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PART 1/3

COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

Proposals for a

- Regulation of the European Parliament and of the Council establishing rules on support for strategic plans to be drawn up by Member States under the Common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulation (EU) No 1305/2013 of the European Parliament and of the Council and Regulation (EU) No 1307/2013 of the European Parliament and of the Council
 - Regulation of the European Parliament and of the Council on the financing, management and monitoring of the common agricultural policy and repealing Regulation (EU) No 1306/2013
- Regulation of the European Parliament and of the Council amending Regulations (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products, (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs, (EU) No 251/2014 on the definition, description, presentation, labelling and the protection of geographical indications of aromatised wine products, (EU) No 228/2013 laying down specific measures for agriculture in the outermost regions of the Union and (EU) No 229/2013 laying down specific measures for agriculture in favour of the smaller Aegean islands

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$Glossary^1 \\$

Term or acronym	Meaning or definition
AECM	Agri-Environment and Climate Measure
ANC	Areas with Natural or other Specific Constraints
AKIS	Agricultural Knowledge and Innovation Systems
AWU	Annual Working Unit
BPS	Basic Payment Scheme
CAP	Common Agricultural Policy
CATS	Clearance Audit Trail System
CDG	Civil Dialogue Groups
CLLD	Community-Led Local Development
CMEF	Common Monitoring and Evaluation Framework
CMES	Common Monitoring and Evaluation System
СМО	Common Market Organisation
DG AGRI	Directorate General for Agriculture and Rural Development
EAFRD	European Agricultural Fund for Rural Development
EAGF	European Agricultural Guarantee Fