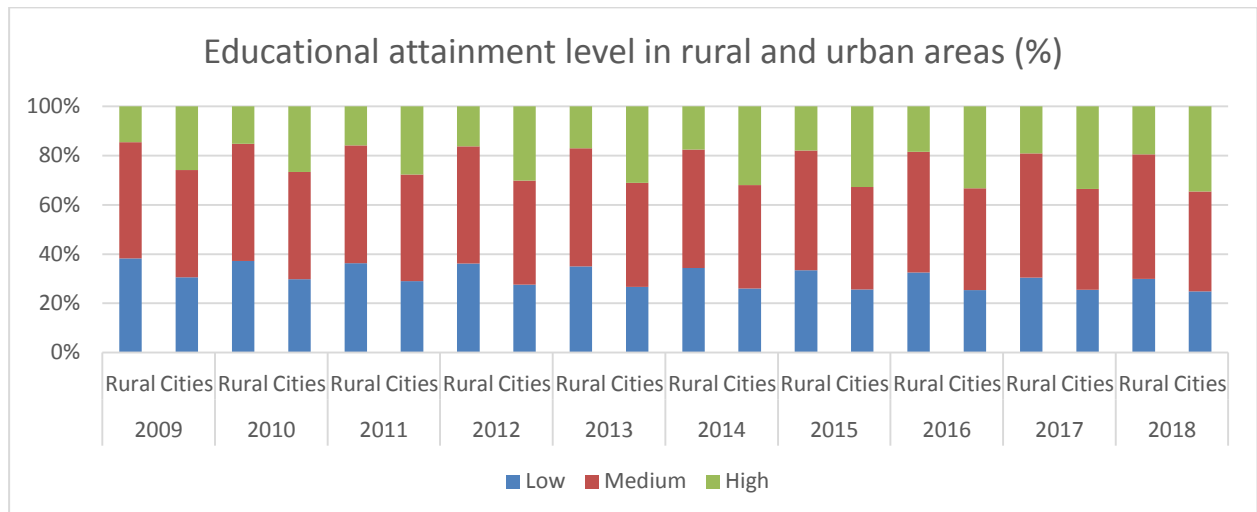
Looking specifically at the highest levels of education, the third graph shows how this varies between EU Member States, although the figures are for absolute numbers so cannot be directly used to identify differential performance.

Figure 43. Agricultural training of farm managers, 2013.



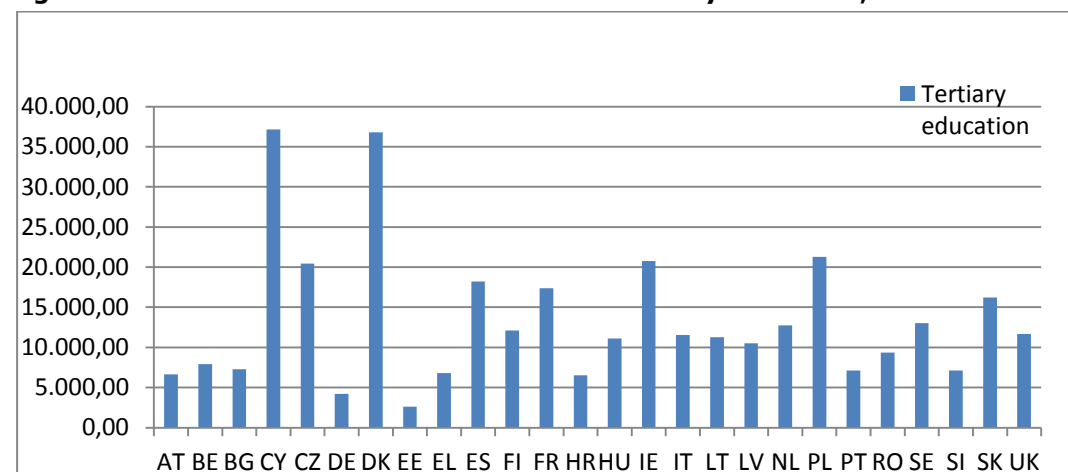
Source: https://ec.europa.eu/eurostat/statistics-explained/index.php/Farmers_in_the_EU_-_statistics

Figure 44. Educational attainment in rural areas compared to urban areas, trend over time.



Source: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>
[https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File: Educational attainment, 2016 \(LFS\).png](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File: Educational_attainment,_2016_(LFS).png)

Figure 45. Numbers of rural inhabitants with tertiary education, 2016



Source:

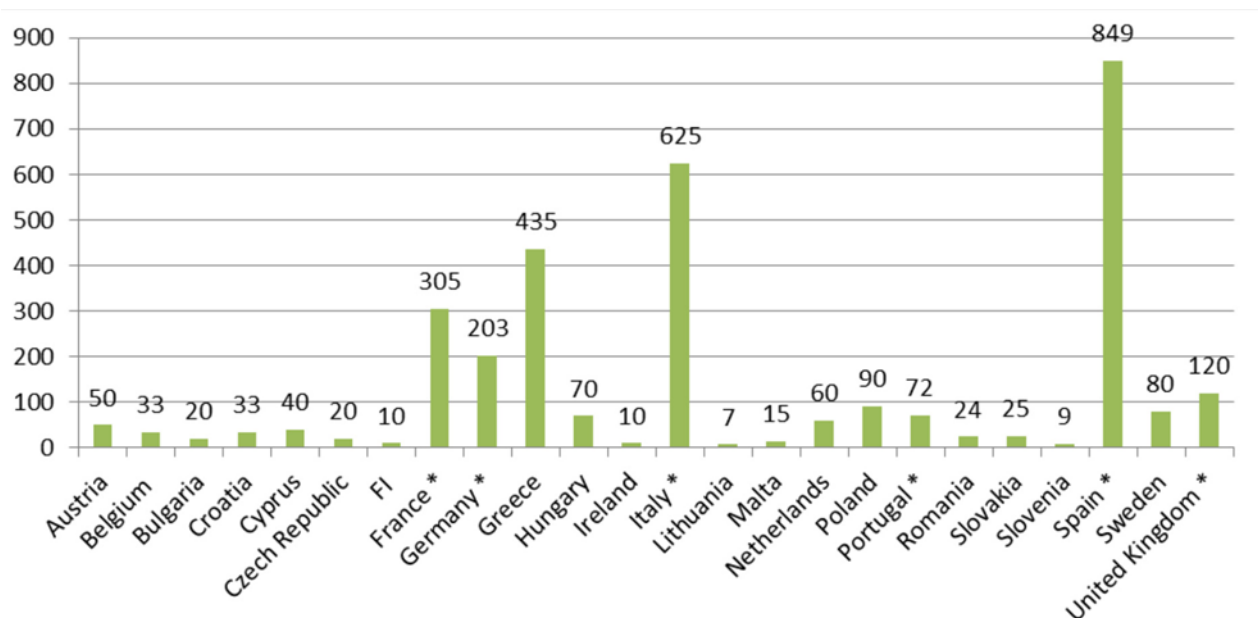
The expenditure indicators for GR measures show very large differences in spending between EU territories. If considered as an even spend over the period, annual pillar 2 spend on FA2B would be about 50% greater than pillar 1 YF supplement spend, for the EU as a whole. Within pillar 2, the spend on KE and innovation-related measures (1,2 and 16) accounts on average for around 10% of the total planned spend on the main measures which could be GR relevant (as listed in the table), although these measures also target non-GR beneficiaries and goals.

Table 22. RDP Spend on relevant GR measures, NUTS 3 level, illustrating high territorial variation

Indicator	Range	Average	Variation
Pillar 1 Young Farmer supplement Payments, 2015-2016, expenditure	€0 -> €7,57 m	€0,63 m	133% of average EU
Pillar 2 M 1 planned expenditure 2014-2020	€0 -> €14,57 m	€1,03 m	140% of average EU
Pillar 2 M2 planned expenditure 2014-2020	€0 -> €9,37 m	€0,79 m	135% of average EU
Pillar 2 M4 planned expenditure 2014-2020	€0 -> €188,35 m	€19,75 m	123% of average EU
Pillar 2 M6 planned expenditure 2014-2020	€0 -> €70,53 m	€7,39 m	131% of average EU
Pillar 2 M7 planned expenditure 2014-2020	€0 -> €71,38 m	€6,48 m	143% of average EU
Pillar 2 M16 planned expenditure 2014-2020	€0 -> €23,66 m	€1,37 m	145% of average EU
Pillar 2 Focus Area 2B planned expenditure 2014-2020	€0 -> €56,11 m	€6,02 m	102% of average EU
all output and result indicators	N/A	N/A	N/A

Source : OIR tabulation of DG Agri data

Figure 46. Targets for the number of EIP operational groups (OG) planned in the 2014-2020 RDPs



Source: Facts and Figures; Rural Development in the European Union 2016
http://ec.europa.eu/agriculture/index_en.htm

Figure 46 illustrates widespread aspirations among the Member States to support Operational Groups under their RDPs; however, progress has been slow in meeting these targets in many MS. A recent evaluation found that most OGs are active in Germany, France, Italy, Portugal and Spain, which is in line with the size of the agro-rural sector and available budget in these countries. Countries such as Poland, Hungary, Estonia, Latvia, Slovakia, Slovenia, Romania, Bulgaria and Croatia were not represented at the time of study (first quarter of 2018). Countries that still lacked groups in May 2019 included Romania, Croatia, Slovakia, Hungary, Denmark (which has its own national innovation policy), Malta and Cyprus, Greece, Luxembourg and Estonia. None of these EU sources provides information on the extent to which OGs involve young farmers or other young rural residents; examples were only cited in two case studies – Ireland and Hungary (section 5.2.1.5). The typology of OGs in the database does not identify groups led by young people or YF (figure 46a).

Figure 46a. Operational Groups by type in the EIP AGRI database (May 2019).

Lead Partner Type	N° of OGs	%	Overall partner types	Amount
Researcher / Research Institute	173	32%	Farmer/forester or their organisation/ association of farmers or foresters	220
Farmer/forester or their organisation/ association of farmers or foresters	112	20%	Researcher / Research Institute	182
Business / SME	80	15%	Business / SME	115
Advisor	65	12%	Advisor	99
Other	33	6%	Public body	84
Public body	20	4%	Education	60
NGO	15	3%	Other	55
Education	13	2%	NGO	29
Total	511	100%	Total number of partners in 239 OGs	844

Source: IDEA Consult, Operational Groups Assessment 2018 Final Report, EIP-AGRI Agriculture & Innovation
<https://ec.europa.eu/eip/agriculture/en/my-eip-agri/operational-groups/projects>

5.2.1.3 Online survey and EU level interviews

The online survey provided insights into trends in certain Member States. In some MS younger, educated people were reported as leaving to seek employment overseas (IE, EL, UK): a “brain-drain to other countries”; while in other MS, educated people were reportedly abandoning agriculture/rural areas, especially mountain/remote areas (EL, ES, IE, SK) to move into towns and cities. CAP schemes that support progress in farming and also specialize in mentoring programmes for young farmers were recognised in IE and ES, also HR and UK. Specifically for Wales (UK) it was noted there are subsidised advisory services and networking schemes that support knowledge transfer to YF. In Spain EU funding is noted as developing a ‘Smart Villages’ project to enable working parents and their children to stay living in villages.

The EU level interviewees suggested that education programmes are key for GR, and YF schemes in general are promoting new skills by supporting business planning and investment. Interviewees commented that young farmers should bring innovative ideas and the enthusiasm to invest in farming; however, they may be overwhelmed by the complexities of claiming financial support and meeting the conditions of policies, which may diminish their ability for truly innovative entrepreneurship. This problem was reportedly lower in MS where farmers’ advisory needs are well supported by CAP and/or national policies (e.g. AT, IT, FR).

Stakeholders suggested that there are many young people in different MS that want to be innovative and would potentially benefit from CAP GR funds, but there is a lack of advice and information to promote the schemes and help people to access them. Thus, YF instead acquire knowledge and/or information themselves either by sourcing private advice, or learning through trial and error. This lack of funding awareness and outreach can mean that although training programmes relevant to GR are supported through Pillar II RDPs, at national level “they address farmers who are already interested and

persistent in getting CAP support”, rather than offering real additionality by reaching younger farmers who have not used them before.

Interviewees revealed a positive perception of the effectiveness of LEADER, which is believed to support innovation and was cited as effective in supporting young urban people who want to move to the countryside to farm the land sustainably using “alternative” ideas and techniques. These people may not be aware of conventional CAP GR funds and/or may not be eligible for some aids, but LAGs reach out to newcomers in rural areas and offer them help and advice. The online survey responses included comments from stakeholders in Spain and Ireland that LEADER had supported effective KE among young rural (non-farming) entrepreneurs by coupling investment aid with appropriate advice and training.

5.2.1.4 Literature review

Training and mentoring

Many studies discussed the importance of training and mentoring support for young farmers and new entrants to farming. Carillo et al. (2013) and McDonald et al. (2013) show that in some specific situations, young farmers with formal educational qualifications had better technological and financial management skills than those who had received only on-farm, informal education when learning how to farm. However, it was commonly found that training, support and mentoring services for YF were insufficient. Finance, IT and business skills (ADAS Ltd, 2004; CEJA, 2017; Caputo, 2018), as well as training to support farm diversification (De Rosa and McElwee, 2015) and as part of succession planning (Williams, 2006) were found to be key areas where more KE support was needed. One Scottish study (Milne and Butler, 2014) observed that this is especially important where older, experienced farmers are encouraged to exit the sector in order to make way for a younger generation. Flanking support measures, such as farm labour relief, are also needed to enable young farmers to attend training (Milne and Butler, 2014).

However, networking and informal peer support can be as important as formal training (Zagata et al., 2017), especially for new entrants from non-farming backgrounds (Davis, Caskie and Wallace, 2013a). It is also beneficial for young people to be involved in the organization of training programmes directed at them, as participation in these schemes is encouraged when the knowledge offered is deemed important and relevant.

Some interesting examples have been researched: LEADER Group in Extremadura (Valle del Jerte) is working to tackle school drop-outs through an integrated plan of complementary educational and training activities negotiated with parents, teachers and students. Another LEADER project from Scotland provided personalized support to young people to acquire skills and confidence that may eventually lead to better integration into the labour market (ENRD, 2016). In Ireland, in addition to receiving milk quota through the New Entrants Scheme (2007-2013), there were compulsory extension modules whereby new entrants attended intensive lectures and farm walks. These modules also provided participants with an introduction to the services and information available, ensuring that they know where they can source further help if required (McDonald et al 2014). In the Basque Country, support to young farmers under M6.1 provides mentoring support to accompany entrepreneurs through the various stages of the development of a business idea (ENRD, 2017).

Innovation

RDP measures were cited as supporting innovation and entrepreneurship among young people in several member states: Finland and Slovenia (ENRD, 2017), Italy (De Rosa and McElwee, 2015), Greece (Kontogeorgos et al., 2014) and Poland (Adamowicz and Szepeluk, 2016).

5.2.1.5 Case Study findings

“Certainly GR measures and farmers who avail them have an impact on knowledge” (IE, government representative). Overall there is a perceived positive contribution of relevant GR measures to promoting knowledge transfer and innovation, but the extent of this impact varies across the CS countries and regions.

Is a requirement for qualifications as a condition of receiving GR aids stimulating young farmers’ knowledge? Pillar 2 YF (Measure 6.1) eligibility criteria include a requirement for a sufficient level of agricultural knowledge and training which is mandatory in all Member States, and applies to all those within our CS sample that use this measure. Additional skills and training criteria in respect of eligibility for financial support for Pillar 1 YF supplements are applied in 8 Member States and 3 regions across the EU (**BE-F**, BE-W, BG, **IE**, ES, **FR**, HR, AT, PT, SK and UK-Northern Ireland), with three of our selected seven CS countries also falling into this category.³⁶

For example, a Level 6 agricultural certificate (the ‘Green Cert’) is mandatory in IE in order to access the Pillar 1 and 2 YF support schemes: this requirement is seen as positive for sector productivity, as trained farmers have 12% higher levels of output than untrained ones (Macra na Feirme, 2018). Agricultural colleges are highly regarded in respect of training provision. Similarly, in Flanders, new entrants to the sector can access formal training with CAP aid which offers attainment of a specified level of experience.

In France, installation aids favour acquisition by qualified young farmers who possess the necessary professional skills. Aid access is firstly conditioned to a minimum qualification level corresponding to the professional baccalaureate. The ex-post evaluation highlighted that in France, among the YF (<40 years) unaided installations, only 58% had a level of qualification equivalent to the baccalaureate. Beyond basic training, the second lever of change is the Personalized Professionalization Plan (PPP). This training plan is drawn up with each young farmer in order to guarantee the conditions enabling the project’s success. It establishes a diagnosis on the project and its bearer, and identifies the needs to complete their competences according to their career and the specificities of their project. This PPP, as well as the internships, are all occasions to encourage the young farmer to distance themselves from their project, by confronting other professional realities and evidence.

A direct effect of the requirement on the education and knowledge of young farmers is reported also in PL, where young farmers learn management with their business planning, are obliged to start farm accountancy and have to obtain a certain education level to access the CAP aid. Interviews also indicated that young farmers are eager to introduce new technologies and practices that they have learned at school/university and they can usually do that only after they take over the farm. Implementation of M 6.1 YF in the RDP 2014-2020 actually requires that the farm is already in the hands of a young farmer. This requirement is applied in IE as well in relation to M4.1, however many interviewees noted that despite this, there is a “*significant time gap*” between YFs gaining their education and being in a position on a farm where they could apply their ideas.

In EE the requirements in respect of specific agricultural education can act as an impetus to increase farmers’ education, although some YF beneficiaries and advisory bodies say this is overestimated. Nevertheless, inadequate education is a significant factor influencing the scoring of applications when farmers apply for aid.

Young farmers in all case study countries are seen as open and willing to implement new ideas and take advantage of technological innovation in farming, whether in respect of using new technologies, machinery, new cultivation techniques, or making use of ICT. They are in general well educated and equipped in respect of pursuing innovative projects. Thus intergenerational knowledge transfer is apparently taking place in the majority of the CS, mostly as a result of two generations in the same family working together (BE-F, IE, IT). Intergenerational co-working is very important in the transition period to support new management. “*Experience and skills of older farmers are always helpful for a young one*” (IT CS). In these cases, a significant degree of intergenerational knowledge transfer has already occurred before the takeover of the farm.

³⁶ https://ec.europa.eu/agriculture/sites/agriculture/files/direct-support/direct-payments/docs/young-farmer-payment_en.pdf
2016

In Estonia, wide ranging training (targeted for different types of farms) is supported through the knowledge transfer and information measure of the RDP. From 2016 it is also possible to participate in a mentoring programme and farmers who have applied for YF support have some preference. The mentoring programme is aimed at small farmers whose last years' sales revenue was 1,200 to 100,000 Euros. It involves collaboration, sharing of knowledge and experience between a successful and experienced farmer/rural entrepreneur and a less experienced farmer/rural entrepreneur. The service is supported (support rate 100%) under M02, up to 25 hours/year (about €40 per hour) – this was viewed as positive by interviewees.

Are GR measures assisting access to good quality advice, to increase KE and KT in farming? There is less evidence of a direct relationship between CAP GR measures and the fostering of KT through advisory services. Nevertheless, access to knowledge and advice is not seen as a problem by stakeholders in IE, BE-F and PL, nor in our case study regions of France or Italy.

In Ireland there is a well-established advisory system: extension services are provided via a combination of public and private services and are considered better than in many other EU countries. Teagasc (state agency) delivers KT sessions and runs free farmer discussion groups (funded under Pillar 2- M1 knowledge exchange) in a range of locations around the country, to keep all farmers updated about new developments (e.g. beef production; improved milk production). Macra na Feirme (an NGO like CEJA) has discussion groups targeted at YFs and some of the dairy cooperatives also run KT events. However, whilst some of these are CAP-funded under Pillar 2, **none of these activities is linked specifically to CAP GR measures**. A similar range of provision, also not necessarily CAP-funded, is reported for YF setting up in business in both Italy and France. In the French case, advice is offered to YF at all stages of their installation planning and implementation, which is seen as important for ensuring business success.

In BE-F, although there is no shortage of good quality farm advisers, it was stated that young farmers from non-farming backgrounds may experience difficulty accessing informal farmer networks, which also serve as important sources of knowledge and best practice, providing access to business-to-business learning. In Estonia, there is apparently a shortage of good quality advisers in some parts of the country.

A wide array of private advisory sources supports agricultural modernisation in Poland, and almost all young farmers use these services to submit applications for GR aids so there is a direct link between the CAP GR measures and (non-CAP-funded) advice. However, it is not known to what extent this advice fosters inter-generational KE or innovation, beyond encouraging YF to make capital investments. M1 Knowledge transfer and M2 Advisory services under the RDP have not been launched yet – the reasons apparently relate to a requirement for funding to be awarded through a competitive process to the providers of training which has caused challenges for the authorities.

Knowledge transfer in Hungary was planned to be supported by agricultural training and preparatory training, demonstration farm programmes and study trips and exchanges, as well as by individual and group counselling, all offered under the YF Sub-Programme of the RDP. The Sub-Programme should support the promotion of enterprise start-ups and investments, as well as expansion of the knowledge base, the development of practical skills, and the promotion of starting a forum, through counselling and mentoring. However, the advice and training measures of the sub-programme have not yet been launched (we understand for similar reasons to those which have also delayed launch of these measures in Poland – requirement for competitive bidding). Stakeholders reported a lack of reliable, affordable, accessible and efficient KT sources for farmers: the operational efficiency of predominantly state-run institutions is described as moderate, their knowledge and information not up to date and its practical applicability limited. Another cited problem is that integrated, strategic advice that brings together technology, production and marketing is not available to smaller producers.

The Ireland RDP makes use of measure 16 co-operation to support partnership arrangements, where two generations work together and share knowledge and subsequently managerial positions and authority are passed over to the young farmer. This has proved a popular measure because within the partnership, old and young farmer eligibility for investment aids can be combined, but at the same time it encourages inter-generational KE as both parties collaborate to develop the business plan for the farm, assisted by technical advice. This is seen as a particularly positive feature of the GR

measures in Ireland and a significant improvement on the former early retirement scheme which was available from 2007-2009 and was not popular; that measure made no specific provision for KE and gradual handover of the farm from one generation to the next.

Do CAP GR provisions act as a specific impetus for innovation? The practical implementation of innovation in **HU** (new practices, novel methods or outputs) is incentivised by a 10% higher aid intensity from the separate budget and an enhanced evaluation score given to YF in animal husbandry, horticultural or water management investment. YF are also eligible to participate in EIP Agri Operational Groups and although these had not yet been established at time of case study reporting (April 2019), it was judged by policy makers and farmers that they were likely to attract YF. In Italy (**IT**), the YF package which has been adopted in the two Italian case study regions has been very successful in fostering innovation, especially in two types of fields: high-quality food production and processing; and farm diversification, with particular emphasis on social farming and sustainable tourism. In both cases, offering investment aid, support for following a business plan and linked access to (non-CAP-funded) advice and training works to encourage young farmers to innovate and expand their knowledge, which in turn promotes a high level of business success, after installation.

The young farmer top up for investment grants (extra 20%) under the 'TAMS II' scheme in **IE** provides support for farm investment (M4.1). There is no evidence to suggest innovation has been enhanced by this scheme: young farmer beneficiaries are generally undertaking basic investments and upgrading machinery and buildings (e.g. fencing, milk storage, new milking parlour), rather than innovative actions. The focus is largely on reducing costs (e.g. labour) and improving product quality (and price).

However, Ireland also makes significant use of the co-operation measure 16 to fund innovation: 23 EIP-AGRI Operational Groups have been selected so far. This is viewed positively by a number of interviewees, especially because of the collaborative nature of the projects and involvement of a research body. At least 5 of the Groups are located in areas where GR is a challenge and farming is marginal, and the innovations are intended to enhance farm viability and thus help retain YF. It is too soon to evaluate any impact as project implementation has only just started but it is hoped that these groups will appeal to younger farmers and offer a more positive future image to farming as a career choice³⁷.

The **PL** RDP places particular emphasis upon innovation but without a strong link to GR measures. According to a Ministry of Agriculture interviewee, out of all beneficiaries realising modernisation with M4.1, 91% choose scheme D: "rationalization of production technology, introduction of innovations and change of production profile". However, the most innovation-oriented GR CAP measures are not launched yet, i.e. M1 Knowledge transfer, M2 Advisory services, and M16 Co-operation.

According to the OECD Report on Rural Poland, 2018: "The current EU financial perspective (2014-20) places a special emphasis on programmes to support agricultural innovation. However, what constitutes innovation can be difficult to define and can differ from one farm to the next. This impacts how EU funds are implemented... Many activities of this programme are scored based on the implementation of innovative activities – but there is a diversity of practices... and hence, parameters are inconsistently applied... The Network for Innovation in Agriculture and in Rural Areas (Sieć Innowacji w Rolnictwie i na Obszarach Wiejskich) was established in 2015 to help facilitate the implementation of agricultural innovation. The establishment of this network is promising and in coming years a special platform for knowledge dissemination will be developed, along with connections to the European Innovation Partnership". Probably, co-operation measures in RDP will score higher due to links with this initiative.

Setting up of a young farmer in **FR** and **EE** is noted as a common opportunity to introduce innovations at the level of the individual holding: new ways of working, new practices and technological changes, system changes, organic conversion etc. The targeting of installation aid in **FR** specifically favours projects that create jobs, add value or introduce new techniques on the farm. Increasingly set-ups involve people taking on

³⁷ <https://www.nationalruralnetwork.ie/eip-agri-news/eip-agri-irelands-operational-groups-2019-booklet-launch/> (accessed 16 August 2019)

small holdings with an emphasis upon adding value via processing on site, or introducing novel/niche products or direct marketing/short supply chains. Nevertheless, the contribution of CAP measures to innovation and inter-generational KT remains limited, because the measures linked to GR aren't specifically focused upon these goals, and RDP measures for KE and advice aren't targeted particularly at YF over and above other farmers. It is also felt that the general approach of the CAP support is not well-suited to foster innovation because it deals mainly with straightforward business handovers. In the French case, several interviewees felt that the YF package was not so easy to access or to use effectively if you were a new entrant to farming with a small holding and/or an unusual business model.

Overall the effect of CAP Pillar 2 GR measures and the YF supplement in Pillar 1 on fostering innovation and knowledge transfer in the agricultural sector, across the case study Member States is judged positive, but limited in scale and scope.

In **PL** an interviewee claimed that CAP Pillar 1 direct aid had an indirect negative impact on GR in agriculture because, thanks to direct payments, farming parents increase their wealth and aspirations; they send their children to universities to become doctors, lawyers, etc. and the younger generation do not return to the farm. The study "Polish Village and Agriculture, 2017" showed that in 2017, direct payments used to support children's education were declared by 7% of direct payment (DP) beneficiaries and on average they declared spending 13% of their total DP on this purpose. Clearly, such a trend is only part of the picture of general economic development in the country, where educated young people may choose careers other than farming if they seem to offer better prospects.

Do CAP GR measures promote KE and innovation beyond agriculture, in rural areas?

Evidence of impact was less evident than it was for farm succession impacts, but some examples were cited in relation to LEADER.

In Estonia, some LEADER LAGs are supporting activities related to KE and skills for young people in rural areas, supporting basic needs, socialisation and communication. In Pärnu county where there is a declining population and young people are moving away, two LAGs target aid to provide free time activities and events for youth, cooperation between youth, and also to promote entrepreneurship skills among young people. In Measure 1 (Entrepreneurship) applicants younger than 40 years get extra points and in Measure 2 (Active community) applicants younger than 26 years get extra points. LEADER measures were also highlighted as valuable by two interviewees from this region.

In Hungary, the development of rural areas is mainly based on the establishment and development of services and sustainable infrastructure, including LEADER development based on community planning, supplementary earning opportunities, diversification and support for co-operation, in the 2014-2020 programming period. In the case of diversification, the promotion of co-operation between small operators, social economy and community-supported agriculture is funded. LAGs have funded enterprises to obtain professional guidance for the implementation of their planned activities. Local entrepreneurs, local governments and civilians participate in the definition of LAG target areas, so they have a real influence on the development process. This has greatly contributed to involvement, as well as the mobilisation of ideas, local resources and networking. However, in respect of overall impact upon rural KE and innovation beyond agriculture, interviewees feel that other national policies for education and family support have a greater impact than these particular RDP provisions.

In the Italian case it is noted that 'Being less selective than the single measures of RDP and close to people in terms of technical advice, LEADER seems fitting better to needs of new entrants and very small farmers.' This suggests that LEADER is playing a role in KE, for these groups.

5.2.1.6 Limitations encountered in answering the evaluation question

The main challenge in answering this question is identifying a clear causal link between the application of the relevant measures and the impacts concerned. The interviews and survey at EU level drew responses which often simply generalised that both were important, and that the former should help the latter or vice versa.

In the indicators and EU level data, the lack of output and result indicators is a critical limitation. Based upon planned expenditure and the number of EiP Agri groups, we can suggest that there should be positive impact of CAP GR measures on knowledge and innovation, but only if we assume that spending is effective in achieving its targets.

In the case studies, there is a clear influence of context in these commentaries – those where general levels of KE and innovation could be expected to be low (e.g. because of low levels of formal education among farmers, or small farms or less developed rural economies) tend to see a stronger link between GR measures and KE/innovation. In more ‘developed’ agri-rural situations their potential impact may be less easy to identify because these other factors have a stronger influence and wider sector provision may already promote KE and KT effectively. Nonetheless there are some good indications of positive impacts at local level, in most cases.

5.2.2 ESQ 3: To what extent have the CAP Young Farmer measures been effective in supporting generational renewal?

5.2.2.1 Our understanding of the question

This question aims to investigate how far the use of CAP funding to encourage young farmers to set up or take on farms is promoting GR within agriculture and in rural areas more generally, promoting employment and retaining population. Subsidiary questions could therefore be identified as

- Do the YF measures result in more young farmers, or more successful young farmers (in absolute or relative terms as a proportion of all farmers), relative to the counterfactual?
- Do the measures decrease the age at which farmers take over the farm business?
- Do the measures increase the business performance of young farmers and thereby help to secure safer transfer or encourage more transfers?
- Do the YF measures help to increase rural vitality by keeping more young people in rural areas, offering more local employment opportunities or improving rural service provision than would exist otherwise?
- Can we distinguish between the impacts of Pillar 1 and Pillar 2 aids in all these respects? Among Pillar 2 aids, which are most significant and how do their reported impacts differ?

The measures considered comprise: Pillar I Young farmer supplement; and Pillar II RDP measures programmed under Focus Area 2B including measure packages, where implemented.

Evidence sources

- Indicators;
- EU interviews, literature review and online survey findings;
- Data analysis – correlations and MCA performed on EU datasets; FADN comparative analysis examining the impact of YF aid upon farm performance, in Italy and France; and Polish CGE modelling, estimating the impact of YF measures upon regional economies;
- Interviews, analysis and workshops in Case Studies at national and local levels.

The combined result of analysing all these sources is presented in the conclusions below. A summary of the evidence from each source then follows, ending with a note on the limitations of the analysis.

Conclusions

Overall there is evidence of a positive impact of YF measures of CAP on GR in agriculture. In the case studies, evidence for significant impact from CAP YF measures, either directly or indirectly, is weak in some MS (Flanders, Estonia) but stronger in others (France, Italy). Nevertheless, many stakeholders from public and private sectors appear to have a broadly positive opinion of the CAP YF aids and feel they make a difference, and help to ensure viable succession or start-ups on farms.

The conclusion of most evaluation studies is that these measures make a positive difference to GR in agriculture and beneficiaries report positive impacts. Nevertheless, in some regions GR in agriculture remains a problem regardless of EU support to young farmers (YF), due to persistent challenges such as a lack of older farmers' retirement, as well as national policy, fiscal and legal disincentives or costs. A complex mix of other factors influences these situations, both within and beyond farming. Particularly in marginal or remote areas, the impact of the measures may be dwarfed by negative influences including socio-cultural and wider economic disincentives to farm or to remain in rural areas. The particular characteristics of YF and their business aspirations play a strong role in some mountain regions (e.g. two Italian case study areas), where innovative strategies for diversification or high-quality products are creating sustainable and viable farms.

In more prosperous agricultural areas, the aids are enabling positive GR when the amount of aid offered and the conditions of the offer are significant in relation to farm business size, land values and knowledge provision, but there are also examples where aid is either too small or too costly to access, meaning that it is much less effective for GR in agriculture.

MCA results analysing indicators across all rural NUTS 3 regions in the EU find a positive relationship between the funding devoted to YF aids in both pillars of the CAP and the numbers of young farmers, although the scale of impact varies according to regional characteristics including the level of economic development, relative importance of agriculture and quality of rural infrastructure.

FADN analysis of farm-level data to assess the impact of CAP YF measures upon farm performance suggests that by comparison to farms that do not receive these integrated packages of aids, farms with YF aid in Italy and France show stronger economic performance, better survival and more resilient business strategies. This in itself does not guarantee GR, but it can be viewed as a potentially influential factor. Econometric estimations based upon this FADN data suggests that the impact of farm investment support is positive and significant in Italian farms – a 10% increase in M4 aid increases employment by 1.3% and the impact is greater if the farm includes young people.

A CGE modelling exercise for the Polish economy examining the regional impact of CAP YF aids at NUTS 2 level also suggests a positive relationship between both Pillar 1 YF supplement and Pillar 2 YF aids, and regional growth and employment. This positive relationship holds for the country as a whole and for most NUTS2 regions, with the exception of those in which a relatively small proportion of the rural population works in agriculture. The same model also indicates a relatively stronger impact of Pillar 1 YF supplement on employment and growth in agriculture, and a stronger impact of Pillar 2 YF aids upon the wider rural and regional economy in sectors upstream and downstream of the farm, and both these impacts are positive in the most predominantly rural regions. This suggests that Pillar 2 YF aid has a weak but positive impact upon wider rural economies, including the creation of rural jobs, which should help to promote GR beyond agriculture.

Big differences in MS decisions concerning rates of aid, maximum eligible areas and also interaction with national reserve entitlements (in those MS using the Basic Payment Scheme) mean that the Pillar 1 YF supplement funding is reportedly having little effect in some regions, while in others it is felt to have a significant and positive impact upon GR in agriculture.

Overall, relative points of significance in evaluating the impact of P2 YF aids could be

summed up as the following.

These aids predominantly support farm succession within families, thus posing the challenge of assessing the additionality of the funding because children may be motivated to succeed their parents with or without additional support, implying a degree of deadweight. The data analysis at EU level indicates a weak but positive link between Pillar 2 YF measures and YF numbers. From the case studies we find examples where low additionality is identified in delivery systems lacking sufficient advisory and technical assessment support (Poland, Estonia), whereas where measures are offered in a co-ordinated package with supporting advice to prepare business plans, gain knowledge and confidence and undertake appropriate training, additionality is well-evidenced in RDP evaluations and in the FADN analysis (Italy, France).

YF aids are apparently less well suited to new entrants to farming from other backgrounds, without inheriting from a parent. Specific beneficiary-level and documentary evidence of this issue was cited and discussed as significant in Estonia, France, Italy, Hungary and Flanders cases and workshops. The reasons stem from the much greater diversity of characteristics of new entrants and their business situations and ideas (e.g. older, smaller, lacking capital, with innovative and unconventional ideas), as well as their generally lower level of pre-existing integration into farm business networks and knowledge systems. This means they more frequently fail to meet standard eligibility conditions, they may be considered higher-risk applicants and thus are less likely to score well on conventional selection criteria, or they may lack broader ongoing support and knowledge even where they qualify for YF aid, which makes their survival and performance more vulnerable. Problems arise from a combination of inappropriate design or lack of awareness in delivery by programming authorities, and sometimes also constraints in the EU legislation.

CAP YF aids and their value should not be assessed in isolation from wider socio-economic conditions in rural areas. Even the best YF packages will be ineffective if farming cannot offer a sufficient standard of living and quality of life to attract a younger generation. Also, rural areas lacking basic infrastructure and services will struggle to retain young people even if the returns to farming are broadly comparable to those of other sectors. If national economies are buoyant and unemployment low then rural exodus will be favoured wherever city living offers young people a better quality of life. Conversely, when economies are in recession and unemployment is high, returning to the family farm can appear an attractive alternative to subsisting on welfare benefits or short-term and low paid employment in a city.

It is possible to design YF packages which give appropriate and significant additionality by tailoring aid rates and delivery processes to local conditions, using a range of measures in a co-ordinated way and also co-ordinating them closely with non-CAP policies and institutional arrangements. The best examples of YF effectiveness in the case studies are seen when the CAP measures are designed to work alongside other legislative and fiscal arrangements, with support from specific institutions and processes at the local level. This effectiveness, in terms of improved performance and resilience among supported farms, is demonstrated via the counterfactual analysis of FADN data in Italy and France.

Through the P2 menu of measures, many of these accompanying elements to start-up aid could be CAP-funded (e.g. setting up new institutions using M16 co-operation, using M01 and M02 to ensure YFs have the skills and knowledge to develop their business plans robustly), but in our case studies we identified a mix of CAP and non-CAP elements working together to enhance measures' effectiveness (notably in France, Italy, Hungary, Ireland and to a lesser extent, Poland).

The indirect effect of the YF measures upon local economies and rural employment appears weak but positive, particularly in the most remote and marginal rural areas. However, these impacts are likely much less than the impacts of other measures in the Pillar 2 menu which target these goals directly, as well as the indirect impacts of Pillar 1 and ANC aids which provide more significant general support to maintain farming in these areas.

5.2.2.2 Indicators

Table 23. Average age of farmers, and trends over time

Table 1 - Age structure of farm managers and ratio of young managers to elderly managers, 2013

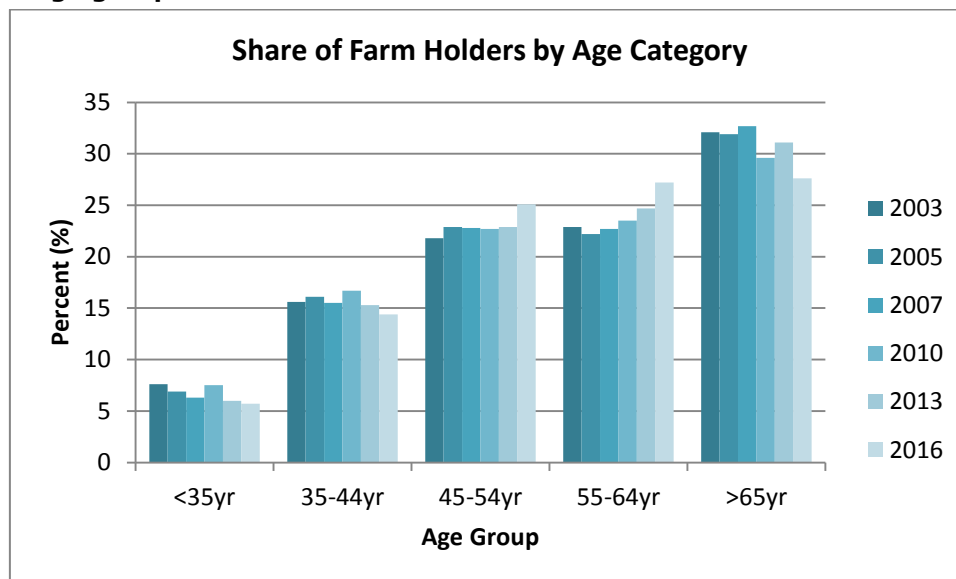
Indicator	C23 - Age structure of farm managers			
Measurement	Ratio: Farmers <35 y.o. / Farmers >55 y.o.	Farmers <35 y.o.	Farmers from 35 to 54 y. 0.	Farmers >55 y.o.
Source	Eurostat			
	Farm Structure Survey			
Year	2013			
Unit	ratio value	%		
Country				
EU-27	0.11	5.9	37.7	54.9
EU-15	0.09	5.2	40.0	54.9
EU-N12	0.12	6.6	37.0	56.3

Note: no data for Croatia in 2013

Source: https://ec.europa.eu/agriculture/cap-indicators/context/2017/full-text_en.pdf

This table indicates that the largest share of farm managers in the EU was over 55 years old in 2013, and that the phenomenon of older farmers was slightly more common in the old MS than the new MS, at that time. The data in the figure below, which uses a more detailed age breakdown, indicates that the share of farmers in the oldest age category (over 65 years) has been declining since 2003 and up to 2016, but so has the share of young farmers under 35 years and between 35 and 44 years, so there has been a growth in the proportion of farm managers in the age range 45 – 64 years over this period.

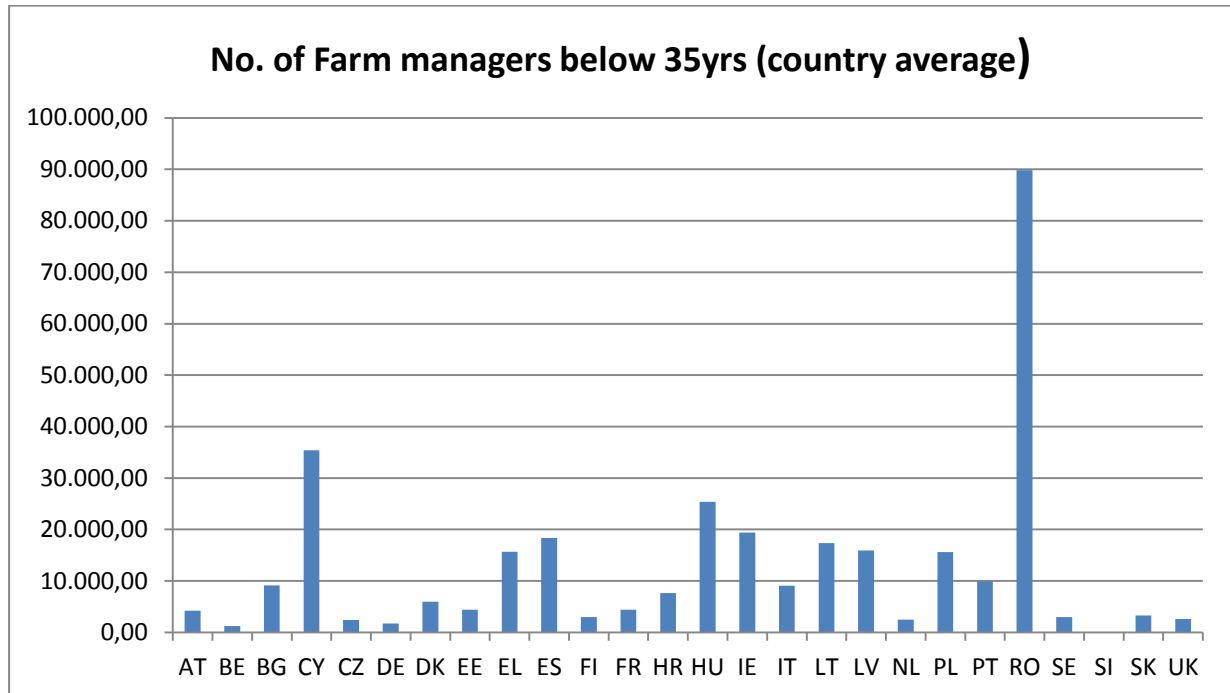
Figure 47. Age group of farmers and trends since 2003



Source: Zagata & Sutherland 2015; https://ec.europa.eu/agriculture/sites/agriculture/files/rural-area-economics/briefs/pdf/009_en.pdf and CCRI calculation from http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ef_m_farmang&lang=en

Examining differences between territories, the figure below shows how the absolute numbers of young farmers varies considerably between MS.

Figure 48. Young farmers



Source: DG Agri datasets as provided

Table 24. Relevant Indicators available at NUTS3

Indicator		Range	Ave	Trend
Number of farmers	Change in number of farm managers under 35, 2013-2016	- 3126 -> 422	- 110	Decrease at EU level (rural and intermediate areas only), with wide disparities at regional level
Farm employment	Change in labour employed by farm manager under 35, 2013-2016	- 4482 -> 354	- 93	Decrease at EU level (rural and intermediate areas only), with wide disparities at regional level

Source : OIR analysis from DG Agri data

These two indicators show that over the EU as a whole, the number of young farmers and the level of farm employment on farms managed by young farmers are both declining, on average; but that at a more local level, both positive and much more severe negative trends are observed, depending upon the area.

5.2.2.3 EU interviews and online survey

Overall, most MS representatives reported that GR in agriculture is a problem in their country, with many farmers not having successors (CZ, IE, EL); several member states report a shortage of young farmers especially in mountainous areas (CZ, IE, EL, ES, IT, AT, RO, SI). Stakeholders perceive EU policy measures as relatively beneficial at supporting GR both within agriculture and farming, and within rural areas more generally. Stakeholders in EL reported that EU co-funded projects provide a strong incentive for GR in rural areas. GR is reportedly supported/ encouraged by both RDPs and national policies in several MS (IT, ES, UK, IE, LT, EL, SK). However, few respondents made a direct link between CAP YF aids and tangible GR impacts, in their country. Some negative comments were made concerning the insignificant impact of Pillar 1 YF supplement in countries where its financial value is limited because of the threshold and scale of average Pillar 1 receipts (e.g. EE).

Several interviewees stated that in many countries there are very few farmers under 35 despite the application of CAP GR measures. This is not the same thing as saying that the CAP measures are ineffective, however: there may be no GR problem if average farmer ages are not getting higher and particularly if the titular head of a holding is not the

same as the person in charge of management decisions, for institutional or fiscal reasons.

The impact of CAP YF measures must be related to national policies concerning retirement, taxation, and institutional arrangements. Interviewees reported that in some MS, retirement options are not attractive to older people so they continue farming for as long as they can, holding on to agricultural land and capital. This limits the opportunities for young people to enter farming regardless of the CAP YF aid. Older people were seen as reluctant to retire because a) they still want control of the farm; b) they are more able to make investments on a farm than young people (via accumulated capital); and c) they do not want to cease farming activity, as they are still fit. CAP direct payments were identified as providing an important income source for many, discouraging older and non-farming land owners from handing over land to successors or new entrants.

Generally there is a perception that young farmers are strongly in favour of the CAP YF measures and would like to see them expanded. However, some interviewees considered that it is not clear to what extent the measures provide additionality in cases where young people are highly motivated already to take on farms. Young people who are either born into farming or have the investment capital to buy/lease land may not need CAP funding in order to succeed. Conversely, new entrants may be much less easy to reach. Overall, the CAP YF measures are perceived as positive for GR but rationales for this impact differ between situations. Pillar I aid was seen by some as a positive impact as it can underpin the income of small farms: *'we would have fewer farmers without it, including young farmers'*. By contrast, its potential to act as a barrier to older farmers releasing land was noted by other interviewees.

5.2.2.4 Data analysis

Correlation

The effectiveness of CAP Pillar 1 Young Farmers supplements on GR was initially investigated by testing for correlations between Young Farmers supplement (data available for Pillar 1 aid, for 2015 and 2016) and the 2013-2016 change in young farm managers' population (in numbers of individuals) across predominantly rural and intermediate EU NUTS 3 regions. The calculated Kendall correlation coefficient was statistically significant, but very small in value (-0.15), indicating a very weak, negative correlation between Young Farmers supplements and the change in young farm managers' populations – so, the more funding spent on YF supplement, the higher the decline in YF numbers.

The effectiveness of CAP Pillar 2 investment dedicated to Focus Area 2B on GR was also investigated through correlation between CAP Pillar 2 expenditure planned under Focus Area 2B for the full 2014-2020 period, and the 2013-2016 change in young farm managers' population (in absolute terms - individuals) across predominantly rural and intermediate EU NUTS 3 regions. The calculated Kendall correlation coefficient was again statistically significant but small in value (-0.28), indicating a weak, negative correlation between Focus Area 2B planned expenditure and change in young farm managers' numbers.

With due consideration to the years of the datasets, we suggest that the apparent weak negative relationships should be understood as more a policy *design*, rather than a policy *evaluation* connection. Impacts upon the number of young farmers may only materialise in the next years after supplementary payments or Pillar 2 aids have been offered, so we may not yet see impacts in the figures for YF change over a period which partially pre-dates the introduction of these measures. In that regard, the slight negative correlation between the variables points in the direction of policies spending more in areas of greater need, i.e. having higher YF supplements and directing more P2 GR aids to those regions with the fastest declining young farm manager populations.

Other tests for links between CAP GR aids and YF number trends expressed in ratios found no significant correlations. Also, no significant correlation was found between the 2007-13 early retirement aids and change in YF numbers from 2013-2016. It is concluded that these relationships, if they exist, are dependent upon context and should be explored with methods which account better for contextual differences across regions.

Multivariate (MCA) analysis

Multivariate analysis, as reported in section 4.3 of this report, was able to take account of significant inter-regional differences at NUTS 3 level, which gave more plausible results. These suggest that **the impact of CAP YF measures (considering both Pillar 1 YF supplements and Pillar 2 YF payments together) on YF numbers is mostly positive**. It further suggests that the impact of these payments is context-specific and depends on the infrastructure and wider economic characteristics of each rural area.

In non-agricultural, developed regions with low CAP expenditure, which includes regions in Germany and Austria, and parts of Sweden and Finland (densely populated with positive net migration, very small GVA from the primary sector): the number of young farmers is likely to increase by 1.24% where the *payments indicator*³⁸ increases by 1%. But an increase in the expenditure on M07 and in the number of large farms and in infrastructure provision would also increase YF numbers in these regions.

In agricultural developing regions, with rapid agricultural restructuring / abandonment, including the biggest parts of Bulgaria, Romania, Czech Republic, Hungary, Slovenia and Slovakia, Northwest Poland, Latvia, Lithuania and Estonia, and some regions in Portugal and north-east Spain (low population density, very high negative net migration, low economic development): an increase in the payments indicator by 1% would cause a potential increase of young farmers by only 0.5%, but an increase in expenditure on just M07 would lead to an increase of the number of young farmers by 0.9% - i.e. a bigger positive impact.

In sparsely populated less developed areas with many small farms, found in Greece, Croatia and Portugal, big parts of Italy and Spain and some areas in France and northern Bulgaria (sparsely populated but low net migration, increasing unemployment and most GVA/c from the tertiary sector - tourism and tourist services, and otherwise low economic development), a 1% increase of the payments indicator is associated with an increase in number of young farmers by 2.18% - this is the strongest response for all the clusters.

In agricultural regions with large farms, high CAP expenditure and an ageing farm population, covering Ireland, Denmark and Cyprus, and large parts of France, Spain and Poland, areas in northern Italy and the UK, and a few regions in Czech Republic, Slovakia and Finland (densely populated and growing, with high economic development), an increase of the payment indicator shows a small positive impact on YF numbers but the relationship is not statistically significant. However, an increase of 1% in expenditure on M01 and M07 would have a small, significant positive impact on YF, increasing numbers by 0.51% and 0.88% respectively.

In developed rural areas where other sectors dwarf the impact of agriculture, spanning areas in Belgium, Germany, the biggest part of the UK and much of Finland and Sweden, western France, northern Italy and Austria (populated and growing areas, GVA/c primarily generated from the tertiary sector with minimal contribution by the primary sector, and highly developed), a 1% increase in the payments indicator would cause an increase in the number of YF by 1%.

In all the 'clusters' identified by the analysis, the number of young farmers generally decreases as the economy of an area develops its focus from the secondary to the tertiary sector - but this also applies to the number of farmers, so it may not represent a decline in the proportion of young farmers. These preliminary results suggest a range of interacting criteria that could affect the relative performance of CAP GR aid in different settings, findings which can be triangulated by comparison with the results from the case studies.

FADN data analysis of YF aids in Italy and France, to examine impact of YF aids on farm performance as an indicator of successful GR

As discussed in section 3.4 of this report, the FADN analysis has shown that in both Italy and France, there is good evidence to suggest that YF aids under the CAP (both pillars) promote better performance and resilience among young farmer beneficiaries than is

³⁸ A composite indicator combining population, education and spend on CAP YF pillar 1 supplement and pillar 2 FA 2B.

found among similar farms in similar conditions that have not received the YF aids, measured over a time period of 3 - 6 years. This is evidence of the additionality of funding in respect of its impact upon farm performance, which can be seen as an indicator favouring GR, although on its own it does not demonstrate GR.

Polish CGE analysis

As discussed in section 3.5 of the report, the Polish CGE analysis estimates a positive impact of CAP YF expenditure on both GDP and employment in agriculture across most of the NUTS2 regions of Poland, with the exception of those which have a particularly low share of rural people working in agriculture. Again, this on its own does not demonstrate a positive impact upon GR but it suggests that the funding is increasing the performance of farming relative to how it would be without the support, which may indirectly attract people to stay in, or move into, the sector. Considering the impact of different elements of the YF aid, the model suggests that the Pillar 1 YF supplement's main positive impact upon employment is confined to the farm sector, whereas that for the Pillar 2 aid under Focus Area 2B is less marked in agriculture itself but is also positive for the wider rural economy as indicated by increases in sectors close to agriculture (food processing and marketing) or known to be significant in rural areas (tourism and crafts). The modelling also indicates that the scale of these impacts is relatively small, by comparison with wider economic impacts upon regions' GDP and employment from non-CAP factors.

5.2.2.5 Case study findings

The extent to which the CAP Young Farmer measures been effective in supporting GR varies across the seven case study countries and there are differences in respect of the impact between Pillar 1 and Pillar 2 support.

It is reported that the YF support from both pillars has limited influence on the decision to take over a family farm in BE-F, IE, EE and PO, but it acts as an impetus to make the change because it offers the possibility to improve farm performance. GR in most farms within the CS countries occurs within the family, usually a transfer from father/parents to son(s)/daughter(s). Very small percentages of new YF have a non-farming background.

Because Member States have made different choices about the payment level, eligible area and proportion of direct payment budget that they devote to the Pillar 1 YF supplement, its impact is judged differently, in case study countries. It is considered low and having little effect in EE and IT, in contrast to IE, HU and PL where it is seen as important in relation to stabilising farms' incomes and in the case of PL farmers suggest it is used to fund land purchase. In IT, the perceived effectiveness of the payments is also linked to the farm type (size).

Table 25 shows the very different potential impact of Pillar 1 YF supplement upon farmers in the 7 case study countries. In some cases it is reported that the amount offered per beneficiary has been too low to make much difference for most farms (e.g. Estonia, not least because the scale of Direct Payments in Estonia is particularly low compared to the EU average), while in others the sums may make an important difference, particularly where low income / marginal holdings specifically receive higher rates of aid (e.g. France, Hungary, Ireland). Nevertheless, other non-CAP factors are also important in these contexts and in Ireland the specific link to national reserve allocations is increasing the impact of the supplements (see good practice examples in section 3.6 of this report – note this approach would not be applicable in Hungary as it implements SAPS).

Table 25. Case Study Comparison of YF payments under Pillar 1 of CAP

Member state & year	Total Pillar 1 sum in EUR per year	% share of Pillar 1 Direct Payments	Average rate per hectare	Upper limit on eligible hectares	Maximum sum per beneficiary	average sum per beneficiary
France 2017	70 million	1%	68	34	2,312	
Estonia 2017	0.35 million		20.92	39	519	
Estonia 2018*	0.44 million		45.41	39	1,771	
Hungary 2016	14.5 million	0.9%	68.4	90	6,156	
Poland 2017	291 million		54	50	2,700	604.8
Italy 2017	38 million	1%		90	2,500	1,000
Italy 2018*			doubled			2,000
Ireland	76 million	2%	68	50	3,400	2,200
Flanders	15.2 million	1%	88.72	90	150,000	

* these MS chose to raise the maximum proportion of total P1 rate/ha from 25% to 50%, for 2018

Source : CCRI et al, gathered from CS teams

Pillar 2 measures targeted at young farmers are viewed as effective in supporting GR in BE-F, PL, IT and to a certain degree in IE and HU. Implementing integrated measure packages seems to be a very effective tool in addressing GR in a more coordinated way, where advice, training and financial support are closely linked and they operate alongside national and regional policies (e.g. institutional, fiscal) which also help to address structural barriers to GR (IT, FR).

Overall from all the case studies, young farmers view the support from CAP positively but its effectiveness is highly context-specific. The wider economic situation, socio-cultural context, level of infrastructure and services as well as national and fiscal policies are often the deciding factors in respect of successful GR in agriculture, and more widely.

Very few interviewees expressed views or cited evidence concerning the potential impact of CAP YF measures on wider GR in rural areas. LEADER was mentioned in this context as a potentially valuable stimulus to local development, particularly where it was known to have offered support to new entrants and/or rural entrepreneurs from non-farming backgrounds (FR, HU, EE). Interviewees cited rural service provision and wider national policies as most relevant to maintaining rural vitality (see answer to ESQ 7).

Do stakeholders, beneficiaries think YF aids make a difference to agricultural GR? What evidence supports these views?

In **BE-F** Beneficiaries say that CAP support did not make much difference to their decision to take over the family farm, but the funding was a welcome bonus to the business. There is secondary evidence from research that the subsidies allow a new farm manager better to handle uncertainties arising from price fluctuations, and make capital investments as well as, crucially, creating a financial buffer for early business performance. Without start-up aid, fewer young people were thought likely to take over their parents' farm, thus potentially increasing the rate of agricultural concentration. A general consensus among interviewees was that without young farmer aid, installation rates would be significantly lower and farm enlargement more marked.

In **Ireland** overall the scheme is considered successful with a high number of applicants and few complaints. Policy makers have not been lobbied about the level of Pillar 1 support, and there have been no criticisms of scheme delivery (national policymaker, DAFM). Measure 4.1 'TAMS II' the Young Farmer Capital Investment Scheme is generally regarded as successful. Paying Agency personnel say the scheme is 'very generous' and a "huge help in bringing young farmers into partnerships where the YF has effective control". Farmer interviews in both local areas indicate the attraction of the additional 20% grant support under the TAMS II programme, and consider it a factor encouraging the development of farm partnerships between young and older farmers. Partnership Support under Measure 16 helps to defray the planning and legal costs of creating

partnerships: current figures indicate 1,556 registered partnerships in Ireland (Leonard et al, 2017b). However dairy farming is the only sector where farm partnerships are attractive from a business perspective, as farms are large enough to be able to financially support 2 farmers. In other sectors it is attractive from a succession perspective but the farm alone doesn't generate enough income to support both partners. The size of the partnership fund is limited and uptake has been low.

In County Mayo where farming is marginal, farmers suggested that the Pillar 1 YF scheme was useful support but not enough on its own or with M4.1 support to attract people back into farming. Farmers' returns are low and most have second jobs to provide a steady income. Competition for jobs in other sectors locally (tourism, pharmaceutical factories), and further afield (construction, professional openings in Dublin) with higher and more reliable incomes means few young people are attracted to farming. As one farmer indicated when asked why he continues to farm despite the low returns: *"If you are brought up with it, it's in your blood, it has to be in your blood, and you've got to want to do it."* (Sheep farmer Co Mayo). In County Cork where land is higher quality and dairy farming predominates, young farmers indicated the importance of Pillar 1 YF aid and the YF top-up under TAMS II, contributing to the development of partnerships although again not sufficient alone to bring about succession. The view was that where farms are already considering succession, the schemes provide the impetus to make the change. But interviewees all knew of neighbours who had no succession plans and no children wanting to farm, suggesting 40–50% of farmers face that situation.

Some national interviewees suggest that despite GR being much more prominent in the current programme there is no targeted help for older farmers to encourage them to identify successors, and a more 'generationally balanced' approach needs to be developed in the future. Policymakers suggest previous experience with an unsuccessful early retirement scheme 2007-2009 demonstrated that older farmers did not want to stop farming. The scheme obliged retirees to cease altogether, and had little impact on changing behaviour of the older generation. The current government view is that the aim is not to push the older generation out of farming but to ensure their continued involvement, while supporting young farmers to get into positions of greater responsibility and then management control, in a gradual and planned process (DAFM interviewee).

In **Italy** the YF payment from the 1st Pillar is not currently considered as a real incentive by young farmers: because the average value of the support is quite low - small farms predominate in our two study areas. The **YF package** in the RDP is considered a positive approach, both by institutional actors/experts and by different types of family farms. In Sicily, generation renewal policy combining CAP and other measures has reduced the average age of beneficiary farmers to 26.4 years. In Marche, data from the 2007-2013 evaluation shows the rate of survival of projects presented for approval is quite high both for installation support 112 (70%) and for associated measures delivered in a package format (68%-73%), implying that the call favoured high-quality projects but also mobilised well-motivated farmers in pursuing their development objectives.

The impact of YF supports on GR is diverse across the different regions and types of family farm. On average, the YF package 2007-13 promoted GR of 9-10% of CAP beneficiaries in Italy and this impact was higher in mountains and areas with natural constraints (between 15-30%), depending on the resource addressed to these areas (RDP ex-post evaluation). In farms with high-quality food production and processing and diversification strategies its role was fundamental in **accelerating** generational change. Moreover, in the logic of the package, the start-up aid (around EUR 40-50,000) was used as a trigger for farm investments, which would have been hard to make without this initial financial starter: *"When the start-up aid arrived, I had in my hands the capital needed to start my investment plan"* (interview with farmer no.9). This concept was confirmed by most of the farmers interviewed. According to this logic, the start-up aid also worked as a first advance.

In **FR**, the challenge of GR in agriculture is complex. The diminution in the number of farmers has been a long-term trend. The goal in France is thus not to replace every departure with a new farmer but to favour, as far as possible, young people taking on holdings rather than simply allowing neighbouring farms to enlarge their size when an older farmer stops farming. The French policies of installation and GR within the CAP

could be seen overall as efficient: the rate of renewal of farmers is quite high and stable (around 70%, 2007-2013) – i.e. for every 10 farmers who quit, 7 replace them. The rate of replacement by YF is 48%, and that of YF receiving installation aid under the CAP is 23%. The context indicators show that the age structure among French farmers is positive. In 2016 the share of farmers aged between 35 and 55 was 18.8% and the proportion of principal farmers under 40 years old 15.6%. This places France in fourth position in the rankings of EU MS in this regard, behind only Austria, Poland and Slovakia.

In France, the ex-post evaluation of the national RDP (PDRH) 2007-2013 showed that the installation support measures contribute positively to the renewal rate in agriculture. Its survey³⁹ conducted with beneficiaries showed that YF aid by itself is not always sufficient to induce the decision to settle in agriculture. Only 18% of beneficiaries state that they would not have settled without YF aid. On the other hand, it greatly influences the conditions of transmission, as well as the viability of the project. Nearly half of the respondents mentioned that they would have settled in agriculture without YF aid, but with a smaller project or a different installation project. The survey also highlights a more significant role of YF aid in the installation decision and its scale in the specialized milk and meat sectors YF aid should be seen as part of a wider approach, which altogether creates an efficient system for supporting viable businesses, particularly in mountainous and other ANC regions. The range of support has proven effective in assuring balanced GR across the territory. The rate of installation with aid is higher in ANC areas (which also receive a higher rate of aid) and in the livestock sectors, where the need for investments is generally greater. The aid for ANCs, as well as other supports which target marginal areas, also play an important role in supporting incomes and the viability of livestock farming in these areas.

There are farmers who do not get the “YF payment” under measure 6.1, but they are nevertheless supported by the national AITA (accompanying farm installation and transmission) programme, for advice, preparation of business plan, and the rest of the package. The decision to give support or not from M6.1 is only made at the end of the exercise. Both have high survival rates after 5 years, the difference between M6.1 beneficiaries (91% survival - ex-post evaluation) and non-beneficiaries (87% survival) within the AITA programme is small.

In **HU** according to interviews, most young farmers are characterised by a modest amount of accumulated capital. For them, the maximum €40,000 of young farmers’ aid from Pillar II is not sufficient to start an independent, viable farm. However, demand was strong: for the first call, the planned budget was €121.8 million and expected number of supported projects 3,000. According to official announcement 3,744 applications were received for a total of €145.5 million, of which 1,170 cases were supported amounting to €67.6 million, i.e. 57% of the total amount is already committed. This suggests the support is popular and potentially oversubscribed. Pillar I support for young farmers is judged a more significant incentive to help them expand their land use, with an upper limit of 90 hectares. In 2015, nearly 6,700 applications from producers were approved covering 149,800 hectares. In 2016, an area of 171,000 hectares was supported, representing 8,900 producers and €68.4 per hectare.

The Pillar 2 start-up support provides the foundations for building effective farming. The support can be used for a specific investment, but it can also be used for self-financing for a larger project. The Young Farmer sub-programme provides a coherent framework for the RDP support system for young farmers. Knowledge transfer and innovation, advisory services and cooperation should also be included in the Young Farmer sub-programme, but it is not yet operational. Young farmer support can work especially well where employment can be expanded. Initial support was focused on horticulture and animal husbandry. These two sectors have high values in terms of value creation and employment, so their impact on the rural environment is much greater than in the case of arable crop production. Based on the experience of the implementation of the 2007-2013 RDP, young farmer subsidies have contributed to the modernisation and restructuring of the sector alongside GR. Applicants for Young Farmer support mainly

³⁹ Source : online survey carried out in 2016 as part of the ex-post evaluation of the PDRH at the level of 3 French regions, including Auvergne. 119 respondents.

used the funding for the purchase of new machines, technological upgrading, breeding animals with better genetic background, and the modernisation and expansion of the existing production infrastructure, which effectively increased the efficiency and effectiveness of their farming. The young farmer measure contributed to a moderate increase in the gross value added and labour productivity of the beneficiaries. As a result of the measure, 7,800 skilled entrepreneurs entered the sector between 2007 and 2013, but the small amount of support did not allow for permanent self-employment for most young farmers.

In **PL** as of November 2018 there were 148,980 beneficiaries supported with Pillar 1 YF aid and 17,219 applications (out of which 9,408 positively verified) for Pillar 2 aid. Pillar 1 payments for young farmers covered nearly 1.6 million ha, which is 11.4% of total UAA in Poland. Interviewees noted that YF DP within Pillar 1 is important and positive because the support gives a young farmer a certain stabilization of income - for a farm whose size is slightly above national average, the income from direct payments with this additional YF component gives an income close to the national average salary. So whatever the market situation, there is some income security for a young person to rely on. Pillar 2 support allows young farmers to combine the TF targeted support with other RDP measures so that the farm household can combine several measures in a package and realise larger investments. It is more targeted than FYP pillar 1 aid, but one cannot purchase land with this support, whereas it is possible with P1.

Monitoring data seem to confirm that beneficiaries usually combine YFP pillar 1 with other GR related RDP measures. Based on that we can conclude that at least the following measures are coherent with YFP pillar 1 with RDP measures 6.1, 6.2, 6.3, 6.4 and 4.1 Support for investments in agricultural holdings (Modernisation of agricultural holdings, and Investment in Natura 2000 farms). The allocation of the funds by beneficiaries of the two GR types of measures seems very much complementary. According to a Study ordered by Ministry of Agriculture and Rural Development (Polish village and agriculture, 2017), the pillar 1 payments (including YFP part too) in 2017 were most often spent on: purchase of machinery (declared by 59% respondents, and amount spent was on average 47% of their total DP), purchase of fuel for agricultural production (56% and 31% respectively), and purchase of fertilizers (50% and 32%). It was also devoted to purchase of land (13% and 22%). So it was complementary to YF in pillar 2, which is farm development based on business plan.

In **EE**, because of the low support level which is linked to Estonia's generally low Pillar 1 payment rates, beneficiaries and farmers organisations' representatives do not perceive the Pillar 1 YF payment to have any effect on the decision to take on farms/enterprises. In most of the traditional farming types (grain, dairy, beef, sheep, etc.) more land than 39 ha is needed in order to have effective production and give at least one full-time job in the enterprise. In total, 22.1 million euros have been planned for the RDP 2014–2020 **Young Farmer business start-up aid** with the aim to support 553 enterprises. By the end of 2018 (three calls) there have been 339 successful applicants. It was mentioned by all respondents as the most effective CAP GR measure, as it helps to make needed investments and gives initial capital if the enterprise is started from zero. It was also mentioned that it helps to speed up the decision of giving an enterprise over to the younger generation. However there is a need for additional investments to develop the business and this is difficult, especially when taking into account YFs' difficulties to access credit.

5.2.2.6 Limitations encountered in answering the evaluation question

In the online survey stakeholders referred to GR and identified problems and barriers, without always relating them to YF schemes. During the EU level interviews, stakeholders often did not distinguish between YF support and the overall CAP Direct Payment support, narratives and comments are about the CAP funding in general, not specific to GR measures.

The significant limitations of the correlation analysis stem primarily from the unavailability of EU-wide datasets directly related to the scope (rural areas) and focus (GR) of the ESQ over appropriate time periods. These mean:

- The non-matching of years linked to the datasets used in the correlation analysis, namely CAP input datasets (Pillar 1 data refer to 2015 and 2016, Pillar 2 data refer to planned expenditure over the entire 2014-2020 financing period) and impact datasets (young farm managers' population data refer to 2013 and 2016). Therefore, the latter 'impact' data should be regarded as 'context' data rather than proper 'impact' data – i.e. we are most likely picking up the positive targeting of aid to areas with significant problems, rather than the impact of this aid upon YF numbers. (Also the Pillar 2 expenditure data should ideally be actual expenditure, rather than planned, to test for impacts).
- The non-normal distribution of the data used in the correlation analysis as well as the presence of obvious outliers, and therefore the impracticality of Pearson correlation coefficient calculations. A cube root transformation was applied to the input datasets and Pearson correlation coefficient calculations were attempted, yielding fairly similar conclusions as with the Kendall method: a statistically significant but very weak negative correlation in the case of Pillar 1 data and young farm managers' population change, and a non-statistically significant correlation – i.e. a potentially 'random' correlation – in the case of Pillar 2 input data and young farm managers' population change.

Nevertheless, the MCA analysis provides a robust approach to overcome these weaknesses. It is more able to distinguish how, in different types of rural area, the YF aids show a positive link to an increase in YF numbers over time.

Very little concrete information was obtained from case study reports concerning the impact of YF measures on wider GR in rural areas, but the Polish CGE analysis provides an estimated positive impact on regional economic conditions which indicates that Pillar 2 YF aid could be an enabler for rural GR.

5.2.3 ESQ 4: To what extent have the CAP measures/instruments relevant for generational renewal contributed (directly and indirectly) to improving rural areas' development?

- As regards infrastructure and services?
- As regards local governance/capacities?
- As regards social capital?

5.2.3.1 Our understanding of the question

This ESQ aims to pick up connections between the use of CAP GR measures and the process of rural development in different situations across the EU. We paraphrase 4 specific elements of investigation thus:

- To what extent do application of the GR measures result in improved service provision, especially services required/desired by young people and entrepreneurs (education, childcare, transport, etc.)?
- Does application of the GR measures result in improved infrastructure that is especially attractive/useful for young(er) people? (broadband, mobile phone cover, modern water supply, sewerage, transport, etc.)?
- To what extent does application of the GR measures result in improved working among local governments or new governance partnerships, or the ability of these institutions to address local issues?
- To what extent does GR spending foster social capital through stimulation of networks, groups, partnerships and other collectives?

Evidence sources

- Indicators;
- Online survey and EU level interviews;
- Literature review;
- Data analysis – notes from the Multivariate analysis;
- Interviews and workshops in Case Studies at national and local levels;
- EU level workshops with ENRD and with the Commission.

The combined result of analysing these sources is presented in the conclusions below. A summary of the evidence from each source then follows, ending with a note on the limitations of the analysis.

Conclusion

Infrastructure, services and social capital in rural areas are poor in a number of member states and this is commonly identified as a constraint for GR. The study found little concrete evidence on links between CAP GR measures and these factors. However, the broader evidence suggests CAP GR measures have a limited, mainly positive direct and indirect impact on these broader rural development pre-requisites. It further suggests that measures targeting rural services (notably Pillar 2 Measures 7 and 19: LEADER) have more significant impact in this respect, and that when applied synergistically with YF aids and initiatives, benefits to both arise.

In the evidence for ESQ 3, it was noted that YF aid in some MS (Italy, France, Ireland, Hungary) has stimulated co-operation, networking and partnerships among farmers, which is a positive impact upon social capital. More evidence from Case studies and national workshops is reviewed here and supports this view, and there is also some similar evidence from the literature.

Local government has directly benefited from LEADER assistance to improve infrastructure in some cases, and LEADER is known to contribute positively to social capital. Where LEADER projects and initiatives explicitly target young people and are therefore directly relevant to GR, there is evidence from this study that these measures promote social capital, infrastructure and local governance (in Hungary, Estonia, France, Ireland). Evaluation of Rural Development Programmes 2007-2013 has indicated that where RDPs focus resources upon Measure 7 or LEADER and invest in rural services and economic diversification, this boosts rural vitality and promotes positive social and governance outcomes, also helping to make rural areas more attractive to young people. It is a widely-held view that the whole of the CAP plays an important role supporting social capital and rural infrastructure and services indirectly, mainly in the most marginal and remote rural areas. This is an argument based principally upon the relative scarcity of other economic activities and thus the financial significance of CAP aid from both pillars in stimulating rural economic and social provision. As it goes beyond 'CAP measures relevant for GR', this phenomenon relates more closely to the subject matter of answers to ESQs 1 and 7, where it is more fully evaluated.

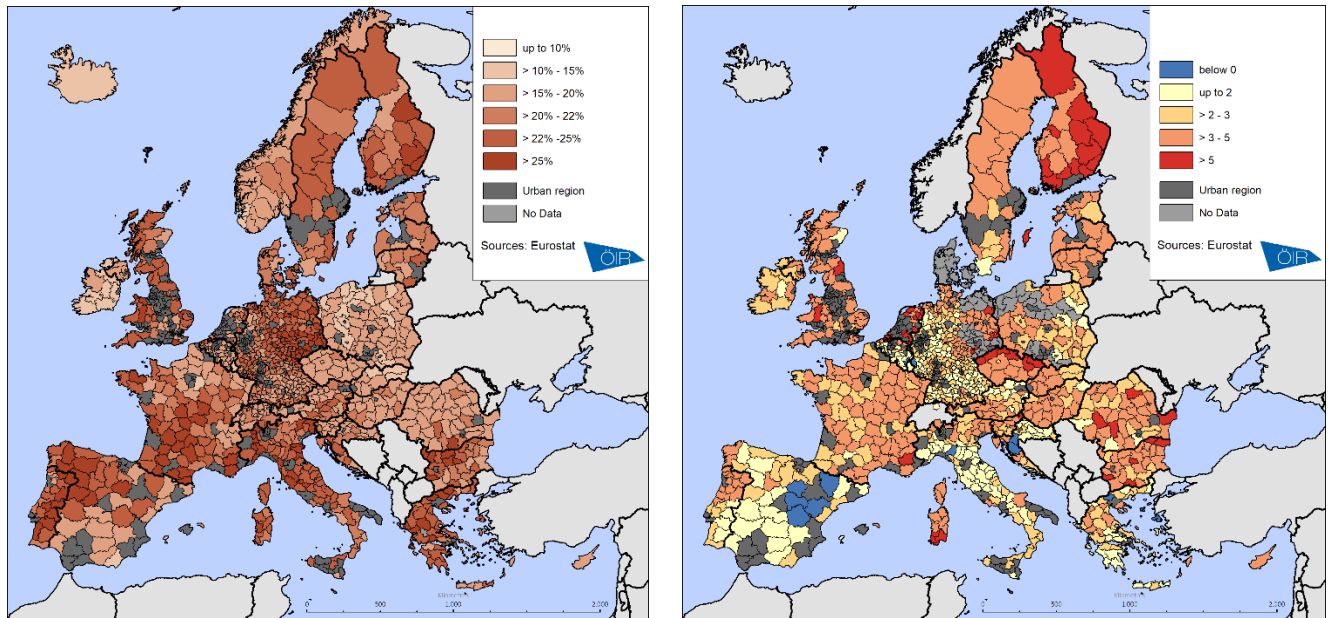
By comparison to 2007-2013, the 2014-2020 RDPs offer generally much smaller allocations of funds towards Measure 7, but increased funding to LEADER: total public funding between both periods is similar. The Pillar 2 amount spent on broader rural development is modest compared to spending on other priorities and of this, the proportion that is explicitly targeting GR appears to be very small (based upon case study evidence alone). One area in which significant change is observed in new programmes compared to the old ones, is in plans for greater use of the co-operation measure and the new EiP-Agri operational groups which are intended to foster innovation both within and beyond agriculture. However implementation has been delayed and we were unable to identify suitably developed examples of how EiP-Agri helps to boost social capital, infrastructure or local governance.

Few of the case studies cite direct examples where CAP GR measures explicitly include support for rural broadband (only HU mentions it); however, we cannot assume that this

is representative of the situation across the EU. Planned spend on this sub-measure for the EU-28 in 2014-2020 was not possible to isolate from overall planned spend on Measure 7, in the available datasets, but from the case studies it is apparent that funds are targeting rural broadband provision for a range of goals, and its potential significance for GR is recognised.

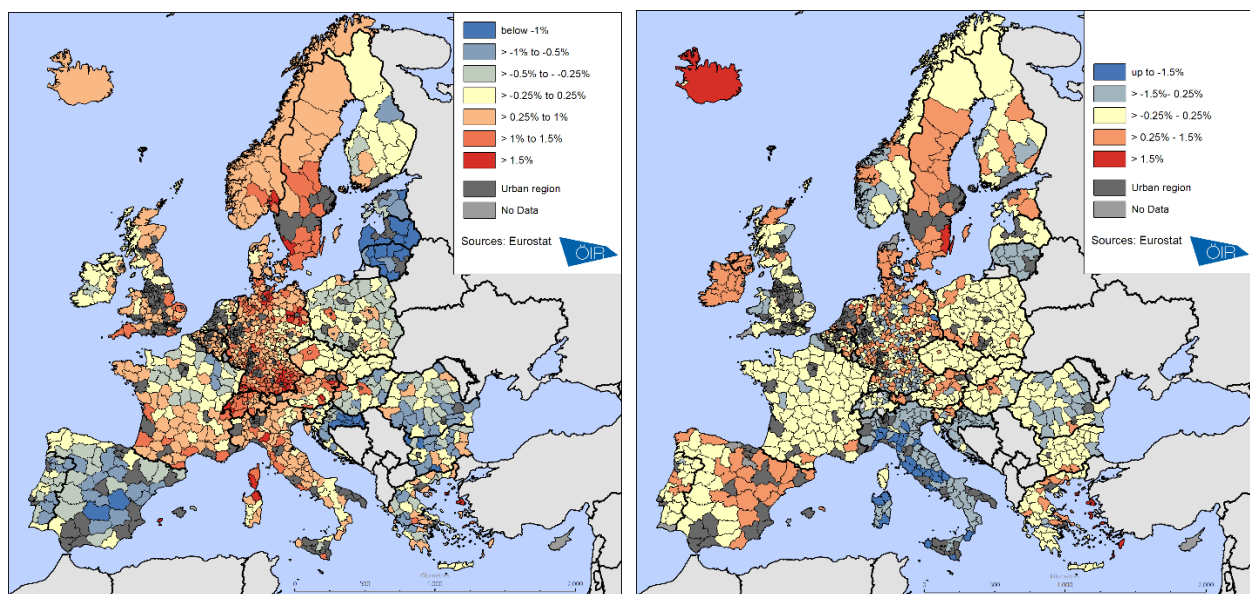
5.2.3.2 Indicators

Age structure of the rural population over time (share over 65, trend since 2007)



These maps show where regions have the most elderly populations and where the ageing trends are strongest. Broadly speaking, people over 65 are a significant share of the population in most areas except for Poland, Slovakia, Bulgaria, Ireland and to a lesser degree Hungary, Czech republic, southern Spain and northern Austria. The strongest increases in share of older population are seen in Finland, Sardinia, the Netherlands and Czech republic and to a less widespread extent in the UK, Bulgaria and Romania and a few regions in France.

Rural in- and out-migration trends (net migration and direction of change, 2013-2016)



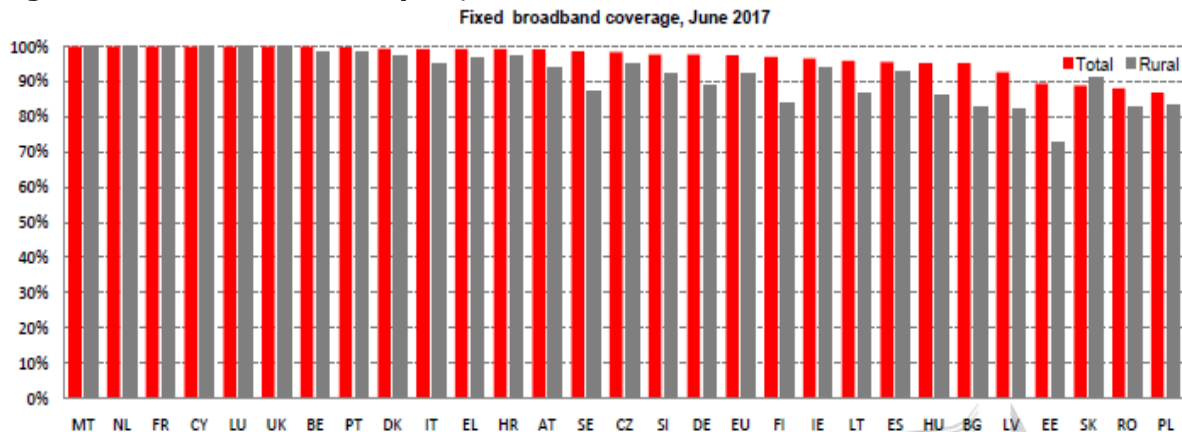
These maps show where the exodus of people from different regions is greatest (left hand map, blue) and increasing the most (right hand map, blue). This suggests areas of worsening concern in Bulgaria, Lithuania, Croatia in particular, but also shows that

depopulation is also an issue for much of Spain and Portugal, Romania, the Baltic states, Hungary, parts of Greece and north-east France.

Broadband – a key element of infrastructure

Fixed broadband is available to 98% of Europeans, and 80% of European homes are covered by fast broadband (at least 30 Mbps). 4G mobile networks cover on average 91% of the EU's population. 75% of European homes subscribe to fixed broadband. 68% of rural homes in the EU had a fixed broadband subscription in 2017. The Netherlands, Luxembourg, the UK and Germany registered the highest figures, while in Bulgaria and Finland, less than half of rural homes subscribed.

Figure 49. Broadband cover by MS, total and rural 2017

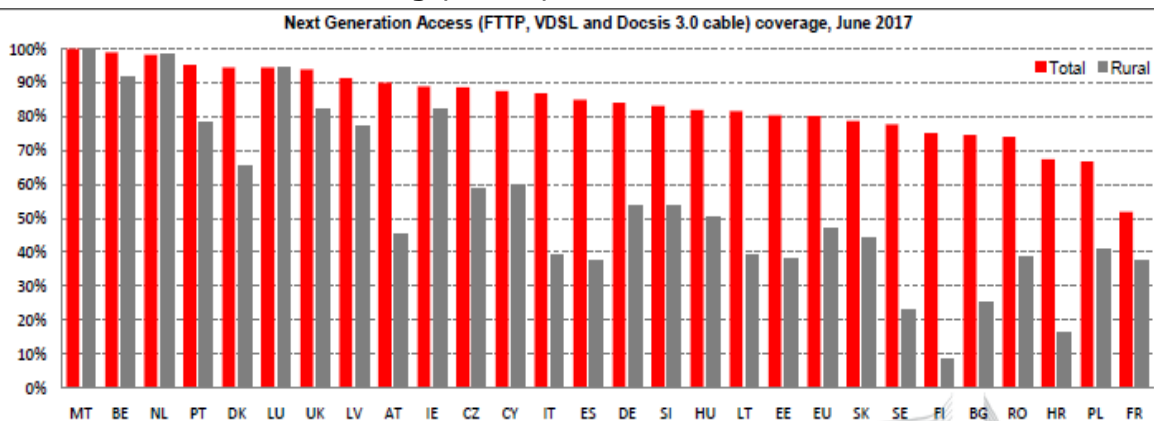


Source : Digital Economy and Society Index 2018 Report.

In the Netherlands, Germany, the UK, Belgium, Austria and Sweden, rural and national penetration rates are identical or almost identical. However, in Finland, Bulgaria, Portugal, Romania and Greece, where fixed rural take-up is among the lowest in Europe, there are significant gaps of 15-18% compared to national take-up.

Coverage of Next Generation Access (NGA) technologies improved significantly in rural areas in 2018, from 39% to 47% of homes compared to 2017. Rural NGA is still far behind national coverage.

Next Generation Access coverage, EU-28, 2017



Source : Digital Economy and Society Index 2018 Report.

According to the digital skills indicator*, 17% of the EU population had no digital skills in 2017, the main reason being that they did not use the internet or only seldom did so. This represents a decrease of 2% compared to 2016. There are proportionally more men than women with at least basic digital skills (respectively, 60% and 55%). About 31% of people with low or no education have at least basic digital skills. This figure is significantly lower among those living in **rural areas** (49%) than for city-dwellers (63%). There are major disparities across Member States. The share of people with at least basic

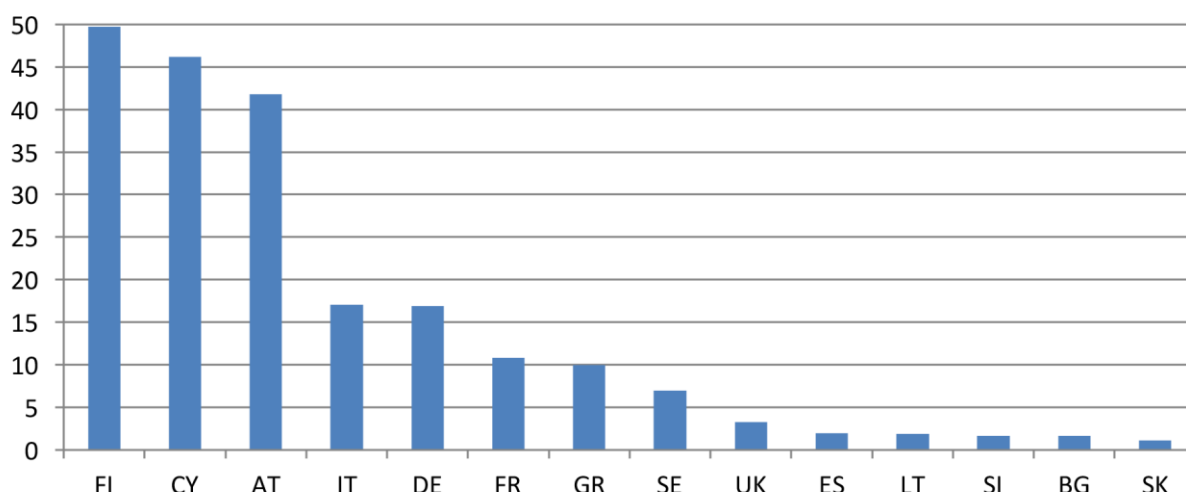
digital skills ranges from 29% in Bulgaria and Romania to 85% in Luxembourg, 79% in the Netherlands.⁴⁰

RDP targets for broadband

Ex-ante targets were estimated by Member States for their RDP investment in rural broadband, as shown below.

Figure 50. Percentage of rural population benefiting from new or improved services/infrastructures (ICT)

(focus area 6C)



Source: Facts and Figures; Rural Development in the European Union 2016
http://ec.europa.eu/agriculture/index_en.htm

5.2.3.3 Online survey and EU interviews

The view was expressed in many survey responses that living in rural areas is not attractive to, or not easy for, young people. Reasons given included a lack of infrastructure and remoteness/ distance from cities, so population in these areas is decreasing (CZ, ES, AT, SK, EL, SI, IE). Respondents reported a lack of social and educational infrastructure (schools, health services, road maintenance, inefficient transport, lack of economic activities in EL, SI, FI, IE, SK, RO), while others mentioned a particularly high cost of living or housing compared to urban areas, and also high cost of land (DK, ES, UK).

Survey scaled responses indicate: 1 = strongly agree; 2 = agree; 3 = neutral; 4=disagree; 5=strongly disagree. Average values across all 25 responding MS were calculated (one MS equals one vote):

- Young people want to reside in rural areas because of the strong social/cultural values = 3.17 average score, indicating that most respondents disagreed with the statement
- Very few young people want to reside in rural areas = 2.71, so most respondents agreed with this statement
- Many young people residing in rural areas feel they have no option as cannot afford to move away = 2.64, so most respondents agreed with this statement

Policy impact: In some MS, GR policies were not perceived as effective enough as it was felt they cannot address the problems of demographically vulnerable areas (ES, SI) or the EU RD process is not sufficient as it is not combined with national RD (SK). Some

⁴⁰ Source: Digital Economy and Society Index 2018 Report.
<https://ec.europa.eu/digital-single-market/en/news/digital-economy-and-society-index-2018-report>

MS, however, report initiatives that have helped both GR and these other factors, such as:

- LEADER (AT) – investing in rural infrastructure;
- Change of ownership policies (DK) - fostering new economic activities in rural areas;
- Participation in Social Farming Schemes & other Communal Settings (UK) strengthens social capital;
- Support of producers' groups (EL) – a stimulus to economic activities, promoting social capital;
- Local government intervention in the land market (CZ) to help young farmers and young people;
- Partnerships between farmers and farm family members to enable shared properties/ownership among generations, exist in some MS (IE, ES) - these help to make it easier for young people to stay in rural areas. They are supported by a mix of national/EU policies.

Interviewees suggested that CAP incentives can act as a driver for young people to become farmers, but they note that this decision is much more complex than a simple economic calculation: even if farming opportunities exist, decisions to live in rural areas are influenced by the future welfare of the household. Some experts and stakeholder representatives said that the most important factors influencing this decision are labour opportunities for other household members (spouses) and the presence of schools for children. In addition, particularly in remote areas, social services (such as medical care) were judged expensive and occasionally non-existent, because there is a limited and too dispersed market for them. Poor infrastructure was also mentioned as a negative driver, however it was noted that infrastructure development may be supported by a wide range of non-CAP policies as well as some CAP measures. In remote areas, municipalities have benefited from investment initiatives under LEADER. Social and cultural structures in rural and remote areas are considered positive drivers for young people to settle there, as *"they are aware of the social and cultural life and they like it"*. In addition, new digital infrastructure development like broadband access was seen as a positive way to alleviate the lack of local social capital – enabling online communities to develop. Despite all of these general comments, evidence to link CAP GR measures directly to the promotion or application of social capital was lacking, although some noted evaluation results suggesting a particular efficacy of LEADER, in this context.

Some interviewees highlighted an indirect positive impact of the CAP on national policy design, in some Member States: before, most policies were urban oriented, life in cities was supported and perceived as more important. Now, new policies are directed towards RD because of the Pillar 2 funding. For instance, in Sweden it was noted that the CAP may not be directly supporting infrastructure and social capital, but it has overall shifted the desire for knowledge towards rural development: *"for example RD is now taught at the university – although there is no CAP support for this"*.

5.2.3.4 Literature review

An EiP-AGRI focus group (2016) discussed innovative models for entry developed by new entrants and older farmers, to overcome economic barriers. These include several which simultaneously support social capital, networking and governance: community supported agriculture, social enterprise models and workers' cooperatives; also equity partnerships, farm incubators, and a variety of partnership models in which older farmers provide start-up opportunities to non-relatives.

Some studies emphasise the importance of these underpinning RD factors, for successful GR. Strano et al. (2010) suggest that high-speed broadband can tempt young people back into an area. The need for broadband was reported as increasingly significant with the rise of digital agriculture; to be innovative, it is argued, farmers need good internet. Two studies concluded that EU subsidies were too focused on fostering sector competitiveness, marginalising social issues important for wider GR such as depopulation, education, culture, human and social capital, as well as non-agricultural rural economic activities and rural services (Carbone and Subioli, 2008; Michalewska-pawlak, 2013).

In contrast, two sources find evidence of CAP measures supporting these RD pre-requisites. Adamowicz & Szepeluk (2016) found that in Poland, EU rural development schemes contribute to rural vitality by supporting the creation of new jobs, technical and social infrastructure, and maintaining cultural heritage. ENRD (2017) reported that in Slovenia RDP aids target green tourism, natural and cultural heritage, social entrepreneurship, social care services, treatment of organic wastes, and energy and heat production from renewable sources, while the Finland-mainland the RDP offers grants to support experimental and innovative entrepreneurs under M6.2 and M6.4, as quick and flexible 'innovation vouchers'. It should be noted that only some of these examples would fall within the definition of CAP aids relevant for GR.

5.2.3.5 Data analysis

The MCA analysis, through its identification of composite indicators and clusters based upon these, provides some 'food for thought' in respect of potential relations between CAP GR measures and the focus of this ESQ.

The multivariate analysis found some connections between CAP GR measures, rural infrastructure and YF numbers. However, the structure of the composite indicators indicated a clear distinction between infrastructure (e.g. broadband, government efficiency etc) and CAP measures, in respect of how they behave across the NUTS 3 areas, e.g. in MCA cluster 1 (developed areas, less agriculture) both infrastructure and CAP YF aids had positive impact on YF numbers whereas in MCA cluster 4 (growing, developed agricultural regions) infrastructure had a negative connection to YF numbers and there was no significant relationship between YF aids and YF numbers. However, the analysis also indicated in several MCA cluster types that expenditure on Pillar 2, Measure 7 could be positive for YF numbers.

5.2.3.6 Case study evidence

Infrastructure and services are identified as insufficient and decreasing in a number of regions within the CS group (IE, EE, IT, FR, HU). This is often coupled with the outmigration of young people and declining social capital. In all these situations, therefore, it should be possible to consider whether GR measures play a positive, neutral or negative role in addressing these challenges.

Multiplier impacts of CAP GR spending upon rural areas?

In Italy and France the targeted funding of GR measures towards such marginal areas is result of strategic political choice. In Italy, the YF package is addressed in both regions (Sicily and Marche) to those rural areas with major needs, to foster local development: mountain areas, areas with natural constraints and economically less developed areas. The YF package here seeks to promote a stronger presence of young innovators among the farm population which it is believed should bring broader RD benefits.

Evidence to support the view that investing in young farmers will benefit rural development is mixed, from the case study areas in France and Italy. The level of support going into rural areas from the CAP GR measures seems important in those rural areas in need of local development (IE, FR, IT) where the multiplier effect of this funding could be essential for sustaining (IE) or developing local services, as well as economic diversification (IT, FR). However in these situations, other funding such as CAP Pillar 1 aids, ANC aids and non-CAP EU funding from regional and social policy could also be equally or more important. In France, the case study authors note that EAFRD resources concentrate upon farm and forestry sectors rather than broader rural development, as the maintenance of viable agriculture is seen as a critical ingredient: the contribution of the CAP to rural development is therefore mainly indirect (i.e. all of CAP), but financially significant.

The YF package in **Italy** promotes young farmers with innovative strategies (high-quality food production and processing, diversification towards social agriculture and sustainable tourism) which generate initiatives in setting-up collective action (cooperatives, consortia to valorise DOP and GIP products). Effects on social capital are also relevant in some types of diversification (e.g. social farming) or when GR implies giving a job opportunity to young people who are otherwise unemployed or would have out-migrated.

In **Ireland** the rural multiplier effect of spending on agriculture is widely cited. Although multiplier studies based on national level statistical models have been undertaken there

have not been any studies to assess the impact of CAP spending on the economic development of local areas. National government planning targets for job creation and employment are based on multiplier estimates. National policymakers and farmers unions claimed that if CAP funding was not there it would be much harder for service suppliers in rural areas, who are felt to be completely dependent on agricultural subsidies for survival. *'There's 1 billion euro going directly into the rural economy – just from Pillar 1, without it you would lose the rural services'* (National Government policymaker). Nevertheless there is no evidence of a direct impact of CAP GR measures on rural infrastructure; more, the whole CAP is noted as keeping farmers on the land and thus supporting continued provision of local services (although these are becoming fewer, due to decline in spending).

Countries with well-developed infrastructure and services (BE-F) are not in need of substantial infrastructure investments. Given the low funding disbursed in GR measures compared to the economic output of these areas, any effects on infrastructure development stemming from CAP GR measures are expected to be negligible. In **Flanders**, interviewees were sceptical or reluctant to link CAP GR measures/instruments with any direct or indirect impact on the improvement of rural area development; however as discussed in ESQ2, the GR aspects of LEADER were cited as having value for social capital.

The move to adopt a sub-programme for Young Farmers in Hungary reflected in part, a wish to link this support to wider rural development benefits including social capital and infrastructure. The indirect objective of the additional measures in the package was to create new, more valuable jobs in the countryside. Young people are innovative. With knowledge, innovation and social capital they can also stay in place and establish a family. Those who are already there can play a part in the management of local affairs that rejuvenates dynamically and gives a new perspective. Rural infrastructure and services in rural areas can be expanded. However, the small-scale diversification call in the programme has been withdrawn, although it could have led to the emergence of innovative rural businesses and services. RDP funded developments of agricultural and local producers are not significant for job creation but have contributed greatly to maintaining jobs and improving their profitability. Developments have expanded the range of locally-produced products and services and tourism development has sped up the scope of tourism infrastructure and services.

In Hajdú-Bihar County almost all respondents said CAP YF aids had an important effect on the local area, but national infrastructure and other policies like education, family support policies have larger effect on daily life than even Leader, among the CAP measures. In Győr-Moson-Sopron county, farming is not popular among the younger generation, they don't have extensive knowledge of farming: mainly non-farmers are buying land, and quality of life seems more important than CAP YF aids as the driver for this trend. EU regional and national economic development policies have strong effects here on rural employment (e.g. car industry).

LEADER and its dual role in GR and wider RD provision

LEADER has been identified as a measure contributing positively to enhancing quality of life in rural areas across all case studies. However, LEADER's primary focus is on development of entire rural communities/ areas and not on GR *per se*. Development of rural areas is mainly based on the establishment and development of services and sustainable infrastructure responding to the needs of the local economy and society. LEADER-type development based on local planning, supplementary earning opportunities, diversification and support for cooperation has been effective in a number of countries (HU, EE, IE, BE, IT, F). An essential aspect of supporting small-scale infrastructure development in rural areas is that the developments meet real needs and support sustainable community and economic services – this is inherent in the LEADER approach. In **Ireland**, LEADER is not supporting large infrastructure projects. Broadband is supported, but this scheme has not been successful so far, funding support is low (max. €10.000) with very strict criteria. Local Action Groups are seen as essential in providing support to farm family members/rural communities, enhancing quality of life by assisting community services, supporting self-employed people, rural businesses and focusing on social care. Both LEADER and EIP AGRI groups have the potential to enhance governance and social capital however; there is no evidence of significant impact from current EIP

groups, yet: *"There is still lack of awareness in respect of social capital and how it can be 'used'. It would help if all [relevant] agencies were working together. At present it is not happening, they are... not joined up..."* (IE, Teagasc rep.)

The added value of LEADER in Hungary has helped to strengthen business relationships. In the view of LAGs, they could provide a high level of added value through low amounts of financial support compared to other measures or programmes, by providing support options for local needs. Several entrepreneurial ideas have been initiated by LEADER; enterprises have been given professional guidance for the implementation of their planned activities in the network. Local entrepreneurs, local governments and civilians could participate in the definition of target areas, so that they could have a real influence on the development process. This has greatly contributed to involvement, as well as the mobilisation of ideas, and local resources and networking.

In France, the main effects of the CAP beyond agriculture are seen via the LEADER approach which is not specific to GR. LEADER's budget is fixed at 5% of the total RDP spend nationally, but it is more important in mountainous regions due to the ANC designation increasing the total CAP resource in these areas (hence implying that the 5% constitutes a bigger level of Euros per inhabitant). Other measures are hardly used in these areas. The RDP for Auvergne helps to support local health services, the valorisation of cultural heritage and tourism infrastructure.

In **Estonia**, in the opinion of interviewees the measures relevant for GR have not had noticeable impact on improving infrastructures and services or local governance capacities in their area. However, in Pärnu county where there is a declining population and where young people are moving away from most communities, there are two LAGs (Pärnu Lahe, Rohelise Jõemaa) operating in this county. Pärnu Lahe (Pärnu Bay) partnership included youth as one of their priorities in the period 2007-2013 and this continues now. Activities are targeted to provide free time activities and events for youth, cooperation between youth, and also to promote entrepreneurship skills among young people. Two measures in the period 2014-2020 give some preference to youth through their evaluation criteria: in Measure 1 (Entrepreneurship) applicants younger than 40 years get some extra points and in Measure 2 (Active community) applicants younger than 26 years get extra points. LEADER measures were also highlighted by two interviewees from this region. The Rohelise Jõemaa (Green Riverland) partnership mentions the importance of keeping young people in the countryside, and their strategy includes organising activities and events for them. Both in the period 2007-2013 and in the period 2014-2020 one of the sub-measures is especially targeted to the activities for youth. One of the farmers interviewed in Pärnu county mentioned that an NGO connecting young people in their village has used the LEADER measure 'Active Community' to establish a youth centre and organise activities for youth. Applying for this measure, the organisation having board members under 26 received additional points in the project evaluation. Also, the chair of the local LEADER group mentioned this possibility, in the measures that they fund. In this way, LAG measures that favour young people are simultaneously measures that promote social capital, governance capacity and local rural infrastructure in this region.

GR measures promoting social capital and governance benefits, via collective actions and institutional change

GR measures in **Poland** foster informal co-operation, so social capital is increasing as a consequence, especially prevalent in informal networking among farmers, and between farmers and advisors. Measure 16 has not been officially launched yet. Local interviewees report that the GR measures foster informal co-operation, then economic growth, to some extent improved quality of life, to some extent increased job opportunities, but not necessarily improved infrastructure (- as there is too little money, especially now in the RDP it is not a priority). The impact of GR RDP on general rural development (infrastructure, etc.) depends a lot on local government: some communes used the funds so well that the quality of life increased and there is a higher chance for young people to live there. Also, GR measures which help stimulate farm diversification have helped to strengthen the tourism infrastructure in some areas.

Social capital increases as co-operation increased, not co-operation formally supported by RDP (M16 is not launched yet in the RDP 2014-2020) but informal: farmers with advisors, and networking. For the 2014-2020 programme period, Poland transferred

some measures from Pillar 2 to Cohesion Policy, i.e. broadband, water infrastructure, job creation in rural areas, with a corresponding budget of €5.2 billion, so those previous CAP measures are now relevant instruments supporting GR through different programmes. A national level respondent said that CAP GR measures are very important in respect of governance. He said that CAP measures are granted to large number of people in a system that it is well managed and distributed based on clearly defined criteria, and that administrative infrastructure was built thanks to that. The administration has learned; this has made it trustworthy for people, which was not the case before. So not only the funds but also the model of distributing the funds is important; that is what the government has learned and farmers have accepted. It has been important for building support for the EU in Poland.

Comments by beneficiaries in other Case study countries – Estonia, Hungary, Italy, Ireland and France – also support the view that by promoting collective structures, from partnerships and GAECs to community groups targeting rural youth, CAP pillar 2 measures combine a focus upon GR with benefits to social capital and capacity-building for rural development. For example, Italy's YF package promotes farms with innovative strategies and initiative in setting-up collective actions (cooperatives, consortia to valorise DOP and GIP products).

5.2.3.7 National and EU workshops

In the national workshop for Estonia, it was noted that if the basic infrastructure (accessible roads, electricity, broadband connection etc.) and services (opportunities to buy or rent a house or apartment, the presence and quality of kindergartens and schools, the availability and quality of medical care, ways to spend free time etc.) are missing or are of very poor quality, then CAP or any other EU policy measure to support young farmers/GR alone cannot change the situation much. Many decisions related to basic services in rural areas (e.g. postal service points, closure of schools) are made based on national economic calculations, and the long-term vision and impact assessment of these decisions on the vitality of the rural areas is often weak or missing.

In the French national workshop, it was noted that collective forms (GAEC, Collective Point of Sale, CUMA, Cooperatives) can reduce costs and facilitate installation and transmission: they are a real asset for the renewal of generations. Nevertheless, more and more young people want to settle alone to develop their own project. The role of LEADER facilitators is important at the territorial level: they have a leverage effect on financing. Many local positive examples of collective action and its benefits to GR were cited:

- Agricultural test space initiated by the communities, or provision of agricultural land by them, with identification and support to transferors and candidates;
- Establishment of local micro-channels bringing together more than 80 producers;
- Multi-stakeholder initiatives to attract young people: cooperatives, rural mayors;
- Incubators set up by communities of municipalities.

These show that GR has been aided by local rural social capital and good governance, not necessarily *vice-versa*.

In the Ireland national workshop, it was said that the new governance structures for LAGs [Local Community Development Committees] are having a negative impact on performance and effectiveness. Participants agreed that LEADER is important in respect of improving quality of life and building local capacity, but it was also noted that many communities still have very short-term thinking; funding is not always the answer to problems, a vision and planning is also required. Participants noted that broadband access and mobile phone coverage in rural areas is not sufficient: LEADER broadband grants are very limited and restricted, and cannot support anything that is part of the 'National Broadband Plan'.

In the Polish national workshop, participants scored the extent to which they believed CAP GR aid/measures in Pillar 1 and in Pillar 2 promoted social capital, farm infrastructure and rural areas' infrastructure. Their responses are summarised in the table below. As can be seen, they generally felt CAP GR measures had some influence on all 3 factors, but that Pillar 2 had a stronger influence upon rural and farm infrastructure.

Table 26. Polish workshop % of participants, views on influence of CAP GR measures

Influence / role upon:	Very High	High	Medium	Small	Very small	None
Pillar 1 GR support						
Social relations	0	23.1	46.1	15.4	15.4	0
Farm infrastructure	7.7	15.4	61.5	7.7	7.7	0
Infrastructure in rural areas	0	38.5	53.8	0	7.7	0
Pillar 2 GR measures						
Social relations	0	23.1	53.8	15.4	7.7	0
Farm infrastructure	7.7	38.4	38.5	7.7	7.7	0
Infrastructure in rural areas	0	53.8	38.5	7.7	0	0

Source : Polish case study

In discussion at the Italian national workshop, the role of LEADER in facilitating GR and the knock-on impacts upon wider RD were examined critically: some farmers' organisations had apparently not appreciated this connection and had previously been vocal in criticising LEADER; but the findings from the case study work in Marche and Sicily demonstrated its positive effects upon farm and rural community innovation and resilience. As a result, the Italian workshop recommended the inclusion of LEADER within Italy's integrated YF package.

5.2.3.8 Limitations encountered in answering the evaluation question

Regarding EU data analysis, no indicator relevant to the output focus of this ESQ (i.e. related to the development of infrastructure and services, local governance/capacities or social capital) and with data available at NUTS 2/NUTS 3 level could be found. The types and quality of available EU data did not allow for correlation analysis, for this ESQ. It is not possible to trace improvements in services in the timespan for which we have GR CAP expenditure data and it is not possible to distinguish a causal relationship between these factors as the expenditure data is insufficiently disaggregated to discern which spending on rural services is linked to GR goals.

In respect of other evidence, few concrete examples where GR aids have stimulated broader RD benefits could be identified, from RDP evaluation studies of the period 2007-13 in case study countries, or in interviews.

5.2.4 Overall assessment of ESQs 5-13-15

ESQ 5: To what extent have the CAP measures/instruments relevant for generational renewal impacted directly and indirectly the maintenance/creation of jobs in rural areas?

ESQ 13: To what extent have the respective CAP measures/instruments focusing on the generational renewal been relevant in fostering rural development by maintaining/creating jobs?

ESQ 15: How have the relevant CAP measures contributed to enhancing sustainable employment in rural areas, especially activities in up- and downstream sectors related to agriculture?

5.2.4.1 Our understanding of the questions

These concern (5) an assessment of how far CAP GR measures are creating and sustaining rural jobs through direct funding or by enabling funded beneficiaries to take on more employees; also (13) how far these impacts foster rural development; and (15) how they have supported long-term or resilient rural employment up and down agricultural supply chains. All three questions are different aspects of understanding how GR measures affect agricultural and rural employment. To help answer them, we could ask:

- How many jobs are sustained or created directly by CAP GR funds?
- What are the likely scale of multiplier effects from CAP GR funding, on employment in other sectors?
- How do the jobs created or supported by GR contribute to rural areas' development, more broadly?

Evidence sources

1. Indicators;
2. Online survey and EU level interviews;
3. Literature review;
4. Data analysis – correlation, MCA, FADN, Polish CGE model;
5. Case Studies.

Conclusions

ESQ 5: Impact of CAP GR measures upon the creation and maintenance of jobs in rural areas

From the ESQ 3 evidence discussed earlier, we can infer that the CAP YF measures help maintain employment in agriculture relative to the counterfactual, because they offer additionality in supporting farm succession, helping to ensure successful farm transfers. In some MS, the reported impact is significant – e.g. 7,000 new farmers installed in Ireland, although in this case it is not possible to assess what the figure for new farmers would have been in the absence of the CAP aids, or how many older farmers retired as these installations were made.

The MCA indicates that CAP spending has a positive impact upon numbers of young farmers in most rural areas across the EU, which implies a positive impact upon total employment in agriculture, (although this also depends upon the rate of retirement of older farmers being lower than the rate of recruitment of young ones). The patterns suggest the biggest positive impacts of GR aids upon employment on farms in marginal areas with scope for economic development, whereas those with depressed or undeveloped wider economies, as well as those in completely different and economically buoyant regions where agriculture is capital-intensive, might not generate much employment impact.

The FADN analysis supports the view that YF aids can generate employment by a combination of increased viability/survival of YF-aided businesses and the fact that those receiving the aid tend to be larger farms employing more labour.

The CGE modelling predicts that CAP GR measures will positively affect rural employment, with Pillar 1 YF aids mainly creating employment in agriculture and Pillar 2 YF aids creating employment in up and downstream sectors as well, to a greater extent, while they have a less strong but still positive impact upon agricultural employment. However, the magnitude of these impacts is likely to be small by comparison to wider economic drivers and trends, for rural employment overall. The estimated impact of CAP Pillar 1 aid in total is more significant particularly for agriculture sector employment, mainly due to its much greater scale.

From case study evidence, it is noted that GR measures help to retain agricultural jobs particularly in marginal areas and especially where the aids are delivered in a targeted way with advice and training to improve the quality of that employment and the performance of supported businesses. It is also noted that their impact upon employment is likely to be higher where they target labour-intensive forms of agriculture rather than farm succession in capital-intensive sectors where opportunities to expand labour use are limited. Furthermore, a link with diversified enterprises and adding-value business development is made – GR aids which help farmers to re-think their business strategies and have confidence to move into higher value markets are more likely to generate enterprises that create new rural jobs. This also depends upon the quality of supporting advice and mentoring, because it needs to give entrepreneurial confidence to move into new markets or develop supply chains.

As regards non-farm employment, there is great variation between MS, with some reporting increase in young people employed in rural areas as a result of CAP spending, while in others a decline persists despite CAP funds. The pattern of trends in rural employment is strongly influenced by EU-wide market and economic phenomena, of which the CAP resources are only a small part. Broadly speaking, rural employment depends on the particular provisions of national legislation and the economic climate. It can be favoured indirectly by CAP funding focused upon the renewal of facilities for young people in small towns and rural villages, as well as directly by support for new business

start ups and farm diversification, and these impacts may be locally significant. LEADER is important in this context.

ESQ 13: Relevance of CAP GR measures for rural employment

In addition to the evidence summarised above for ESQ 5, the case studies show the relevance of Pillar 2 GR measures in supporting agricultural employment in situations where succession would otherwise be unsure or less successful (France, Italy, Estonia, Ireland). Case studies also provide evidence for the relevance of a variety of Pillar 2 measures in directly supporting new business start-ups and farm diversification, as well as indirectly maintaining or creating jobs via support for infrastructure, services and quality of life enhancements. Many of these cases involve job creation as part of broader economic development, and the cumulative implication is that these impacts can be locally significant.

The impact of the CAP GR measures on employment levels in both farming and non-farming rural jobs is generally perceived as positive, although hard to estimate robustly due to multiple intervening and often much stronger, influences from employment/wider economic policies (e.g. national growth plans, public spending cuts) and market trends and conditions. Against these, it is likely that CAP-induced employment changes will be relatively modest.

ESQ15: creation of sustainable employment in rural areas

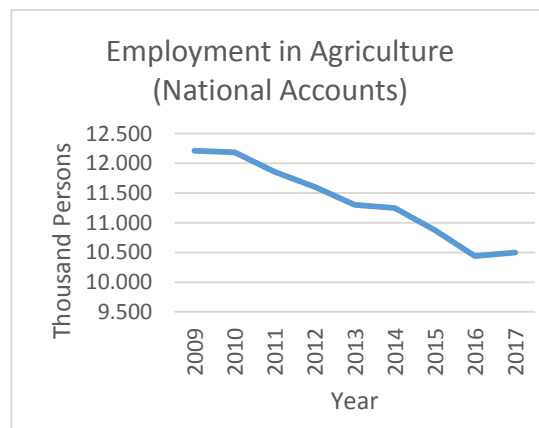
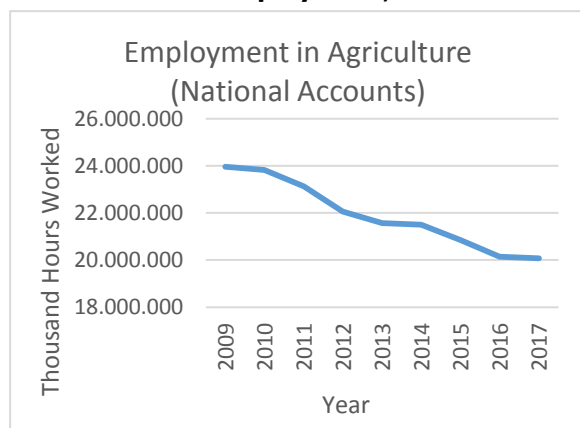
To the extent that GR measures of the CAP promote more successful farm succession than would be the case without them, we can say that they are likely to increase the socio-economic sustainability of these farms. The FADN analysis provides this evidence, from France and Italy and for Italy it also shows evidence of increased employment from YF aid.

The CGE modelling work indicates that CAP expenditure on GR stimulates a degree of employment both up and downstream of agriculture; as more young farmers relative to the baseline scenario (i.e. without the CAP aids) make use of more training and education, draw more public support and use more public services, develop more activities in diversified business and invest more in the enhancement of their own farms' infrastructure and business performance, than they would have done without the YF aids. Considering these different sectors, we could classify public sector, education and construction as mainly upstream of the farm, while food sector, trade and tourism would be mainly downstream. So, this evidence supports the case that CAP GR funding stimulates jobs up and downstream of agriculture, within the regional economy (but we cannot say whether these jobs are rural or urban, at the scale of analysis - NUTS 2 regions).

The study found little evidence concerning whether the non-farm jobs promoted with CAP funding were sustainable, although stakeholder and policy makers' opinion appears generally positive on this point.

5.2.4.2 Indicators

Trends in farm employment, EU-28

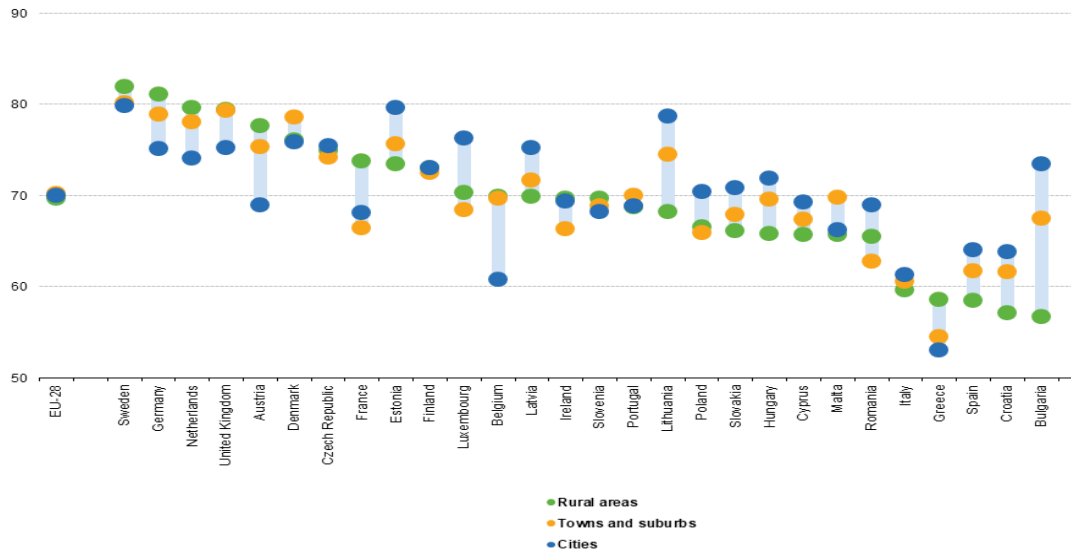


Source: <http://appsso.eurostat.ec.europa.eu/nui/submit>

[ViewTableAction.do](#)

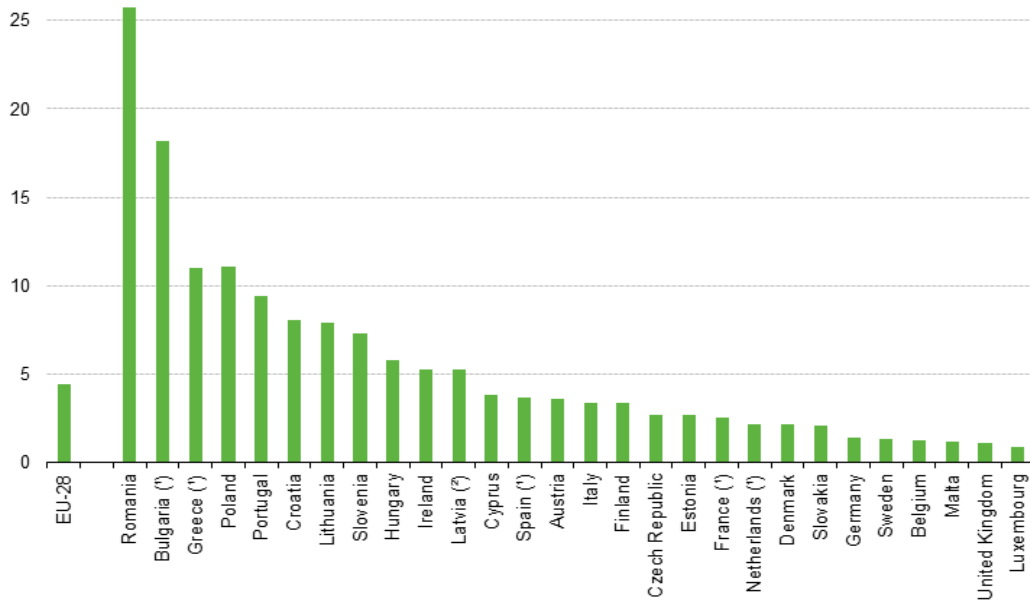
Note: data is for Agriculture, forestry and fishing sector

Employment rate, persons aged 20–64, by degree of urbanisation, 2015 (%)



Source : Eurostat, at: <https://ec.europa.eu/eurostat/statistics-explained>

Employment in agriculture, 2015 (National accounts) (%)



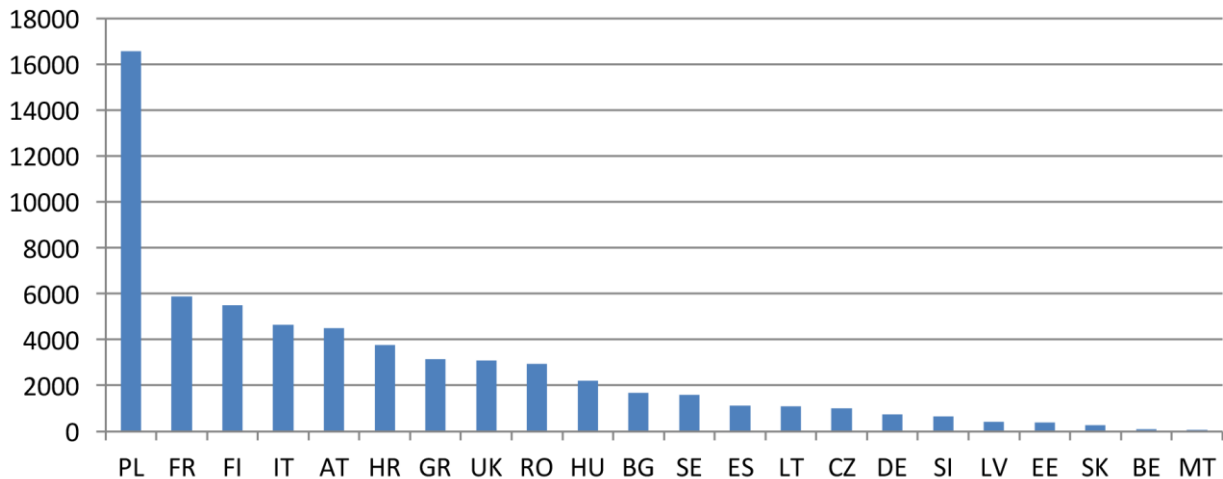
Source : Eurostat, at: <https://ec.europa.eu/eurostat/statistics-explained>

These charts show a significant (12.5%) decline in overall employment in agriculture in the EU since 2009; also they show the variability in rural employment levels and how they compare with those in urban areas, by Member State, and finally the variation in the share of the total workforce that is still engaged in agriculture, by Member State. As can be seen, many of the countries with the highest shares of people working in agriculture also have much lower levels of employment in rural areas compared to the level in cities, while the countries with high reverse differentials (a much higher percentage of people working in rural areas, than those in cities) tend to be MS with low shares of employment in agriculture. A notable exception to this pattern is Greece, where the economic effects of recession are still felt strongly.

CAP Pillar 2 targets for jobs

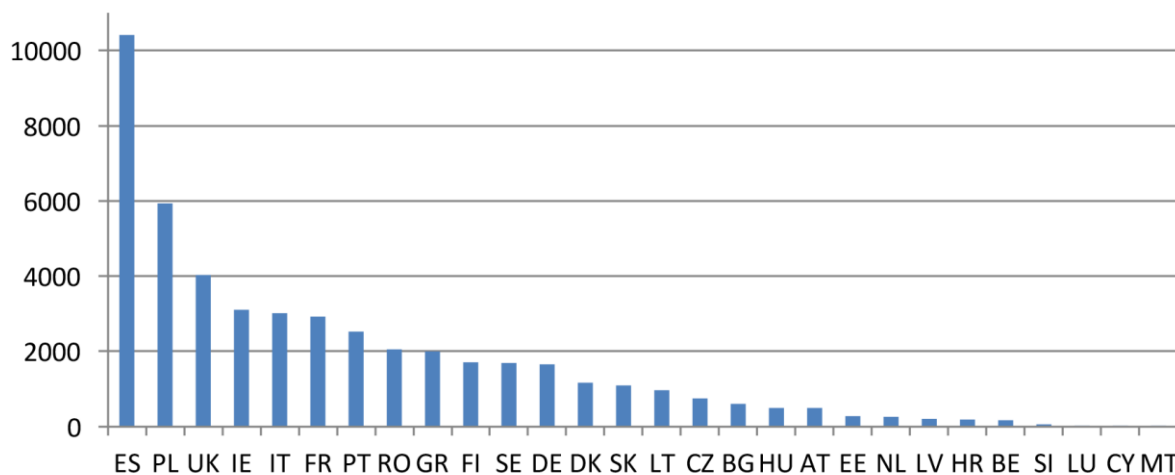
Although a relatively large share of EAFRD targets action related to agricultural value chains, an important part is earmarked actions related to developing economic activity outside farm gates as well as the delivery of basic services. In all these areas, job creation can be a relevant target. The graphs below show the planned impact of RDP spending on some relevant measures for job creation: NB these were estimated *ex-ante* figures, not actuals.

Figure 51. Number of holdings and SMEs to be supported for non-agricultural investment/business set-up in rural areas



Source: Facts and Figures; Rural Development in the European Union 2016
http://ec.europa.eu/agriculture/index_en.htm

Figure 52. Jobs to be created in supported projects (Leader) (focus area 6B)



Source: Facts and Figures; Rural Development in the European Union 2016
http://ec.europa.eu/agriculture/index_en.htm

5.2.4.3 Online survey and EU level interviews

Survey respondents said that young people are interested in living in rural areas due to having children (FI), or the economic crisis (EL, IT) affordability of housing (EL) or changes in career paths (UK) and they would return if they can find employment (FI). This however may be prevented by high taxation and/or lack of land to farm (EL). In DK a change in ownership law has made it easier for young people to return to rural areas as farmers, while in the UK, rural growth with a high concentration of agri-food producers in some regions has facilitated the in-migration of 'newcomers' to the area. Rural tourism was mentioned as an alternative employment option for rural remote areas (EL, HR).

However, many MS respondents report a tendency of young people, particularly educated people, to leave rural areas because of lack of employment opportunities and low standards of living or quality of life (RO, IE, SK, ES, EL, IT, UK, LT), remoteness and lack of infrastructure (LT, UK, EL, RO, IE) or aversion to farming-related jobs (LT, IE, RO).

One interviewee said that the CAP does not sufficiently address the issue of rural jobs, as it is not stimulating the wider labour market but mainly focused on agriculture: the best way for CAP to support the job market is when combined with other policies that support the creation of diverse job opportunities. However, particularly in remote rural areas, these may be lacking. Another interviewee noted a trend for ex-urban people to be driven into agriculture because of its potential for income stability. In these cases, Pillar 1 direct support plays a significant incentive role. However, their view was that the CAP does not meet other socio-economic needs of young people; in particular it provides few job options for spouses, children and other members of a farm family, or for people that want to live in rural areas but not to farm.

RDP measures were recognised by several interviewees as helping create non-farming, on-farm jobs, such as in farm shops or food processing. They may also promote tourist activities, or fund businesses that use local agricultural products mainly in the tourist industry. These are opportunities for the creation and/or maintenance of employment in an area, particularly for young people. LEADER was mentioned frequently, as able to promote the creation of rural jobs and add to the vitality of an area. It was claimed that in some MS LEADER is constrained in supporting commercial businesses to create jobs for young people: its effectiveness depends on the implementation choices in each MS. Nevertheless, it is felt to be positive in this respect.

5.2.4.4 Data analysis

ESQ13: The relevance of CAP Pillar 1 Young Farmers Payments and CAP Pillar 2 investment dedicated to Focus Area 2B with regards to the need to maintain/create jobs in rural areas was investigated through the correlation between 1) total Young Farmers Payments in 2015 and 2016 and Pillar 2 expenditure planned under Focus Area 2B over 2014-2020, respectively, and 2) the 2013-2016 change in the labour force directly employed by farm managers aged under 35 (in absolute terms - individuals), across predominantly rural and intermediate EU NUTS 3 regions.

The calculated Kendall correlation coefficients were statistically significant but very small in value (-0.15 and -0.22 respectively) for CAP Pillar 1 and CAP Pillar 2 YF measures, indicating **a very weak, negative correlation between Young Farmers Payments/YF aids under Pillar 2 and the change in the labour force**. In both cases, the negative (though small) value of the correlation coefficient indicates that **CAP measures/instruments focusing on GR tend to be directed at regions where the number of agricultural jobs offered by young farm managers is decreasing** – so it is possible that the CAP measures are targeted at maintaining and creating agricultural employment opportunities in areas where they are fast declining. It should be noted that Polish and, to a lesser extent, Bulgarian, Romanian and Greek regions are outliers to the other MS, as they have seen particularly strong declines in the labour force of young farmers, in recent years.

MCA

The analysis identified a composite employment indicator describing the relative importance of secondary and tertiary sector GVA, which had a key influence upon the character of NUTS 3 rural regions and this in turn affected the influence of CAP GR measures on the different types of region (described as clusters). The typology and results of the OLS regression analysis suggest:

- in less developed regions in which farms are shedding labour and restructuring (MCA cluster 2), GR measures focused upon agriculture only will sustain or create fewer young farmer jobs than if the same funding were used for Measure 7, including investing in non-farm businesses, rural services and broadband access. However, in sparsely populated and less developed regions where agriculture and tourism dominate the economy (MCA cluster 3), GR measures will have a more significant effect in increasing the number of young people choosing to work in agriculture (as principal farmers).

- In more developed regions, GR measures may help to sustain jobs in agriculture where they can increase its income-generating potential relative to other employment options (MCA clusters 1 and 5). However where agriculture is already relatively capitalized, farms are large and structures are stable (MCA cluster 4), GR funding is more likely to make little difference to overall employment whereas investment in other rural sectors and services could have a more positive impact on rural employment.

FADN analysis

The difference-in-difference analysis comparing similar farms across all of Italy, where one group received YF aids and its comparator group did not, indicated that the YF aids improved the business performance of farms over a 4-year period (2012-2016). Simply comparing similar types of farms managed by young farmers to those managed by older farmers indicated that YF-aided farms and farms with a young successor employ more people on average across all farm types, than other farms; they also tend to be larger because they rent more land, and they also attract more CAP support.

The same exercise conducted for FADN sample farms in France also showed better business performance and more robust business development trajectories for YF-aided farms than for those without YF aids. However, the impact upon levels of employment was not analysed. Nevertheless, we can predict that YF-aided farms are likely to sustain those young farmers more successfully than farms which do not receive the YF aids, based upon this data.

Polish CGE analysis

This modelling work indicates that **YF aids in both Pillar 1 and Pillar 2 of CAP create employment** in the regional economy, in Poland. Whilst the overall magnitude is similar for the number of jobs stimulated in response to the public expenditure estimated over the programming period 2014-2020, the composition of employment effects differs by CAP instrument. From Pillar 1 YF supplements, in the primary sector there are 0.62% more jobs compared to the baseline situation without these aids, while from Pillar 2 Focus Area2B there are only 0.17% more jobs in this sector, but there is higher employment in industry and services by 0.15% and 0.03% respectively compared to the baseline, while for Pillar 1 YF aid this impact is much smaller, increasing by only 0.10% and 0.01% respectively.

Predicted employment impacts of CAP GR expenditure in Poland, 2014-2020

National employment	Up- or downstream	P1 YF : % change from baseline	P2 focus area 2B : % change from baseline
Primary sector	NA	0.62	0.17
Food sector	Downstream	0.13	0.19
Construction	Upstream	0.01	0.02
Trade	Downstream	0.01	0.02
Tourism (Hotel & Rest)	Downstream	0.02	0.04
Education	Upstream	0.05	0.08
Public administration	Upstream	0.06	0.09
Other	NA	-0.07	-0.02

Source: CGE model results, Polish case study

For both types of aid, the most positively affected sectors in terms of production and employment (apart from the primary sector) were: the food sector, public administration, education, tourism, trade and construction. This indicates that **CAP expenditure on GR stimulates a degree of employment both up and downstream of agriculture; as more young farmers relative to the baseline scenario (i.e. without the CAP aids) make use of more training and education, draw more public support and use more public services, develop more activities in diversified business and invest more in the enhancement of their own farms' infrastructure and business performance, than they would have done without the YF aids.** Considering these

different sectors, we could classify public sector, education and construction as mainly upstream of the farm, while food sector, trade and tourism would be mainly downstream. Given the significant regional diversity of Poland at NUTS 2 level, it could be interesting to use the ratios calculated to give a very rough estimate of the potential magnitude of employment effects of CAP GR expenditure at EU level. For GR spending we use the defined measures for YF aids in both pillars. If we assume that the % changes in employment by sectors for Poland would be the same for EU-28, what would be the number of stimulated jobs from YF Pillar 1 and YF Pillar 2 at EU-28 level? Taking EUROSTAT data on initial employment in the EU-28 by the sectors that we analysed (divided into Upstream and Downstream), the estimated number of jobs in thousands can be calculated.

Estimating potential impact of CAP GR measures on EU employment

National employment in EU28	Number of employed (in thousand people in 2007, EU28)	Number of jobs stimulated by P1 YF (in thousand people)	Number of jobs stimulated by P2 focus area 2B (in thousand people)
Primary sector	12681	78.62	21.56
Food sector (Downstream)	4974.19	6.47	9.45
Construction (Upstream)	17604.99	1.76	3.52
Trade (Downstream)	34101.7	3.41	6.82
Tourism (Hotel & Rest) (Downstream)	10172.51	2.03	4.07
Education (Upstream)	14812.47	7.41	11.85
Public administration (Upstream)	15141.65	9.08	13.63
Other	119401.33	-83.58	-23.88
Sum		25.20	47.02

Source : Extrapolation from Polish CGE model results, Polish case study

NOTE that these are very broad and provisional estimates, so should only be seen as indicative of rough magnitude of impacts. Also, they are NUTS 2 region estimated impacts, including rural and urban areas, so we cannot assume that all these new jobs would be rural.

5.2.4.5 Case study findings

In Ireland agriculture has traditionally been seen as the most important contributor to the rural economy and remains important as a relatively significant source of both direct and indirect employment. However, perceptions of the impact of CAP support on rural areas were mixed - some farmers suggested it has limited impact on rural areas while national level policy makers were more convinced of potential multiplier effects.

Farmers in County Cork suggested that farm employment continues to decline, particularly among farms investing in modernising and improved efficiency (e.g. new milking parlours) – this could include those benefiting from YF investment aids. A young farmer in County Mayo receiving investment aid built a new milk parlour, noting that local tradesmen undertook the construction work which would help maintain employment in the area. One farmer noted that dairy farmers were generating large revenues which circulates through the local economy.

The impact of CAP measures depends on the strength of the Irish economy. When the wider economy is doing well, competition from other sectors draws young people into urban centres and away from rural areas. With 5% unemployment across the country, it is very difficult to find farm labour. Improved road transport (new motorways, upgraded main transport links) as a result of other EU funding have played a role in making rural areas more accessible, enabled more people to access jobs in urban centres, and also made social and economic relationships easier between urban and rural (reducing travel

time). Participants at the Stakeholder Workshop (March 2019) suggested that CAP support is sustaining jobs in rural areas but *"not pulling in new people and creating a significant number of jobs"*. Part time farmers tend to look for off-farm jobs as an easier way to gain additional income than to diversify or add value on the farm itself. In 2012 an Irish study⁴¹ showed that only a small proportion of Irish farmers are interested in farm diversification; often only those who fail to make a viable income from commercial agriculture. Some suggested that diversification is viewed negatively by many as a diversion from the main agricultural activity. This ignores the potential for such developments to add value to the farm product at source and, along with the export-orientation of Irish agriculture generally, may help to explain why the largest farm sectors in Ireland remain strongly focused on commodity production.

LEADER is the only CAP instrument outside of 'agriculture' that supports GR in rural areas. However, there are more funding opportunities available from national schemes (e.g. Rural Regeneration Fund). *"There were over 1,600 LEADER projects [in Ireland] approved by the end of January 2019. Of these, 734 were considered by the LAGs to impact on jobs. It is anticipated that 5,848 (FTEs) jobs will be sustained through LEADER investment in these projects and 1,920 FTEs will be created"* (Principal Officer). To set this in context, consider that farms in Ireland number around 130,000 and employ around 108,000 FTE workers, so farming sustains 20 jobs for each job sustained by LEADER projects. There is very limited impact on infrastructure; LEADER supports smaller community projects. Broadband grants are also available under LEADER but the financial support is limited (up to €10,000) and underlying conditions are viewed as very restrictive by interviewees.

Respondents involved in LAG delivery in Co cork and co Mayo report that agriculture is not viewed as a favourable form of employment. The LAG in co Cork suggests that land abandonment is occurring in the north of the country, on poorer land and where older farmers are *'farming the subsidy'* (i.e. doing the minimum level of activity to obtain EU farm payments). In co Mayo interviewees suggested more needs to be done to make rural Mayo attractive to young people. Investment in infrastructure especially roads and local services is essential, as well as changes to planning regulations. There is a need for a national campaign promoting rural areas as places to work and live in. A recent survey showed that co Mayo has one of the highest numbers of tertiary level graduates, but one of the lowest levels of graduate employment opportunity.

Interviewees noted that GR needs to create a portfolio of opportunities for young people and it needs to address the challenges, and create new opportunities over and above the form and scale of current farm businesses. *"There is a very negative image of farmers-being alone, isolated, with no social life, that needs to change in order to attract more young people"* (Sheep farmer, Co Mayo). Many respondents felt the current incentives just maintain the status quo, especially in respect of farm succession/community. Interviewees including farmers and farm advisers noted that the state of the national economy was a far more powerful force than agricultural support schemes, for local employment.

In Flanders, the increase in standards and requirements (environmental, hygiene...etc.) have created a need for advisory services. To meet this demand, specialised agricultural experts, e.g. accountants and bankers have developed their services and created numerous jobs. But overall in Flanders, agriculture is extremely capital- intensive and the impact of CAP measures on the creation of agricultural jobs is relatively insignificant. Flanders is a heavily urbanised region, so reliance on agricultural production as a source of employment is minimal. This stems from the close proximity of the provinces to heavily urbanised areas in which most inhabitants work. Investments in GR and young farmers may retain a limited number of jobs in the agricultural sector that would have shifted elsewhere otherwise, but YF aids first and foremost help farm businesses invest in the necessary capital to operate their farms, as opposed to creating employment.

In France, CAP measures mainly target the maintenance or protection of farming jobs rather than their creation; seen in a wider context of continuing farm enlargement. The

⁴¹ Meredith, D., Heanue, K., and McCarthy, S. (2012) Farm Development: Attitudes of farmers to farm diversification. Teagasc Rural Economy and Development Programme (REDP) <https://bit.ly/2VUIYFD>

decline of agricultural employment in AWU between 2007 and 2016 was less marked in France (FR -12%, Rhone-Alps -14%, Auvergne -11%) than the EU average, or in the majority of neighbouring countries: Germany (-20%), Belgium (-16%), Spain (-17%), Italy (-33%) or Austria (-38%).

The ex-post evaluation⁴² of the RDP showed that the pattern of declining employment in agriculture slowed markedly after 2010. To isolate the role of the RDP in influencing this change would be difficult (wider economic conditions had an important influence). An INRA⁴³ study attempted to do this, finding a positive correlation between KE/training, AEM and diversification aids and levels of employment in agriculture. But they didn't examine YF installation aid. The ex-post evaluation also showed that in mountain areas which were sustained through considerable CAP support (via ANC aids and higher rates of support for investments and installations, as well as GR measures), the levels of farm employment were less subject to decline than in other regions of France.

Beyond the farm sector, again the goals of policy tend towards the maintenance of jobs rather than creation. Nonetheless the Auvergne and Rhone-Alps RDPs fixed a target to create 535 jobs from supported projects. As part of the ex-post evaluation of the French RDP 2007-2013, a counterfactual analysis tested the impact of public spending under axes 3 and 4 on overall rural employment in the period. This showed that the RDP had a positive effect, linked to Axis 3 spending in particular; which was much less evident in LEADER areas. They identified a threshold level of €30 per inhabitant, to have a significant impact upon rural employment.

For Italy some data exists on the employment effects on farm beneficiaries of the YF package in 2007-2013:

- Sicily: farm employment increased by 1.4 full time equivalent working units per farm and per year, mostly permanent employees (73,2%), then seasonal work units (10,5%) and family labour (16,3%).
- Marche: In 33% of new farms, young farmers started working full-time after the generational change, and they were previously under-employed. 2/3 of new farms had no relevant change.

Quality of employment: improvements in farm human capital include increased professional skills and **increased capacity of relations with public administration** (*"experience with the young farmer package made me learn a lot about programme opportunities, how to prepare a business plan, how to manage with public officials, etc. I was completely ignorant about these issues, but if you want to grow as an entrepreneur, you must learn a lot about these issues"*, (interview with farmer no. 8) as well as **knowledge of new market channels** and different ways of marketing (*"when I started this new adventure, I immediately understood that we should change the relations with markets, search new modalities of selling our products, make more evident that we aim to reach consumers that appreciate the high quality of our olive oil"* (interview with farmer no.7).

In Hungary, both the food industry and agriculture were characterised by continuous labour outflows by 2008. However, following this period, an increase in the number of employees was observed in both sectors, with smaller fluctuations. Of CAP RDP funds, the investment measures encouraging technological development reduced labour demand, but support for young farmer start-ups stimulated the numbers of young farmers. In terms of retaining the workforce and expanding employment in rural areas, the most relevant CAP GR measures and interventions are those which support developments implemented with higher capital and labour intensity. Thus, support for launching agricultural enterprises in labour-intensive sectors (horticulture, animal husbandry) and diversified activity are the primary areas of job retention or expansion.

In Poland interviewees observed that the situation in the labour market in rural areas has reversed compared to 10 years ago - that is a very important context shift. There

⁴² See *Evaluation ex-post du PDRH 2007-2013*, rapport final tome 2, p.319-332 (création d'emplois) et p.202-212 (renouvellement des générations) <https://www.reseaurural.fr/centre-de-ressources/documents/rapport-final-de-évaluation-ex-post-du-pdrh-2007-2013>

⁴³ « Evaluation the impact of rural development mesures on farm labour use : a spatial approach », 2014, Y. Desjeux, P. Dupraz, L. Latruffe, E. Maigne, E. Cahusac,

used to be ample young people in rural areas and unemployed but now there is almost no unemployment and it is similar in the cities, which is an important pull factor for young farmers. In the LEADER programme it used to be a challenge to receive funds but easy to find young people to get involved in the programme. Today it is opposite, it is relatively easy to obtain the funds (because beneficiaries have learned how to do that over the years)- for example, one can obtain the funds for new job creation, but you will find it difficult to hire anyone.

It seems that GR support has directly impacted rural jobs because more young people took over farms than otherwise (according to interviewees), more old people left the farm and started early retirement (indicated by implementation of 113 Early Retirement measure, 2007-2013), and more services are in rural areas, especially tourism. GR CAP also had an indirect stabilization impact. For young people, this matters because usually they are offered jobs without contracts (so no insurance, no seniority etc.) and CAP measures require being insured in KRUS (Farmers Social Security Fund) which assures health, social security and pensions.

In **Estonia**, in the opinion of the official interviewed they expected that M 6.1 would have a high impact on maintaining/creating jobs. Many applicants are interested to receive support for activities which do not give a full-time job, and create or provide working places. However, some beneficiaries mentioned that requirements related to M6.1 do not encourage creating full-time jobs. When evaluating the implementation of the YF measure during 2007–2013, it was concluded that the planning and creation of new jobs was rather limited, as most of the applicants already used or planned to use seasonal workers and/or engage only family members in their business (EUoLS, 2014).

5.2.4.6 Limitations encountered in answering the evaluation question

ESQ 5: No indicator is relevant to the focus of this ESQ (i.e. with data available at NUTS 2/NUTS 3 level and for years suitable to a post-investment impact analysis) that could be found.

ESQ 15: No indicator relevant to the focus of this ESQ (i.e. with data available at NUTS 2/NUTS 3 level and for years suitable to investigate a causal relationship between the two variables) could be found.

ESQ13: The limitations to the correlation analysis carried out in the framework of this ESQ are the following:

- The absence of detailed information on the labour force employed by young farm managers, namely the age of the employed persons and type of work performed, impedes an in-depth understanding of the extent to which the above-mentioned CAP measures /instruments address the needs for maintaining/creating jobs in rural areas. The non-normal distribution of the data used in the correlation analysis as well as the presence of obvious outliers precludes calculation of Pearson coefficients.
- Unavailability of data at a lower granulation level than NUTS 2 for Pillar 2 input data and labour force data required a proxy-based estimation method to disaggregate NUTS 2 data at NUTS 3 level. Correlation analysis is partially based on estimated data and findings should be interpreted with caution.

Nevertheless, the MCA, FADN and CGE modelling work provided useful alternative analysis and interpretation that is highly relevant to answering these questions.

5.2.5 Overall assessment of ESQs 12-16

ESQ 12: Relevance of CAP Measures/instruments focusing on generational renewal in enabling generational renewal in agriculture - Extent to which the Measures correspond with identified needs and extent to which they enable access to: Land; Capital and Knowledge.

ESQ 16: Impact of relevant CAP Measures/instruments on land mobility (change in land ownership, or in other type of land management such as renting): On direct beneficiaries; and on other stakeholders

5.2.5.1 Our understanding of the questions

The issues of access to land, capital and knowledge are widely cited as the most significant barriers to GR in agriculture. These questions ask to what extent the CAP GR measures are effective in meeting local needs as perceived by stakeholders or presented in the literature, with particular reference to these three needs. So:

- Do the measures enable improved/easier access to land?
- Do the measures enable improved/easier access to capital?
- Do the measures enable improved/easier access to knowledge?
- Do the measures meet local demand for land/capital/knowledge?
- How, if at all, do the measures affect changes in land ownership or tenure by YF, new entrants or young entrepreneurs?
- How, if at all, do the measures affect other stakeholders (non-beneficiaries of GR measures) in respect of land mobility issues and phenomena?

Evidence sources

1. Indicators;
2. Online survey data and EU level interviews;
3. Literature review;
4. Data analysis;
5. Interviews and workshops in Case Studies at national and local levels; comparison.

Conclusions

ESQ 12: Relevance of CAP GR measures in addressing key needs of access to land, credit and knowledge

The study has confirmed that access to land, capital and knowledge are indeed key factors in ensuring successful GR in EU agriculture. However it seems clear that the causes behind these needs, and therefore the best mechanisms for addressing them, vary considerably across the territory. As a simple guide, we can consider the contrasting situations of highly productive and capital intensive agricultural systems and sectors, versus economically marginal, remote and low-intensity agriculture in rural areas which have few other economic activities. In the first case the barriers to access land will include high prices from competition by established businesses and perhaps also competition from non-farm uses. The second may also lead to high land prices because older farmers retain land as security even though their earnings are low, because they have few alternatives. In the first case, access to capital may not be an issue in principle but the need for capital to buy out the existing farmer (even a parent) can be a challenge until the younger generation has sufficient amassed assets against which to generate a bank loan. In the second case, capital needs may not be high but renovating a semi-abandoned holding will nonetheless require some investment and the YF will lack the proof of viability or asset value that may be demanded by banks, in order to lend. In respect of knowledge, the first case may not find this to be an issue for a successor, whereas in the second case it is a major challenge to be able to develop new business models that can innovate and enhance farm profitability.

In respect of relevance, therefore, the CAP GR aids fall into several categories.

- Those aids which provide funding to assist with general costs following YF set-up (Pillar 1 supplement and M6.1) and early years investment (M4.1) have relevance and potential value, but they will often be insufficient, on their own, to address the barriers described here either because those barriers are non-financial (e.g. where very little land is available on the market) or the aid on its own does not unlock access to the capital that may be needed to achieve installation.
- Aids which promote co-operation, innovation, training and advice may be highly relevant in a wide variety of cases. The co-operation measure can be used to create new forms of incorporated business facilitating inter-generational transfer (as in the case of Ireland, with farm partnerships); aids for innovation, training and advice can help to raise farmers' awareness and confidence to manage transfers effectively and to prepare the YF for a successful start in business.
- Aids which promote rural economic diversification, added value and better services, including broadband, may not appear directly relevant to these needs but they may nonetheless be relevant and important in creating a wider economic climate, particularly in remote and marginal rural areas, in which the barrier of access to land is reduced because older farmers are less reluctant to release their land when they have a better quality of life, more broadly. The availability of off-farm work for YF and their spouses in such areas may also facilitate the generation of financial reserves to enable access to bank loans and investment aids.

In sum, therefore, the CAP measures for GR may be concluded as relevant and necessary, where their selection and eligibility criteria are suitably tailored to local conditions; but the value of using a variety of approaches, including legal, fiscal and institutional provisions (e.g. financial guarantees, as newly promoted by the EC-EiB initiative of April 2019) as well as financial support, is also highlighted.

ESQ 16. Impact of relevant CAP Measures/instruments on land mobility (change in land ownership, renting, etc.): on direct beneficiaries; and on other stakeholders

Overall CAP GR measures appear to play only a modest role in enabling YF to gain access to land by impacts upon land mobility for direct beneficiaries and other stakeholders. Where their main role is in providing financial support to YF, this alone does not free up the land market (e.g. PO, EE, IE case study experiences). However, the effectiveness of the CAP measures is greatly enhanced if combined with appropriate national policies that support land transfers, such as the land mobility service in Ireland and favourable attitudes among agricultural banks, interest-free loan facilities or credit associations that reduce the cost of borrowing in favour of YF. In these situations, it is a combination of national effort and CAP funding for start-ups, investments, advice, training and/or co-operation which provides a secure route to accessing land and capital.

The Member States which have the longest history of supporting GR in agriculture through the CAP also tend to be those that have developed the most versatile and multi-faceted approaches to easing access to land and capital through national policies, institutions and legislation. In France we can mention the SAFER land agencies, institutional options for gradual land transfer such as GAECs, and in Italy the two case study areas exhibited interesting local examples of how agencies and legal entities can facilitate access to land for young farmers and new entrants, supported also by national policies (see ESQ 12). Training and advice for YF funded by the CAP can also help YF to explore the options for accessing land and to become more proficient in planning carefully so that they choose wisely between e.g. purchase or leasing, or partnerships / share farming arrangements.

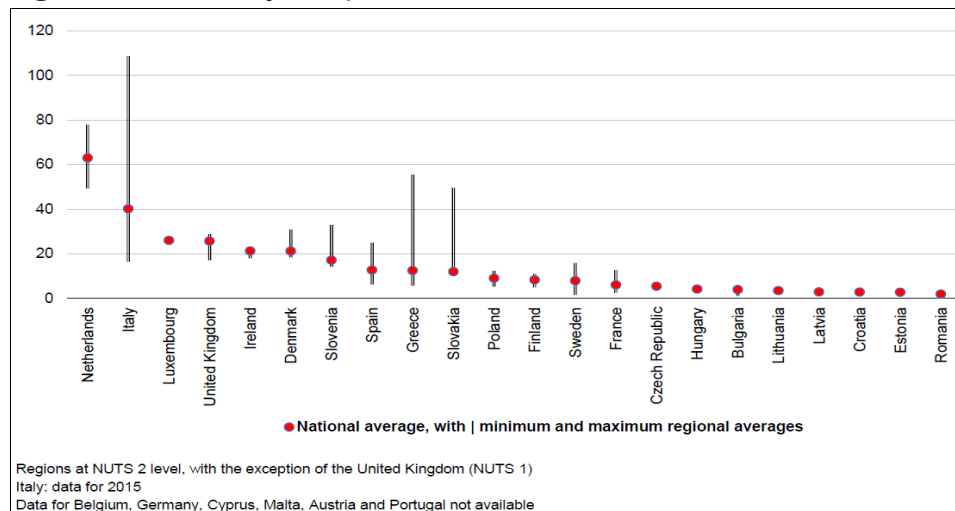
There is also a need to consider mechanisms to help older farmers to release land by providing them with options for the gradual transfer of assets, and ways to enhance their retirement income or quality of life. There was evidence that the former CAP early retirement measure had not been appropriately designed to fit the specific needs and concerns of older farmers, in this respect (IE, FR) because it required the older farmer to

cease farming activities and involvement completely.

Access to land is a main barrier for GR and remains a big issue across Europe. In most MS agricultural land is inherited and transfer is strongly linked to socio-economic context, inheritance laws, land protection, land sales and/or retirement customs. Older farmers may be unwilling to sell land, and in several CS (IE, HU, Fr, IT) beneficiaries and government officials stated that they use the Pillar 1 DPs as a form of income support in retirement, increasing their reluctance to make the land available for a younger generation (although share-farming might provide this opportunity). In more market oriented economies (like Denmark, UK, or Flanders) where land enters more easily in the market, it is nonetheless expensive and requires access to significant resources for anyone who needs to pay for rental or purchase (most likely for non-family entrants to farming). It seems from the CS that in some cases, CAP direct support helps farmers create financial reserves. But in addition, there is strong evidence that national initiatives that facilitate transfer, such as land banks, fiscal incentives for transfer, facilitation services and advice, and promote non-conventional or collective inter-generational business models (partnerships, share farming, GAEC etc.) increase the impact of the CAP aids upon GR in agriculture.

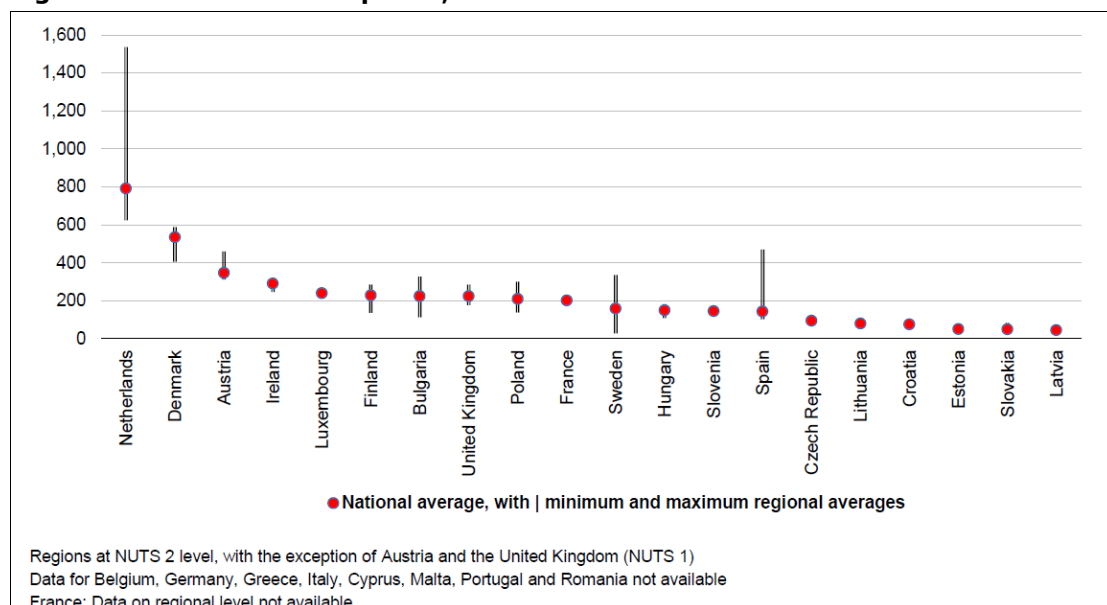
5.2.5.2 Indicators

Figure 53. EU land prices, arable land



Source : Eurostat, 2018

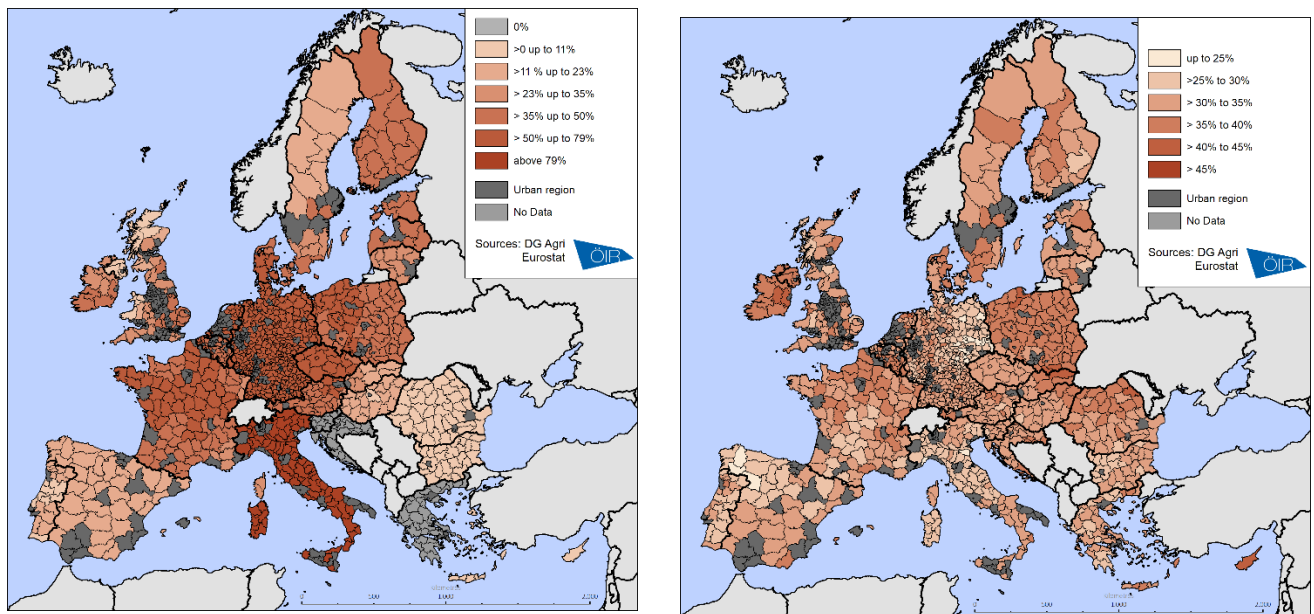
Figure 54. EU Land rental prices, 2016



Source: Eurostat, 2018.

These two figures show the great range of variation in arable land prices and land rental prices between MS, as well as some large variation in values within certain MS. Generally there is a relationship between population density and land values, so more densely-populated countries and regions tend to feel pressure on land the most, which is reflected in high land prices and rental prices. However other factors are also important: particularly in the rental market, the amount of land available to rent will vary according to the relative incentives for landowners of leasing or keeping in-hand, which can include both market and non-market considerations (e.g. fiscal policy, flexibility of leasing arrangements and tenure conditions).

Figure 55. (i) % of farm managers with basic or higher training, compared to (ii) share of young farmers under 35 in total farm managers, 2016



The purpose of the maps in figure 55 is to examine whether general levels of education/training within the farmer population are correlated with the prevalence of young farmers, at NUTS 3 regional level – this might help to indicate the relative need for better knowledge and skills among young farmers, in a very broad sense. As can be seen, there are some regions and countries (e.g. Cyprus, Bulgaria, eastern areas of Slovakia and Hungary, Crete, northern Scotland, west Wales and Northern Ireland) with notably low levels of training and relatively higher shares of young farmers, where the needs of YF for knowledge might therefore be anticipated as high. In some other areas, lack of knowledge is associated with few young farmers which is as could be anticipated from general trends in development, indicating likely need for both GR and knowledge (Romania, mid-Portugal, northern Spain, Sweden). There are a few areas which have high levels of training and low shares of young farmers (eastern Germany and many parts of Italy), and where both training levels and shares of YF are high, we anticipate a relatively lower relative need for knowledge, among YF (Poland, northern France).

5.2.5.3 EU Online survey and EU interviews

In the online survey some MS report that there is high demand for land by YF but a shortage of available land (SK, IE, CZ), and that Pillar 1 payments keep unproductive farmers in business, thus restricting GR (IE). In many MS most land is acquired by young farmers through inheritance (EL, IE, FI, SI, ES, UK, DE), or bought from relatives when they retire (EL, FI, SI, SI, NL, UK). Partnerships, share farming or joint ventures are reported as significant in some MS (IE, UK, HR) particularly between siblings (ES). Co-operatives and regional policy interventions were reported as useful and relevant in ES and CZ, and incentives for land unification and use of public lands was mentioned for IT. The tables below indicate the context of land transmission and availability in different MS, as provided by survey respondents.

Table 27. Inheritance/Inheritance laws and land transfer

SE, EL, IE, LV, MT, SI, FI, LT	Inheritance is the main way YF have access to land
FI, EL, IE, NL, BE	Inheritance tax is very high
CZ, FE, IE, SE	Tax relief is available for land transfer
UK, SE, AT, MT	Inheritance laws are complicated
LT, DE, LV	Inheritance is facilitated through legislation

Source : Online survey, CCRI et al

Table 28. Land availability to purchase/lease

IE, SK	There is a shortage of available land
ES, EL, IT	Farm land is extremely fragmented due to inheritance traditions (shared by heirs)
SE, IT, CZ	Land for purchase or lease is scarce and expensive
DK	Agricultural land availability is a free market and is not a specific issue of concern

Source : Online survey, CCRI et al

Table 29. Capital availability for land purchase/lease

DK	Follows the rules of the free market
EL, IT	Buying land is very costly
SE, AT	Land needs to be bought from siblings, partners etc. – this requires capital
FI, ML	Land needs to be bought from parents – this requires capital
SE	Banks do not support loans for purchase or lease of land
EL	Access to capital is needed via EU schemes
IE	Available (fertile) land is too costly to buy or lease, for most farmers

Source : Online survey, CCRI et al

Table 30. Schemes that support land transfer

DE	The 'Höfeordnung' is a good Instrument to enable farm succession
UK	There are many: inheritance tax relief, shorter-term farm business tenancies, large private/public estates offering 'starter' tenancies (e.g. National Trust, local government); also farming partnerships that are simple and quick to establish between parents and younger farmers and allow gradual transfer of assets.
EL	EU RDP grants for support of farm businesses help to incentivise transfer
IE	Tax reliefs for farmers that lease land long term
CZ	Public land is available for lease to YF
ES	"there are incentives through RDPs"

Source : Online survey, CCRI et al

These findings together emphasise the importance of legal and institutional factors in shaping farmers' and others' access to land, in different national and regional settings.

5.2.5.4 Literature review

Access to Land

Access to land was cited by many studies as a major, if not the biggest, barrier to entry for new farmers (ADAS, 2004; Williams, 2006; Carbone and Subioli, 2008; CEJA, 2010; European Commission, 2012; Carillo et al., 2013; Milne and Butler, 2014; DG Agriculture and Rural Development, 2015; Zagata and Sutherland, 2015; Adamowicz and Szepeluk, 2016; Directorate-General for Internal Policies of the Union, 2016; EIP-AGRI, 2016; World Bank Group, 2017; Zagata et al, 2017; Caputo, 2018). Several of these express

explicitly that subsidies and grants have been insufficient to overcome this barrier (Carbone and Subioli, 2008; Carillo et al., 2013; Milne and Butler, 2014; Zagata et al, 2017). - Close to 70% of YF in Europe work on farms smaller than 10 ha. (European Commission, 2012) - Almost half of young sole holders in Europe operate farms of less than 2 ha. (Zagata and Sutherland, 2015).

Only one paper that mentioned access to land as a barrier found that there was no issue in their studied country. Zagata, Hádková and Mikovcová (2015) found that young farmers in the Czech Republic were not concentrated on small farms. Here, the average farm size for the under-35-year-old farmers was 90.3 hectares. Williams (2006) cites a relevant policy: Scotland's Agricultural Holdings legislation (2003) aimed to improve the relationship between landlord and tenant and free up the market for let land; however this study found that it had been ineffective at achieving this aim.

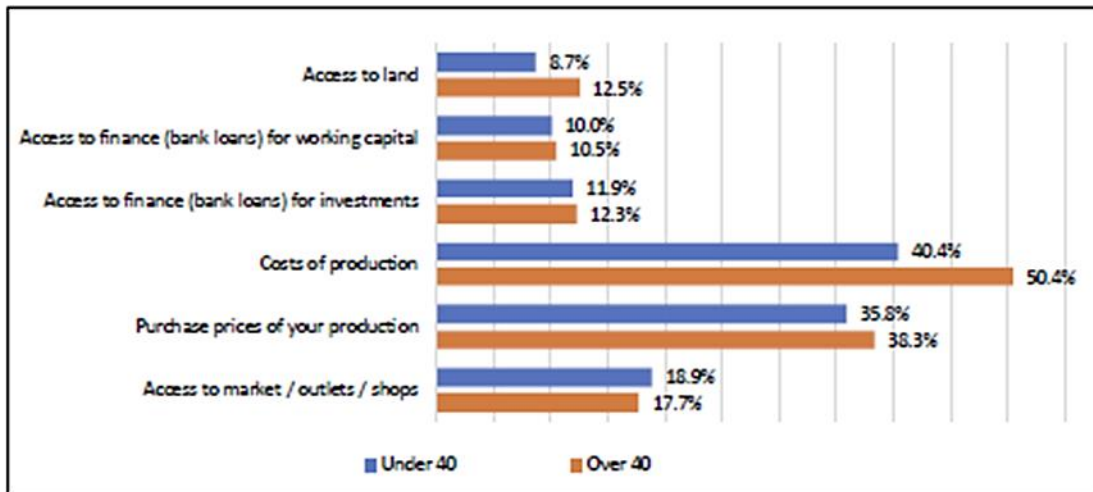
Access to credit

A key study in this topic area is the DG AGRI fi-compass (2019) *Survey on financial needs and access to finance of EU agricultural enterprises*. It noted that young farmers in the EU are characterised by⁴⁴: a low proportion of total farms, agricultural land and standard output; medium-sized farms; higher professional qualifications; below-average income, low capital stocks and land ownership; high net investments, below-average liabilities and average debt-to-asset ratios; and high returns on assets. Access to finance, especially bank loans, was critical for 12.2% of all farmers using them for investment finance and 10.4% for working capital. Access to finance was particularly difficult in Greece (more than half of farms experienced difficulties in accessing finance in 2017), Estonia, Hungary, Lithuania, Bulgaria and Portugal. For farms in Poland, Sweden, Italy and Austria, access to finance was less problematic than for the rest of the EU.

The same share of young farmers (below 40) as older farmers applied for finance in the previous year. They applied for almost the same types of financial products. However, young farmers tend to rely more on resources provided by relatives and friends, and are less confident in approaching the banking system. Agricultural enterprises run by young managers have less success in obtaining the requested finance, in particular short-term or long-term loans and the rejection rate is also higher for young farmers. Young farmers tend to invest more in new machinery, equipment or facilities, as well as in working capital; older managers use bank financing more for investments related to the land. Loan applications by young farmers are rejected mostly for the high risk associated with the new business; they also seem to suffer more from a lack of appropriate collateral (both immovable and movable) as well as from inadequate business plans. Young farmers are much more interested in a potential financial instrument which includes flexible conditions, such as an interest rates or a repayment schedule adjusted to the business cycle or cash flow.

⁴⁴ European Commission (2017), Young farmers in the EU - Structural and economic characteristics, EU Agricultural and Farm Economic Briefs No 15, October, p.1.

Figure 56. Difficulties experienced in the previous year (% responding yes)



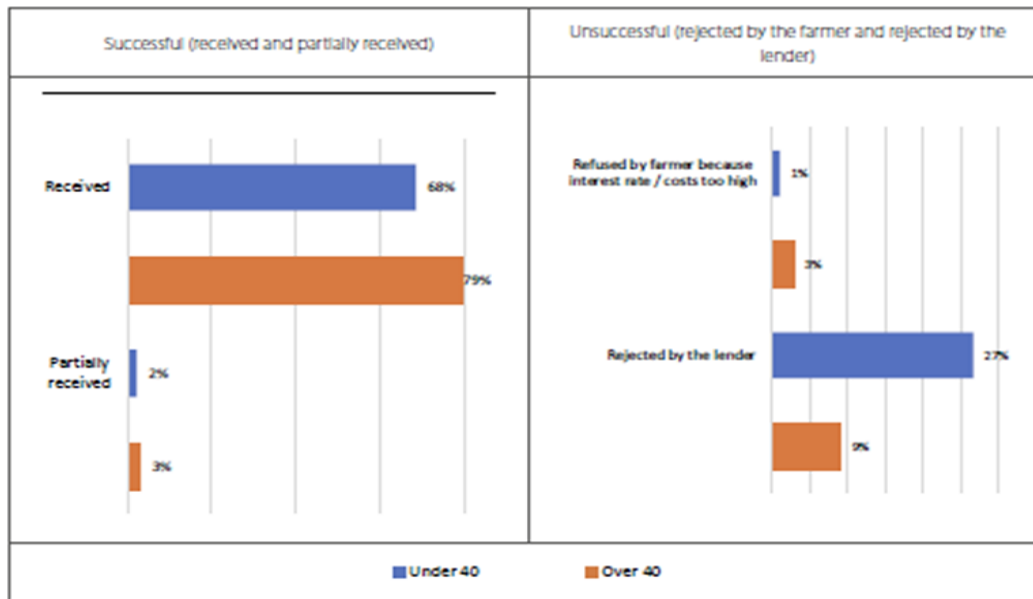
Source : DG AGRI fi-compass (2019) Survey

The attitude towards finance of the two age groups seems similar, though the responses from banks were very different. Agricultural enterprises run by young farmers are considerably less successful in obtaining finance for all the financial products (68% versus 79%). In particular, the difference with older farmers is wider for credit lines (73% versus 88%), short-term loans (67% versus 79%) and long-term loans (63% versus 75%). This is largely due to young farmers being two to three times more likely to have their loan application rejected. Older farmers refuse loans slightly more because of their high cost.

This seems to reflect the reasons given by banks to refuse loan applications confirming a specific risk aversion towards young farmers. More than 60% of applications from young farmers do not receive funds because of the perceived riskiness of the investment (against 18% for older farmers). There is a more specific justification that risk is too high for new businesses (14.6%). Lack of movable or immovable assets to be used as collateral also seems to be a much bigger issue for young farmers (more than 35%) than for old ones (13%).

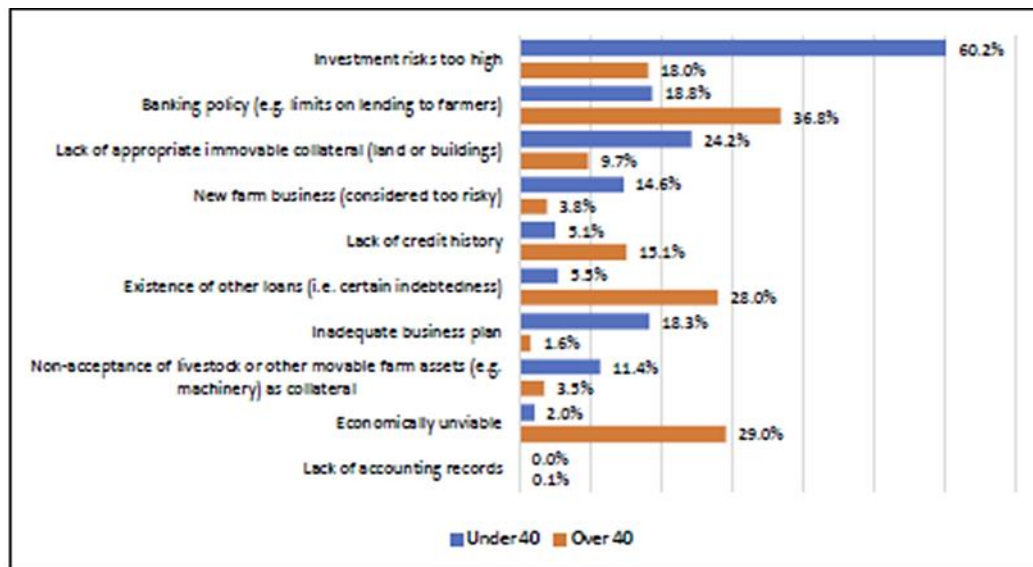
For expectations about farms' financial needs in the coming years, older farmers are more confident about their needs remaining unchanged (41%), while young farmers see increased needs (32% versus 26%). Interestingly, about a third of both groups cannot define how their future will evolve. Importantly, there are very few farmers thinking that their financial needs will decrease (4.3% of young farmers and 3.2% of those over 40). Moreover, both age categories seem to attach similar importance to all the bank financial products, although they are slightly more important for young farmers.

Figure 57. Farmers' experience in seeking loans from banks



Source : DG AGRI fi-compass (2019) Survey

Figure 58. Key reasons given by the bank for refusing the application



Source : DG AGRI fi-compass (2019) Survey

A subsequent, recent study by Fi-Compass has focused attention upon the scope for Financial Instruments to ease the access to credit of young farmers and others starting up in agriculture (FiCompass, 2019⁴⁵). The study examined the experience of lending institutions and financial intermediaries to identify how and where policy intervention to facilitate farmers' access to credit might be most beneficial, in view of the findings of previous studies. In sum, the report identified the potential for an EU-wide loan guarantee facility to help encourage lenders to invest in farm businesses, reducing the level of risk that would otherwise act as a significant barrier to such lending. This work has already had positive impacts: in April 2019 the EC announced a new initiative to promote easier access to credit for young farmers. A partnership between the EIB and the European Commission is targeting the establishment of financial guarantees to help

⁴⁵ <https://www.fi-compass.eu/publication/factsheets/debt-finance-and-use-credit-guarantee-instruments-agricultural-enterprises>

increase YFs' access to credit, as part of its Financial Instruments provision, and several MS have launched new schemes on these lines.

5.2.5.5 EU data analysis

Correlation

As presented for ESQ 3 earlier, weak but statistically significant correlations were found between planned expenditure on CAP GR measures in both pillar 1 and pillar 2 (FA2B), and decline in the number of young farmers, at NUTS3 level, in a similar timeframe. This can be interpreted as indicating that GR funds are focused on territories where the general challenge of GR is most severe: i.e. reflecting needs. However this finding sheds no particular light on the specific issues of access to land, capital or knowledge.

CGE analysis

In the Polish model, the impact of YF aids upon land prices could be estimated at NUTS 2 regional level, net of the counterfactual. This found that land prices increased in most regions where CAP GR aids were applied, but that this impact was relatively marginal (from 0 to 0.48% for Pillar 1 YF supplement and up to 0.64% for Pillar 2 FA 2B), but there were also ten regions where Pillar 2 aids led to a fall in land prices.

Table 31. Estimated impact of CAP spending 2014-2020 on land prices in Polish regions

Polish NUTS 2 region	P1 YF aid, % impact	P2 focus area 2B, % impact	Pillar 1 total aid % impact
1 DOLNOSLASKIE	0.08	-0.17	4.2
2 KUJPOORSKIE	0.25	-0.04	7.42
3 LUBELSKIE	0.48	0.64	20.93
4 LUBUSKIE	0.23	-0.06	9.53
5 LODZKIE	0.21	0.12	6.59
6 MALOPOLSKIE	0.05	0.51	-0.87
7 MAZOWIECKIE	0.24	0.1	10.97
8 OPOLSKIE	0.1	-0.23	1.62
9 PODKARPACIE	0.19	0.48	7.23
10 PODLASKIE	0.36	-0.06	11.32
11 POMORSKIE	0.24	-0.14	5.54
12 SLASKIE	0	-0.06	-1.42
13 SWIETOKRZYSK	0.28	0.58	9.02
14 WARMMAZURSKI	0.24	-0.12	13.93
15 WIELKOPOLSKI	0.15	-0.09	2.74
16 ZACHPOMORSKI	0.21	-0.15	12.07

Source : CGE model results, Polish case study

The model also examined the estimated impact of total Pillar 1 aids upon land prices, by region. In this case, the impact was much greater (up by almost 21% in the most rural region, Lubelskie), reflecting the much more significant level of support offered per hectare in the SAPS scheme, compared to the level of support given per hectare or per beneficiary, specifically and uniquely to young farmers, under both CAP pillars. These findings are consistent with a claim made in many stakeholder interviews in the case studies and at EU level, namely, that Pillar 1 aid increases land prices and can therefore sometimes exacerbate YF challenges in seeking to gain access to land.

5.2.5.6 Case Study evidence

A longstanding issue identified as a barrier to entry for young farmers is access to land and credit. This issue is shared among all YF across the selected Member States. However it is commonly held that CAP GR measures have very limited impact on access to land, capital and land mobility. In addition, the reasons underlying these barriers are very different, in different local situations as demonstrated in the case studies.

Access to land and capital are major issues for farmers in **Flanders** overall, and in the case study areas under examination (Provinces of Flemish Brabant and Limburg) in particular, where prices are high and competition from non-agricultural land uses is intense. Via the CAP aids received (all CAP, pillars 1 and 2), farmers may be able to create financial reserves which ease their access to capital: this is particularly relevant due to the intensive nature of the agricultural sector in Flanders and its related degree of specialisation. The associated easing of income fluctuations also contributes to ensuring long-term business viability, this is highly relevant. On the other hand, access to land is not targeted via the disbursement of aid. Rather, it ensures that existing farms are taken over by the next generation, thus retaining continuous access to existing land by a given farm enterprise.

Older farmers can be reluctant to rent or sell part of their properties to young farmers that they do not know. Agricultural land is also sometimes used for non-agricultural purposes which leads to the reduction of available land. Young farmers support organisations have found a solution to these social or non-price related issues linked to land mobility. For example, a Flemish association (De Landgenoten) is using crowdfunding to buy land and then rent it out to selected young farmers. The aim of the association is to manage agricultural land sustainably as common property (described in more detail in the good practices section, 4.4.5).

Access to land is also identified as a major barrier for YF in **Ireland**. Specific problems include:

- Older farmers not retiring (due to loss of status, loss of income, poor pension provision);
- Older farmers can reduce agricultural activity and still draw down Pillar 1 CAP support payments;
- Limited land is available for sale (less than 1% agricultural land comes available each year);
- Very high prices for land; and small farm size (average size 32ha) – is not enough to support a family;
- Limited availability of land for long-term lease (Ecorys, 2015).

Other factors creating barriers to YFs include lack of succession planning, tax incentives, cultural perceptions on the importance of keeping land in the family, young people's perceptions of agricultural work as low paid and hard work, lack of start-up aid for new YFs, lack of services in rural areas for young people and young families, and high levels of employment in the Irish economy with better paid jobs in urban areas (Bogue, 2013; Macra na Feirme, 2018; Conway, et al., 2017; Leonard, et al., 2017).

Cultural factors play an important role in land availability, land is perceived as 'almost sacred' and the person who sells the family farm, or even part of it, can feel a failure (Livestock farmer, Co Cork). Because many people holding land also earn incomes from non-agricultural employment this can lead to a significant pattern of under-use or virtual abandonment of farmland across swathes of the country, especially where land quality is relatively poor. Northern areas of the country such as County Mayo have seen an increase in 'under-utilised' land as the farming population gets older and gradually reduces its investment and activity. Consequently, access to land, whether to buy or rent, is extremely limited even though it lies almost idle. Farmers interviewed noted that in order to either buy or rent you had to know in advance when and where land might come available. Most sales and rental agreements occur before land is ever put on the market, and when land does come up for sale the demand pushes prices up, in some cases making it uneconomic to buy for farming. Access to land, even to rent, can be difficult: *"One young person around here couldn't get land but then a man rented him land because he was getting young farmer support and the landowner could get more in rent [from the YF] than he could farming the land himself."* (Sheep farmer, Co Mayo).

CAP support has not altered the availability or mobility of land for lease or purchase for YFs and new entrants, the vast majority remains within families. The evidence suggests that the single farm payment keeps old farmers on the land, and results in underutilisation of land resources, especially in marginal agricultural areas. One YF interviewed in County Mayo noted that that older farmers just gradually wind down their level of activity rather than lease or sell: *"... a lot of the old farmers around here are half-retired, they're getting their pension, and they do enough to get the money (single farm*

payment), but they are not farming it properly, they're not doing the upkeep, the fencing, the improvements, the maintenance..." (Sheep farmer Co Mayo).

A three-year 'Land mobility service' pilot programme established by Macra na Feirme operated successfully in 2014-16, creating 282 'arrangements' across 25,000 acres of agricultural land (Land Mobility Service, 2017). Financial support came from the FBD Trust (identified as essential to the success of the pilot project), the Irish Farmers Journal, Macra na Feirme, the Department of Agriculture, and three cooperatives in different parts of Ireland, as well as from farmers themselves. Other organisations such as Teagasc and the Irish Farmer's association also provided service support. The aim of the pilot was to develop and test support services required to increase access to land through collaborative farming arrangements (Land Mobility Service 2017). Despite the success of the pilot and its continuation Macra notes that it is difficult to attract young farmers.

Land can be rented in a variety of ways but until recently the majority of land was only available on short-term 11-month leases (known as 'conacre'). Longer-term leases are reported as becoming more available but in the most profitable sectors competition for land, and prices, are high, making it harder for YFs to compete with established farmers. Tax relief on long-term leasing has started to open up the market as both YF and the land owner benefit, but there is a reported reluctance to engage in long-term leasing due to concerns over potential loss of earnings if the market changes (Bogue, 2013). The evidence for an effect is in the dairy sector, where farms are viable and there is a desire to enlarge.

Access to credit was cited by all young farmers interviewed as a key barrier to entry to farming. Access to credit is easier for the dairy sector, supported by the Glanbia MilkFlex Fund⁴⁶. The aim of the fund is to provide Glanbia milk suppliers, with an innovative funding product that helps protect farm incomes from the impact of dairy market volatility. The fund which underpins loans enables farmers in the co-operative to adjust loan repayments based on milk prices (e.g. when prices go below a trigger level then loan repayments can be adjusted downwards). The fund has been established by investment from the National Treasury, Rabobank, Glanbia, and Finance Ireland (which is the fund manager). It is not targeted at Young Farmers but at dairy farmers in general. Loans help to address the issue of milk production and price volatility (fi-compass, 2019). Key issues relate to the lack of assets against which to borrow and high start-up costs, not just for buying/leasing land but also for purchase of livestock and machinery. One YF, who grew up on a farm but was not in line to inherit noted that he had been turned down nine times for a bank loan, and in order to start up had to borrow money from family and then get a family member to act as a guarantor for a loan. Another YF noted: "Getting transfer of the farm into your own name is the hardest thing. Land is expensive and round here it's touristy which pushes the price up. Finance is not easy to get, you need three years of running accounts to get any credit. Tell them you're a sheep farmer and they just laugh..." (Sheep farmer, Co Mayo).

Direct subsidies in **HU** have both a positive and negative effect on GR, as they increase the income of farmers and improve the chances of farmers accessing loans, thereby functioning as an entry barrier while increasing production incomes.

Land purchases by family farms and young farmers are preferred by legislators, with the pre-emption right to assist the land acquisition of persons registered for farming. The aims of the legislator with the introduction of the New Land Act were also to strengthen small and medium-size family farms, to consolidate the properties by the pre-emption rights, to limit speculative land purchases and use, as well as to assist the transformation and development of the rural economy with the involvement of local communities. The mobility of land is enhanced by the fact that, on the Hungarian land market, where sale of agricultural land to economic organisations is still prohibited, land can be considered inexpensive compared to prices in other EU-15 Member States: the average arable land sale price was EUR 4,218 per hectare in 2016. Owing to pre-emption rights, family farms are beneficiaries in the land market as their number and land ownership have increased.

⁴⁶ <https://www.glanbiaconnect.com/news/milkflex-fund>

Of the various production tools, access to land is the biggest obstacle for young people. It is a limited resource that is protected by strong legal regulations. Land mobility is hampered by the fact that direct subsidies have been capitalised in land prices and land rent, in addition to increasing farmers' income. The effect is economically significant and leads to the outflow of income from the sector, creating a barrier for young farmers to access land. Consequently, there is a need to reconsider the land regulation by providing a preference for young farmers taking over farms in pre-emption and pre-leasing rankings.

The CAP GR measures are relevant for GR in agriculture in **Poland**, especially with respect to access to capital for young people, to some extent also to knowledge (because of the eligibility criteria requiring qualifications, although that should be extended to not only agricultural but also economic and management studies). However, they would especially welcome CAP GR measures enabling better access to land (e.g. by allowing purchase of land as an eligible cost for M 6.1 YF installation aid). The impact of CAP on land prices is not so much raised as an issue, but the Land Act 2016 introduced in Poland which very much restricted land turnover.

Land mobility is to some extent addressed by GR measures as they encourage e.g. land consolidation in Polish implementation. For example in the case of M 6.1 YF aid there is requirement on the farm size to be of the size of national or at least the provincial average, so small farms which more often participate in GR need to buy more land to be eligible. That encourages land consolidation.

Case study analysis in **France** shows that the main obstacles to installation are land access, the high costs of succession, uncertainty in the viability of projects and access to finance. The evidence shows that CAP measures are relevant and respond to farmers' needs, particularly in terms of access to capital, acquisition costs and economic opportunities. However, CAP measures have little grip on the issue of land access and knowledge access. Transmission remains an important issue. The national installation policy AITA and modulation of the M6.1 installation aid can nonetheless encourage installations outside the family context. This issue is mainly covered by national provisions around Land Development and Rural Settlement Societies (SAFER) and Structural Controls as well as the transmission component of the national AITA programme. French policy at both national and regional levels has also long used financial instruments to help YF to access credit: investment plans have been supported by low or no-interest loans (the 'Dotation Jeunes Agriculteurs', or DJA), although in recent years these have been less used due to declining bank interest rates and some regions have withdrawn their DJA provision. In the region of focus for our case study, the DJA was withdrawn in 2017 but in 2019 a new loan guarantee facility was launched under the EiB-EC initiative: it is too early as yet (2019) to evaluate its impact.

Young farmers in **Estonia** are starting businesses in different ways, but the most common is gradual transfer within the family: in these situations, access to land is not really a major issue. However, access to land is a problem for new entrants as there is not much land available or it is of poor quality or only usable as permanent grassland. The land available (if any) is mostly not allowed to be ploughed it is suitable for only limited types of farming (e.g. beef production, greenhouses and apiculture). State owned land is sold in auctions, the price is not affordable for young farmers as they are not able to compete with larger agricultural and forestry companies that are able to pay higher prices. The State can do and is expected to do more here. One option would be to offer the land [state owned] for long-term lease (e.g. 25-30 years) with preference given to YF, or to sell it with additional conditions attached, so that the highest price no longer plays the prime role.

Access to finance was the second most significant barrier facing YFs when starting out in agriculture. Without assets YFs cannot gain access to credit. In most of the cases banks don't give loans to enterprises starting their business, especially in the farming sector. Targeted financial instruments could be a solution here and giving loans for buying land should be included. The Financial Instruments applied in Estonia under the RDP should help to address poor access to credit, once fully established, but as yet there is little evidence of its impact. Other CAP GR measures don't really help address these issues.

In **Italy**, a great majority of farmers interviewed said in particular the Direct Payments (DPs) have strong effects on land prices and consequently make it harder accessing land for new entrants or buying land in order to enlarge the farm. On the other hand, CAP

entitlements can ensure guarantees to help access credit from banks. There is some contradiction/conflict between the objective of fostering generational change and the objective of income support assumed by direct payments. In both CS areas, despite relative isolation from urban/peri-urban centres, strong competition for land is reflected in high land prices.

In Sicily, entry of young people in agriculture is hindered by various economic and social factors: difficulties in accessing credit, stillness in the land market, low profitability of farms, lack of full-time employment, poor quality of life in rural areas, poor infrastructure and services (Schimmenti et al. 20146). Particularly after the credit crunch in 2010 and in the absence of family assets or external economic aid, young people are unable to benefit from the recent slow recovery of bank loans to farms. Access to land is strictly linked to both soil characteristics and regional land market: there are different demands for land related to different uses and different profitability expectations from different economic actors (Schimmenti et al., 20137), even speculative interests in other sectors (building, tourism, renewable energy) or emotional attachment or potential occupational way out in the absence of other viable options. Therefore, the best plots of land in terms of fertility, infrastructures and irrigation are overpriced compared to actual profitability. In Sicily, price of land increased progressively from the 1970s up to 2005, when the introduction of CAP single premium curbed this trend.

However, there are great differences at both territorial and sector level: in 2017, average price was 20,331 Euros/ha at national level and 9,776 Euros/ha at regional level, whereas in the Madonie area, land good for manna ash trees may range from 7,000 to 12,000 Euros/ha. Lately, national authorities tried to promote land sales by granting payment and fiscal facilities (CREA, 2019 8), while the regional OP ERDF Measure 4.11 Land reparation financed costs for exchange of parcels or land purchase and a share (40% in disadvantaged areas, 30% in other areas) of capital contribution or interest subsidy through property leasing (unfortunately not reconfirmed after 2007-13). Transfer of land was encouraged by RDP 2007-2013, in particular by measures for set-up of young farmers, agri-environment-climate payments, organic farming and compensatory allowances. Moreover, there has been an increase in lease of pasture land in hilly and mountain areas, where RDP requires a certain number of animals to be held, for livestock holdings. Lastly, as observed at national level (Longhitano and Povellato, 201711), in Sicily land lease is the main way to keep rural areas vital.

In Marche region, specific factors that act as barriers to enter agriculture include: lack of financial resources, higher risks related to the climate, low income, scarce availability of land and the lack of services in rural areas, negatively affecting quality of life in those areas. Additional barriers can be considered: high initial investments and inadequate financial incentives for young farmers, lack of specific professional training, high prices of inputs, particularly land price, as well as market imperfections due to factors outside agriculture (Sotte, 2004). Since 2014, the Italian government has instituted a series of measures to help to free up the land market in Italy (see ESQ14 and 11 fiche, for more details). Financial instruments have also been newly adopted by some Italian regions, also specifically targeting YF, but this happened in 2017-2018 and they have only recently started to work in Apulia with several reported 'teething problems'. Loan guarantee funds have been set up to facilitate the uptake of measure 4.1, 4.2 and 6.4, but with insufficient results by 2019 to enable evaluation.

Access to knowledge is covered in the answer to ESQ 2. Here we add a few additional points only.

In Ireland, agricultural colleges are accessible, and Teagasc and Macra na Fierme both run knowledge transfer sessions and discussion groups enabling YFs to meet each other and older farmers. Nevertheless, the CAP criteria for attaining a certain level of skills and knowledge to access the YF support under Pillar 1 and investment aid at the higher YF rate (M4.1) has undoubtedly led to an increase in knowledge among YFs, who have often had a lot more formal schooling than either their parents or grandparents. In the dairy sector cooperatives are relatively strong and also provide KT opportunities, while this is less prevalent in the beef and sheep sectors. In County Mayo some farmers indicated that much of their knowledge to address livestock problems came from talking to older farmers at livestock markets, rather than from more formal KT channels.

The proportion of young farm managers with secondary and higher education degrees in **HU** are higher than average. In Hungary, there is a great need for as many experts with

this qualification level as possible to live and work in the countryside, thereby helping to revitalise rural communities. However, owing to their age-specific characteristics, young farm managers typically lack market and management experience. In many areas, school-based training is not capable of transferring the knowledge required for practical management, and there is much information that can be effectively obtained by transferring the knowledge and practical experience of farmers, mainly from the well-functioning farms. For GR, it is vital to ensure that access to practical knowledge transfer methods is also ensured by school-based training. For the future, the reserve for the expansion of human resources in the food economy can be freshly-graduated career starters with secondary and higher educational degrees and professional qualifications. As with other sectors of the national economy, education and training are key factors in improving competitiveness and creating long-term employability in the food economy. The exploitation of the potential of human capital is hampered by the lack of reliable, affordable, accessible and efficient knowledge transfer systems for farmers. The operational efficiency of predominantly state-run institutions is moderate, the knowledge and information disseminated is out of date and their practical applicability is limited. Another problem is that integrated, strategic consulting that brings together technology, production and marketing is not available for smaller producers. Relevant measures for training and advice (M1 and M2) have not yet been launched in **Poland**, but advisors play a significant role in the success of start-up aid for YF. (see ESQ 2 answer).

5.2.5.7 Limitations encountered in answering the evaluation questions

Case study evidence is strong, but EU evidence less so: the online survey questions did not directly connect land availability with CAP measures so some of these comments are not wholly relevant to this ESQ. During EU level interviews also, these issues were addressed in general and not specifically related to the CAP GR measures. Stakeholders' opinions were influenced by the situation in their home countries.

5.3 EFFICIENCY – ESQs 6 and 8

5.3.1 ESQ 6: Efficiency of the CAP Measures/instruments in fostering generational renewal

5.3.1.1 Our understanding of the question

This question concerns the extent to which CAP GR measures deliver outcomes well but at minimum cost, avoiding excessive bureaucracy whilst still ensuring cost-effective delivery. It embraces examples of where more careful design can reduce costs for all those involved in GR measure implementation, public and private. Subsidiary questions could be:

- What are the estimated costs of delivery per spend of output?
- What are the estimated costs per unit of outcome?
- How do the patterns of implementation costs vary across Member states/regions?
- Which measures are most expensive to deliver, and what are the reasons?
- Could ways be identified to reduce these costs without reducing outcomes?
- To what extent can delivery costs be attributed to the design of EU level rules, and to what extent to MS implementation approaches?

Evidence sources

- EU interviews and on-line survey;
- Case study findings.

The combined result of analysing all these sources is presented in the conclusions below. A summary of the evidence from each source then follows, ending with a note on the limitations of the analysis.

Conclusion ESQ 6

The material assembled and analysed for this ESQ illustrates the complexity of achieving a simple answer. Efficiency varies considerably between different countries, and different measures that are delivered individually or in packages, as well as different delivery

approaches and different actors within these processes. What is efficient for an administrator may not be perceived as efficient for a beneficiary, as transaction costs may be very unequally divided between the different actors.

So far, we have gathered a large body of evidence showing some elements of efficiency and some elements of inefficiency, in the design and implementation of GR measures under the CAP. In summary:

- Pillar 1 YF aid may be comparatively low-cost to deliver but its effectiveness in fostering GR is less direct than M6.1 and less recognised by stakeholders.
- Pillar 2 aid may be perceived as relatively simple and easy to access, or can be associated with slow processes and relatively high implementation costs, but these factors appear irrespective of whether it is delivered in a package or delivered one measure at a time in separate calls. Key factors tending to more costly or less efficient delivery include:
 - the ratio of applicants to available funds (a high ratio can easily swamp the delivery system and lead to long delays);
 - the quality of information (including transparent selection and eligibility processes), advice and support available to applicants to ensure that their plans and applications are of a high quality (to reduce delays and repeat requests for more information);
 - the level of skills, resourcing and co-ordination of relevant personnel within the public administration to facilitate swift and robust appraisal of applications (to enable funding to be offered to the cases offering best additionality) and to smooth the process of associated permissions or checks; and
 - the ease of operation, continuity and quality of communications between beneficiaries and administrative/advisory personnel (to encourage trust and efficiency in transactions).
- Efficiency has been measured in terms of costs and times to complete business start-up and related investments linked to the business plan. Analysis of the delivery process highlights how different models have been set up in the support of GR through CAP Pillar 2 measures. Efficiency is not necessarily linked to the complexity of the delivery model: a package of measures can be more efficient than an approach based on single measures;
- Efficiency in mixing different instruments to pursue the objective of generational change is more evident in the French and Italian cases, the former being able to combine RDP instruments and national policies accompanying the preparation of instalment, the latter mixing different instruments and simplifying the application process for the potential beneficiary in a “one-stop shop” approach;
- Targeting of aid rates or by selection criteria appears an efficient way to address policy instruments toward certain issues, in particular there is evidence that territorial modulation of rates of aid can focus public expenditures in the most fragile areas (mountain and remote areas) to good effect;
- Efficiency appears to be strongly conditioned by State and regional institutional organisation and every delivery model must be analysed taking account of external conditions that hamper the type of delivery undertaken. This is key to evaluation: the different approaches cannot be assessed only in terms of costs and times; the risk is to attribute to costs and times an explanatory capacity that in reality they cannot provide;
- General and specific factors influencing heavy delivery and inefficiency are explored more in detail in ESQ 8 concerning the administrative burden;
- Models of delivery based on an integrated set of measures and national policies can stimulate a learning effect both in administering bodies and for the private sector: as they require more co-ordination effort among the different bodies/offices responsible for policy management; they also require a holistic vision of the farm needs and development strategies of young entrepreneurs;
- Most of the policy instruments under examination prove to be less efficient for young entrepreneurs coming from outside the family farm and beyond the agricultural sector – preparing an application and securing aid takes longer and requires more effort for this group, compared to farm successors.

- Some particular concerns in the case of France, arising from audit and subsequent revised procedures for business plans, appear to result from a low level of trust within the hierarchy of delivery, triggering particularly onerous responses. Interviewees at more local level perceive the 'blame' to lie with EU audit and control points, while those at EU level say that there has been an overly restrictive reaction at Member State or Regional level.

5.3.1.2 EU Interviews and on-line survey

In some Member States, RD programmes change significantly from one period to the next, which may cause uncertainty and give rise to additional costs among beneficiaries. In addition, one important issue detected by interviewees was that GR measures usually address young people that are already interested and informed about them. However, a large number of young people could avail of funding opportunities but are not able to find out about them. Bureaucracy, lack of accessible and easy-to-understand information sources, difficulties in reaching the authorities and/or limited initial capital are some reasons for this. One of the interviewees mentioned: *"Some young people are reluctant to ask for funding because of the heavy processes and controls"*.

Relevant responses also came up in the online survey from some MS respondents:

- "It is necessary to listen to the needs of the inhabitants of rural areas, only in this way we will be able to solve their problems" (ES).
- "Social and agricultural policies are not attentive enough to the socially excluded people in remote, demographically vulnerable rural areas. The issue is that there is just one measure/ rule for all very diverse/heterogeneous rural areas in the country. The rural policy in the country is ineffective and not innovative because the policy makers do not possess sufficient scientific base for proper policy making. There are not investments in such research and analysis" (SI).

5.3.1.3 Case study evidence

Costs of delivery have been calculated on the basis of the working time spent in preparing, approving and providing payments for an average application and average salaries of administrative-technical personnel involved in processing applications in some Member States (see more details in section 4.4.2 of this report).

Overall, from the analysis of delivery costs, we cannot deduce relevant inefficiency problems. Costs can be considered reasonably in line with the size and complexity of the projects, especially if implemented under the form of a package of measures. The cost of Italian YF packages seem reasonably low (between €5,000 and €5,500) if we consider that the package always includes at least two measures (sometimes three) and this represents about 2% of the total public expenditure activated by the package in the two regions. In some regions a higher cost is partly explained by longer times devoted to advising young farmers in preparing the application (e.g. Loire case study for M 6.1). This increases the share of delivery costs in total expenditures, but it seems necessary in order to reach as many farmers as possible and to prepare viable projects.

Delivery costs do not include private costs, they have been estimated separately in some countries: these costs strongly depend upon the complexity of application and investment size, in general the cost of filling in applications has not been expensive in recent times, as it is fully digitalised in most case study countries.

Complexity of selection procedures also depends on the number of specific criteria used to assess applications. There is obviously a trade-off between selection criteria and better targeting of policy measures: more criteria, in particular linked to territorial or farming types, help to address the needs of specific territories or type of farming. Territorial modulation of the minimum size is used to make eligibility requirements less restrictive in some specific areas. Selection criteria are also modulated to give more favourable access to:

- Areas with natural constraints, mountain areas and areas with low population densities (Marche, Sicily, Auvergne-Rhône Alpes);
- Specific types of farming (e.g. extensive livestock, fruits in Auvergne-Rhône Alpes);

- Investments related to specific objectives, such as innovation, environment and climate change adaptation (Marche, Hungary);
- Organic production, production with quality certification (PDO, PGI, etc.), healthy animal production and animal welfare, energy saving technologies (Sicily, Auvergne-Rhône Alpes);
- Agricultural employment impact and quality of employment.

Results from the targeting via modulation of selection criteria are not yet evident in all areas. In Italy there has been a clear targeting in favour of upland and remote areas: 60% of new business start-ups are allocated to these areas in Sicily, while in Marche the share of young farms in these areas is 46%.

5.3.1.4 Limitations encountered in answering the evaluation question

In Poland it was impossible to assess the cost effectiveness of application verification as it varies too much between cases. In most CS countries it has proven difficult to obtain comparable estimates of efficiency, although we have been able to draw some general patterns from the comparative analysis (section 4.4.2). Very few previous studies have taken a robust look at efficiency issues, so the work here is novel and exploratory.

5.3.2 ESQ 8: Assess the administrative burden of relevant CAP Measures/instruments linked to generational renewal at each of the following levels: Programme/Measure beneficiaries; MS administration (e.g. MA & PA; local delivery); EU level.

5.3.2.1 Our understanding of the question

This question seeks to ascertain to what extent accessing and delivering GR measures is felt as a heavy administrative burden upon applicants and delivery bodies, and whether there is scope to reduce this burden. It also asks from which policy level, the burdens arise, so that remedial actions can be targeted appropriately. Subsidiary questions would therefore include:

- What are the administrative costs at EU and MS level, of GR measures' delivery?
- What resources are required by applicants to access programme/measure benefits?
- How do the resource requirements differ across programmes/Measures?
- Are there examples of best practice which minimise the administrative burden at EU/MS/Regional level? - At applicant/beneficiary level?
- What are the most challenging aspects/barriers to delivery of Measures that influence GR?
- Which aspects of delivery of GR are easiest to deliver?
- To what extent does policy design contribute to the administrative burden at:
 - EU level: EU policy design level?
 - MS level: Implementation and design choices at MS level?

Evidence sources

- EU literature review;
- EU interviews;
- Case study findings.

Conclusions

There can be significant administrative burdens for the applicants for EU funding in different MS that may reduce the effectiveness of the measures and be negative drivers for young people participating in schemes. From the case studies there is evidence of administrative burdens on both beneficiaries and the public administration arising from each of the factors identified as critical for efficiency (ESQ 6), in particular cases. However, the overall picture is of a system of support which is at least as efficient as a wide range of other comparable types of EU funding. The estimated administrative overheads appear within a reasonable range (1-20%), and in very few instances have beneficiaries suggested that applying for the measures is not worthwhile, in view of their

administrative burden.

Time resource requirements for processing and completing applications differ across programmes and depend on three broad categories of factors: policy rules, role of public and private actors and finally general socio-economic conditions.

The application processes for measures 6.1 and 4.1 can be complicated for applicants and may require skills beyond their knowledge and expertise, in many cases. Where advisory services are provided by government or part-supported through the funding provided, the burden should be reduced, however where advice has to be purchased (in whole or part) from private providers, it may distort the cost-benefit balance of the aid package. Private advisers' incentives in preparing an application may not coincide with what is optimal for the beneficiary: an adviser may encourage a high volume of aid and investment because that maximises their income from the job, whereas for the beneficiary a more modest investment or plan might be more sensible, given future uncertainties.

The application process for these measures may also be made more burdensome for applicants by poor policy design or inadequate resourcing at national or local levels, leading to a lack of administrative personnel to make appropriate checks and take decisions, also proper interpretation of legal and other requirements and other national provisions (such as planning permissions) that delay the process and increase the perceived administrative burden.

These administrative burdens can be attributed more to MS choices in implementation approaches than to the design of EU level rules. However, the need to comply with selection criteria of single measures, and financial allocation by single measures, unnecessarily increases the complexity of the selection for packages of measures (as in the Italian cases) and the management of financial resources within the package, which increases this administrative burden for authorities and beneficiaries. Flexibility to allow designing selection criteria and financial allocation for an integrated package would reduce this burden.

5.3.2.2 EU Interviews

One perception regarding the application process was that applying to an RD scheme requires "accounting" knowledge: very few people can do it without help and that implies a cost. According to interviewees, for farmers the administrative burden can be quite complex and advice is not always relevant or accessible. In countries where there is an advisory service provided by the government it is easier for interested YF to apply for funding. Provision of advisory services may vary: for example, in remote areas private advisory services may be non-existent because there is a very limited market for them. In Member States where advisory services are not provided by the state, they pose a financial burden to applicants; in some Member States CAP funding applications include advisory costs but that increases the cost of the total investment and affects eligibility for funding across the total package.

Other issues arise from the perceived relationship of applicants to MS authorities. Interviewees reported that in some MS, YF wanting to access CAP Pillar 2 measures have become frustrated with the extent of details they have to provide and the strict controls. They look at their farm as an investment and would like to be judged on its results. Controls are based on standard criteria that do not always match the situation, they are not results-oriented and focused on accounting details that can be ill-matched to new businesses. Some of the interviewees concluded that with fewer administrative burdens or more help from effective advisory services, farmers could concentrate more fully on effective and innovative entrepreneurship.

5.3.2.3. EU literature review

There were mixed findings across the studies as to the impact of bureaucracy. Some found excessive administration and strict requirements to be a barrier to farmers accessing support (Carbone and Subioli, 2008; Directorate-General for Internal Policies of

the Union, 2012; Adamowicz and Szepeluk, 2016; EIP-AGRI, 2016; Zagata et al, 2017; Caputo, 2018). Other studies reported cases where the administrative requirements – specifically, the requirement to submit a business plan – were found to be positive, as they discouraged less entrepreneurial farmers, and taught new skills to those who persevered with them (Carbone and Subioli, 2008; McDonald et al, 2014; Zagata et al, 2017). Some found that farmers were only able to complete the paperwork with mentoring support, which could be costly if not provided by government schemes, but which had positive outcomes in regard to skills gained (Carbone and Subioli, 2008; ENRD, 2017).

5.3.2.4 Case study evidence

In order to explore administrative burdens, data on times of delivery are very helpful. These data were gathered through a semi-structured questionnaire, with public officials in Managing Authorities of the RDP and in provincial/local offices assessing single applications. This allowed calculation of average times per application in each delivery phase. Even in this case, comparisons must be analysed with many caveats due to the strong influence of the composition of investments, the size and complexity of the business plan and the specific national delivery model.

Figure 32 in chapter 4.4.2 presented comparisons among delivery times in Poland, Loire (France) and two Italian regions (using a package approach). In Loire the preparation of applications implies longer times than in other countries, due to the specific accompanying programme of supporting advice/training and planning. Italian packages are characterised by longer times of approval and, especially in Marche, too long times for completing projects. In the specific case of Marche these times are explained by the increasing difficulties of farms in covering investment costs with their own financial resources during the transition period before the new production is established, and also in finding credit support from banks. On average, we must say that completion of projects and receiving the final payment represents the most critical phase.

Time resource requirements differ across programmes and depend on three broad categories of factors:

- **RDP rules** (designed by Member States): eligibility conditions, selection criteria, financial allocation to measures, business plan rigidity and complexity, ceiling for investments, change of implementing rules over time;
- **Role of institutions and private sector**: communication/information on available aid, public advice for project preparation, completeness of application submitted, complexity of projects, administrative capacity of regional/local offices, times to get permission/authorisations from public authorities, times and procedures of controls, times to get funds from Paying Agency, times and procedures of controls;
- **General socio-economic factors**: lack of capital/liquidity at the farm level, credit guarantees and collateral conditions, land shortage/land prices, general trends in agricultural product/inputs prices.

Eligibility conditions and selection criteria are quite relevant in most of case studies but they have different meaning according to the context. Requirements in terms of physical/economic size are seen as restrictive for small-scale units managed by young farmers (Poland, Flanders), and this contributes to reduce the share of potential beneficiaries and hamper the full exploitation of the financial resources. The same happens in France, where it is pointed out that the age limit of 40 years is conflicting with the growing trend of new instalment by people coming from other sectors and outside the family context.

Selection criteria and financial allocation by measure create new constraints in the context of the package for young farmers in Italy, where specific problems arise for the application of the package approach:

- The definition of selection criteria for the whole young farmers' package has to include all selection criteria set in the RDP for the measures of the "package". This implies that the selection of the "package" is not carried out on the basis of its own set of criteria, but simply on the basis of sum of criteria derived from the constituent measures of the package. But making selection criteria a sum of

criteria of the single measures, although in principle a procedure consistent with the RD regulation, might in fact cause conflicts between criteria.

- Albeit introduced to achieve objectives specifically set for the package, in both programming periods each measure was funded separately. Therefore, for each call the overall budget available is indicated with a clear division of financial allocations by measure, and applications positively ranked can be financed up to the limit of either a maximum available funding for the package, or a maximum available funding for single measures. This results in a sub-optimal use of the package and has significant negative impacts on applicants: either resources for some specific single measures are used up before all the beneficiaries on the ranking list are financed, or it is not possible to use all the funds designated for the purposes of the package. This allocation problem means that some applicants could not obtain aid because the resources intended for funding were exhausted for only some of the measures, while the resources for other less popular measures remained unutilised.

Changes in implementing rules (from one programming period to the next or even within the same programming period, between calls) often affect the speed of preparation/presentation of applications by potential beneficiaries: they modify the system of priorities and the scoring system within which farmers take their decisions to invest and local offices/private advisors, in turn, need time to apply the new rules.

Factors of inefficiency arise from inadequate support to farmers in the preparation phase: this is a specific problem in Poland and Flanders - frequent incomplete applications are emphasized and, consequently, this causes delays in the approval process both for beneficiaries and in the public administration. This is strongly linked to problems of information and public advice in preparing applications, especially for small farms.

More complex projects usually require more time, both in assessment and in the implementing phase, due to business plans covering new buildings/restructuring of the already existent ones (Poland, Hungary, Ireland), or more innovative investments (Sicily, Marche), or diversification of farm activities (Hungary).

The administrative capacity of regional/local offices plays a crucial role in Hungary and Italy: this depends on the number of personnel involved and the ratio between technical officials and applications submitted. In Italy the package approach was popular among young farmers and this explains the high number of applications. Available staff cannot be dedicated full-time to just one call on one measure, because there are simultaneous calls on different measures to be assessed/controlled at provincial level. Times to get permissions/authorisations from public authorities and to get funds from Paying Agencies are the most common factors highlighted as causing inefficiency, in this context. Fragmented responsibilities between different bits of government (e.g. for protected areas, economic development zones) may increase coordination costs and very often cause delays.

Delays in times to get funds from Paying Agencies have been emphasized in Belgium, Hungary and Italy. In particular, delays are linked to the procedure set up by the Paying Agency to check payment claims for single measures. Consequently, it does not fit the needs of integrated measures within a business plan. Times and procedures of controls, often considered one of the heaviest components of second pillar measures, have been highlighted as major factors in Ireland and Poland.

General socio-economic factors can strongly influence efficiency of CAP GR measures because they affect decisions to invest, the financial resources necessary for the investment process, the opportunity to access available land, and the level of income/farm viability of young farmers. These factors have been highlighted in all case studies and are considered as highly relevant in all contexts.

More specific considerations for each country:

- **In Ireland** the Pillar 1 YF support is not viewed as a particular burden by beneficiaries, in terms of application, or by delivery personnel. The process is seen as relatively simple and approval in most cases only takes "a few minutes". Over 8,000 YFs have been supported through the scheme in each year of its operation. The major barrier for application is meeting the eligibility criteria, which requires YFs to be in effective control of the farm business. Under the TAMS II scheme YF receive a 20% top-up on M4.1. Payment Agency personnel

report that the total number of days to complete a single application can vary enormously, depending on the type of investment. There is no clear average time: applications for machinery are relatively simple and quick to process, applications for buildings require planning permission, regular inspections during construction, and are much more costly. Applicants to the scheme do not need to submit a business plan, as the government takes the view that it is an unnecessary burden on both the applicant and the delivery personnel. Previous experience has shown business plans are difficult to undertake: Payment Agency personnel cannot assess the quality of the plan, nor whether it makes sense for the farm in question. For both schemes (under Pillar 1 and 2) application processes are relatively simple (especially under Pillar 1) and take relatively little time, although more than two thirds of applicants under the TAMS scheme pay advisors to draw up the application.

- **In Italy** a strong role was played by the economic crisis - it has exacerbated the problem of access to credit from all farms, consequently also young farmers engaging in ambitious business plans. Credit crunch on one side and a need to implement investment plans on the other side, caused severe problems in finding financial resources in all phases of the projects. This was particularly true at the beginning of the investment plan, when young farmers needed initial capital to invest. In this regard, the instalment aid was crucial to initiate, but it was not sufficient and required complementing by the first advance on measure 4.1.
- In **Hungary** it is necessary to raise the efficiency of support through the reduction of both the administrative costs and the time needed for getting support. Setting-up of young farmers is hampered by administrative burdens. The tendering procedure is extremely long. The delay for getting support is significant, leading to a considerable loss of income. The most critical point is slow decision-making during project selection. This has often taken up to a year, as application deadlines for several measures occurred at the same time. This originated from delays to EU RD legislation, the slow drafting of the RDP and project calls after the slow adoption of the RDP by the Commission and resulted in at least a one-year delay. Since all the projects have started at the same time, this means at least one more year for an average-sized investment. Calculating with more than four years to construction time, investments may be failing due to reduced profitability, especially without enough investment capacity. The most difficult decision on taking up the scheme was whether the investment was viable. Compliance with the commitments are problematic, not everyone understood what they were taking on, so the income from the support is less than the cost of meeting the commitments. Generally, there was little time available for the application process. Payment requests can also have delays for up to one year. Amendments to the application and the related administration have also caused difficulties. In Hajdú-Bihar county respondents found uptake difficult originating from small farm size. They found support itself is not enough for development, and due to the low financial viability of farms, delays in getting the payment is also an issue. In Győr-Moson-Sopron county respondents found even the application procedure complex. The start-up of young farmers is complicated compared to many investment tenders. The cumulative cost of these administrative tasks can make net support benefits close to neutral / nil.
- In **Poland** investment-type GR measures are more demanding and it takes a longer time to obtain them, due to the following problems: lots of appendices required, documents signed with relatively short validity period; individual approaches by some officials to verification of the applications (some are more strict in verification of the applications than others, beneficiaries are asked for extra documents to prove the applications - they need to spend time to apply for confirmations and bring additional appendices to their applications); sometimes long verification of applications due to lack of personnel in regional offices of Paying Agency, meaning that signed documents run out of time and need to be re-done. From the administration's point of view, the main problems are the verification of applications. From the beneficiary point of view, young farmers said that it is time-consuming to collect all the building permits which have to be

attached to the application to prove that investment will be possible, and it applies to all investment GR measures.

- In **France**, the complexity of the system put in place and the requirements related to the monitoring of business plans as part of the 2014-2020 programming entail significant administrative burden in relation to the amount of the installation aid. In addition, there are still uncertainties about criteria and procedures for audit at the close of the case-file. This situation is described as very insecure for both services and beneficiaries. The numerous modulations to plans play a part in the difficulty. The interviews conducted and the survey performed as part of the ex-post evaluation show that the complexity of support schemes and administrative difficulties may discourage some applicants from seeking help.
- In **Estonia**, the administrative burden both for beneficiaries as well as for administration has decreased a lot during this programming period after implementing (for most RDP investment measures) the fully digital application system and use of electronic databases by the paying agency (e-ARIB). Depending on the measure this change has been taking place over the last few years. Digital application reduces the time spent for preparing the application and work related to processing and evaluating of the applications and therefore speeds up the whole process. Only if construction works (building) is included it takes much longer. LEADER measures are not fully digital yet (as local level evaluation is involved) and therefore preparation of these applications takes much longer. Applying for Pillar 1 YF support is very easy as it is done together with other area-based Pillar 1 supports and does not include almost any additional time spent by the beneficiaries.

5.3.2.5 Limitations encountered in answering the evaluation question

The answers of stakeholders interviewed at EU level were coloured heavily by the situation in their particular home countries and therefore should not be seen as necessarily representative for the EU. The EU level input to this ESQ was limited to the administrative burden for the beneficiaries and the managing authorities, as little attention was given by interviewees to the burden upon local and EU authorities.

Within the case studies, the material enables a fuller appreciation of when and how different burdens may arise, and their magnitude, illustrating the close relationship in some cases between the complexity of beneficiaries' installation plans and the burdens experienced by them, and in other cases indicating the potential risks of reduced public finances leading to under-resourced administrative processes which can prove counter-productive for cost-effectiveness.

5.4 COHERENCE – ESQs 9 and 10, 11 and 14

5.4.1 *ESQ 9: Extent to which CAP Measures/instruments linked to generational renewal are coherent with each other*

5.4.1.1 Our understanding of the question

This question asks whether CAP GR aids are internally consistent – do all the aids work together in a mutually reinforcing way? Or are they generating conflict, in their applications? Subsidiary questions could be:

- To what extent do the different measures operate together to support GR in rural areas?
- How effective are integrated approaches/projects (combining different Measures) in supporting young farmers and/or entrepreneurs: e.g. to get into farming or take over an existing farm business? How effective are they measures in supporting young entrepreneurs to start new businesses in rural areas?
- Is there good local co-ordination at the point of delivery of the CAP GR measures:
 - Where Measures are delivered independently of each other?
 - Under integrated approaches/projects?
 - Within specific sub-programmes?

Sources of evidence

1. Indicators;
2. Case studies.

Conclusion

There is a general perception across the examined case studies that the various Pillar I and Pillar 2 GR measures are coherent with each other. Between the measures in Pillar 2, positive correlation is reported in many case studies but especially where integrated packages or multi-measure approaches are designed and implemented. In general, the two pillars support each other by having common targets and goals and Pillar 1 YF supplements are being modified in some countries to improve coherence (e.g. increasing aid rates so that they make a financial difference to the average beneficiary, in Estonia and Italy). There was a variation of evidence regarding the coherence of the CAP measures with each other, across the case study Member states, with some case study reports concluding less, and some more. Regarding coherence between Pillar I and Pillar II measures, some CS stakeholders perceived them as mutually supportive, although they serve different purposes. However, in some local situations Pillar I payments contribute to limit land availability and therefore, make it more difficult for Pillar II measures to be implemented to the greatest effect, particularly for new entrants in agriculture that do not inherit land.

5.4.1.2 Indicators

EU or MS level documentation indicating inconsistencies or scope for conflict – the study team did not find any such documentation.

5.4.1.3 Case studies

The extent to which CAP Measures/instruments linked to GR are coherent with each other varies across the selected case studies. The delivery models vary, but in general CAP measures are considered to be mutually supportive with high degree of synergies. Delivery models range from single measures support (Be-F,EE, PL,IE) to complex integrated packages (IT,HU, F). In BE-FL, PL, EE and IE no coordinated packages of measures are offered, although the managing authorities as well as beneficiaries have identified synergies between the measures proposed.

There are a few interesting examples of coherence between these strands of activity:

...Various initiatives have emerged in Flanders, such as the LEADER- funded organisation “Boeren op een kruispunt” (‘Farmers at a crossroads’) which helps farmers and horticulturalists in need of psychological support. More awareness on mental health issues in the Flemish farming community is reportedly necessary to ensure that young farmers and new entrants remain in farming (ENRD, 2018).

In **IE** schemes under Pillar 1 and 2 of the CAP are mutually supportive, which is crucial given the lack of any YF installation aid, or retirement support for older farmers. YF schemes, however, are isolated from any other EU rural area support measures. LEADER support has limited interaction with the farming community. Pillar 1 YF support and the national reserve entitlement scheme operate well together to support the creation of registered farm partnerships. Evidence suggests that almost 8,000 young farmers have been assisted through the combined support. The TAMS II top-up investment aid is also reported as working in tandem with Pillar 1 to encourage development of registered farm partnerships. The combined support from Pillar 1 and 2 makes an attractive package that is also encouraged through financial support from Measure 16 to assist in paying for legal advice in developing formal partnership arrangements. A concern remains lack of support for older farmers to assist them in developing partnerships, making succession arrangements, and stepping back from farming. Macra na Ferme has indicated issues associated with a lack of young farmers coming forward to enter their pilot Land Mobility Scheme, and an unwillingness of young farmers to move to a different community to gain access to land.

There is no coherent delivery with other Pillar II measures; agricultural support measures and LEADER operate in parallel with very little interaction. However, a number of youth targeted projects are supported via LEADER and many of the business grants are awarded to young beneficiaries less than 40 years old. There is some evidence that the number of young entrepreneurs is growing (Co Mayo) but it is not clear to what extent this can be attributed to CAP measures, as LEADER is not primarily aimed at GR. In the current programming period the LEADER budget has been cut significantly and there is less funding available to support small business and farm diversification. In some areas (Co Mayo) there is close cooperation with the Local Enterprise Office, which provides training opportunities; and in combination with LEADER funding the effect could be multiplied. One interviewee in Co Mayo praised the cooperation and found it highly beneficial to their business. However, close cooperation between these entities is quite specific for Co Mayo and not replicated through-out the country (LEADER manager Co Mayo).

Interesting views were expressed at the Stakeholder Workshop regarding the relationship between LEADER, farm diversification, and the farming community. A LEADER Coordinator at the Workshop was emphatic that LEADER is for 'other people' living in rural areas, not for farmers themselves. In relation to the lack of farm diversification noted by the Case Study Research Team, farm diversification farm advisors and farmers noted that *'diversification is not a golden egg – it's a tough situation, not a panacea'*. There was a general opinion that diversification was driven largely by women on the farm while farmers who were present indicated there was a sense of social stigma associated with it: *'If you are moving towards diversification then you are moving away from what you should be doing and moving towards giving up (farming)'*. Participants agreed there was a lack of knowledge about what LEADER can fund, poor recognition of LEADER, of what it can do, and where to get information about it.

Equally there are no packages of measures related to GR available in **Estonia** and there are no specific links between measures. Interviewees did not specifically identify coherence between GR measures. However, there are clear synergies and YF receive advantage points and higher level of financial support in M4.1 and M6.4. YF get 5% higher support rate under M4.1 and get 4 points extra in the evaluation process under M6.4.

Some interviewees mentioned that it would be beneficial to have packages available as M6.1 support helps to start up with the business and make first investments but in most types of the farming investment need is much higher and better conditions (less own financing, additional points in evaluation) for receiving especially M4.1 support would be appreciated a lot. Also there is need for support to access and credit and this could be also part of the package.

Some LAGs are also supporting activities related to YF and young people in rural areas. Pärnu county (CS area) has selected Youth as one of their priorities. There are two LAGs (Pärnu Lahe, Rohelise Jõeamaa) operating in the area. Pärnu Lahe (Pärnu Bay) partnership had youth as one of their priorities in the period 2007-2013 and has it also now. Activities are targeted to provide free time activities and events to youth, cooperation between youth but also to initiate the entrepreneurship skills of the young people. Two measures of current RDP 2014-2020 give some preference to youth through evaluation criteria, in Measure 1 (Entrepreneurship) applicants younger than 40 years get some extra points and in Measure 2 (Active community) applicants younger than 26 years get extra points.

Estonia was the first MS to launch an EAFRD FI (Financial Instruments) during the 2014-2020 programming period. The objective of the FI is to improve the access to credit of micro, small and medium-sized (SMEs) agricultural and rural enterprises. 36 million EURs are allocated from the Estonian RDP in order to provide growth and investment loans under measures M04 (specifically M4.1 and M4.2) and M06 (M6.4)⁴⁷. As of January 2018, 61 growth and 28 investment loan applications were approved for an amount of €21.9 million, in addition €19.9 million from banks has been co-invested into the same projects. Farmers' interest in FIs is higher than the budget foreseen for the measure and

⁴⁷ https://www.fi-compass.eu/sites/default/files/publications/case-study_Estonia.pdf.

thus there is need to find additional finances for this measure or limit the applications (e.g. close the application of investment loans)⁴⁸.

GR Pillar 1 and Pillar 2 measures proved coherent in **Poland**. Young interviewees underlined that not a singular measure decides on their decision to run farm business but the possibility to combine the measures of Pillar 1 with the measures of Pillar 2. The logic given by young interviewee was that he could take over a farm, when father took Early Retirement, then he gets pillar 1 and 6.1 measure in pillar 2, so the whole farm household could receive 3 measures and that was encouraging.

Monitoring data seem to confirm that beneficiaries usually combine YFP pillar 1 with other GR related RDP measures. At least the following measures are coherent with YFP pillar 1 measures as follows:

- 6.1 Start-up support for young farmers;
- 6.2 Business start-up support for non-agricultural activities in rural areas;
- 6.3 Support for business start-up for the development of small farms;
- 6.4 Support for investments in creation and development of non-agricultural activities;
- Support for investments in agricultural holdings (Modernisation of agricultural holdings);
- Support for investments in agricultural holdings (Investment in Natura 2000 farms).

The allocation of the funds by beneficiaries of the two GR types of measures seems very much complementary. According to a Study for Ministry of Agriculture and Rural Development (Polish village and agriculture, 2017), the Pillar 1 payments (including YFP) in 2017 were most often spent on: purchase of machinery (declared by 59% respondents, and amount spent was on average 47% of their total DP), purchase of fuel for agricultural production (56% and 31% respectively), and purchase of fertilizers (50% and 32%). It is also used to purchase land (13% and 22%). Based on this finding it was complementary to YF in Pillar 2, which is farm development based on a business plan. As indicated in OECD Rural Poland 2018, in Poland's case, the young farmer scheme is focused entirely on farm and business development, as opposed to the other options of knowledge, advisory services, investments in physical infrastructure and co-operation.

RDP implementation in Sicily and Marche - case study areas in **Italy**, highlight the novelty and the diverse advantages of the so-called "young farmers' package", built on an integrated use of start-up aid and other investments measures of the RDP menu. As regards the relations between 1st pillar measure and 2nd pillar measures, the payment for young farmers did not show any particular (neither positive nor negative) correlation with the young farmer package. The same holds for the relations with other RDP measures. In reality, the IFP of the 1st pillar is not perceived as helpful at all by farmers, as interviews with farmers at local level are indicating. The role of Direct Payments (DP) is perceived in different and controversial ways:

- In general, the role strongly depends on the typology of farm: young farmers with small farms and diversification strategies and/or high-quality food production strategies do not perceive CAP DPs as necessary for their survival and for the success of their strategy;
- Conversely, young farmers with medium-large farms and intensification strategies see DP and whatever form of surface payment as a sort of safety net in a context of unstable prices and risks associated to climate changes.

The role of LEADER measures might be considered as complementary to the young farmer package:

- Some young farmers, after undertaking the package, continue to invest over time in farm diversification and/or processing equipment thanks to the LEADER support;

⁴⁸ <https://www.agri.ee/sites/default/files/content/arengukavad/mak-2014/seirekomisjon/mak-2014-sk-2018-01-24-reinup.pdf>.

- Being less selective than the single measures of RDP and close to people in terms of technical advice, LEADER seems fitting better to needs of new entrants and very small farmers.

The Young Farmer Thematic Sub-Programme in **Hungary** supports starting an enterprise and developing a farm by enhancing knowledge, developing practical skills, as well as consulting and mentoring. Farmers who can access the initial aid can also apply for subsidies built on this aid. Government agencies and NGOs support the process with additional and complementary events and resources.

There is a dedicated resource for young farmers to use agricultural training and preparatory trainings, to organise demonstration programmes, to attend professional study trips, to participate in exchange programmes, to receive individual and group counselling, to provide further education to specialist consultants, and to develop the livestock management, horticultural and water management sectors. In addition, young farmers benefitted from higher aid intensity for investment titles, extra score was awarded for joining quality systems, transition to organic farming or its maintenance, the consideration of animal welfare aspects in the dairy sector and implementing innovative projects. The whole system is dynamic and well-integrated, encouraging continuous learning and engagement between beneficiaries and their peers, as their businesses develop.

In **France**, the GR measures are judged as globally coherent with strong complementarity, in particular for the livestock sectors and in areas with natural constraints. The main coherence problem derives from the recent evolution of certain provisions (elimination of the age limit on ANC aids, revaluation of DPB in disadvantaged areas and lowering of minimum load thresholds). These developments do not encourage farmers reaching the retirement age to release their land for the benefit of a young person's installation, especially in mountain areas. It is often more interesting for them to maintain a minimum activity to get the aids rather than to retire. Finally, the supplement YF of the 1st pillar was defined *a posteriori*. Strong coherence was not sought afterwards in France for the design of this measure, compared to the rest of the installation support device.

5.4.1.4 Limitations encountered in answering the evaluation question

No specific answers to this ESQ could be derived from EU level interviews and survey. The EU level interviewees were mainly knowledgeable only in one of the two pillars and could hardly identify the links between the pillars.

No quantified indicators can show coherence or an absence of coherence, so this answer relies heavily upon case study consideration.

5.4.2 ESQ 10: The level of coherence between the relevant CAP Measures/instruments on generational renewal and other EU policies and actions

5.4.2.1 Our understanding of the question

Key relevant policies and actions include ERDF and ESF funding; research funding and to a lesser extent, the other funds within the Common Strategic Framework – Cohesion Fund and EMFF.

To what extent do the different GR measures and EU policies operate together to support GR in rural areas? Subsidiary questions could be -

- Are these measures contradicting other CAP funding and goals?
- Are these measures duplicating other CAP funding and goals?
- Is there good local, national and regional co-ordination between CAP GR goals/measures and the goals of other EU policies?

Evidence sources

1. Indicators from EU databases and literature;
2. Case Studies.

Conclusion

Where the CAP funds non-agricultural GR – principally via Pillar 2 Measure 7 and LEADER – it seems that in the current period, there is coherence with other non-CAP EU funding and measures, particularly ERDF and ESF and in coastal areas, EMFF. This is most evident in those MS where the different policies are delivered together by sub-regional delivery bodies or similar arrangements (e.g. Local Development Companies in Ireland, Local integrated approaches in some regions of Italy). Elsewhere, it is generally perceived that non-CAP EU funds do not focus a great deal on matters relevant to rural GR.

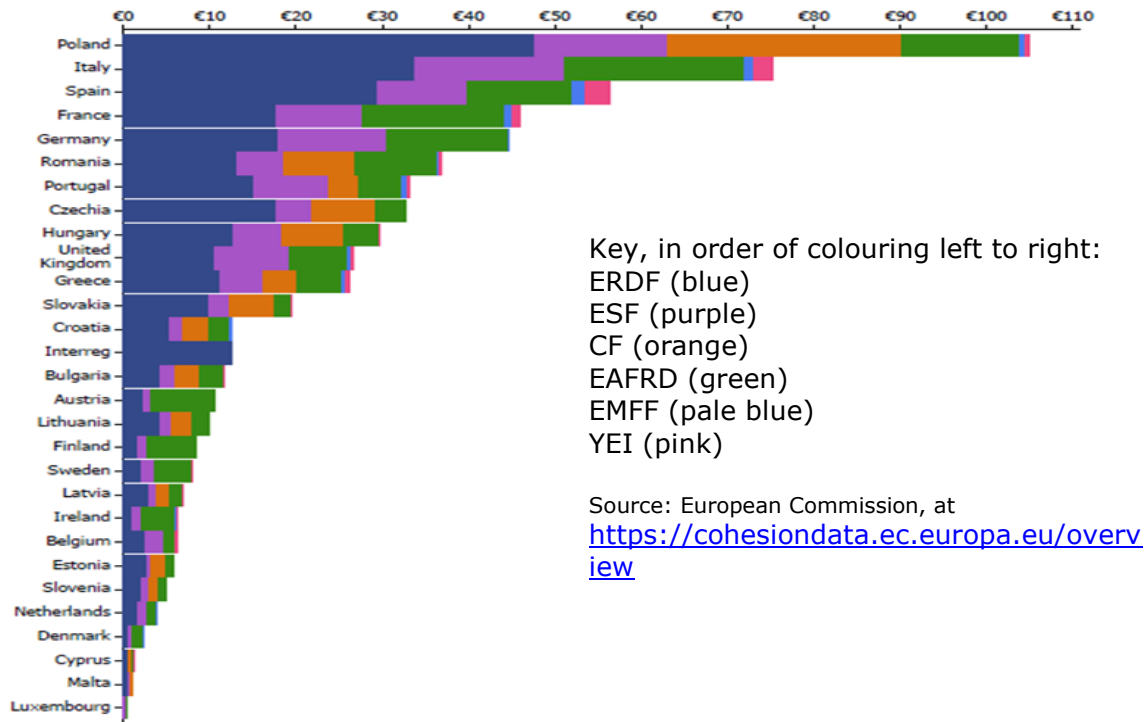
As far as EU research is concerned, there are relevant projects running under the H2020 programme which examine the challenges and possible solutions to GR in Europe's rural areas. We have not found direct evidence of these studies working in a coherent way with CAP funding but to the extent that they are able to increase understanding of the challenges and potential solutions to enhance GR in these contexts, they should be coherent with the goals of the CAP, in that respect.

In the current programming period, coherence between EU funds seems less of an issue than it has been in previous periods. This suggests that co-ordination at MS level is reducing conflict and overlap between the main funds of the CSF and EAFRD, and that coherence with research is satisfactory. On the other hand, there are few indications from this evidence – just that given in relation to research – that other EU funds are being deployed in truly complementary ways to those of CAP.

5.4.2.2 Indicators

Common Strategic Framework: The CSF and Partnership Agreements are intended to improve the co-ordination of funds in all countries, giving national governments new responsibilities in coordinating the separate programmes for each Fund. Through the new Common Strategic Framework, RDP planning has been required to co-ordinate closely with Member States' programming of other EU funds, notably the European Regional Development Fund (ERDF), Cohesion Fund (CF) and European Social Fund (ESF) as well as marine and fisheries funding (EMFF). This may have encouraged a more disciplined and strategic approach to inter-fund co-ordination and complementarity than previously but much depends upon the quality of communication processes at MS level. An important contextual factor in understanding choices of MS is the relative scale of EAFRD funding compared to other EU funds: both Pillar 1 CAP funds, and the ESIF funds (ERDF, ESF and EMFF in particular). The figure below shows the relative shares of the CSF funds in total planned expenditures for the 2014-2020 period.

Relative share of funding in total planned CSF spend, by fund and MS, 2014-2020



Refresh Date: 19/7/2019

The figure indicates the significance of total spending under ERDF and ESF funds, within the CSF, and shows how different MS have different relative levels of funding from each EU source. There is also marked difference in choices as between the strategic EU priorities of the CSF, at MS level.

Research coherence: a search of the CORDIS database of EU-funded research projects within the H2020 call which is coincident with the period for this evaluation study (2014-2020) found 39 projects listed as relevant to the topic of 'generational renewal rural'. However, only one of these appears directly close to the topic of GR in rural areas – the vast majority concern renewable energy technologies and there are also ones focused on health, non-EU countries and historic changes. The project with a rural GR focus similar to that of the CAP appears to be well focused upon issues and challenges already identified and discussed in this study: RURALIZATION. However, it has only started in 2019 so there are no results to report, as yet.

RURALIZATION will utilise both quantitative and qualitative methods to develop innovations and to make these transferable to other contexts. Innovative practices will be selected by two methods. First, by the use of statistical data and foresight analysis to find areas that deviate from the general trend of rural decline and distinguish, using a multi-actor approach, the instruments and approaches that may contribute to these trend breaches. Secondly, through the study of new approaches and instruments in practice, and by developing these in a multi-actor context, to be applied in new contexts of application. Based on the call, innovations will be on facilitating rural newcomers, rural jobs, new entrants into farming and access to land for new generations. In foresight analysis rural dreams of new generations will be investigated and alternative rural futures will be designed and reflected with rural stakeholders and focus groups in terms of possibility, probability and preferability. Actions will be formulated to make positive futures reality. The outcomes of the project will result in novel options for policy makers and practical tools for rural actors. An extensive communication campaign will disseminate the project and its results.

Another project funded under the Sustainable Agriculture and Forestry main call is relevant to this study – NEWBIE, which began in 2018:

Analysis of Eurostat figures suggests that there is not an adequate replacement rate of young farmers in many European countries, although there is evidence of considerable innovation and comparatively high rates of new entrants in others (Zagata and Sutherland, 2015). The NEWBIE Network (New Entrant netWork: Business models for

Innovation, entrepreneurship and resilience in European agriculture) has been designed to address the significant challenge of enabling new entrants to successfully establish sustainable farm businesses in Europe. The NEWBIE network will facilitate the development and dissemination of new business models, including new entry models, to the full range of new entrants - from successors to complete newcomers to the agricultural sector. This will be achieved by a transdisciplinary network of farming organisations, educators, advisors, researchers and industry stakeholders, who will assemble, assess and exchange the state of the art on new entrant farming enterprises, and establish national and European new entrant support networks.

The outcomes of both of these studies should be relevant to policy development in this field, over the coming years. For example, NEWBIE has already published practice abstracts focused upon access to land:

A first practice abstract published deals with Access to land with a farm related land fund and was developed by Wageningen University. For many start up farmers, finding and particularly financing land is very challenging. Purchasing land is often above the financial possibilities of a young business and lease, or rental, is much more common. This is often in the form of a one year contract that give little security and makes it difficult for farmers to plan for the future. A new opportunity recently realized by two companies (De Groote Voort in Lunteren and De Hooilanden in Bennekom) is a farm-related land fund. This is a land fund that leases land to a specific farm, for a reasonable price. The land fund purchases land and leases it for a reasonable price to the farmers who are connected with the land fund. A second practice abstract deals with Access to land through the Land Mobility Service and was developed by the Irish partner Teagasc. The Land Mobility Service is a support service for farmers and farm families who are contemplating expansion, changing enterprise, or stepping back. The service allows people explore their options and helps match farmers interested in long leases and collaborative arrangements.

Source: NEWBIE website: <http://www.newbie-academy.eu>

5.4.2.3 Case study evidence

The level of coherence between the relevant CAP Measures/instruments on GR and other EU policies and actions within the selected CS areas is perceived as limited. In none of the case studies areas under examination has a strong coherence between the relevant policies been recognised. There are national level strategies (eg. IE) where clear links are drawn between EU and national level policies and support is targeted at rural areas with coherent delivery perceived, however there is very little evidence of any interaction and integrated delivery. We deal in turn with the main relevant policies.

ERDF and ESF

In **BE-F**, the generally affluent nature of the economy and close proximity of urban and rural areas means that there is relatively little structural funding available which promotes rural regeneration. Similarly, the element of CAP funding which could be used to target non-agricultural GR is very small and not much emphasised within the RDP.

There is no evidence of strong coherence between agricultural GR measures under the CAP and wider EU regional development and regeneration aid in **IE**. The two strands of policy activity operate essentially separately. A focus on 'integration' during the Stakeholder Workshop held in Galway suggested little coherence between CAP and other EU policies, or little understanding of potential for coherence among stakeholders present. The majority of participants did not have much to say about programme coherence, noting that '*Coherence among programmes occurs at national level*', and integration of funding occurs at EU level. One farm advisor noted the '*Policy makers work out and ensure there is no overlap and that policies are coherent with each other*'.

Local development companies deliver Social Inclusion programmes, partially funded by ESF, although the overall focus is on regeneration in rural areas rather than GR specifically. Local Development Companies are one example of collaborative working and integrated approaches in rural areas. There tend to be real synergies between the programmes they are implementing and they have a broad knowledge of their local areas, with an impact on every parish. Stakeholder workshop participants suggested this type of model should be replicated more widely. The Project Ireland 2040 National

Planning Framework does envisage more coordinated support for rural areas under Rural Investment Coordination, although GR across rural areas is not a specific focus. In **HU**, numerous support tools for young people to become entrepreneurs also operate outside of agriculture in Hungary; many of which are supported by EU structural funds ESF and ERDF. In addition to the training programme that facilitates the entrepreneurship of early-stage unemployed and the promotion of self-employment, they have also been specifically organized to support young people becoming entrepreneurs through GINOP (Economic Development and Innovation Operational Program). The aim of the measure is to prepare young people, who are planning to start a new individual or micro enterprise in the less developed regions of Hungary, to start their own business, to use their knowledge and skills to develop their business plan and have support for realize their approved business plan. The total budget is €51.6 million. Also within the GINOP framework, €322.7 million of subsidised funds are planned for food industry developments. As for agricultural producers, beneficiaries are limited only to medium-sized enterprises, while all SMEs producing Non-Annex products may receive funds. Enterprises to be developed include supplier integrators, logistic parks and clusters, where the services and products resulting from the development can be provided at a preferential price, which may also have indirect benefits for non-participant SMEs involved in the production of agricultural raw materials. These developments require a skilled permanent workforce and, in seasonal cases, trained and temporary workforce with practical experience.

There seems to be awareness of the funds and their complementarity in **PL**. The representative of National Union of Rural Youth mentioned that apart from RDP they use the funds from operational programme Knowledge Education Development for the implementation of the European Social Fund and the Youth Employment Initiative (YEI) for projects on employment, social inclusion, and education. In Poland the total budget for this programme is €4.689 billion of which €4.436 billion from the EU budget including €252 million from the Youth Employment Initiative. An interviewee observed that some years ago it was more beneficial for young people in rural areas to benefit from ESF than from RDP. He explained that young people living on farms preferred to register as unemployed because then they could benefit from programmes offered by Provincial Labour Offices which offered them an aid granted through ESF, rather than make an effort to apply for RDP measures. Later on the RDP measures evolved and this situation changed.

In the 2014-2020 programming period, Poland has transferred some measures from RD to the Cohesion Policy, i.e. broadband, water infrastructure, job creation in rural areas, with the corresponding budget of €5.2 billion so those previous CAP measures are now relevant instruments supporting GR.

In FR, the interviews did not identify any problem of coherence with other EU policies and actions. The dividing lines are clear with the ESF and the ERDF. The ERDF (European Regional Development Fund) also supports the creation of activities and jobs in rural areas. The EAFRD is more focused on activities directly related to the agricultural and forestry sector. According to one interviewee, the "training" measure within the framework of the EAFRD can only be applied to existing farmers and not to applicants to installation. The ESF (European Social Fund) was mobilized by certain chambers of agriculture in order to support training intended for candidates to install as part of their Personalized Professionalization Plan (PPP).

In Estonia coherence is felt not to be an issue between EU funds.

5.4.2.4 Limitations encountered in answering the evaluation question

We suspect that the case study interviewees are not focusing upon potential gaps in addressing needs, between the spheres of influence of CAP and regional funds in particular. This may be because the networks of actors dealing with the CSF funds are not the same as those dealing with CAP funding and therefore those consulted in the course of this study have not had significant involvement with CSF and cannot therefore comment in depth on how the other funds are working.

5.4.3 Overall assessment of ESQs 14-11

ESQ 14: External factors affecting CAP Policies related to generational renewal

ESQ 11: The impact of external factors on the relevant CAP Measures/instruments linked to generational renewal, taking account of Policies and actions at local /regional /national levels including those beyond the agricultural domain that may impact generational renewal.

5.4.3.1 Our understanding of the questions

These two questions are directly linked. ESQ 14 requires the identification and examination of external factors that affect the performance and the context for the CAP GR measures; while ESQ 11 requires an assessment of their impact upon CAP GR measures. In both questions, the focus of interest includes both policy and non-policy factors but specifically policy and institutional factors beyond the EU policy domain (i.e. not the rest of the CAP, and not other EU policies, which were covered in questions 9 and 10 respectively). Subsidiary questions include -

- To what extent are CAP GR measures constrained or supported through institutional arrangements (e.g. planning regulations; tax regimes; rules on land management and tenure; access to advice)?
- To what extent are CAP GR measures constrained or supported by economic factors and market conditions (e.g. land availability and prices; employment opportunities; access to markets; poverty; availability of risk insurance)?
- To what extent are CAP GR measures constrained or supported by socio-cultural factors (e.g. access to pensions and housing for older farmers; retirement support; inheritance laws)?

Sources of evidence

1. Indicators;
2. EU Interviews.

Conclusions

ESQ 14. External factors creating barriers to GR in agriculture and rural areas include lack of succession planning, tax incentives and financial penalties of early transfer, cultural perceptions around the importance of keeping land in the family, fears of retirement, and young people's negative perceptions of agricultural work or rural quality of life. The barriers created are often region specific, and are linked to the presence or absence of opportunities in each area for farm and non-farm employment.

At the same time, there are many factors in other areas of policy and non-policy influence which are positive in that they support GR in agriculture and beyond it. It is important to recognise both negatives and positives, for this topic.

In most MS, a range of national policies covering issues like land inheritance, taxation of land, transfers of property and business assets and requirements to rent land, all affect the processes of GR in agriculture and thus the impact of CAP GR aids. In those MS which take a coherent approach to GR overall, these national policies work in parallel with, and complementary to, CAP GR aids, but there are examples where evidence suggests that complementarity is lacking and some national policies hinder the CAP policies' effectiveness – this is the case for inheritance tax in Hungary, for example.

In addition, spatial planning policies are directly relevant to the farm business development and diversification which is commonly associated with GR plans as supported under the CAP. In general this is not a problem but it is a frequent cause of delayed processes when farmers and others apply for investment or start-up aids, where the funding is conditional upon them having already obtained prior planning consent.

There is a wide range of other social and public sector provision in rural areas which affects the quality of life in rural areas; this is directly linked to the feasibility and sustainability of GR in agriculture and in rural areas more generally. Rural areas which

have been the subject of significant public or private investment in infrastructure, housing and services will tend to be much more attractive to young people.

Finally, strong cultural norms and traditions can be either a help or a significant hindrance to effective GR as promoted via the CAP, and to tackle these may require interventions which go far beyond the realm of the CAP. Advice programmes, mentoring, promotions and other information events designed to change people's preconceptions about farming as a career or the challenges of living far away from a big city, have been used in a variety of MS with mixed results.

ESQ 11: There are positive examples where key institutional, fiscal or legal elements in national policies are critical to the success of GR, and specifically to the performance of CAP-aided GR in agriculture. These include the comprehensive approaches detailed in the case studies in France and Italy, as well as more limited but still important relationships as shown in Flanders (social supports and training); Ireland (the Land Mobility Service and the management of the mandatory BPS national reserve); Hungary (a suite of flanking institutions and practices provided through national and more local governance) and Poland's land laws.

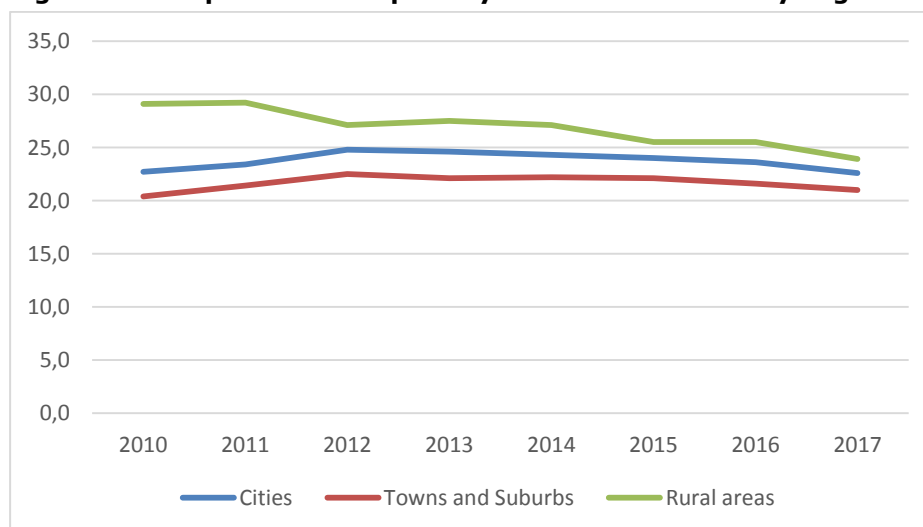
Key to a successful interaction between these instruments and initiatives and CAP GR measures is the intelligent design of the latter in full cognisance of the impacts and influence of the former. This requires good analytical capability and ongoing monitoring and evaluation.

In some respects, there are limits to what can be done for GR by policies concerned mainly with funding. However, as the instruments of CAP second pillar have expanded it becomes more evident that funding is not limited simply to putting financial resources into farmers' pockets. Through the creation of measures with institutional capabilities – notably measure 16 for co-operation – it becomes increasingly possible to integrate CAP measures into stronger and more supportive institutional frameworks to promote GR, in a variety of different historical, cultural and legislative contexts.

5.4.3.2 Indicators

A range of indicators help to build a picture of the conditions in rural areas in which GR measures operate. To an extent, these represent 'external factors' relevant to this evaluation.

Figure 59. People at Risk of poverty or social exclusion by degree of urbanization (%)



Source: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

This figure shows that rural areas have a slightly higher incidence of poverty than urban areas, which is an important factor shaping local actors' capacity to respond to various CAP measures. Poorer people and poorer communities tend to be less willing and less able to seek financial support through open calls and competitive processes than others who are more confident and do not lack a reasonable income.

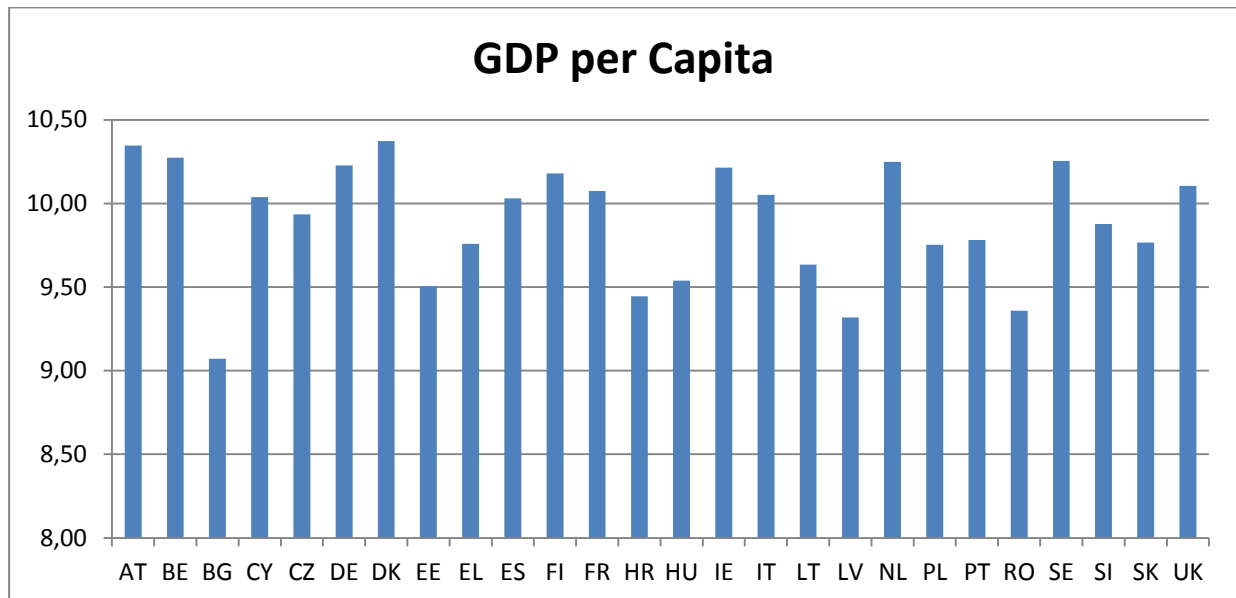
Figure 60. Poverty risk by types of area



Share of people at risk of poverty or social exclusion, by degree of urbanisation, 2015 (%)

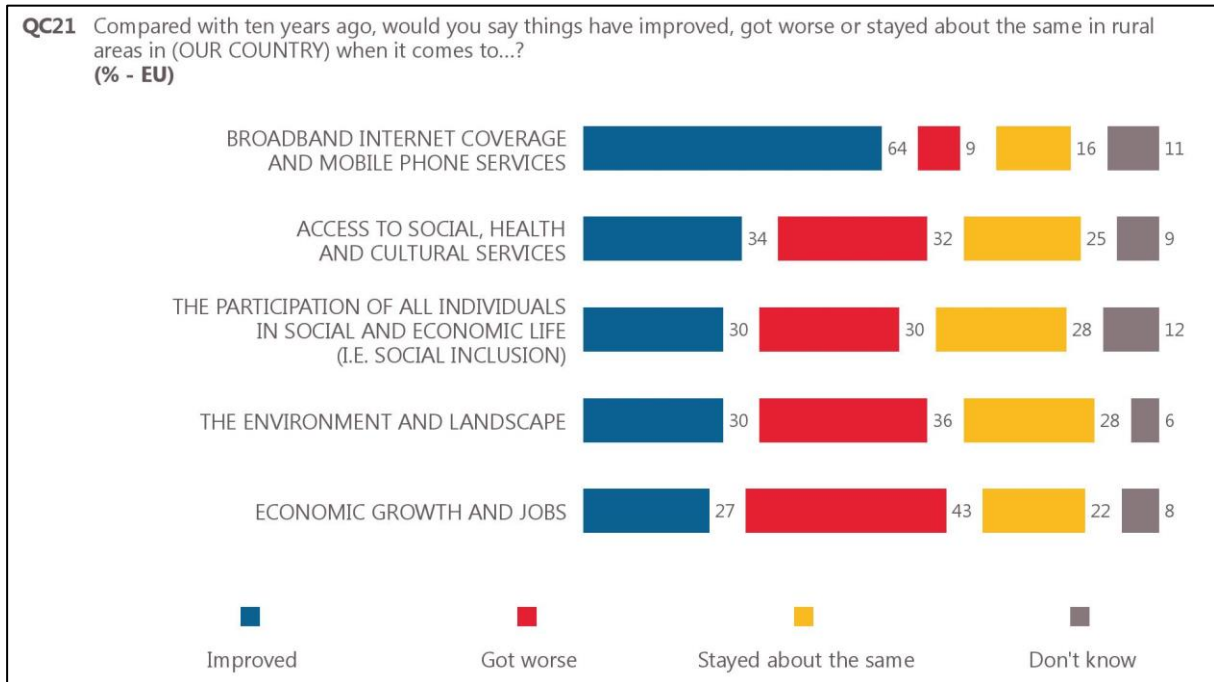
Source: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Share of people at risk of poverty or social exclusion, by degree of urbanisation, 2015 \(%25\) RYB17.png](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Share_of_people_at_risk_of_poverty_or_social_exclusion,_by_degree_of_urbanisation,_2015_(%25)_RYB17.png)

Figure 61. Relative GDP levels



Source: EUROSTAT

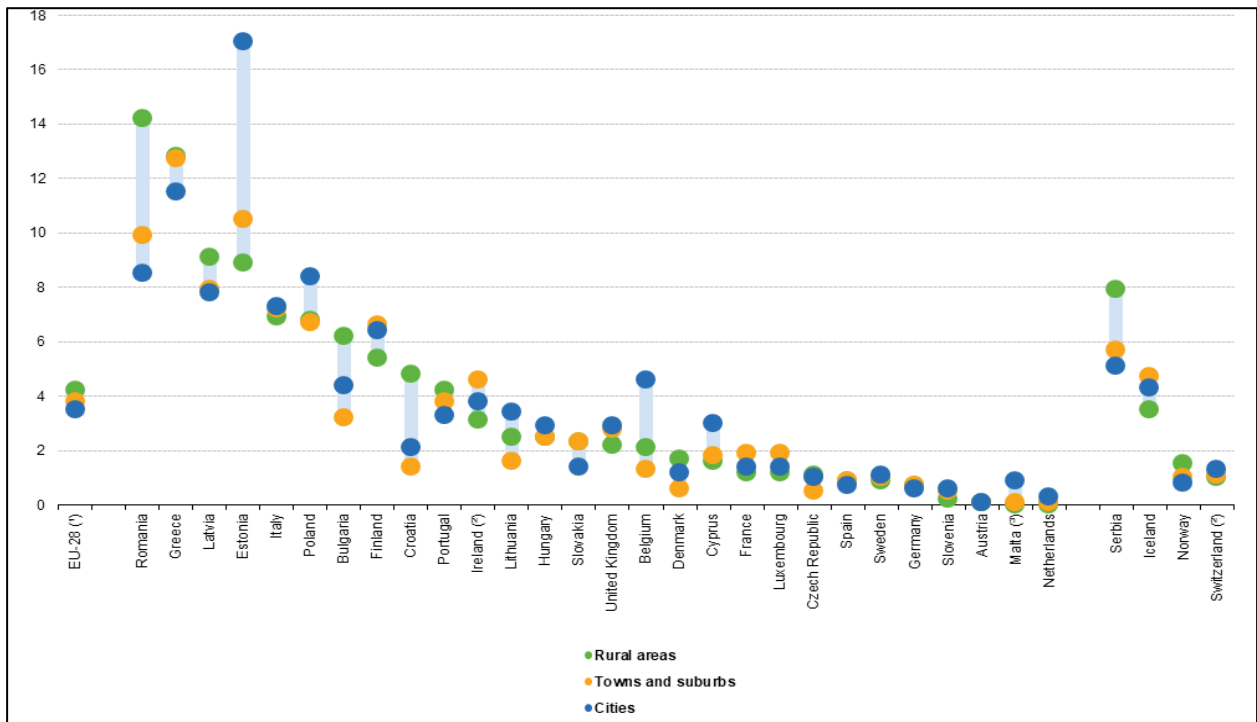
Figure 62. Rural Residents' Perception of their quality of life



Source: <http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/survey/getsurveydetail/instruments/special/surveyky/2161>

Special Eurobarometer 473 Survey requested by the European Commission, Directorate-General for Agriculture and Rural Development and co-ordinated by the Directorate-General for Communication
Special Eurobarometer 473 – Wave EB88.4 – TNS opinion & social Europeans, Agriculture and the CAP

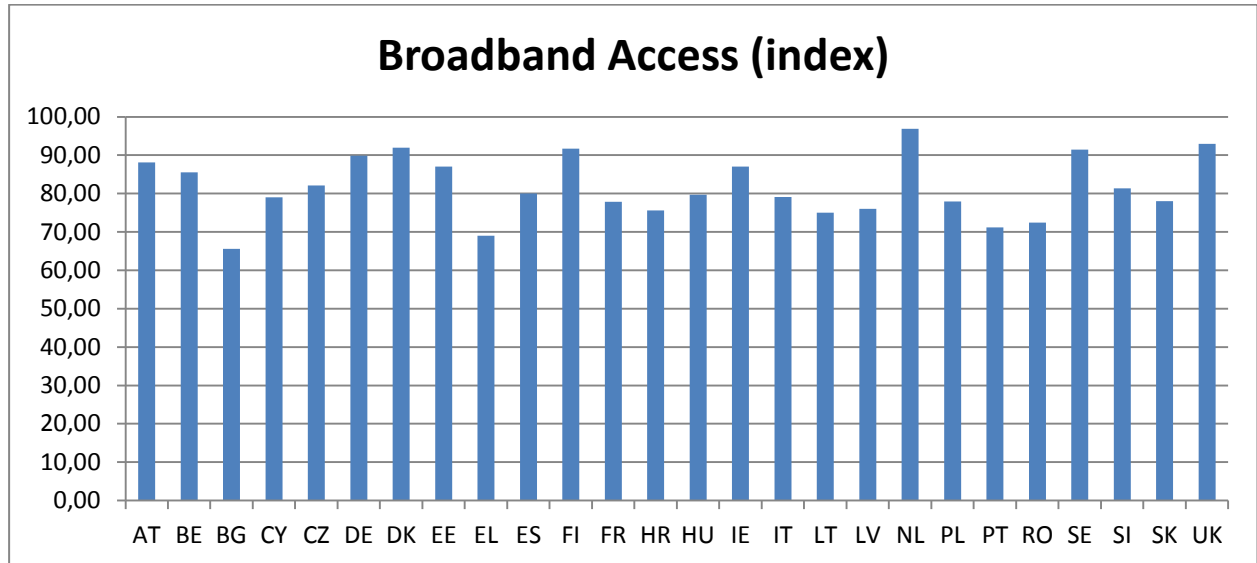
Figure 63. Health care



Share of people aged 16 and over who reported unmet needs for health care in the previous 12 months due to expense, distance to travel or length of waiting list, by degree of urbanisation, 2015 (%).

Source: https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Statistics_on_rural_areas_in_the_EU

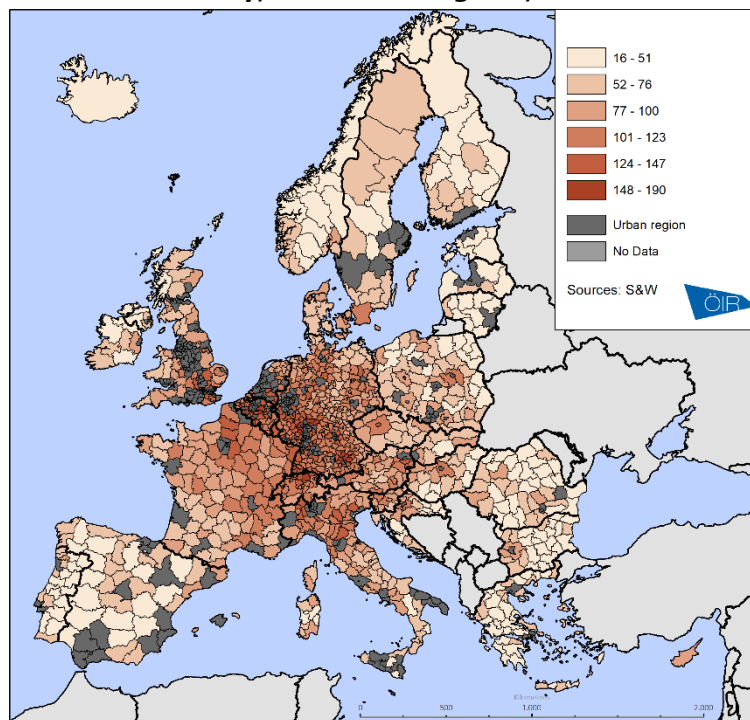
Figure 64. Internet access.



Source: DG-AGRI

Other information on rural broadband is presented under ESQ 4, section 5.2.3.2 indicators.

Figure 65. Multi-modal accessibility, EU NUTS 3 regions, 2016



Whilst these indicators help to illustrate the degree of variation in quality of life for rural residents across the MS, they alone are insufficient to show how far CAP measures affect this. The main source of evidence to answer these questions is the case studies, therefore. It should be noted that there is already some discussion of external factors in the answers to ESQs 12 and 16, in particular. That is not repeated, here but it is referred to in the conclusions to the ESQ answer, where relevant.

5.4.3.3 EU level interviews

Interviewees briefly discussed rural disadvantage and its causes. Rural areas may be considered as areas with good quality of life for people that want to raise families or seek alternative lifestyles. However there is a variety of rural areas, the ones closer to cities are more attractive. More remote areas are less attractive as services are very expensive

and sometimes non-existent as there is no market for them. In remote areas, roads are hardly maintained and local transport can be very expensive, if it exists. Sometimes infrastructure development is supported by local policies and in remote areas. When policies are designed at national level, living in remote areas can be even more challenging.

5.4.3.4 Case study evidence

External factors impacting on GR measures vary across the seven case study areas but there are also many commonalities. In all areas access to land and credit have been noted as significant barriers: these are discussed in detail in ESQ 12 and 16. Difficult access to farming for new entrants has been highlighted especially in BE-F, EE, PL and HU. High cost of land is another hampering factor for YF notably in IT, IE, BE-F and EE. Pillar 1 direct payments in respect of “keeping older farmers” on the land, has been prevalent issue in BE-F and IE. Cultural factors, deeply rooted attachment to land is hindering land sale and lease in IE. In summary, the state of the wider economy is the most powerful external factor impacting on the CAP GR measures across all seven case study countries, but institutional and attitudinal factors are also widespread.

In **BE-F** national legislation on agricultural leases (the “pachtwet”) awards significant protection to the lessee as well as regulating price ceilings. While this proves beneficial for incumbents with access to land, young farmers without extensive access to informal networks may find it comparably difficult to access land leases. This may dampen the impact of GR measures under Pillar I and II.

There is a general perception attached to farming that it is a life-long profession. Farming appears as a life commitment which leaves little flexibility or choice in terms of way of living. Once the decision is made to enter farming and substantial investments are made (potentially leading to indebtedness), the situation becomes binding. In today’s society, such an idea is rather off-putting as most youngsters would like to have other work experiences. As a result, new entrants or young farmers may be increasingly older, i.e. they turn to farming as a change of career, for example. Finally, attitudes and behaviours of wider society are also relevant. In Flanders, the general perception that agriculture is less about producing food but rather about landscape and architecture is becoming very prevalent.

In **IE** there is considerable variation across the agricultural sector in terms of the economic viability of farms. The majority of dairy farms (>90%) are considered economically viable or sustainable, compared to only 64% of ‘cattle other’ farms. Sectors with the largest proportion of vulnerable farms were cattle rearing (40%) and sheep (42%). The level of economic vulnerability is underlined by the number of farms receiving support that enable them to continue living on their farms: in 2017, an average of 7,375 farmers received the ‘Farm Assist’ payment. Estimated expenditure on Farm Assist in 2017 was €79 million and 2,656 people received Rural Social Scheme (RSS) support with estimated expenditure of €45.5 million. A total of 16,400 farms reported non-agricultural activity in a 2016 survey (DAFM, 2018) in order to receive supplementary income.

Access to markets, and access to business and professional advice and training were not viewed as significant barriers to Irish dairy farmers. Markets were viewed as more problematic by beef and sheep farmers. There were fewer cooperatives or organisations representing farmer’s interests and the beef processing sector was viewed as a dominant force in price setting, with farmers as price takers, resulting in low beef prices. In both Co Cork and Co Mayo beef farmers indicated they were reducing herd numbers and moving into either dairy (Co Cork) or sheep (Co Mayo).

Cultural factors and traditions play a vital role in GR in Ireland in general. There is great emotional attachment to land and a pride of place. This is deeply rooted in the history; there is a sense of obligation to take care of the land. Passing the land down to family members and securing the family name in respect of land ownership is very important. There is still a great pressure placed on especially young male members within the farming families to take over farms. Gender perspective, the role of women farmers and women in general in rural Ireland is an untapped resource according to some interviewees.

An inability of a farm to provide financially for exiting and entering generations has been cited as having an influence on the timing of farm transfer (Leonard et al, 2017). YF in

Ireland perceive the national inheritance law and interventions of parents or other persons as more problematic than other young farmers in the EU (Ecorys 2015). "Dispersed settlement pattern" is seen as major obstacle - making other forms of potential development (renewable energy, tourism, agriculture) difficult to site. (An Taisce, 2013)

National tax relief schemes are important and work synergistically with CAP support to encourage partnerships between young and old farmers. Macra na Feirme indicate that CAP measures and the tax relief schemes work well together as they address different issues. Stamp duty relief, for example, is cited as removal of a major barrier to transfer of ownership (i.e. removal of a 6% tax on value of the farm which previously reduced the drive to invest in the farm). Stamp duty is viewed as a major potential barrier [if the relief is no longer in place] to transfer of farms and ownerships, and an obstacle to YFs seeking to get onto the farming ladder.

Many of the YF farming jobs are part-time, which keeps people in rural areas and contributes to local economic multipliers, but it also means farmers must have off-farm incomes to survive. Interviewees indicated that there are a lot of factors working against agriculture. The perception of agriculture is of long hours and low pay – very negative views. Young people would rather do something else, and with high national employment levels there are plenty of alternative jobs available.

In County Mayo cultural factors were also cited as a key barrier to land mobility (and access to commonage which is essential for sheep farming in western parts of the county). There is a reluctance to sell the family farm or land, and anyone who does so fears being viewed as a failure. Consequently there are large numbers of older farmers, continuing to farm and gradually reducing their input (e.g. reducing herd sizes, changing from beef to sheep, and then to smaller flocks, not repairing fences or draining the land). One RD Company & LEADER Coordinator noted that the Rural Social Scheme (a national welfare programme) has had a significant impact in stabilising small family farms and keeping people on the land.

In Italy the external factors varied in relation to interviewees with notable differences between farmers and public official views. From the point of view of farmers, the most important external factors are the following:

- Lack of initial technical advice, needed for those who have scarce knowledge of agricultural production and processing techniques;
- Lack of initial capital and strong difficulties to have access to credit;
- High land prices, that make it impossible to buy land, even in Madonie area, where the amount of abandoned/non-utilised land is quite relevant;
- Lack of professional and social networks;
- Scarce training offered on rules/legislation in crucial field, where opportunities for innovations are significant (e.g. high-quality production and processing technologies);
- Difficulties in accessing market segments where quality food is more appreciated (e.g. export markets);
- No attention to support promotion of new products.

National policies supporting young entrepreneurship have introduced policy tools which can be considered as complementary to policies pursued by EU programmes, especially RDPs. This complementarity can be considered in terms of the following aspects:

- Financial resources;
- Implementing rules (they follow more or less the same approach of start-up aid of the RD regulation, with some marginal difference);
- National policies cover some intervention fields that RD programmes do not consider at all, but at the same time are considered as crucial by farmers and new entrants. Access to land, access to credit and fiscal burden are assumed as relevant objectives by national policies and are faced through specific provisions (Decreets "Living lands" and "Free Fields"). In reality, access to credit is quite selective and becomes an opportunity only for large farmers or for farmers with financial capacity, as well as access to land is possible only for new farmers with

sufficient skill and resources to implement a business plan which should pass a severe financial and economic assessment;

- National policies introduce new instruments for fiscal contributions to boost employment of young dependent workers in agriculture, but little information is available on their application;
- National policies financing start-up of young farmers are quite important in the transition period between two programming phases of rural development (e.g. between 2007-13 and 2014-20), because they intervene when rural development resources are not yet planned and are unable to meet financial needs of young farmers until new RD programmes become operational;
- The national Terre vive initiative has been described in the 'good practice' sub-section of Chapter 4 in this document – this is also significant.

Indirect external factors affecting GR in **Hungary** are those related to demographic, macroeconomic, geographical, sectoral and vocational training. In the rural areas of Hungary, the population density has declined over the past decade and the aging of the population has intensified which reduces labour supply, consumption and savings rates and adversely affects growth prospects. In addition, each region moves on different development paths, depending on their different economic circumstances, and the possibility of young people to launch farming activity is limited by low levels of enterprise density and the adverse funding environment in fundamentally rural areas. From the aspect of labour, it is important to emphasise that younger educated people should already have a greater share in agricultural production, but owing to the general shortage of workforce, other sectors are more attractive in terms of both financial aspects and prestige. External legal, fiscal or institutional factors affect generation renewal and the impact of CAP. The most important issues are connected to the efficient acquisition of production resources.

Young farmers without a family farm background are disadvantaged in the order of land purchase and lease regulation. In the case of inheritance land transfer could last for years in the inheritance procedure. In case of non-linear family inheritance, there is also duty. The efficiency of GR in land regulation would be improved by transforming the pre-order order for young farmers. It is a little help that in the case of non-hedged producers, the Agri-Enterprise Credit Guarantee Foundation assumes a surety guarantee. The foundation had 17,000 clients in 2018, of which more than 9000 were individual farmers, including 2,720 young farmers.

In **Poland** the situation within the labour market has changed significantly – there used to be high unemployment among young people in rural areas (and in cities) and nowadays it is a reversed situation, where it is hard to find employees (due to demographic changes). Development of enterprises in rural areas provides an alternative, offering more stable jobs in respect of agriculture. Furthermore, development of companies in rural areas encourages young people to think of alternative uses of their land e.g. renting as a storage place. All GR measures are influenced by the situation on labour market – where now is a shortage of people and very low unemployment in outside of agriculture. So farming is competing with more prestigious, less risky and lighter jobs in rural areas. Especially when more international businesses have their premises or storage facilities located in rural areas (e.g. a recently built Logistic Centre of Amazon in Poland).

The perception of agriculture as "hard labour, low pay and lack of free time" resurfaced in the interviews as well. Interviewees noted that currently the 18 years old, those born in 2000s, so-called "Millennial generation" have different hierarchy of values, e.g. possibility of self-development, having personal life (including holidays) so that they can leave a farm under someone's supervision for some time, they want to live a more comfortable life.

To high extent the Land Act 2016 negatively influenced all CAP measures which have any requirement on land size (e.g. 6.1 YF has eligible farm size, etc.) and it also prohibits new entrants from outside of agriculture. Interviewees mentioned that even if people come back from foreign migration they rather buy a house (not a farm holding) and do not start any farming activities but treat it as a place for living and commute to work or work from distance.

In **France** economic opportunities remain the determining factor for the renewal of generations. However, the beginning of the programming period was marked by significant economic uncertainties linked to external factors in France, particularly in the livestock sectors: low prices, end of milk quotas and crisis in the milk sector, crisis in the pig sector, Russian embargo, etc. These uncertainties played a role in the sharp decline in assisted facilities in 2015. On the other hand, the transition between the two periods, with the convergence and revaluation of BPS (basic payment schemes) in less-favoured areas and certain other aids, may have prompted some candidates to postpone their projects pending new, potentially more favourable arrangements.

The installation system is part of an integrated policy that combines national measures and RDP aids. National measures are therefore complementary to the CAP measures and participate together in the GR in agriculture. National arrangements such as the IATA programme, "SAFERs", GAEC farm partnerships, and a range of structural controls on agricultural holdings, all contribute positively to the impact of CAP GR measures.

Access to farmland in France remains an important issue which the CAP cannot really tackle. The range of national initiatives taken since the early 1960s via the 'contrôles des structures' laws and the SAFER land bank/ agency have greatly facilitated successful instalment policies and GR in French agriculture. They demonstrate to young farmers that there are ways to free up access to land and holdings. They enable priority to be given to setting up a young farmer in business over the simple enlargement of neighbouring holdings, when land comes up for sale or rent. These arrangements have contributed over the last few decades to the containment of farm enlargement, thus protecting the family farm model. Tax and social provisions also help to enhance the incomes of young farmers in the first phase of setting-up. Inheritance tax provisions and stronger protection of peri-urban land from development are also facilitating intergenerational transfer. And farm tenancy laws are also important.

In **Estonia**, the wider and more general trend has been that people, especially young people are moving from countryside to bigger centres and cities, especially the capital and other larger cities. However, there has also been an increase of people who are looking for possibilities to move (back) to countryside. This trend is probably widening as the possibilities to work from home are improving and the state is supporting this development through e.g. investments in infrastructure (roads, communications, broadband) or through some specific state funded programmes. From the point of view of entrepreneurs, high labour taxes are hindering the set up and development of businesses. Furthermore, as technology develops there is a need for qualified workforce who are able to manage the modern technology and entrepreneurs can't often find these people. A few interviewees mentioned the fact that older farmers are not interested to retire due to loss of income because pensions are rather poor.

Very important external factors are related to infrastructure. Basic infrastructure (accessible roads all year around, sufficient industrial electrical power, broadband connection etc.) and available services (presence and quality of kindergartens and schools close by, availability of high quality medical care, leisure opportunities, activities for children, opportunities to buy/rent house or apartment) are often crucial for young people/families in making decision on moving to /staying in rural areas. Another factor is the availability of jobs for spouses - if one member of the family is starting in farming. If basic infrastructure and services are missing or are of very poor quality, CAP measures/instruments alone cannot change the situation. They do not provide the trigger needed for young people to move/live in rural areas.

Government institutions are talking a lot about marginalisation and need to do something against it but there are still not too many policy measures implemented in practice. One of the few positive examples is a support scheme launched in 2015 by Ministry of Financial Affairs (from 2016 Ministry of Rural Affairs), Enterprise Estonia and Union of Setomaa Rural Municipalities called "Youth to Setomaa". The aim of the scheme is to support activities to improve the living conditions of the people in the age of 21-40 years in the area. Setomaa consists of municipalities in South Estonia near Russian border where the population decline and marginalisation are significant. Another programme financed from the state budget is "Low density area programme" (administrated by Enterprise Estonia) which helps (with rather small funding) families in sparsely populated areas to e.g. build roads to their households, build new wells and sewage systems. Although the budget of these programmes is substantially smaller compared to CAP, they

are important for making the rural areas more attractive and improving the living conditions which are both very important factors for fostering GR in rural areas. There is no competition between national policy schemes and EU policy measures but there is not much synergy either. Local governments could also do much more to create better business environment and conditions for starting businesses as well as for young families. There are several good examples on this but interviewees mentioned that in their communities they have not seen much support.

At the Workshop in **Poland**, a majority (53.9%) of the participants claimed that there is a need for a greater coherence between CAP and national policy GR measures. In **France and Italy**, a high degree of coherence is reported between CAP YF aids and national policies for land mobility or access, advice and training, and institutional options for farm transfer between generations. Elsewhere, some contradictions have been noted, particularly where national fiscal, landholding and inheritance provisions appear to be designed without consideration of GR goals and they create barriers either to YF access to land and capital, or they disincentivize older farmers to release land to the younger generation.

Spatial planning and infrastructure development policies in each country directly affect farm business development and also influence the wider rural economy. Insofar as these policies can promote quality of life in rural areas, business opportunities and increased social capital, they should contribute to GR in rural areas. Positive examples are cited in several CS (Estonia, Hungary, Poland, France). Developing rural infrastructure and stimulating social capital may actually decrease the number of young farmers, particularly in areas where high existing agricultural activity has previously been linked to a lack of other employment opportunities, and this should not be seen as a negative trend unless it becomes so strong as to threaten continued sustainable farming in these areas. In general, we find the fear of this outcome to be stronger than the current evidence of its occurrence.

5.4.3.5 Limitations encountered in answering the evaluation question

Regarding data analysis: No indicator relevant to the focus of this ESQ (i.e. related to external factors, with consistent and harmonised data available at NUTS 2/NUTS 3 level and with sufficient EU coverage) could be found and integrated into an EU-level data analysis with CAP input data.

5.5 Overall effectiveness, indirect efficiency for Quality of Life, and added value – ESQs 1, 7 and 17

5.5.1 Overall assessment of ESQs 1-17

ESQ 1: To what extent have all CAP measures/instruments had an effect on fostering generational renewal in rural areas?

ESQ 17: What is the added value contributed by CAP Measures/instruments to generational renewal

5.5.1.1 Understanding of the questions - subsidiary questions

- Are the CAP GR measures providing additionality in GR by comparison with what MS policies achieve?
- Is there cumulative evidence to support the rationale for GR to be a key focus of the CAP?
- Overall, what is the contribution of the whole CAP to supporting GR in agriculture and rural areas of the EU?

Sources of evidence

- All contributing ESQ – evidence already presented;
- Further analysis concerning the impact of the WHOLE CAP on GR – evidence from literature, data analysis, and case studies.

ANSWER TO ESQ 1.

Conclusions on effectiveness and relevance

The study found evidence that the CAP as a whole has a positive effect in fostering GR, particularly in agriculture, which varies in extent from significant to only weakly effective between different MS and territories. Differences in the magnitude of impact are determined by a combination of the underlying socio-economic and cultural context, and CAP instrument selection and measure design, as well as delivery choices and provision. The best evidence of sustained and positive impact is in MS in which a variety of measures and instruments is used in a complementary way, including funding and investment aids for business start-ups, advice and training, and incentives for collaborative institutional and/or fiscal arrangements easing inter-generational transfer, as well as broader support for rural services, infrastructure and quality of life.

In respect of non-agricultural GR, the study found less evidence overall concerning CAP impacts, perhaps because this goal is less prioritised, despite significant need being evident in many situations. However, where CAP resources are focused upon non-farm GR, principally through LEADER and other specific measures under Pillar 2 including measure 7 and the non-farm elements of measure 6; significant and positive impacts at local level have been demonstrated in the case studies.

In more detail:

- Funding for GR from the CAP makes a difference to the performance of farm businesses and the secure transfer of farms from an older to a younger generation.
- MCA of EU datasets indicates that the combined impact of GR measures in CAP is generally weakly positive for GR in agriculture, although impacts are differentiated according to national and local socio-economic conditions.
- Detailed examination of how measures and instruments are applied to support farm and wider rural GR within 7 case study countries (France, Italy, Estonia, Ireland, Hungary, Poland and Belgium-Flanders) demonstrates that, to a large degree, they can be effective, efficient and coherent with other policies if:
 - well-designed to target situations of most need,
 - calibrated to local conditions,
 - offering a mix of financial, institutional and knowledge-based support, and
 - delivered through well-co-ordinated administration and extension.

A counterfactual analysis at farm level in Italy and France demonstrated the additionality of YF aid in enhancing farm performance and resilience. The study also revealed that the measures most relevant for GR vary between countries and territories within countries, reflecting the different barriers and opportunities for GR in each situation.

The case studies and econometric analysis suggest that CAP YF measures have some ability to promote rural vitality in marginal territories suffering economic and demographic decline with poor rural infrastructure and services, low levels of rural economic diversification and little value-added in agriculture and forestry, particularly when measures are delivered with supporting advice, mentoring and review. However, in these situations the impact of CAP YF funding is constrained by these other limitations, which are often compounded by wider economic and cultural disincentives for young people to live, work and farm there. Where this is the case, alternative and/or parallel

approaches which support broader rural development, more diverse economies and enhanced quality of life are needed, for farm and non-farm GR.

The study found that CAP GR measures in agriculture are effective in those cases where complementary national, regional and local governance institutions and fiscal policies also support and enhance GR. This includes the creation of institutional mechanisms and fiscal incentives to increase land mobility and ease the process of inter-generational transfer for the older, as well as younger, generations. Examples include creating farm partnerships; incentivising share-farming and other collective business models; providing help with retirement income planning and tax breaks for the gradual transfer of assets; and using land banks or creating new non-profit organisations to consolidate and re-let landholdings preferentially to new entrants. Older farmers may be dis-incentivised to transfer their farms to a younger generation if their access to income and a reasonable quality of life is heavily dependent upon continuing receipt of CAP pillar 1 aids, sometimes beyond retirement age and especially if transfer means losing additional fiscal or other financial benefits. In such conditions, measures and initiatives using 'soft' approaches including awareness-raising, advice and planning for successful handover also appear effective. CAP pillar 2 measures can be used to help provide advice and stimulate new co-operation, in this context (as in Ireland, France and Italy case study areas).

It is too early to identify clear evidence of the impact of the Young Farmer supplement to direct payments under Pillar 1 of the CAP, in promoting or supporting GR in agriculture. The study found that these payments have very different financial significance to farms in different Member States, and their pattern of distribution across the EU is very different to the pattern of GR priorities as determined in MS Pillar 2 RDPs. Case study evidence suggests there are some particular situations where they can support GR in complementary ways to Pillar 2, but this depends upon careful design of the delivery approach which is not widespread among MS. The simple interpretation of recent trends also suggests that the YF aids might be a factor encouraging inter-generational transfers in a small proportion of regions where trends in YF shares of the total farmer population have increased significantly in the 2013-2016 period: this deserves more qualitative investigation.

The combined evidence from the material and analysis brought together in this study demonstrates that CAP GR measures can be effective to a significant extent in promoting GR in agriculture, particularly in respect of farming succession. However, the performance of these measures is also significantly affected by a range of factors including both exogenous ones: e.g. the wider context and culture within which these instruments are applied, at local level; and endogenous ones: the extent to which the design, delivery and accompanying institutional and fiscal frameworks are coherent with the needs for, and barriers to, effective GR in each local area; and the choices made about how best to ensure accessible, transparent and efficient delivery processes that maintain trust and open communication between funders and beneficiaries.

This study has examined much evidence which supports the adoption by MS of a multifaceted and co-ordinated approach to GR in agriculture in which national legal, institutional and fiscal instruments operate alongside CAP measures in a coherent way. In proven effective and long-established cases such co-ordination represents the promotion and integrated delivery of a 'package' of instruments to young farmers and the farms that they seek to take on, with a single point of application and a jointly-devised budgetary and assessment process. Evidence from case studies suggests this can be the most cost-effective approach.

YF aids are apparently less well suited to new entrants to farming from other backgrounds, without inheriting from a parent. Specific beneficiary-level and documentary evidence of this issue was cited and discussed as significant in Estonia,

France, Italy, Hungary and Flanders cases and workshops. The reasons stem from the much greater diversity of characteristics of new entrants and their business situations and ideas (e.g. older, smaller, lacking capital, with innovative and unconventional ideas), as well as their generally lower level of pre-existing integration into farm business networks and knowledge systems. This means they more frequently fail to meet standard eligibility conditions, they may be considered higher-risk applicants and thus are less likely to score well on conventional selection criteria, or they may lack broader ongoing support and knowledge even where they qualify for YF aid, which makes their survival and performance more vulnerable. Problems arise from a combination of inappropriate design or lack of awareness in delivery by programming authorities, and sometimes also constraints in the EU legislation.

The study has concluded that support for non-farm GR is not currently a major focus of the CAP but that it can be valuable and positive for GR. Low impact overall is likely due to a low level of investment within many RDPs in 'wider rural development' beyond the farm sector, compared to the scale of the economy. A valuable local contribution of LEADER is highlighted in case studies. We also acknowledge study limitations: it has found quantitative and qualitative evidence that other CAP measures not directly linked to GR can foster and strengthen non-farm GR through the pursuit of improved rural quality of life, e.g. by supporting rural service provision, infrastructure and rural economic diversification. However, a full investigation of these mechanisms was beyond the Terms of Reference for this evaluation.

There remain important obstacles to successful agricultural GR in many Member States which are probably more efficiently addressed through institutional and fiscal arrangements, than through direct funding of beneficiaries – these include some types of access to land, and helping older farmers with a gradual transition process to enable transfer to a younger generation, including new entrants. Also, financial instruments may offer opportunities to help address the challenge of access to credit, given the evidence reluctance of commercial lenders to invest in young farmers over older ones. At present, it has not been commonplace for institutions or Financial Instruments to be created using CAP resources but this is indeed possible under the Pillar 2 EAFRD menu of measures, whereas in the case of fiscal provisions these remain the competence of national and more local levels of government.

5.5.2 Evidence from other ESQ

- Impact of the Young Farmer measures on GR.
- CAP GR measures' effects on Inter-generational knowledge transfer and innovation.
- Contribution of CAP GR measures to social capital, infrastructure and good governance in rural areas.
- CAP GR measures impacts upon rural employment, its quality and durability.
- CAP GR measures and access to land and capital, importance and influence of non-CAP factors on GR.

5.5.3 Impact of the whole CAP on GR in agriculture and rural areas of Europe

5.5.3.1 Literature review

A small number of studies has examined how the whole CAP might affect a variety of indicators that can be indirectly related to GR in agriculture and in rural areas more generally. In particular, the 2017 World Bank study, which was based upon macro-level econometric analysis and detailed examination of data on total CAP expenditures by pillar and by measures compared against a variety of context indicators, provides some useful information in this regard. The following extracts from the study illustrate the main points of relevance to our evaluation:

"Agricultural production in the EU provides work to about one tenth of the workforce. Most of the workforce in agriculture is family labor, since farming in

the EU is dominated by family farmers. But are the (family) jobs created in agriculture good jobs? And do they contribute to the eradication of poverty, given the substantial challenge described above? This report argues that agriculture and the CAP are indeed playing this role, but that this role differs depending on where the country finds itself along the process of structural transformation.”

If farmers are successful in profiting from agriculture and raise its productivity, poverty will be reduced. And because of the strong local multipliers of agriculture, poverty in the area will be reduced. At some point in the process, poverty will be eradicated, but agricultural labor productivity will continue to rise to levels comparable to other sectors in the economy, to reduce the agricultural income gap. At this point, the correlation between agriculture and poverty turns negative: structural transformation is completed and successful. This has happened in about half of the countries in the EU. These countries saw significant migration from rural to urban areas, but at the same time agricultural labor productivity increased, so that those who remained could benefit from better, more remunerative, jobs in agriculture. In these countries, agriculture today is no longer associated with poverty, has modernized and is a source of growth and good jobs.... Improvements in agricultural productivity and employment go hand in hand, supported by the CAP. Agricultural productivity, defined as growth in agricultural value added per worker, is positively associated with the CAP, particularly in the NMS. The decoupled payments of Pillar I and the Pillar II payments have a positive impact on agricultural productivity growth, but not the coupled payments. The hypothesis is that because farmers no longer received subsidies coupled to the production of low value-added crops, they switched to higher value added crops. This hypothesis is further supported by the fact that decoupled payments are also associated with a reduction in the outflow of labor: higher productivity sustains better jobs in agriculture. This report therefore argues that there may not be a trade-off between agricultural employment and supporting increases in agricultural productivity. The CAP seems to be effective in increasing farmers’ investments in productivity by reducing farmers’ incomes exposure to risk and relieving certain credit constraints. This should matter most in the NMS — a hypothesis supported by the data.

.... in particular the Pillar I decoupled and Pillar II payments, show a different link to poverty reduction over time: i. For the successful structural transformers, Pillar II is the only payment associated with regions in which poverty declined. ii. For the incomplete transformers, both Pillar I decoupled as well as Pillar II payments are associated with regions which achieve higher poverty reduction. iii. However, in the incomplete transformers, the magnitude of the correlation for Pillar II is considerably lower than in the successful transformers, pointing to the need to improve the basic conditions [of quality of life in rural areas] which would improve the returns on the investments made.” (World Bank, 2017)

The findings hypothesised in the World Bank report are consistent with the range of findings of this evaluation study, emphasising the way in which states of overall socio-economic development affect the role and scale of impact of CAP funding for GR. Based upon this coherence, we infer that the impact of the whole CAP upon GR varies between Member States, but on balance it is more likely to be positive than negative, for the reasons explained in the World Bank study. Nevertheless, we can add specific additional points of synthesis which draw particularly from the empirical work of this evaluation.

5.5.3.2 Data analysis – MCA re-run using total CAP Pillar 1 aids as well as YF aids

The PCA again produced three robust composite indicators (CI), similar to those produced in the YF payments analysis (see table 33).

The hierarchical cluster analysis of all predominantly rural and intermediate NUTS3 regions using these composite indicators as variables indicated that they still divide into the same 5 distinct MCA clusters as for those which emerged from the CAP GR measures’ analysis, although the K mean clusters analysis produced different values. The clusters were described in the map, in section 4.3.4⁴⁹: We describe them a second time below,

⁴⁹ The characterizations low, moderate and high are based on the comparison with the other MCA clusters.

using the new mean values and regression results coming from the analysis of total Pillar 1 aid plus CAP GR measures.

Table 32. Results of the PCA and correlation strength of indicators for each component, total CAP P1 analysis

	CI1: infrastructure	CI2: payments	CI3: employment
Broadband access	0.864		
Quality of governance	0.859		
GDP/capita (log)	0.826		
Accs_Multimodal	0.800		
Net migration	0.762		
Unempl. Rate	-0.696		
Population		0.928	
Tert. Education		0.878	
Pillar I Total aids 2015		0.690	
P2_Area_2B		0.583	
GVA/c primary			
GVA/c secondary			-0.973
GVA/c tertiary			0.966

Source : CCRI et al

MCA Cluster 1: Non-agricultural developed regions with low CAP expenditure

This cluster includes regions in Germany and Austria, and parts of Sweden and Finland. 47% of the regions in this cluster use the Pillar 2 GR measures. As seen in Table 33, the regression analysis for this cluster showed that as *infrastructure indicator* increases by 1%, the number of young farmers in these areas is likely to increase by 0.81%. Similarly, as the *payments indicator* increases by 1% the number of young farmers in these areas is likely to increase by 1.07%. An increase the number of large farms by 1% is likely to increase the number of young farmers by 2.56%, and the number of young farmers is likely to decrease by 2.98% if no changes are made to the context or input indicators.

MCA Cluster 2: Developing regions with rapid agricultural restructuring

This cluster includes the biggest parts of Bulgaria, Romania, Czech Republic, Hungary, Slovenia and Slovakia, Northwest Poland, Latvia, Lithuania and Estonia, and some regions in Portugal and north-east Spain. Compared to other clusters, the expenditure from CAP Pillars I and 2 overall is moderate to high. 91% of these regions use Pillar 2 GR measures. As seen in table 33 the regression analysis for this cluster indicated that an increase in the *payments indicator* by 1% would cause a potential increase of young farmers by 0.41%, and an increase in expenditure on M07 would lead to an increase of the number of young farmers by 0.97%.

MCA Cluster 3: Sparsely populated developing areas with many small farms

This cluster includes almost all regions of Greece, Croatia and Portugal, big parts of Italy and Spain and some areas in France and northern Bulgaria. CAP expenditure levels differ, with the overall Pillar I expenditure being at moderate levels (compared to the other clusters), and expenditure from Pillar 2 very high. 88% of these regions use Pillar 2 GR measures. As shown in table 33, the regression analysis for this cluster showed that a 1% increase of the *payments indicator* is associated with an increase in number of young farmers by 1.91%. In addition, a 1% increase of M01 expenditure and of the number of large farms, would lead to an increase of young farmers by 1.32% and 1.99% respectively.

MCA Cluster 4: Agricultural regions with large farms, high CAP expenditure and ageing farm population

This cluster includes all areas in Ireland and Denmark and Cyprus, and great parts of France, Spain and Poland; also, some areas in northern Italy and the UK, and a few regions in Czech Republic, Slovakia and Finland. CAP expenditure across both Pillars overall and particularly for YF is high. 66% of the regions use Pillar 2 GR measures. The regression analysis results (table 34) indicate that an increase of the *infrastructure indicator* and the *employment indicator* each by 1% correlates with a negative impact on the number of YF by 4.96% and 1.86% respectively, meaning that further infrastructure development and further increase of tertiary sector is negative for keeping young farmers in these areas. However, an increase in expenditure on M01 and M07 would have a positive impact on YF, increasing their number by 0.61% and 0.70% respectively.

MCA Cluster 5: Developed rural areas where other sectors dwarf the impact of agriculture

This cluster includes areas in Belgium, Germany, the biggest part of the UK and much of Finland and Sweden, western France, northern Italy and Austria. CAP GR expenditure across both Pillars in this cluster is low. 51% of the regions in the cluster use Pillar 2 GR measures. For this cluster, the regression analysis (table 33) showed that a 1% increase in the payments indicator would cause an increase in the number of YF by 0.74%. Similarly, small increases in the numbers of YF (0.16% and 0.8%) may result from an increase in expenditure for M01 and in the number of large farms. Finally, there is a decline by 0.3% of the numbers of YF if no changes are made to the CIs.

Table 33. OLS results by MCA cluster, impact of CIs on change in no. of farmer/managers < 35 years old

Indicator	Impact on change in the number of YF (%)				
	MCA Cluster 1	MCA Cluster 2	MCA Cluster 3	MCA Cluster 4	MCA Cluster 5
Infrastructure indicator	0.81***	-0.44	0.23	-4.96***	0.18
Payments indicator	1.07***	0.41**	1.91***	0.63	0.74*** ⁵⁰
Employment indicator	0.10	-0.34	0.24	-1.86***	-0.66***
M07	2.43	0.70***	0.72	0.61***	0.009
M01	-0.08	0.09	1.32**	0.70***	0.16***
Number of farms over 50 ha	2.56**	0.01	1.99*	-0.55	0.79***
Constant	-2.98**	-0.53	-0.37	0.90	-0.29***

Source : CCRI et al

Discussion

Despite large differences in infrastructure and expenditure between clusters, we see from this second OLS regression that *CAP spend including all Pillar 1 aid is positively correlated with increases in the number of young farmers* in almost all clusters, even those where agricultural activity is dwarfed by other sectors. The only exception is MCA cluster 4 (agricultural developed regions with large farms, high CAP expenditure and ageing farming population), where it appears to have no significant impact on YF numbers. Note, however, that Pillar 2 spending on rural services and training has a significant, positive impact on YF numbers in this cluster.

In comparing these results to those presented and evaluated when answering ESQ 3, we can see that once the total CAP Pillar 1 aid to YF is included, the estimated strength of the relationship between payments and YF numbers is slightly reduced, for most of the clusters. This is logical as it probably reflects the less direct impact of total Pillar 1 aid upon GR, by comparison with the specific YF measures as examined before, which are targeted to GR. **With a much larger total spend and a weaker overall relationship to YF numbers, a similar scale of increase in total CAP payments shows a smaller impact on YF than if this increase were just focused on those CAP**

⁵⁰ Indicates statistical significance at *** 1%, ** 5% , *10% level

payments that target YF. Nonetheless the indications are that this impact is positive for MCA clusters 1, 2, 3 and 5 and not significant for MCA cluster 4 – the same pattern as for the CAP YF payments.

5.5.3.3 Case study evidence

Whilst decoupled payments in Pillar 1 of the CAP may have a positive impact upon overall agri-sector development, as suggested in the World Bank study, at a regional or sub-regional level there is evidence that they provide some disincentives to GR via inter-generational farm transfer, because older farmers and landowners are using the payments as income support right up to and beyond what would be a usual retirement age, in other sectors. In addition, in areas where farms or landholdings are quite large but non-farm GR is a significant concern, the CAP Pillar 1 payments may be seen as unfairly benefiting a small minority of landowners and offering few tangible incentives for wider GR. Where these situations arise, there is a need to think about: a) devoting more effort to alternative assistance for older farmers to help them with the earlier transfer of assets to a younger generation – including advice, incorporation in collective management structures and adequate pension and services provision; or b) reducing or capping Pillar 1 aids to the largest beneficiaries in order to shift greater resources into broader RD under Pillar 2 measures for rural diversification, business start-ups, and rural infrastructure and services.

As discussed in more detail in the answers to other ESQs, this study has identified that in territories lacking basic rural infrastructure, with poor services and little economic activity other than agriculture, often also facing population decline, the CAP's influence upon GR depends critically upon the extent to which it stimulates and supports broader rural development under LEADER, and Measures 7, 8 and 6.3 / 6.4, than upon aid targeting young farmers, alone.

In examining EU datasets in section 4.1, an analysis was made of the pattern of change in the share of YF within the total population of farmers, over the past 13 years. This highlighted the significant impact of wider economic conditions upon the relative attraction of farming, for young people, in many MS. The trends from 2003-2013 suggest that a positive impact (increasing share of young farmers) seems to coincide with the global recession, 2007-2010, although negative trends are apparent either side of that uplift, for many countries. Interestingly, a few MS then saw sustained upturn in YF up to 2013 – Slovakia, Slovenia, Estonia and Luxembourg in particular. For a few MS, the recession appears to have had no impact upon farmer age balance which has declined fairly steadily over the full decade: Latvia, Cyprus, Sweden, Ireland and Germany. Then from 2013-2016 we see worsening trends over 1% (i.e. a decline in the share of young farmers) in a variety of places including Greece, Bulgaria, Poland, Finland, and some parts of France and Italy – often the more remote areas. Most marked positive trends since 2013 occur in Romania, parts of Germany, Slovakia and western Austria, and Northern Ireland.

Seeking to interpret these patterns in the light of the combination of evidence from the MCA analysis and the case studies, it appears that overall, the CAP is not the most significant influence upon YF numbers across the EU as a whole, but that there are specific regions or countries where its influence is felt more strongly. Adapting the World Bank approach slightly to these findings, we can hypothesise that there is a group of MS and regions within MS where, due to a relatively low level of economic development and relatively uncompetitive secondary and tertiary sectors, recession triggers contraction in these sectors and young people who were working in them then return to their parents' farms to try to make a living from the land, at least until the economy recovers and job prospects elsewhere increase again.

There are also some areas where restructuring in agriculture has been steadily shedding labour in both positive and less positive wider economic conditions. Here, a declining share of YF is noted as young people choose alternative careers. However, within this group there are some places which have seen a resurgence of popularity in farming among young people, just in very recent years since 2013 – notable in this respect is central Germany, also to a lesser extent its eastern and northern regions. As this change relates to a very short period, it is probably too soon to be sure that this is a significant impact, but it is possible that the new CAP might play some role. In Germany, the non-use of Focus Area 2B aids means that if there is a CAP impact here, it relates either to

other Pillar 2 measures or perhaps more likely to the introduction of the Pillar 1 YF supplement. If, for instance, these regions already have young people farming alongside their parents, the introduction of the YF supplement may have incentivised a formal transfer of the farm down the generations, to avail of the slightly higher payments on offer. However, without a more detailed and qualitative exploration of the context and situation of YF in central Germany we cannot confirm or refute this hypothesis.

5.5.4 EU Added Value

Conclusions on EU Added Value

The combined study evidence demonstrates EU added value in many aspects of CAP GR measure performance: all case studies discuss and validate a view that without CAP funding, not so much would be achieved that is positive for GR within agriculture. Nevertheless, we emphasise the importance of the term 'added', here, because it is also very clear that national policies and provisions also play a key complementary role, and that consideration of the integrated influence of EU and national (or more local) instruments and institutions is essential, in order to optimise the added value of CAP funding.

The study also finds evidence of the added value of LEADER as a mechanism for GR beyond the farm sector and also for new entrants to farming, operating only at small scale but with high impact in comparison to the resources provided. Key to this role appears to be the local knowledge of LAGs in identifying the barriers to and opportunities for GR and enhanced rural viability, as well as the relative flexibility of LEADER as a mechanism which retains the principle of funding that can be tailored to the specific circumstances and potential of each beneficiary and project.

The study has also examined and presented evidence to suggest that EU added value is greater in those MS and regions where the problem of GR is well-understood by national and local policy makers as a result of sustained analysis and the development of an integrated approach to tackling the problem, using multiple CAP and non-CAP instruments, institutions and broader legislative and fiscal provisions in a coherent way. Furthermore, it has found evidence to suggest that the scope for this kind of approach is greater than has yet been realised in many areas, that the existing menu of Pillar 2 measures (including M16, M7/LEADER, financial instruments and EiP Agri) can be used in more creative ways to achieve this, and that there may even be opportunities to bring the role of CAP Pillar 1 aids and the YF supplement into such an approach.

5.5.4.1 Evidence in addition to that presented for ESQ 1

Stakeholder opinion at EU level (from interested parties and Member State administrations), and beneficiary experience as gathered in the case studies, agree that funding for GR from the CAP makes a difference at local level and represents an important and valued contribution to EU added value.

EU data analysis using multivariate and econometric methods provides some evidence that the combined impact of GR measures in CAP is significant and positive, although differentiated according to national and local socio-economic conditions.

Detailed examination of how these measures and instruments are applied within our 7 case study countries via national, regional and local implementation strategies, demonstrates that to a large degree, they are valued, effective and can be efficient and coherent with other policies, with a low degree of overlap.

The FADN counterfactual analysis provides evidence of the additionality of CAP YF support in Italy and France, demonstrating how financial assistance with start-up costs and investment aid boost the business performance of beneficiary's farms compared to those of similar farms which do not receive this aid. Whilst this in itself does not demonstrate GR, it is an important element in increasing farmers' confidence for GR and the positive impacts that should flow from it.

A concern remains in respect of the more limited ability of CAP GR measures (relative to their performance elsewhere) to promote rural vitality in local areas where there is a lack of investment in broader rural infrastructure and services, as well as rural economic diversification and adding value. In these situations of broad socio-economic decline

and/or vulnerability, the EU added value of CAP GR funding is constrained by these other limitations.

We also note the considerable enhancement of EU added value for CAP GR measures in situations where the national, regional and local governance structures make institutional and fiscal provisions to support and enhance rural and agricultural GR, particularly by focusing upon the creation of mechanisms and resources to increase land mobility and ease the process of inter-generational transfer for the older as well as the younger generation.

5.5.5 ESQ 7: Efficiency of all CAP Measures/instruments in fostering generational renewal indirectly, by improving quality of life in rural areas

5.5.5.1 Understanding of the question

This ESQ is very broad and requires a strategic level of consideration, focused upon the extent to which choosing to put any resources into CAP (instead of other policies, or having lower public spending) is an efficient way to enhance Quality of Life in rural areas as a key driver of GR. The corollary would be to ask whether using these resources in other policies or deploying fewer resources could achieve better QoL impacts. In this sense, it is a question relevant to the EU added value of CAP spending, for GR goals. Subsidiary questions that are relevant could be:

- Considering the study findings concerning the relevance of direct and indirect CAP measures for GR, could alternative approaches achieve similar indirect impact improving quality of life, with lower expenditures?
- Is there evidence that other policies at EU level, or among MS national and local policies, are more cost-effective than the CAP measures in promoting GR via enhanced quality of life?
- Does the interaction between CAP and non-CAP measures and instruments affect the efficiency of CAP measures in promoting GR indirectly, via enhanced quality of life?
- Beyond those measures relevant for GR directly, what impact upon rural quality of life does the whole of CAP have, and is it efficient in this respect?

Evidence sources

Relevant indicators are any that measure QoL improvement assessment, and also link this to CAP GR impacts, considering both CAP GR measures, and the whole of CAP.

Evidence provided in answers to ESQ concerning CAP GR measures' relevance, the role of external factors, CAP GR measures' coherence and their impacts upon quality of life attributes including social capital and governance, knowledge and the availability and quality of rural employment, are all relevant to this question.

Further evidence and analysis concerning the impact of the whole CAP upon GR is also relevant, particularly in respect of its indirect impact upon quality of life factors. This was examined in the answer to ESQ 1.

In addition, there may be more material from the EU literature review and case studies that adds detail, on this topic.

Conclusions for ESQ 7

In overview, the CAP promotes quality of life in rural areas directly through measures which promote rural economic diversity, rural jobs, rural services, and protection and enhancement of the rural environment. These measures are found principally within the Rural Development Programmes. Analysed at EU level, the largest share of RDP resource is focused upon environmental land management under priority 4, and measures 10 and 11 of the RDPs; while the share devoted to economic diversification, job creation and rural services including broadband, transport and social and community activities – as identified by programming under Focus area 6, is around 15%. Whilst it is beyond the scope of this study to analyse the effectiveness of spending programmed under these objectives and goals, we can note that from the interviews and secondary evidence reviewed on the topic of farm and non-farm GR for this study, evidence is presented of the value at local level of these kinds of expenditure as indirect influences upon GR.

In particular, LEADER expenditure is noted as having a valuable role, especially since in many MS now, there is no significant CAP funding for non-agricultural rural development other than through LEADER, (which has expanded significantly in its coverage, compared to its role in the previous programming period, whilst the spending on non-LEADER broader rural development measures has declined significantly).

In respect of the significant sums of money currently spend on agri-environment-climate measures and on aids for Areas of Natural Constraint, these are identified in several case studies as having an indirect but important role in agricultural GR, not because of a direct impact upon broad rural quality of life but because they contribute significantly to meeting the income needs of farm businesses, particularly in economically marginal areas, and this is seen as important for maintaining communities and cultural value in these places, in particular.

In a similar but more substantial way, the wider role of income support under the first Pillar of CAP, both that which benefits Young Farmers directly and that which supports all other farmers, in contributing to rural quality of life, appears indirect and weakly positive (see the evidence in ESQ answer 1, MCA analysis). Secondary evidence from modelling studies suggests that without the support of Pillar 1, a significant share of Europe's farms would not be viable and employment in agriculture would decline. But different studies use reasoning from theory and partial evidence to suggest that this could either lead to declining quality of rural life associated with further rural depopulation (e.g. WUR, 2016), or it could release resources from agriculture which could stimulate other kinds of rural added value or economic activity, adding to rural quality of life (e.g. World Bank, 2017). As suggested by the diversity of situations of rural change described in the case studies, the balance of positive and negative impacts of current support in Pillar 1 of the CAP upon rural quality of life depends critically upon wider socio-economic conditions and other economic and social policies, which vary considerably between countries and regions. So, the efficiency of spending money on CAP Pillar 1 income support as a way to promote GR indirectly through enhanced quality of life will vary by territory, and over time, as these conditions change

5.5.5.2 Indicators

Among quality of life indicators, the **share of people at risk of poverty** or social exclusion is particularly relevant to this question. Slightly more than one quarter (25.5 %) of the EU-28 population living in rural areas was exposed to the risk of poverty or social exclusion in 2016. The risk for people living in cities was 23.6 %, while the lowest risk was recorded for the population living in towns and suburbs (21.6 %). Women, young adults, unemployed persons and those with a low level of educational attainment experienced — on average — a greater risk of poverty or social exclusion than other members of the EU-28 population in 2016 (Eurostat, 2018).⁵¹ The risk was highest in rural Bulgaria and Romania, (53.8 % and 51.7 % respectively), also more than one third of the rural populations of Greece (38.9 %), Lithuania (37.6 %), Latvia (35.0 %), Spain (33.5 %) and Croatia (also 33.5 %) faced the risk of poverty or social exclusion in 2016.

5.5.5.3 Combined evidence on CAP GR measures' efficiency in promoting quality of life

The pulling together of combined experience from the Case Studies suggests a broadly positive perception of the value and the efficiency of CAP GR measures in achieving their aims, particularly if implemented in a co-ordinated way alongside a range of other national and local policy measures including institutional, fiscal and financial tools. However, the links between these measures and indirect effects upon rural quality of life are more tenuous. Many interviewees appear to presume that farm-focused GR will be positive for rural QoL, while some others explicitly claim that the two elements are almost entirely disconnected – usually when they are identifying the shortfalls in respect of funding or attention focused upon rural development beyond agriculture, or the limited scale of LEADER by comparison to the scale of support for other elements in RDPs.

⁵¹ Source: Living conditions in Europe 2018 edition, Eurostat statistical book, European Union, 2018

<https://ec.europa.eu/eurostat/documents/3217494/9079352/KS-DZ-18-001-EN-N.pdf/884f6fec-2450-430a-b68d-f12c3012f4d0>

From the EU level multifactorial analysis, the indications are that CAP GR measures do connect indirectly with key indicators of context which can be seen as proxies for Quality of Life, in some respects. However, the relationships vary between different types of rural area (the 5 clusters of the CI typology), so it is not a simple task to assess the extent of influence at EU level as a whole.

Considering the combined implications of the evidence presented in answers to ESQ 4, 12, 16 and 11 and 14 in particular, the study would suggest that CAP GR measures do have a positive indirect impact on QoL for farmers, and thus where farm families are an important component of rural communities (numerically and/or culturally), the same effect is likely to be felt. On the other hand, a focus on CAP GR without a balancing investment in wider rural development appears to be a limiting approach – as discussed most clearly in the examples from Ireland, Estonia, and Hungary. It therefore seems clear that in order to maximise the potential for CAP GR measures to enhance quality of life, i.e. to ensure that they are efficient to deliver indirect quality of life benefits, it is important to see them as only one component in a broader mix of essential interventions, for this purpose.

5.5.5.4 Evidence concerning the impact of the CAP as a whole (including all of Pillar 1) and its efficiency in promoting rural Quality of Life, as an indirect influence upon GR

In overview, the CAP promotes quality of life in rural areas directly through measures which promote rural economic diversity, rural jobs, rural services, and protection and enhancement of the rural environment. These measures are found principally within the Rural Development Programmes. Analysed at EU level, the largest share of RDP resource is focused upon environmental land management under priority 4, and measures 10 and 11 of the RDPs; while the share devoted to economic diversification, job creation and rural services including broadband, transport and social and community activities – as identified by programming under Focus area 6, is around 15%. Whilst it is beyond the scope of this study to analyse the effectiveness of spending programmed under these objectives and goals, we can note that from the interviews and secondary evidence reviewed on the topic of farm and non-farm GR for this study, evidence is presented of the value at local level of these kinds of expenditure as indirect influences upon GR.

In particular, LEADER expenditure is noted as having a valuable role, especially since in many MS now, there is no significant CAP funding for non-agricultural rural development other than through LEADER, (which has expanded significantly in its coverage, compared to its role in the previous programming period, whilst the spending on non-LEADER broader rural development measures has declined significantly).

In respect of the significant sums of money currently spend on agri-environment-climate measures and on aids for Areas of Natural Constraint, these are identified in several case studies as having an indirect but important role in agricultural GR, not because of a direct impact upon broad rural quality of life but because they contribute significantly to meeting the income needs of farm businesses, particularly in economically marginal areas, and this is seen as important for maintaining communities and cultural value in these places, in particular.

In a similar but more substantial way, the wider role of income support under the first Pillar of CAP, both that which benefits Young Farmers directly and that which supports all other farmers, in contributing to rural quality of life, appears indirect and weakly positive (see the evidence in ESQ answer 1, MCA analysis). Secondary evidence from modelling studies suggests that without the support of Pillar 1, a significant share of Europe's farms would not be viable and employment in agriculture would decline. But different studies use reasoning from theory and partial evidence to suggest that this could either lead to declining quality of rural life associated with further rural depopulation (e.g. WUR, 2016), or it could release resources from agriculture which could stimulate other kinds of rural added value or economic activity, adding to rural quality of life (e.g. World Bank, 2017). As suggested by the diversity of situations of rural change described in the case studies, the balance of positive and negative impacts of current support in Pillar 1 of the CAP upon rural quality of life depends critically upon wider socio-economic conditions and other economic and social policies, which vary considerably between countries and regions. So, the efficiency of spending money on CAP Pillar 1 income support as a way to promote GR indirectly through enhanced quality of life will vary by territory, and over time, as these conditions change.

The World Bank report contained interesting detailed, econometric analysis of the way in which relative levels of economic development at MS level appear to alter the relations between CAP support, poverty and employment:

“Overall, countries seem to target CAP support reasonably well, given where they are in the process of structural transformation.... The CAP is associated with poverty reduction and a decrease in inequality at the regional (subnational) levels. The channel through which poverty could have fallen in relation to the CAP would be through the creation of better jobs in agriculture for the workers who remained behind in agriculture. This hypothesis is supported by the combined results of the statistical analysis on productivity, jobs and poverty. However, the CAP components, in particular the Pillar I decoupled and Pillar II payments, show a different link to poverty reduction over time: i. For the successful structural transformers, Pillar II is the only payment associated with regions in which poverty declined; ii. For the incomplete transformers, both Pillar I decoupled as well as Pillar II payments are associated with regions which achieve higher poverty reduction; iii. However, in the incomplete transformers, the magnitude of the correlation for Pillar II is considerably lower than in the successful transformers, pointing to the need to improve the basic conditions which would improve the returns on the investments made.” (World Bank, 2017)

These findings are consistent with the evidence presented in our study of the CAP and GR, in which the CS demonstrate how the contrasting contexts within which CAP operates, affect its emerging outcomes.

In Italy, it was found that young farmers with small farms and diversification strategies and/or high-quality food production strategies do not perceive CAP Direct Payments as necessary for their survival and for the success of their strategy. Conversely, young farmers with medium to large farms and intensification strategies see DP and other forms of area payment as a sort of safety net in a context of unstable prices and risks associated with climate change. Most farmers are aware of the other impacts of DP: effects on land prices and consequently harder access to land for new entrants or those who would like to buy land in order to enlarge a farm.

From the Polish CGE modelling, evidence emerges of the impact of CAP GR measures and the total Pillar 1 payments upon basic economic indicators of quality of life, in different regions. The underlying pattern of estimated impact is for Pillar 1 aids to principally support jobs, growth and household incomes in the farm sector, while Pillar 2 aids are estimated to have greater positive employment and economic development impacts up and downstream of agriculture and in the wider rural economy, including sectors such as tourism. The scale of impact is linked to volumes of expenditure, so total Pillar 1 impacts are greater than those for Pillar 2, but the spread of impact is much broader for Pillar 2.

From the MCA analysis the different behaviour of the five clusters of regions in response to changes in the 3 composite indicators appears to show how the relative roles and impacts of investing in CAP payments, or infrastructure, or secondary or tertiary sectors of the rural economy, vary according to the underlying nature of these cluster-types. Because the analysis focused upon the number of Young Farmers as its impact indicator, it is not possible to discuss differential impacts upon non-agricultural GR of these investment options. However, it would seem likely that they also differ between regions and that, to a degree, *indirect* inducement focused upon improved infrastructure or non-agricultural employment that is encouraging young people to stay farming, may also encourage wider rural GR beyond farming.

In general, there is sufficient evidence from former evaluation studies of Pillar 2 policies to suggest that the LEADER approach in particular, and investment in rural services and rural economic diversification more generally, offer multiple benefits to rural quality of life when they are delivered effectively, at local level, and that success factors for LEADER include effective local inclusion and well-tailored strategies incorporating a good articulation between top-down and bottom-up priorities and actions, in Local Action Groups' activities.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions - effectiveness and relevance of CAP GR measures

6.1.1 Overall impact of the whole CAP on Generational Renewal

The study found evidence that the CAP as a whole has a positive effect in fostering GR, particularly in agriculture, which varies in extent from significant to only weakly effective between different MS and territories. Differences in the magnitude of impact are determined by a combination of the underlying socio-economic and cultural context, and CAP instrument selection and measure design, as well as delivery choices and provision. The best evidence of sustained and positive impact is in MS in which a variety of measures and instruments is used in a complementary way, including funding and investment aids for business start-ups, advice and training, and incentives for collaborative institutional and/or fiscal arrangements easing inter-generational transfer, as well as broader support for rural services, infrastructure and quality of life.

In respect of non-agricultural GR (encouraging young people to live and work in rural areas), the study found less evidence overall concerning CAP impacts, likely because this specific goal is less prioritised, despite significant need being evident in many situations, and because of the strong influence of non-CAP factors. However, where CAP resources are focused upon non-farm GR, principally through LEADER and other specific measures under Pillar 2 including measure 7 and the non-farm elements of measure 6; significant and positive impacts at local level were found in the case studies.

In more detail:

- Funding for GR from the CAP makes a difference to the performance of farm businesses and the secure transfer of farms from an older to a younger generation.
- MCA of EU datasets indicates that the combined impact of GR measures in CAP is generally weakly positive for GR in agriculture, although impacts are differentiated according to national and local socio-economic conditions.
- Detailed examination of how measures and instruments are applied to support farm and wider rural GR within 7 case study countries (France, Italy, Estonia, Ireland, Hungary, Poland and Belgium-Flanders) demonstrates that, to a large degree, they can be effective, efficient and coherent with other policies if:
 - well-designed to target situations of most need,
 - calibrated to local conditions,
 - offering a mix of financial, institutional and knowledge-based support, and
 - delivered through well-co-ordinated administration and extension.

A counterfactual analysis at farm level in Italy and France demonstrated the additionality of YF aid in enhancing farm performance and resilience. The study also revealed that the measures most relevant for GR vary between countries and territories within countries, reflecting the different barriers and opportunities for GR in each situation.

The case studies and econometric analysis suggest that CAP YF measures in both pillars have some ability to promote rural vitality in marginal territories suffering economic and demographic decline with poor rural infrastructure and services, low levels of rural economic diversification and little value-added in agriculture and forestry, particularly when measures are delivered with supporting advice, mentoring and review. However, in these situations the impact of CAP YF funding is constrained by these other limitations, which are often compounded by wider economic and cultural disincentives for young people to live, work and farm there. Where this is the case, alternative and/or parallel approaches which support broader rural development, more diverse economies and enhanced quality of life are needed, for farm and non-farm GR.

The study found that CAP GR measures in agriculture are effective in those cases where complementary national, regional and local governance institutions and fiscal policies also support and enhance GR. This includes the creation of institutional mechanisms and fiscal incentives to increase land mobility and ease the process of inter-generational transfer for the older, as well as younger, generations. Examples include creating farm partnerships; incentivising share-farming and other collective business models; providing help with retirement income planning and tax breaks for the gradual transfer of assets;

and using land banks or creating new non-profit organisations to consolidate and re-let landholdings preferentially to new entrants. Older farmers may be dis-incentivised to transfer their farms to a younger generation if their access to income and a reasonable quality of life is heavily dependent upon continuing receipt of CAP pillar 1 aids, sometimes beyond retirement age and especially if transfer means losing additional fiscal or other financial benefits. In such conditions, measures and initiatives using 'soft' approaches including awareness-raising, advice and planning for successful handover also appear effective. CAP pillar 2 measures can be used to help provide advice and stimulate new co-operation, in this context (as in Ireland, France and Italy case study areas).

Considering YF aids only, it is too early to identify clear evidence of the particular impact of the Young Farmer supplement to direct payments under Pillar 1 of the CAP, in promoting or supporting farm GR. The study found that these payments have very different financial significance to farms in different Member States, and their pattern of distribution across the EU is very different to the pattern of GR priorities as determined in MS Pillar 2 RDPs. Case study evidence suggests there are some particular situations where they can support GR in complementary ways to Pillar 2, but this depends upon careful design of the delivery approach which is not widespread among MS. The simple interpretation of recent trends also suggests that the YF aids might be a factor encouraging inter-generational transfers in a small proportion of regions where YF shares of the total farmer population have increased significantly in the 2013-2016 period: this deserves more qualitative investigation.

The combined evidence from the material and analysis brought together in this study demonstrates that CAP YF measures can be effective to a significant extent in promoting GR in agriculture, particularly in respect of farming succession. However, the performance of these measures is also significantly affected by a range of factors including both exogenous ones: e.g. the wider context and culture within which these instruments are applied, at local level; and endogenous ones: the extent to which the design, delivery and accompanying institutional and fiscal frameworks are coherent with the needs for, and barriers to, effective GR in each local area; and the choices made about how best to ensure accessible, transparent and efficient delivery processes that maintain trust and open communication between funders and beneficiaries.

This study has examined much evidence which supports the adoption by MS of a multifaceted and co-ordinated approach to GR in agriculture in which national legal, institutional and fiscal instruments operate alongside CAP measures in a coherent way. In proven effective and long-established cases such co-ordination represents the promotion and integrated delivery of a 'package' of instruments to young farmers and the farms that they seek to take on, with a single point of application and a jointly-devised budgetary and assessment process. Evidence from case studies suggests this can be the most cost-effective approach.

YF aids are apparently less well suited to new entrants to farming from other backgrounds, without inheriting from a parent. Specific beneficiary-level and documentary evidence of this issue was cited and discussed as significant in Estonia, France, Italy, Hungary and Flanders cases and workshops. The reasons stem from the much greater diversity of characteristics of new entrants and their business situations and ideas (e.g. older, smaller, lacking capital, with innovative and unconventional ideas), as well as their generally lower level of pre-existing integration into farm business networks and knowledge systems. This means they more frequently fail to meet standard eligibility conditions, they may be considered higher-risk applicants and thus are less likely to score well on conventional selection criteria, or they may lack broader ongoing support and knowledge even where they qualify for YF aid, which makes their survival and performance more vulnerable. Problems arise from a combination of inappropriate design or lack of awareness in delivery by programming authorities, and sometimes also constraints in the EU legislation.

The study has concluded that support for non-farm GR is not currently a major focus of the CAP but that it can be valuable and positive for GR. Low impact overall is likely due to a low level of investment within many RDPs in 'wider rural development' beyond the farm sector, compared to the scale of the economy. A valuable local contribution of LEADER is highlighted in case studies. We also acknowledge study limitations: it has

found quantitative and qualitative evidence that other CAP measures not directly linked to GR can foster and strengthen non-farm GR through the pursuit of improved rural quality of life, e.g. by supporting rural service provision, infrastructure and rural economic diversification. However, a full investigation of these mechanisms was beyond the Terms of Reference for this evaluation.

There remain important obstacles to successful agricultural GR in many Member States which are probably more efficiently addressed through institutional and fiscal arrangements, than through direct funding of beneficiaries – these include some types of access to land, and helping older farmers with a gradual transition process to enable transfer to a younger generation, including new entrants. Also, financial instruments may offer opportunities to help address the challenge of access to credit, given the evidence reluctance of commercial lenders to invest in young farmers over older ones. At present, it has not been commonplace for institutions or Financial Instruments to be created using CAP resources but this is indeed possible under the Pillar 2 EAFRD menu of measures, whereas in the case of fiscal provisions these remain the competence of national and more local levels of government.

6.1.2 Impact of GR measures upon inter-generational knowledge transfer and innovation

The Pillar 2 measures relevant to GR show a positive, but relatively limited, connection to fostering knowledge exchange and innovation, particularly within agriculture, from case studies and in earlier published evidence. Among stakeholders and beneficiaries, a significant proportion of those consulted in case studies and interviews cited examples of improved knowledge, skills and innovation occurring through the implementation of CAP GR measure-supported farm transfers.

Of the total planned resource focused upon agricultural GR in pillar 2 of CAP (€4,736 million over seven years), only a small proportion (5%, or around €34 million per year) is planned to be spent directly on KE and fostering innovation. Taken as a proportion of CAP spending altogether, the share is less than 0.05 per cent. It therefore seems likely that the impact of this CAP GR spending upon knowledge exchange and innovation at EU level will be very modest, especially compared to other EU and national funding for these services.

However, there is clear evidence to support a more significant, indirect link between GR as a process, and knowledge exchange in farming communities. In nine Member States or regions, the receipt of the Pillar 1 YF supplement is conditional upon beneficiaries having an adequate level of training, and this condition applies to all beneficiaries of Pillar 2 YF business start-up aid. Evidence from the case studies shows that these conditions indirectly promote knowledge exchange and training, primarily improving farmers' technical and business skills and thereby helping to improve levels of skills in the farming population more broadly.

The evidence suggests that when training and advice are provided to young farmers and new rural entrepreneurs because it is a condition of the process to access capital grants, installation aid and/or Pillar 1 YF supplement, the link between GR measures and increased inter-generational knowledge exchange is clear and positive. Secondary sources and stakeholder views further emphasise the added value of delivering advice and business planning in a coherent process throughout the installation period. This was identified in four of our seven case study countries – Ireland, Italy, France and Hungary – and recommended for the future by stakeholders in two more: Estonia and Poland. In the EU online survey an integrated approach was also mentioned as relevant in 2 other MS (UK and Croatia). Integrated delivery of training/advice and non-agricultural investment aid through LEADER was also noted as having a positive effect upon GR in Spain and Ireland.

Evidence from case studies also shows how targeting and eligibility criteria are used to encourage a stronger link between other GR measure spending and levels of knowledge among the farming population. This is the case for M4 investment aids which help young farmers to enhance the productivity and competitiveness of their holdings.

The evidence for CAP GR aids directly supporting and promoting innovation is mixed. In several case studies (IE, FR, PO, EE), evaluation teams conclude that the GR measures support mainly conventional farming through transfer of farming businesses from one

generation to the next, and innovation is not particularly emphasised. However, beneficiary views are more positive on this point, and the early evidence from EIP Agri initiatives indicates that young people are actively involved in some Operational Groups. LEADER is highlighted as one CAP mechanism which has promoted innovation by offering support to non-conventional new entrants to farming, as well as funding some rural training and information actions which improve KE among young people, and those starting new rural businesses. Stakeholders in several CS country workshops suggested that a greater focus within the CAP upon support for new entrants and non-farming entrepreneurial skills could enhance levels of rural innovation, and thus promote enhanced resilience in respect of rural GR.

6.1.3 Impact of the CAP Young Farmer measures on Generational Renewal

Overall there is evidence of a positive impact of the YF measures of CAP on GR in agriculture. In the case studies, evidence for significant impact from CAP YF measures, either directly or indirectly, is weak in some MS (Flanders, Estonia) but stronger in others (France, Italy). Nevertheless, many stakeholders from public and private sectors appear to have a broadly positive opinion of the CAP YF aids and feel they make a difference, and help to ensure viable succession or start-ups on farms.

The conclusion of most evaluation studies is that these measures make a positive difference to GR in agriculture and beneficiaries report positive impacts. Nevertheless, in some regions GR in agriculture remains a problem regardless of EU support to young farmers (YF), due to persistent challenges such as a lack of older farmers' retirement, as well as national policy, fiscal and legal disincentives or costs. A complex mix of other factors influences these situations, both within and beyond farming. Particularly in marginal or remote areas, the impact of the measures may be dwarfed by negative influences including socio-cultural and wider economic disincentives to farm or to remain in rural areas. The particular characteristics of YF and their business aspirations play a strong role in some mountain regions (e.g. two Italian case study areas), where innovative strategies for diversification or high-quality products are creating sustainable and viable farms.

In more prosperous agricultural areas, the aids are enabling positive GR when the amount of aid offered and the conditions of the offer are significant in relation to farm business size, land values and knowledge provision, but there are also examples where aid is either too small or too costly to access, meaning that it is much less effective for GR in agriculture.

MCA results analysing indicators across all rural NUTS 3 regions in the EU find **a positive relationship between the funding devoted to YF aids in both pillars of the CAP and the numbers of young farmers**, although the scale of impact varies according to regional characteristics including the level of economic development, relative importance of agriculture and quality of rural infrastructure. When the analysis was repeated to include all CAP Pillar 1 aids, the relationship was similar, varying according to the same regional characteristics, but relatively weaker (i.e. for the same increase in absolute spending, a smaller response is seen in YF numbers), reflecting the fact that total CAP Pillar 1 aids are not targeted to YF and provide support to older and younger farmers alike.

A matched analysis of FADN farm-level data to assess the impact of CAP YF measures upon farm performance suggests that by comparison to farms that do not receive these integrated packages of aids, farms with YF aid in Italy and France show stronger economic performance, better survival and more resilient business strategies. This in itself does not guarantee GR, but it can be viewed as a potentially influential factor. Econometric estimations based upon this FADN data suggests that the impact of farm investment support is positive and significant in Italian farms – a 10% increase in M4 aid increases employment by 1.3% and the impact is greater if the farm includes young people.

A CGE modelling exercise for the Polish economy examining the regional impact of CAP YF aids at NUTS 2 level also suggests a positive relationship between both Pillar 1 YF supplement and Pillar 2 YF aids, and regional growth and employment. This positive relationship holds for the country as a whole and for most NUTS2 regions, with the exception of those in which a relatively small proportion of the rural population works in

agriculture. The same model also indicates a relatively stronger impact of Pillar 1 YF supplement on employment and growth in agriculture, and a stronger impact of Pillar 2 YF aids upon the wider rural and regional economy in sectors upstream and downstream of the farm, and both these impacts are positive in the most predominantly rural regions. This suggests that Pillar 2 YF aid has a weak but positive impact upon wider rural economies, including the creation of rural jobs, which should help to promote GR beyond agriculture.

Big differences in MS decisions concerning rates of aid, maximum eligible areas and also interaction with national reserve entitlements (in those MS using the Basic Payment Scheme) mean that the Pillar 1 YF supplement funding is reportedly having little effect in some regions, while in others it is felt to have a significant and positive impact upon GR in agriculture.

Overall, relative points of significance in evaluating the impact of P2 YF aids could be summed up as the following:

- **These aids predominantly support farm succession within families**, thus posing the challenge of assessing the additionality of the funding because children may be motivated to succeed their parents with or without additional support, implying a degree of deadweight. The data analysis at EU level indicates a weak but positive link between Pillar 2 YF measures and YF numbers. From the case studies we find examples where low additionality is identified in delivery systems lacking sufficient advisory and technical assessment support (Poland, Estonia), whereas where measures are offered in a co-ordinated package with supporting advice to prepare business plans, gain knowledge and confidence and undertake appropriate training, additionality is well-evidenced in RDP evaluations and FADN analysis (Italy, France).
- **YF aids are apparently less well suited to new entrants to farming from other backgrounds**, without inheriting from a parent. Specific beneficiary-level and documentary evidence of this issue was cited and discussed as significant in Estonia, France, Italy, Hungary and Flanders cases and workshops. The reasons stem from the much greater diversity of characteristics of new entrants and their business situations and ideas (e.g. older, smaller, lacking capital, with innovative and unconventional ideas), as well as their generally lower level of pre-existing integration into farm business networks and knowledge systems. This means they more frequently fail to meet standard eligibility conditions, they may be considered higher-risk applicants and thus are less likely to score well on conventional selection criteria, or they may lack broader ongoing support and knowledge even where they qualify for YF aid, which makes their survival and performance more vulnerable. Problems arise from a combination of inappropriate design or lack of awareness in delivery by programming authorities, and some constraints in the EU legislation.
- **CAP YF aids and their value should not be assessed in isolation** from wider socio-economic conditions in rural areas. Even the best YF packages will be ineffective if farming cannot offer a sufficient standard of living and quality of life to attract a younger generation. Also, rural areas lacking basic infrastructure and services will struggle to retain young people even if the returns to farming are broadly comparable to those of other sectors. If national economies are buoyant and unemployment low then rural exodus will be favoured wherever city living offers young people a better quality of life. Conversely, when economies are in recession and unemployment is high, returning to the family farm can appear an attractive alternative to subsisting on welfare benefits or short-term and low paid employment in a city.
- **It is possible to design YF packages which give appropriate and significant additionality** by tailoring aid rates and delivery processes to local conditions, using a range of measures in a co-ordinated way and also co-ordinating them closely with non-CAP policies and institutional arrangements. The best examples of YF effectiveness in the case studies are seen when the CAP measures are designed to work alongside other legislative and fiscal arrangements, with support from specific institutions and processes at the local

level. **This effectiveness, in terms of improved performance and resilience among supported farms, is demonstrated via the counterfactual analysis of FADN data in Italy and France.**

- Through the P2 menu of measures, many of these accompanying elements to start-up aid could be CAP-funded (e.g. setting up new institutions using M16 co-operation, using M01 and M02 to ensure YFs have the skills and knowledge to develop their business plans robustly), but in our case studies we identified a mix of CAP and non-CAP elements working together to enhance measures' effectiveness (notably in France, Italy, Hungary, Ireland and to a lesser extent, Poland).

The indirect effect of the YF measures upon local economies and rural employment appears weak but positive, particularly in the most remote and marginal rural areas. However, these impacts are likely much less than the impacts of other measures in the Pillar 2 menu which target these goals directly, as well as the indirect impacts of Pillar 1 and ANC aids which provide more significant general support to maintain farming in these areas and should thereby support local economies and rural employment. Case study evidence in France, Estonia and Poland suggested that these indirect impacts were relevant to encouraging young people to farm, in these marginal areas.

6.1.4 Contribution of CAP GR measures to fostering social capital, infrastructure and good governance in rural areas

Infrastructure, services and social capital in rural areas are poor in a number of member states and this is commonly identified as a constraint for GR. The study found little concrete evidence on links between CAP GR measures and these factors. However, the broader evidence suggests CAP GR measures have a limited, mainly positive direct and indirect impact on these broader rural development pre-requisites. It further suggests that measures targeting rural services (notably Pillar 2 Measures 7 and 19: LEADER) have more significant impact in this respect, and that when applied synergistically with YF aids and initiatives, benefits to both arise.

In the evidence for ESQ 3, it was noted that YF aid in some MS (Italy, France, Ireland, Hungary) has stimulated co-operation, networking and partnerships among farmers, which is a positive impact upon social capital. More evidence from Case studies and national workshops is reviewed here and supports this view, and there is also some similar evidence from the literature.

Local government has directly benefited from LEADER assistance to improve infrastructure in some cases, and LEADER is known to contribute positively to social capital. Where LEADER projects and initiatives explicitly target young people and are therefore directly relevant to GR, there is evidence from this study that these measures promote social capital, infrastructure and local governance (in Hungary, Estonia, France, Ireland). Evaluation of Rural Development Programmes 2007-2013 has indicated that where RDPs focus resources upon Measure 7 or LEADER and invest in rural services and economic diversification, this boosts rural vitality and promotes positive social and governance outcomes, also helping to make rural areas more attractive to young people.

It is a widely-held view that the whole of the CAP plays an important role supporting social capital and rural infrastructure and services indirectly, mainly in the most marginal and remote rural areas. This is an argument based principally upon the relative scarcity of other economic activities and thus the financial significance of CAP aid from both pillars in stimulating rural economic and social provision. As it goes beyond 'CAP measures relevant for GR', this phenomenon relates more closely to the subject matter of answers to ESQs 1 and 7, where it is more fully evaluated.

By comparison to 2007-2013, the 2014-2020 RDPs offer generally much smaller allocations of funds towards Measure 7, but increased funding to LEADER: total public funding between both periods is similar. The Pillar 2 amount spent on broader rural development is modest compared to spending on other priorities and of this, the proportion that is explicitly targeting GR appears to be very small (based upon case study evidence alone). One area in which significant change is observed in new programmes compared to the old ones, is in plans for greater use of the co-operation measure and the new EiP-Agri operational groups which are intended to foster innovation

both within and beyond agriculture. However implementation has been delayed and we were unable to identify suitably developed examples of how EiP-Agri helps to boost social capital, infrastructure or local governance.

Few of the case studies cite direct examples where CAP GR measures explicitly include support for rural broadband (only HU mentions it); however, we cannot assume that this is representative of the situation across the EU. Planned spend on this sub-measure for the EU-28 in 2014-2020 was not possible to isolate from overall planned spend on Measure 7, in the available datasets, but from the case studies it is apparent that funds are targeting rural broadband provision for a range of goals, and its potential significance for GR is recognised.

6.1.5 CAP GR measures' impacts upon rural employment, its quality and durability

ESQ 5: Impact of CAP GR measures upon the creation and maintenance of jobs in rural areas

From the ESQ 3 evidence discussed earlier, we can infer that the CAP YF measures help maintain employment in agriculture relative to the counterfactual, because they offer additionality in supporting farm succession, helping to ensure successful farm transfers. In some MS, the reported impact is significant – e.g. 7,000 new farmers installed in Ireland, although in this case it is not possible to assess what the figure for new farmers would have been in the absence of the CAP aids, or how many older farmers retired as these installations were made.

The MCA indicates that CAP spending has a positive impact upon numbers of young farmers in most rural areas across the EU, which implies a positive impact upon total employment in agriculture, (although this also depends upon the rate of retirement of older farmers being lower than the rate of recruitment of young ones). The patterns suggest the biggest positive impacts of GR aids upon employment on farms in marginal areas with scope for economic development, whereas those with depressed or undeveloped wider economies, as well as those in completely different and economically buoyant regions where agriculture is capital-intensive, might not generate much employment impact.

The FADN analysis supports the view that YF aids can generate employment by a combination of increased viability/survival of YF-aided businesses and the fact that those receiving the aid tend to be larger farms employing more labour.

The CGE modelling predicts that CAP GR measures will positively affect rural employment, with Pillar 1 YF aids mainly creating employment in agriculture and Pillar 2 YF aids creating employment in up and downstream sectors as well, to a greater extent, while they have a less strong but still positive impact upon agricultural employment. However, the magnitude of these impacts is likely to be small by comparison to wider economic drivers and trends, for rural employment overall. The estimated impact of CAP Pillar 1 aid in total is more significant particularly for agriculture sector employment, mainly due to its much greater scale.

From case study evidence, it is noted that GR measures help to retain agricultural jobs particularly in marginal areas and especially where the aids are delivered in a targeted way with advice and training to improve the quality of that employment and the performance of supported businesses. It is also noted that their impact upon employment is likely to be higher where they target labour-intensive forms of agriculture rather than farm succession in capital-intensive sectors where opportunities to expand labour use are limited. Furthermore, a link with diversified enterprises and adding-value business development is made – GR aids which help farmers to re-think their business strategies and have confidence to move into higher value markets are more likely to generate enterprises that create new rural jobs. This also depends upon the quality of supporting advice and mentoring, because it needs to give entrepreneurial confidence to move into new markets or develop supply chains.

As regards non-farm employment, there is great variation between MS, with some reporting increase in young people employed in rural areas as a result of CAP spending, while in others a decline persists despite CAP funds. The pattern of trends in rural employment is strongly influenced by EU-wide market and economic phenomena, of which the CAP resources are only a small part. Broadly speaking, rural employment

depends on the particular provisions of national legislation and the economic climate. It can be favoured indirectly by CAP funding focused upon the renewal of facilities for young people in small towns and rural villages, as well as directly by support for new business start ups and farm diversification, and these impacts may be locally significant. LEADER is important in this context.

ESQ 13: Relevance of CAP GR measures for rural employment

In addition to the evidence summarised above for ESQ 5, the case studies show the relevance of Pillar 2 GR measures in supporting agricultural employment in situations where succession would otherwise be unsure or less successful (France, Italy, Estonia, Ireland). Case studies also provide evidence for the relevance of a variety of Pillar 2 measures in directly supporting new business start-ups and farm diversification, as well as indirectly maintaining or creating jobs via support for infrastructure, services and quality of life enhancements. Many of these cases involve job creation as part of broader economic development, and the cumulative implication is that these impacts can be locally significant.

The impact of the CAP GR measures on employment levels in both farming and non-farming rural jobs is generally perceived as positive, although hard to estimate robustly due to multiple intervening and often much stronger, influences from employment/wider economic policies (e.g. national growth plans, public spending cuts) and market trends and conditions. Against these, it is likely that CAP-induced employment changes will be relatively modest.

ESQ15: creation of sustainable employment in rural areas

To the extent that GR measures of the CAP promote more successful farm succession than would be the case without them, we can say that they are likely to increase the socio-economic sustainability of these farms. The FADN analysis provides this evidence, from France and Italy.

The CGE modelling work indicates that CAP expenditure on GR stimulates a degree of employment both up and downstream of agriculture; as more young farmers relative to the baseline scenario (i.e. without the CAP aids) make use of more training and education, draw more public support and use more public services, develop more activities in diversified business and invest more in the enhancement of their own farms' infrastructure and business performance, than they would have done without the YF aids. Considering these different sectors, we could classify public sector, education and construction as mainly upstream of the farm, while food sector, trade and tourism would be mainly downstream. So, this evidence supports the case that CAP GR funding stimulates jobs up and downstream of agriculture, within the regional economy (but we cannot say whether these jobs are rural or urban, at the scale of analysis - NUTS 2 regions).

The study found little evidence concerning whether the non-farm jobs promoted with CAP funding were sustainable, although stakeholder and policy makers' opinion appears generally positive on this point.

6.1.6 CAP GR measures and access to land, capital and knowledge

ESQ 12: Relevance of CAP GR measures in addressing key needs of access to land, credit and knowledge

The study has confirmed that access to land, capital and knowledge are indeed key factors in ensuring successful GR in EU agriculture. However it seems clear that the causes behind these needs, and therefore the best mechanisms for addressing them, vary considerably across the territory. As a simple guide, we can consider the contrasting situations of highly productive and capital intensive agricultural systems and sectors, versus economically marginal, remote and low-intensity agriculture in rural areas which have few other economic activities. In the first case the barriers to access land will include high prices from competition by established businesses and perhaps also competition from non-farm uses. The second may also lead to high land prices because older farmers retain land as security even though their earnings are low, because they have few alternatives. In the first case, access to capital may not be an issue in principle but the need for capital to buy out the existing farmer (even a parent) can be a challenge

until the younger generation has sufficient amassed assets against which to generate a bank loan. In the second case, capital needs may not be high but renovating a semi-abandoned holding will nonetheless require some investment and the YF will lack the proof of viability or asset value that may be demanded by banks, in order to lend. In respect of knowledge, the first case may not find this to be an issue for a successor, whereas in the second case it is a major challenge to be able to develop new business models that can innovate and enhance farm profitability.

In respect of relevance, therefore, the CAP GR aids fall into several categories:

- Those aids which provide funding to assist with the general costs of set-up (Pillar 1 supplement and M6.1) and early years investment (M4.1) have relevance and potential value, but they will often be insufficient, on their own, to address the barriers described here, either because those barriers are non-financial (e.g. where very little land is available on the market) or the aid on its own does not unlock access to the capital that may be needed to achieve installation.
- Aids which promote co-operation, innovation, training and advice may be highly relevant in a wide variety of cases. The co-operation measure can be used to create new forms of incorporated business facilitating inter-generational transfer (as in the case of Ireland, with farm partnerships); aids for innovation, training and advice can help to raise farmers' awareness and confidence to manage transfers effectively and to prepare the YF for a successful start in business.
- Aids which promote rural economic diversification, added value and better services, including broadband, may not appear directly relevant to these needs but they may nonetheless be relevant and important in creating a wider economic climate, particularly in remote and marginal rural areas, in which the barrier of access to land is reduced because older farmers are less reluctant to release their land when they have a better quality of life, more broadly. The availability of off-farm work for YF and their spouses in such areas may also facilitate the generation of financial reserves to enable access to bank loans and investment aids.

In sum, therefore, the CAP measures for GR may be concluded as relevant and necessary, where their selection and eligibility criteria are suitably tailored to local conditions; but the value of using a variety of approaches, including legal, fiscal and institutional provisions as well as financial support, is also highlighted.

[ESQ 16. Impact of relevant CAP Measures/instruments on land mobility \(change in land ownership, renting, etc.\): on direct beneficiaries; and on other stakeholders](#)

Overall CAP GR measures appear to play only a modest role in enabling YF to gain access to land by impacts upon land mobility for direct beneficiaries and other stakeholders. Where their main role is in providing financial support to YF, this alone does not free up the land market (e.g. PO, EE, IE case study experiences). However, the effectiveness of the CAP measures is greatly enhanced if combined with appropriate national policies that support land transfers, such as the land mobility service in Ireland and favourable attitudes among agricultural banks, interest-free loan facilities or credit associations that reduce the cost of borrowing in favour of YF. In these situations, it is a combination of national effort and CAP funding for start-ups, investments, advice, training and/or co-operation which provides a secure route to accessing land and capital.

The Member States which have the longest history of supporting GR in agriculture through the CAP also tend to be those that have developed the most versatile and multi-faceted approaches to easing access to land and capital through national policies, institutions and legislation. In France we can mention the SAFER land agencies, institutional options for gradual land transfer such as GAECs, and in Italy the two case study areas exhibited interesting local examples of how agencies and legal entities can facilitate access to land for young farmers and new entrants, supported also by national policies (see ESQ 12). Training and advice for YF funded by the CAP can also help YF to explore the options for accessing land and to become more proficient in planning carefully so that they choose wisely between e.g. purchase or leasing, or partnerships / share farming arrangements.

There is also a need to consider mechanisms to help older farmers to release land by providing them with options for the gradual transfer of assets, and ways to enhance their retirement income or quality of life. There was evidence that the former CAP early retirement measure had not been appropriately designed to fit the specific needs and concerns of older farmers, in this respect (IE, FR) because it required the older farmer to cease farming activities and involvement completely.

Access to land is a main barrier for GR and remains a big issue across Europe. In most MS agricultural land is inherited and transfer is strongly linked to socio-economic context, inheritance laws, land protection, land sales and/or retirement customs. Older farmers may be unwilling to sell land, and in several CS (IE, HU, Fr, IT) beneficiaries and government officials stated that they use the Pillar 1 DPs as a form of income support in retirement, increasing their reluctance to make the land available for a younger generation (although share-farming might provide this opportunity). In more market oriented economies (like Denmark, UK, or Flanders) where land enters more easily in the market, it is nonetheless expensive and requires access to significant resources for anyone who needs to pay for rental or purchase (most likely for non-family entrants to farming). It seems from the CS that in some cases, CAP direct support helps farmers create financial reserves. But in addition, there is strong evidence that national initiatives that facilitate transfer, such as land banks, fiscal incentives for transfer, facilitation services and advice, and promote non-conventional or collective inter-generational business models (partnerships, share farming, GAEC etc.) increase the impact of the CAP aids upon GR in agriculture.

6.2 Conclusions on efficiency and the administrative burden

6.2.1 Efficiency

The material assembled and analysed for this ESQ illustrates the complexity of achieving a simple answer. Efficiency varies considerably between different countries, and different measures that are delivered individually or in packages, as well as different delivery approaches and different actors within these processes. What is efficient for an administrator may not be perceived as efficient for a beneficiary, as transaction costs may be very unequally divided between the different actors.

So far, we have gathered a large body of evidence showing some elements of efficiency and some elements of inefficiency, in the design and implementation of GR measures under the CAP. In summary:

- Pillar 1 YF aid may be comparatively low-cost to deliver but its effectiveness in fostering GR is less direct than M6.1 and less recognised by stakeholders.
- Pillar 2 aid may be perceived as relatively simple and easy to access, or can be associated with slow processes and relatively high implementation costs, but these factors appear irrespective of whether it is delivered in a package or delivered one measure at a time in separate calls. Key factors tending to more costly or less efficient delivery include:
 - The ratio of applicants to available funds (a high ratio can easily swamp the delivery system and lead to long delays);
 - The quality of information (including transparent selection and eligibility processes), advice and support available to applicants to ensure that their plans and applications are of a high quality (to reduce delays and repeat requests for more information);
 - The level of skills, resourcing and co-ordination of relevant personnel within the public administration to facilitate swift and robust appraisal of applications (to enable funding to be offered to the cases offering best additionality) and to smooth the process of associated permissions or checks; and
 - The ease of operation, continuity and quality of communications between beneficiaries and administrative/advisory personnel (to encourage trust and efficiency in transactions).
- Efficiency has been measured in terms of costs and times to complete business start-up and related investments linked to the business plan. Analysis of the delivery process highlights how different models have been set up in the support of GR through CAP Pillar 2 measures. Efficiency is not necessarily linked to the

complexity of the delivery model: a package of measures can be more efficient than an approach based on single measures;

- Efficiency in mixing different instruments to pursue the objective of generational change is more evident in the French and Italian cases, the former being able to combine RDP instruments and national policies accompanying the preparation of instalment, the latter mixing different instruments and simplifying the application process for the potential beneficiary in a “one-stop shop” approach;
- Modulation for targeting appears to be a very efficient way to address policy instruments toward certain destinations, in particular there is evidence that territorial modulation can facilitate major shares of public expenditures in the most fragile areas (mountain and remote areas);
- Efficiency appears to be strongly conditioned by State and regional institutional organisation and every delivery model must be analysed taking account of external conditions that hamper the type of delivery undertaken. This is key to evaluation: the different approaches cannot be assessed only in terms of costs and times; the risk is to attribute to costs and times an explanatory capacity that in reality they cannot provide;
- General and specific factors influencing heavy delivery and inefficiency are explored more in detail in ESQ 8 concerning the administrative burden;
- Models of delivery based on an integrated set of CAP measures and national policies can stimulate a learning effect both in administering bodies and for the private sector: as they require more co-ordination effort among the different bodies/offices responsible for policy management; they also require a holistic vision of the farm needs and development strategies of young entrepreneurs;
- Most of the policy instruments under examination prove to be inefficient in facilitating access to young entrepreneurs coming from outside the family farm and beyond the agricultural sector. The policy instruments are overwhelmingly targeted to young farmers from within the family farm and targeting already viable family farms. There is in general little space for “new entrants”, given the rigidity of land markets and credit rules for people unable to provide adequate collateral.

Some particular concerns in the case of France, arising from audit and subsequent revised procedures for business plans, appear to result from a low level of trust within the hierarchy of delivery, triggering particularly onerous responses. Interviewees at more local level perceive the ‘blame’ to lie with EU audit and control points, while those at EU level say that there has been an overly restrictive reaction at Member State or Regional level.

6.2.2 Administrative burden

There can be significant administrative burdens for the applicants for EU funding in different MS that may reduce the effectiveness of the measures and be negative drivers for young people participating in schemes. From the case studies there is evidence of administrative burdens on both beneficiaries and the public administration arising from each of the factors identified as critical for efficiency (ESQ 6), in particular cases. However, the overall picture is of a system of support which is at least as efficient as a wide range of other comparable types of EU funding. The estimated administrative overheads appear within a reasonable range (1-20%), and in very few instances have beneficiaries suggested that applying for the measures is not worthwhile, in view of their administrative burden.

Time resource requirements for processing and completing applications differ across programmes and depend on three broad categories of factors: policy rules, role of public and private actors and finally general socio-economic conditions.

The application processes for measures 6.1 and 4.1 can be complicated for applicants and require skills beyond their knowledge and expertise, in many cases. Where advisory services are provided by government or part-supported through the funding provided, the burden should be reduced, however where advice has to be purchased (in whole or part) from private providers, it may distort the cost-benefit balance of the aid package. Private advisers’ incentives in preparing an application may not coincide with what is

optimal for the beneficiary: an adviser may encourage a high volume of aid and investment because that maximises their income from the job, whereas for the beneficiary a more modest investment or plan might be more sensible, given future uncertainties.

The application process may also be made more burdensome for applicants by poor policy design or inadequate resourcing at national or local levels, leading to a lack of administrative personnel to make appropriate checks and take decisions, also proper interpretation of legal and other requirements and other national provisions (such as planning permissions) that delay the process and increase the perceived administrative burden.

Administrative burden can be attributed more to MS implementation approaches than to the design of EU level rules, but in some cases the need to comply with the selection criteria of the single measures and the financial allocation by measures increases the complexity of the selection of packages of measures (as in the case of Italian packages) and the management of financial resources within the package. More flexibility in designing selection criteria and financial allocation by measures would be highly desirable, in such cases.

6.3 Conclusions on coherence

There is a general perception across the examined case studies that the various Pillar I and Pillar 2 GR measures are coherent with each other. Between the measures in Pillar 2, positive correlation is reported in many case studies but especially where integrated packages or multi-measure approaches are designed and implemented. In general, the two pillars support each other by having common targets and coherent implementation of Pillar 1 aids is being enhanced by modifications in some MS (e.g. increasing aid rates so that they make a financial difference to the average beneficiary, in Estonia and Italy). There was a variation of evidence regarding the coherence of the CAP measures with each other, across the case study Member States, with some case study reports concluding less, and some more. Regarding coherence between Pillar I and Pillar II measures, some CS stakeholders perceived them as mutually supportive, although they serve different purposes. However, in some local situations Pillar I payments contribute to limit land availability and therefore, make it more difficult for Pillar II measures to be implemented to the greatest effect, particularly for new entrants in agriculture that do not inherit land.

Where the CAP funds non-agricultural GR – principally via Pillar 2 Measure 7 and LEADER – it seems that in the current period, there is coherence with other non-CAP EU funding and measures, particularly ERDF and ESF and in coastal areas, EMFF. This is most evident in those MS where the different policies are delivered together by sub-regional delivery bodies or similar arrangements (e.g. Local Development Companies in Ireland, Local integrated approaches in some regions of Italy). Elsewhere, it is generally perceived that non-CAP EU funds do not focus a great deal on matters relevant to rural GR.

As far as EU research is concerned, there are relevant projects running under the H2020 programme which examine the challenges and possible solutions to GR in Europe's rural areas. We have not found direct evidence of these studies working in a coherent way with CAP funding but to the extent that they are able to increase understanding of the challenges and potential solutions to enhance GR in these contexts, they should be coherent with the goals of the CAP, in that respect.

In the current programming period, coherence between EU funds seems less of an issue than it has been in previous periods. This suggests that co-ordination at MS level is reducing conflict and overlap between the main funds of the CSF and EAFRD, and that coherence with research is satisfactory. On the other hand, there are few indications from this evidence – just that given in relation to research – that other EU funds are being deployed in truly complementary ways to those of CAP.

Influence of external factors

External factors creating barriers to GR in agriculture and rural areas include lack of succession planning, tax incentives and financial penalties of early transfer, cultural perceptions around the importance of keeping land in the family, fears of retirement, and

young people's negative perceptions of agricultural work or rural quality of life. The barriers created are often region specific, and are linked to the presence or absence of opportunities in each area for farm and non-farm employment.

At the same time, there are many factors in other areas of policy and non-policy influence which are positive in that they support GR in agriculture and beyond it. It is important to recognise both negatives and positives, for this topic.

In most MS, a range of national policies covering issues like land inheritance, taxation of land, transfers of property and business assets and requirements to rent land, all affect the processes of GR in agriculture and thus the impact of CAP GR aids. In those MS which take a coherent approach to GR overall, these national policies work in parallel with, and complementary to, CAP GR aids, but there are examples where evidence suggests that complementarity is lacking and some national policies hinder the CAP policies' effectiveness – this is the case for inheritance tax in Hungary, for example.

In addition, spatial planning policies are directly relevant to the farm business development and diversification which is commonly associated with GR plans as supported under the CAP. In general this is not a problem but it is a frequent cause of delayed processes when farmers and others apply for investment or start-up aids, where the funding is conditional upon them having already obtained prior planning consent.

There is a wide range of other social and public sector provision in rural areas which affects the quality of life in rural areas; this is directly linked to the feasibility and sustainability of GR in agriculture and in rural areas more generally. Rural areas which have been the subject of significant public or private investment in infrastructure, housing and services will tend to be much more attractive to young people.

Finally, strong cultural norms and traditions can be either a help or a significant hindrance to effective GR as promoted via the CAP, and to tackle these may require interventions which go far beyond the realm of the CAP. Advice programmes, mentoring, promotions and other information events designed to change people's preconceptions about farming as a career or the challenges of living far away from a big city, have been used in a variety of MS with mixed results.

There are positive examples where key institutional, fiscal or legal elements in national policies are critical to the success of GR, and specifically to the performance of CAP-aided GR in agriculture. These include the comprehensive approaches detailed in the case studies in France and Italy, as well as more limited but still important relationships as shown in Flanders (social supports and training); Ireland (the Land Mobility Service and the management of the mandatory BPS national reserve); Hungary (a suite of flanking institutions and practices provided through national and more local governance) and Poland's land laws.

Key to a successful interaction between these instruments and initiatives and CAP GR measures is the intelligent design of the latter in full cognisance of the impacts and influence of the former. This requires good analytical capability and ongoing monitoring and evaluation.

In some respects, there are limits to what can be done for GR by policies concerned mainly with funding. However, as the instruments of CAP second pillar have expanded it becomes more evident that funding is not limited simply to putting financial resources into farmers' pockets. Through the creation of measures with institutional capabilities – notably measure 16 for co-operation – it becomes increasingly possible to integrate CAP measures into stronger and more supportive institutional frameworks to promote GR, in a variety of different historical, cultural and legislative contexts.

6.4 Conclusions on EU Added Value

The combined study evidence demonstrates EU added value in many aspects of CAP GR measure performance: all case studies discuss and validate a view that without CAP funding, not so much would be achieved that is positive for GR within agriculture. Nevertheless, we emphasise the importance of the term 'added', here, because it is also very clear that national policies and provisions also play a key complementary role, and that consideration of the integrated influence of EU and national (or more local) instruments and institutions is essential, in order to optimise the added value of CAP funding.

The study also finds evidence of the added value of LEADER as a mechanism for GR beyond the farm sector and also for new entrants to farming, operating only at small scale but with high impact in comparison to the resources provided. Key to this role appears to be the local knowledge of LAGs in identifying the barriers to and opportunities for GR and enhanced rural viability, as well as the relative flexibility of LEADER as a mechanism which retains the principle of funding that can be tailored to the specific circumstances and potential of each beneficiary and project.

The study has also examined and presented evidence to suggest that EU added value is greater in those MS and regions where the problem of GR is well-understood by national and local policy makers as a result of sustained analysis and the development of an integrated approach to tackling the problem, using multiple CAP and non-CAP instruments, institutions and broader legislative and fiscal provisions in a coherent way. Furthermore, it has found evidence to suggest that the scope for this kind of approach is greater than has yet been realised in many areas, that the existing menu of Pillar 2 measures (including M16, M7/LEADER, financial instruments and EIP Agri) can be used in more creative ways to achieve this, and that there may even be opportunities to bring the role of CAP Pillar 1 aids and the YF supplement into such an approach (e.g. by using co-design with relevant beneficiary groups and innovators at local level).

In overview, the CAP promotes quality of life in rural areas directly through measures which promote rural economic diversity, rural jobs, rural services, and protection and enhancement of the rural environment. These measures are found principally within the Rural Development Programmes. Analysed at EU level, the largest share of RDP resource is focused upon environmental land management under priority 4, and measures 10 and 11 of the RDPs; while the share devoted to economic diversification, job creation and rural services including broadband, transport and social and community activities – as identified by programming under Focus area 6, is around 15%. Whilst it is beyond the scope of this study to analyse the effectiveness of spending programmed under these objectives and goals, we can note that from the interviews and secondary evidence reviewed on the topic of farm and non-farm GR for this study, evidence is presented of the value at local level of these kinds of expenditure as indirect influences upon GR.

In particular, LEADER expenditure is noted as having a valuable role, especially since in many MS now, there is no significant CAP funding for non-agricultural rural development other than through LEADER, (which has expanded significantly in its coverage, compared to its role in the previous programming period, whilst the spending on non-LEADER broader rural development measures has declined significantly).

In respect of the significant sums of money currently spend on agri-environment-climate measures and on aids for Areas of Natural Constraint, these are identified in several case studies as having an indirect but important role in agricultural GR, not because of a direct impact upon broad rural quality of life but because they contribute significantly to meeting the income needs of farm businesses, particularly in economically marginal areas, and this is seen as important for maintaining communities and cultural value in these places.

In a similar but more substantial way, the wider role of income support under the first Pillar of CAP, both that which benefits Young Farmers directly and that which supports all farmers, in contributing to rural quality of life, appears indirect and weakly positive (see the evidence in ESQ answer 1, MCA analysis). Secondary evidence from modelling studies suggests that without the support of Pillar 1, a significant share of Europe's farms would not be viable and employment in agriculture would decline. But different studies use reasoning from theory and partial evidence to suggest that this could either lead to declining quality of rural life associated with further rural depopulation (e.g. WUR, 2016), or it could release resources from agriculture which could stimulate other kinds of rural added value or economic activity, adding to rural quality of life (e.g. World Bank, 2017). As suggested by the diversity of situations of rural change described in the case studies, the balance of positive and negative impacts of current support in Pillar 1 of the CAP upon rural quality of life depends critically upon wider socio-economic conditions and other economic and social policies, which vary considerably between countries and regions. So, the efficiency of spending money on CAP Pillar 1 income support as a way to promote GR indirectly through enhanced quality of life will vary by territory, and over time, as these conditions change.

6.5 Recommendations

These recommendations have been developed mainly from the Case Study national and EU level workshops with stakeholders and Commission Officials respectively. During these workshops, a range of participants including policy makers, delivery agencies, farmers and other rural stakeholders were able to review the emerging findings of the evaluation in each case study context. They then spent time discussing and agreeing suggestions for improving the CAP's approach to GR, particularly in the context of the Commission's draft Regulation for the CAP beyond 2020. As a result, their recommendations should be more informed, considered and balanced. As far as possible, they are differentiated by target: i.e. some recommendations for EU level policy, and some for Member States.

6.5.1 Summary of recommendations from National Workshops in CS countries

Estonia

MS level:

YF Pillar 1 supplement – For the next programming period the supported area should be larger (c. 90-100 hectares) and the payment per hectare higher (e.g. around the same as the direct payment level).

Non-CAP – the State could establish a special land fund offering young farmers the possibility to buy/rent land with certain conditions, or change the criteria of state land auctions in order to favour young farmers (especially smaller farmers).

The availability of basic services and infrastructure such as housing, kindergartens-schools, medical care, broadband connection, possibilities of recreational activities etc. is extremely important for GR and the state as well as local governments should offer specific solutions and increase financing.

Measure 6.1 – several (mostly Estonia-specific) suggestions were made for changing conditions, e.g. the need for level 5 professional qualification is questionable; the basis of calculation of professional experience in agriculture should be more clear; methodology needs updating for calculating Total Standard Output; possibly too high a share of evaluation points is awarded to farms taken over from parents/grandparents; suggest a higher support rate compared to current period, with different support rates for different farming types, etc. to allow better calibration to needs.

Remove the current restriction where an enterprise that has received M6.1 support is not eligible for applying to M6.3: a combination of these measures should be possible. Minimum sales revenue for applying for M4.1 support is 14,000 Euros and YF starting the new enterprise don't often have so high a sales revenue after a couple of years and are therefore not eligible, but can't also develop their enterprise using e.g. M6.3.

EU level:

Provide for GR support to be delivered in targeted packages (or sub-programmes). These packages should include elements of current RDP measures (e.g. M6.1, M4.1, M2.1 and also financial instruments – loans and guarantees), packaging would give more synergy, efficiency and less bureaucracy, at the same time improving access to credit. An important part of the packages would be provision of advice, mentoring and knowledge transfer, possibly also risk management measures.

Besides CAP, other EU policies and funds (cohesion fund, regional development fund), as well as national policies and financing are needed in order to improve the general socio-economic situation and attract young people to come/stay in rural areas. Infrastructure, availability (and quality of service) of kindergartens-schools, broadband connection, recreational activities etc. merit funding.

France

MS level:

Address the issue of GR in terms of transmission, considering both YF and farmers leaving for retirement; both types of stakeholders must be considered. Include the question of retirement, of pension and level of pension; identify farms with no successor ideally 5-10 years before succession; put them in contact with YF looking for farms.

Encourage more collective/ cooperation/ GAEC farms: all these elements are important for GR because they allow individuals to lower their costs of installation.

Real simplification in the delivery system - this was called for in both previous programming periods, but things get worse; administrative complexity discourages potential beneficiaries to request support. It is also linked to frustration and the development of extreme (anti-EU) views.

EU level:

The requirement of the EC to abolish the age limit of 65 for ANC aid, the lack of definition of an "agricultural active person" and the low level of agricultural pensions have a negative impact on the renewal of generations in particular in these [marginal farming] areas. There is a perception of an urgent need to re-define the concept of "**active farmer** (*agriculteur actif*)" to include also criteria related to age, thereby addressing the problem of people at retirement age and older who still get support and want to get support that is higher than their pension.

Support instalment after 40 years of age, also (even if it is supported differently).

Replace the support proposed for purchasing land (that it is felt will not benefit YF, but the "sellers" or others) by a support targeted to transmission (in terms of facilitation – to bring together people who reach retirement age without a successor with a potential YF (to let the land/ farm to the YF).

Ireland

MS level:

Pillar 2 funds could be used to fund partnership work, which is complex. A higher level of support for establishing and supporting partnerships through the initial phases is required. Funding for Succession partnerships could be used to bring two generations together to encourage them to talk through succession and develop a succession plan. Or it could create 'farm development teams- integrated support units' with the aim to help farms through the transition process: for this, vets, accountants, bankers, agronomists, technicians are brought together to talk with the farm family. It saves time and money because all expertise is brought together at the same time. You could use a voucher system to enable team members to get paid – a farm family could use vouchers to pay for areas where they need most information/support. It is essential also to have people there with soft skills (e.g. in conflict management), to facilitate the work of the team in line with the beneficiaries' needs.

Rural service delivery needs to be considered across wider rural areas, not just the towns as hubs. Hinterlands need better services and better accessibility – supporting agriculture alone will not be sufficient for GR in the rural areas as a whole.

EU level:

Create a form of "Succession farm partnership" (funded jointly by EU and national level) where an older farmer and younger farmer form a partnership with profit sharing that changes over a defined period of time. YF starts with a higher share of an EU direct payment (some form of installation aid) and very little of the farm profit; older farmer retains most of the profit. Over a period of time (5 - 10 years possibly) the YF's share of installation aid declines and their share of profit increases, while for the older farmer, as his share of profit decreases it is replaced over time by retirement support.

Shift responsibilities to the Member States: implementing bodies need more flexibility, especially around the options for funding, and setting upper limits for payments and application criteria. MS need flexibility to tailor CAP support to local contexts, within the EU framework. Return the "tool box" back to MS in order to empower them:

1. To set out a defined budget annually;
2. To set an upper limit per application on the supports available, such as a maximum number of entitlements allocated from the National Reserve;
3. To set out objective criteria for successful application for (P1) GR support.

Those receiving entitlements under the National Reserve should not be allowed to transfer (sell or lease) them for a minimum period of 5 years, apart from under

exceptional circumstances; if a beneficiary fails to utilise these supports for a year they should revert back, for redistribution.

Pillar 2 incentives for older farmers are required. All of the focus is currently on younger farmers with nothing for older farmers - it is important to "give them voice" in GR. Support for older farmers could address a wider range of issues such as social exclusion. It would be beneficial if both young farmers' organisations as well as older farmers "clubs" could be funded through the co-operation measure.

Rural development needs to stay within CAP – if it gets passed to DG Regio the focus will all be on urban areas and we will lose support for the rural hinterlands.

Poland

MS level:

An enhanced provision of very early education on farming is needed (from kindergarten level), to raise awareness and interest among the new generation. Farmers should be allowed to have meat production for on-farm consumption.

EU Level:

Strengthen the economic conditions /profitability of agricultural production as the strongest incentive to attract YF. Guarantee minimum prices, give better access to loans (with easier conditions), better offers for insuring agricultural production. Place some controls over the prices of agricultural inputs (as input prices always increase just after the farmers apply for or receive the money from CAP).

Control imports from abroad especially from Ukraine and Belarus.

Both levels: with the Regulation and rules, lower bureaucracy (make easier procedures to apply for aid). Consider a substantial increase of the amount of YF instalment grant, with more measures directed to YFs, and also early retirement aid (for those transferring the farm to a young farmer).

Italy

MS level:

Keep the YFs package, sending a clear signal regarding the importance of integrated farm-level projects, especially for peripheral areas.

Broaden the scope of the package by adding measures to cover promotion of agricultural products and cooperation between farms, and make it possible to interconnect the package and LEADER aids.

The process of selection of final beneficiaries should be speeded up and completed by fixed deadlines, without time extensions, avoiding overlap in tasks and competences of different public authorities.

Include in the YF package: risk management measures and mentoring schemes for on-the-job training from retiring/old farmers.

EU level:

Future provisions governing the YF package should envisage a single budget allocation and selection criteria specifically established and harmonized for the package as a whole, rather than by measure.

Young farmers should be required to build the development plan upon a few, significant qualitative and quantitative objectives/targets, and eligibility should be extended to young people engaged in part-time farming.

The YF supplement to Pillar 1 direct payments – should it be seen as additional funding for investments? All agreed it doesn't serve a real purpose with regard to investments or innovation. Farmers organisations highlighted the importance of keeping it as a separate and independent instrument, while others suggested embedding it within the YFs package.

Hungary

MS level:

Increase the efficiency of support so no YF applicant has to wait more than 6 months for a decision.

Re-think previous orientation tools to make them more suitable for the Hungarian situation (e.g. providing farmers with enhanced early retirement opportunities).

Amend sections of the land regulations related to young people so they have priority to acquire land.

Fund more practical programmes: e.g. communication and career orientation programmes; access to practical knowledge transfer methods; and provide broader access to entrepreneurial skills development programmes, diversification aids, advice, facilitation, networking and innovation.

Flanders

MS level:

Lower the income threshold for access to M6.1 and allow part-time farmers also to be eligible.

Target more advice and support towards new entrants from non-farming backgrounds.

Consider financial instruments: lower-interest or guarantees on loans, to help YF to access capital.

EU level:

Give LEADER a specific role and remit for unconventional forms of GR (i.e. not a young farmer succeeding to their parents' farm, but all other transfers and non-farm young business start-ups)

6.5.2 Recommendations from the EU level workshop with Commission officials

A common strategy for GR compiling Pillar 1 and 2 measures will be valuable and should be required in the upcoming CAP plans.

Pillar 1 young farmers top-up support and Pillar 2 measures are perceived as complementary and both should be maintained.

Continue and improve rural development and other related measures such as investments and co-operation (farm partnerships for succession planning, LEADER etc.), knowledge and innovation (e.g. EiP groups, etc): all of these measures are important for farm and non-farm GR.

Improve the situation of YF by empowering them, ensuring an adequate access to land (e.g. establishing conditions for land acquisition, mobility and restructuring such as land banks, etc.); and easier access to finance (e.g. facilitating conditions with banking organizations) and risk management.

6.5.3 Recommendations arising from the ESQ findings

In general, more balanced territorial strategies are needed, embracing both farm and non-farm GR issues, to encourage synergistic and more resilient rural development, especially in marginal areas.

More MS ability to design and deliver measures in integrated packages would be beneficial (regulations providing for a new approach where MA wish to use a joint delivery process with several measures, for a unified goal) – may require changes to implementing regulations / plan specifications.

More attention should be given to MS and regions' administrative and KE capacity in supporting delivery, to enhance the added value of EU aid. Currently this support is insufficient in some MS.

There is considerable scope for MS administrations and MA to learn from good practices in other MS – especially concerning the scope for more creative application of measures to enable institutional and social innovations, and the types of non-CAP policy development that can assist GR.

Learning from good practice within LEADER and in some national programmes is suggested, to develop an enhanced, specific approach for new entrants as a separate strand under the new CAP. For example, the Regulation could allow testing and development of co-designed projects at local level, where former new entrants help to design improved aid packages for future new entrants.

More practical help for innovation in land-based businesses is needed, particularly in the context of future global challenges (e.g. on climate and the need for carbon-neutral agricultural economies). This isn't necessarily all about technical support, as information is

increasingly available via digital media. Support for broader self-help learning among farmers and other actors in rural areas, providing mentoring or facilitation, is widely favoured among all those who have contributed to this study.

7. REFERENCES

- AAM-AKI-Collectivo (2016) NHRDP ex-post evaluation
Act No. CXXII/2013 on agricultural and forestry land turnover.
Act No. CXXVIII of 2012 on Interprofessional Organisations and certain aspects of agricultural market regulation
Act No. CXVII of 1995 on Personal Income Tax
Adamowicz, M. and Szepeluk, A., (2016). Support to Young Farmers as Part of Agricultural Policy of the European Union. *Problems of Agricultural Economics*, [online]. 348(3), pp.106-128. [Viewed 28 November 2018]. Available from: doi: 10.5604/00441600.1218186
ADAS Consulting Ltd., (2004). Entry to and Exit from Farming in the United Kingdom RMP 2037 [online]. London: Department for Environment, Food and Rural Affairs (DEFRA). Available from:
<https://webarchive.nationalarchives.gov.uk/20110318142205>
<http://www.defra.gov.uk/evidence/economics/foodfarm/reports/documents/Entry.pdf>
ADE & Epices, (2017) [Ex-post evaluation of the French Rural Development Programme]: Evaluation ex post du Programme de Développement Rural Hexagonal (PDRH) – Programmation FEADER 2007/2013. Rapport final. France: Ministry of Agriculture, Food and Forestry, The European Agricultural Fund for Rural Development. Available at: <https://www.reseaurural.fr/centre-de-ressources/documents/rapport-final-de-valuation-ex-post-du-pdrh-2007-2013>
Baptista, R. (2012), Technological transition and the new skills required by the agribusiness sector. *International Food and Agribusiness Management Review*, Special Issue A, 5: 105-109.
Biró, Sz., Dudás, Gy., Fieldsend, A., Fogarasi, J., Hamza, E., Miskó, K., Kürthy, Gy., Potori, N., Rácz, K., Tikász, I., Tóth, O., Vágó, Sz., Varga, E. and Varga, E. (2016): Research for AGRI Committee – Farm structural change in Central and Eastern Europe and the CAP. In *Research for AGI Committee – Structural change in EU farming: How can the CAP support a 21st century European model of agriculture?* Brussels: Policy Department B: Structural and Cohesion Policies, European Parliament, 79–196.
Buysse, J., Verspecht, A., and Van Huylenbroeck G., (2011) Assessing the impact of the EU Common Agricultural Policy pillar II support using micro-economic data. In: *The European Association of Agricultural Economists (EAAE). 122nd EAAE Seminar "Evidence-based Agricultural and Rural Policy Making: Methodological and Empirical Challenges of Policy Evaluation"*, 17-18 February 2011, Ancona, Italy [online]. [Viewed 28 November 2018]. Available from: <http://purl.umn.edu/99596>
Cabus, P., & Vanhaverbeke, W. (2003). The economics of rural areas in the proximity of urban networks: evidence from Flanders.
Caputo, N. (2018). Report on the implementation of CAP young farmers' tools in the EU after the 2013 reform A8-0157/2018 [online]. Brussels: European Parliament. [Viewed 28 November 2018] Available from:
<http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A8-2018-0157&language=EN>
Carbone, A. and Subioli, G., (2008). The Generational Turnover in Agriculture: the Aging Dynamics and the EU Support Policies to Young Farmers. In: *The European Association of Agricultural Economists (EAAE). 109th EAAE Seminar "The CAP After the Fischler Reform: National Implementations, Impact Assessment and the Agenda for Future Reforms"*, 20-21 November, 2008, Viterbo, Italy [online]. [Viewed 28 November 2018]. Available from: <http://purl.umn.edu/44731>
Carillo, F., Carillo, M.R., Venittelli, T., Zazzaro, A., (2013). Aging and succession on Italian farms. *International Agricultural Policy* [online]. (1), 39-55. [Viewed 28 November 2018]. Available from: <http://purl.umn.edu/166005>
Commission Implementing Regulation (EU) 2017/1272 of 14 July 2017 establishing budgetary ceilings for 2017 applicable to certain direct support schemes provided for in Regulation (EU) No 1307/2013 of the European Parliament and of the Council
Conway, S., McDonagh, J., Farrell, M. and Kinsella, A., (2016). Cease agricultural activity forever? Underestimating the importance of symbolic capital. *Journal of Rural Studies* [online]. 44, pp.164-176. [Viewed 28 November 2018]. Available from:

doi: 10.1016/j.jrurstud.2016.01.016

Davis, J., Caskie, P. and Wallace, M., (2013a). How Effective are New Entrant Schemes for Farmers? *EuroChoices* [online]. 12(3), pp. 32-37. [Viewed 28 November 2018]. Available from: doi: 10.1111/1746-692X.12038

Davis, J., Caskie, P. and Wallace, M., (2013b). Promoting structural adjustment in agriculture: The economics of New Entrant Schemes for farmers. *Food Policy* [online]. 40, pp.90-96. [Viewed 28 November 2018]. Available from: doi: 10.1016/j.foodpol.2013.02.006

Decree No. 63/2013. (VII.25.) of the Ministry of Rural Development on the detailed rules for the recognition and control of interprofessional organisations

Departement Omgeving. (2017). *4. Regeling voor landschappelijk waardevol agrarisch gebied*. Retrieved February 2, 2019, from Art. 5.7.1 VCRO (nieuw artikel): <https://www.ruimtelijkeordening.be/nl-nl/NL/Beleid/Wetgeving/Regeling-voor-landschappelijk-waardevol-agrarisch-gebied-lang>

De Rosa, M. and McElwee, G., (2015). An Empirical Investigation of the Role of Rural Development Policies in Stimulating Rural Entrepreneurship in the Lazio Region of Italy. *Society and Business Review* [online]. 10(1), pp. 4-22. [Viewed 28 November 2018]. Available from: doi: 10.1108/SBR-08-2014-0041

DG GROW. (2018). *Flanders*. Retrieved from Regional Innovation Monitor Plus: <https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/flanders>

Directorate-General for Agriculture and Rural Development (European Commission)., (2012). Ex-post evaluation of Rural Development Programmes 2000-2006 [online]. Luxembourg: European Union. [Viewed

November 2018]. Available from: https://ec.europa.eu/agriculture/evaluation/rural-development-reports/ex-post-evaluation-rdp-2000-2006_en

Directorate-General for Agriculture and Rural Development (European Commission)., (2015). Report I of the Pilot project: Exchange programmes for young farmers Needs of young farmers [online]. Luxembourg: European Union. [Viewed 26 November 2018]. Available from: doi: 10.2762/13075

Directorate-General for Internal Policies of the Union (European Parliament)., (2016). Research for Agri-Committee - Structural Change in EU Farming: How Can the CAP Support a 21st Century European Model of Agriculture? [online]. Luxembourg: European Union. [Viewed 28 November 2018]. Available from: doi:10.2861/116664

Dudek, M., Chmieliński, P., Karwat-Woźniak, B. and Wrzochalska, A. (2014): Human capital in the structural transformation process of rural areas and agriculture. Warsaw: Institute of Agricultural and Food Economics – National Research Institute (IERIGZ)

Dwyer, J., Kubinakova, K., Lewis, N., Powell, J., Vigani, M., Fährmann, B., Gocht, A., Grajewski, R., Coto Sauras, M., Nieto Cachinero, P., Mantino, F., Berriet-Sollic, M., Pham, H. (2016). Research for AGRI Committee - Programmes implementing the 2015-2020 Rural Development Policy. IP/B/AGRI/IC/2015-74, European Parliament, Brussels.

Ecorys, LEI, Aequator Groen & Ruimte . (2015). *Young farmers' needs in Belgium* .

EIP-AGRI Focus Group., (2016). New entrants into farming: lessons to foster innovation and entrepreneurship Final Report [online]. Brussels: The European Innovation Partnership. Available from: https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip_agri_fg_new_entrants_final_report_2016_en.pdf

ENRD. (2018). Rural Connections.

ESPON. (2018). Small and Medium-Sized Enterprises.

European Commission., (2012). Generational Renewal in EU Agriculture: Statistical Background. EU Agricultural Economic Briefs No. 6 [online]. [Viewed 28 November 2018]. Luxembourg: European Union. Available from:

https://ec.europa.eu/agriculture/sites/agriculture/files/rural-area-economics/briefs/pdf/06_en.pdf

European Commission., (2011). Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy 52011PC0625 [online]. Brussels: European Parliament. [Viewed 28 November 2018]. Available from: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2011:0625:FIN>

- European Council of Young Farmers (CEJA)., (2017). Joint CEJA-ENRD Workshop on Generational Renewal through Rural Development, 25 January 2017, Brussels, Belgium [online]. Brussels: European Network for Rural Development. [Viewed 28 November 2018]. Available from: https://enrd.ec.europa.eu/sites/enrd/files/w13_genren_event-report_0.pdf
- European Council of Young Farmers (CEJA)., (2010). Young Farmers are Key in the Future CAP [online]. Brussels European Council of Young Farmers (CEJA). [Viewed 28 November 2018]. Available from: <http://www.ceja.eu/wp-content/uploads/2017/05/Final-Young-Farmers-are-Key-in-the-Future-CAP-BW.pdf>
- European Court of Auditors (ECA)., (2017). EU support to young farmers should be better targeted to foster effective generational renewal Special report No 10/2017 [online]. Luxembourg: European Union. [Viewed 26 November 2018]. Available from: <https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=41529>
- European Network for Rural Development (ENRD), (2016). How to support the social inclusion of young people in rural areas? In: European Network for Rural Development (ENRD). LEADER/CLLD & networking supporting social inclusion in rural areas, 17 March 2016, Brussels, Belgium [online]. [Viewed 28 November 2018]. Available from: https://enrd.ec.europa.eu/sites/enrd/files/w8_factsheet2_youth.pdf
- European Network for Rural Development (ENRD), (2017). Working Document: 2014-2020 Rural Development Programmes' support for Rural Businesses [online] Brussels: ENRD Contact Point. [Viewed 28 November 2018]. Available from: https://enrd.ec.europa.eu/sites/enrd/files/tg_rural-businesses_rdp_analysis.pdf
- Eurostat . (2018). Key variables: area, livestock (LSU), labour force and standard output (SO) by economic size of farm (SO in Euro), legal status of holding and NUTS 2 regions. Retrieved from Eurostat: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ef_kvecsleg&lang=en
- Eurostat. (2018). 2.4.2-r2163-2018-08-17 (PROD) Online support Legal Notice. Von Eurostat: https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tgs00010&plugin=1_abgerufen
- Eurostat. (2018). *Employment by sex, age and economic activity*. Retrieved from Eurostat: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>
- Eurostat. (2018). *Main farm land use by NUTS 2 regions*. Von Eurostat: http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do_abgerufen
- Eurostat. (2018, September 10). *Population on 1 January by age, sex and NUTS 2 region*. Retrieved from Eurostat: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_r_d2jan&lang=en
- Eurostat. (2018). *Population on 1 January by NUTS2 region*. Retrieved from Eurostat: <https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tgs00096&plugin=1>
- Eurostat. (2018). *Population: Structure indicators by NUTS 3 region*. Retrieved from Eurostat: http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_r_pjanind3&lang=en
- Eurostat. (2018). *Youth unemployment rate by sex and NUTS 2 regions*. Retrieved from Eurostat: <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>
- Eurostat. (2019). *Methodological manual on territorial typologies*. Luxembourg: Publications Office of the European Union.
- Fi-Compass (2019) Debt finance and use of credit guarantee instruments for agricultural enterprises in the EU. EC/EIB, Brussels.
- Fieldsend, A.F., Tudor, M.-M., Varga, E., Florian, V, Rusu, M., Biró, Sz., Chiritescu, V. and Kruszlicika, M. (2015): Knowledge sharing to promote innovation in agriculture and rural development in Hungary and Romania, in V. Vásáry and D.M. Voicilas (eds), *Agricultural Economics and Rural Development at the Beginning of the Programming Period 2014-2020 in EU Member States – Comparative Analysis for Romania and Hungary*. Budapest: AKI, 103-123.
- Flanders Investment & trade. (26. June 2017). *RIS 2017 figures confirm: Flanders is an innovation leader*. Von Flanders Investment & trade: https://www.flandersinvestmentandtrade.com/invest/en/news/ris-2017-figures-confirm-flanders-innovation-leader_abgerufen

- Flanderstoday.eu. (2011). *Flemish farm-hotel have trouble keeping up with demand*. Retrieved from Flanderstoday: <http://www.flanderstoday.eu/business/wild>
- Hamza, E., Rácz, K., Ehretné, B. I. (2015): Szezonális foglalkoztatás a magyar mezőgazdaságban. (Seasonal employment in Hungarian agriculture) Georgikon online konferencia kötet. (http://napok.georgikon.hu/cikkadatbazis/cikkek-2012/cat_view/3-cikkadatbazis/37-2015/40-vii-szekcio-kerteszet-es-szoleszet-boraszat)
- Hungarian Chamber of Agriculture (2015) Rural Development Programme Handbook
- Karcagi-Kovats, A. and Katona-Kovacs, J., (2012). Factors of population decline in rural areas and answers given in EU member states' strategies. *Studies in Agricultural Economics* [online]. 114(1), 49-56. [Viewed 28 November 2018]. Available from: <http://purl.umn.edu/122451>
- Kemény G., Hamza E., Keszthelyi Sz., Rácz K., Tóth O. and Varga É. (2015): A tőkehiányos mezőgazdasági kisüzemek jellemzői és fejlesztésének lehetőségei. (Development possibilities of small-scale farms). Budapest, Agrárgazdasági Kutató Intézet, Research report.
- Kiss, M. Zs. (2014): Mit, miből, hogyan? Vidékfejlesztési Program 2014–2020. (What, from what, how? Rural Development Program 2014-2020. Falu, XXIX. (4) 5–15.
- Kontogeorgos, A., Michailidis, A., Chatzitheodoridis, F. and Loizou, E., (2014). "New Farmers" a Crucial Parameter for the Greek Primary Sector: Assessments and Perceptions. *Procedia Economics and Finance* [online]. 14, pp. 333-341. [Viewed 28 November 2018]. Available from: doi: 10.1016/S2212-5671(14)00721-7
- Leonard, B., Kinsella, A., O'Donoghue, C., Farrel, M. and Mahon, M., (2017a). Policy Drivers of Farm Succession and Inheritance. *Land Use Policy* [online]. 61, pp. 147-159. [Viewed 28 November 2018]. Available from: doi: 10.1016/j.landusepol.2016.09.006
- Leonard, B., Mahon, M., Kinsella, A., Donoghue, C., Farrel, M., Curran, T. and Hennessy, T., (2017b). The Potential of Farm Partnerships to Facilitate Farm Succession and Inheritance. *International Journal of Agricultural Management* [online]. 6(1), pp. 4-19. [Viewed 28 November 2018]. Available from: doi:10.5836/ijam/2017-06-04
- McDonald, R., Macken-Walsh, Á., Pierce, K. and Horan, B., (2014). Farmers in a Deregulated Dairy Regime: Insights From Ireland's New Entrants Scheme. *Land Use Policy* [online]. 41, pp. 21-30. [Viewed 28 November 2018]. Available from: doi: 10.1016/j.landusepol.2014.04.018
- McDonald, R., Pierce, K., Reamonn, F. and Horan, B., (2013). Characteristics, Intentions and Expectations of New Entrant Dairy Farmers Entering the Irish Dairy Industry Through the New Entrant Scheme. *International Journal of Agricultural Management* [online]. 2(4), pp. 189-198. [Viewed 28 November 2018]. Available from: doi: 10.5836/ijam/2013-04-02
- Michalewska-pawlak, M., (2013). Rural Areas Development as a Field of Intervention of the European Union Cohesion Policy After 2013. *Studies in Agricultural Economics* [online]. 113(2), pp. 161-166. [Viewed 28 November 2018]. Available from: <http://repo.aki.gov.hu/id/eprint/2223>
- Milne, C. and Butler, A., (2014). Young Entrants to Farming: Explaining the Issues RPC PB 2014/02 [online]. Edinburgh: Rural Policy Centre, Scotland's Rural College. [Viewed 28 November 2018]. Available from: https://www.sruc.ac.uk/downloads/file/1880/2014_young_entrants_to_farming_explaining_the_issues
- Michalek, J., Ciaian, P. and Kanacs, D. (2014): Capitalization of the Single Payment Scheme into Land Value: Generalized Propensity Score Evidence from the European Union. *Land Economics*, 90 (2) 260–289.
- Ministry of Rural Development (2012): National Rural Strategy, 2012-2020
- Ministry of Rural Development (2017): Report on the situation of the Hungarian agriculture, 2016
- Nemes G. and Varga Á. (2015): Régi intézmények, új kihívások – a mezőgazdasági tudásrendszer (MTR) Magyarországon. (Old institutions, new challenges - agricultural knowledge system in Hungary). *Gazdálkodás*, 59. évfolyam 6. szám, pp. 506-516.

- Oláh, J. (2014): The role and importance of public employment programmes: the case of Hajdúböszörmény micro-region, Hungary. *Studies in Agricultural Economics* **116** (3), 131-139.
- Peri-urban regions platform Europe. (2018). *Flanders*.
- Rankin, J. (2018). 'Taste the difference': Farm-to-fork movement takes off in urban Flanders. *The Guardian*.
- Raggi, M., Sardonini, L. and Viaggi, D., (2013). The Effects of the Common Agricultural Policy on Exit Strategies and Land Re-allocation. *Land Use Policy* [online]. 31, pp. 114-125. [Viewed 28 November 2018]. Available from: doi: 10.1016/j.landusepol.2011.12.009
- Regulation no. 5/2015. (II. 19.) in relation to the support system for the period between 2014-2020
- 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) and repealing Council Regulation (EC) No 1698/2005/Decree no. 32/2018 (XI 29.) of the Ministry of Agriculture on the amendment of ministerial decrees on the conditions on using support within the framework of the appropriation of the Farmstead Development Programme
- Rovný, P., (2016). The Analysis of Farm Population with Respect to Young Farmers in the European Union. *Procedia - Social and Behavioral Sciences* [online]. 220, pp. 391-398. [Viewed 28 November 2018]. Available from: doi: 10.1016/j.sbspro.2016.05.513
- STATBEL. (2018, June 14). *On 1st January 2018, Belgium had 11,376,070 inhabitants*. Retrieved November 2018, from Belgium in Figures: <https://statbel.fgov.be/en/themes/population/population-movement>
- Strano, A. et al., (2010). Employment and Social Inclusion. *EU Rural Review* [online] 6. [Viewed 28 November 2018]. Available from: https://enrd.ec.europa.eu/publications/eu-rural-review-6-employment-and-social-inclusion_it
- Suess-Reyes, J. and Fuetsch, E., (2016). The Future of Family Farming: A Literature Review on Innovative, Sustainable and Succession-oriented Strategies. *Journal of Rural Studies* [online]. 47A, pp. 117-140. [Viewed 28 November 2018]. Available from: doi: 10.1016/j.jrurstud.2016.07.008
- Udovecz G., Pesti Cs. és Keszthelyi Sz. (2012): Nyertes és vesztes gazdaságok Magyarországon. (Winner and loser farms in Hungary). *Gazdálkodás*, 56 (5) 387-397.
- Swinnen, J. and Vranken, L. (2010), Review of the transitional restrictions maintained by Bulgaria and Romania with regard to the acquisition of agricultural real estate, CEPS Report prepared for the European Commission, Brussels
- Van Huylenbroeck, G., Vanslebrouck, I., Mieke, C., & Van de Velde, L. (2006). *Synergies between Farming and Rural Tourism*.
- Vermeyen, V., Van Buggenhout, E., & Platteau, J. (2018). How are you? Welfare in the agricultural and horticultural sector.
- Vlaamse Overheid. (2018). *Vlaamse Belastingdienst*. Retrieved February 5, 2019, from Wijzigingen erfbelasting vanaf 1 september 2018: <https://belastingen.vlaanderen.be/wijzigingen-erfbelasting-vanaf-1-september-2018>
- Velikov, I. (2013), Development in agriculture and rural areas of Bulgaria. From implementing full EU CAP in the first seven years of full EU Membership and the Potentials for improvements, Friedrich-Ebert-Stiftung – Regional Project for Labour Relations and Social Dialogue in South East Europe, Belgrade.
- Williams, F., (2006). Barriers Facing New Entrants to Farming – an Emphasis on Policy Land Economy Working Paper Series No. 17 [online]. Aberdeen: Scotland's Rural College (SRUC). Available from: https://www.sruc.ac.uk/downloads/file/379/17_barriers_facing_new_entrants_to_farming_an_emphasis_on_policy
- World Bank (2017): Thinking CAP Supporting Agricultural Jobs and Incomes in the EU. Regular Economic Report 4. Washington DC: International Bank for Reconstruction and Development / The World Bank. [Viewed 28 November 2018]. Available from: <http://pubdocs.worldbank.org/en/369851513586667729/Thinking-CAP-World-Bank-Report-on-the-EU.pdf>

Zagata, L., Hádková, Š. and Mikovcová, M., (2015). Basic Outline of the Problem of the "Ageing Population of Farmers" in the Czech Republic. *Agris On-line Papers in Economics and Informatics* [online]. 7(1), pp. 89-96. [Viewed 28 November 2018]. Available from: <http://purl.umn.edu/207060>

Zagata, L., Hrabak, J., Lošťak, M., Bavorova, M., Ratinger, T., Sutherland, L-A. and McKee, A., (2017). Research for AGRI Committee – Young farmers: policy implementation after the 2013 CAP reform [online]. Luxembourg: European Union. [Viewed 28 November 2018]. Available from: doi: 10.2861/536526

Zagata, L. and Sutherland, L.-A., (2015). Deconstructing the 'Young Farmer Problem in Europe': Towards a Research Agenda. *Journal of Rural Studies* [online]. 38, pp. 39-51. [Viewed 28 November 2018]. Available from: doi: 10.1016/j.jrurstud.2015.01.003

GETTING IN TOUCH WITH THE EU

In person

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: https://europa.eu/european-union/contact_en

On the phone or by email

Europe Direct is a service that answers your questions about the European Union. You can contact this service: – by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls), – at the following standard number: +32 22999696, or – by email via: https://europa.eu/european-union/contact_en

FINDING INFORMATION ABOUT THE EU

Online

Information about the European Union in all the official languages of the EU is available on the Europa website at: https://europa.eu/european-union/index_en

EU publications

You can download or order free and priced EU publications from: <https://publications.europa.eu/en/publications>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see https://europa.eu/european-union/contact_en).

EU law and related documents

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-Lex at: <http://eur-lex.europa.eu>

Open data from the EU

The EU Open Data Portal (<http://data.europa.eu/euodp/en>) provides access to datasets from the EU. Data can be downloaded and reused for free, for both commercial and non-commercial purposes.



Publications Office
of the European Union

doi:10.2762/364362
Isbn 978-92-76-09261-2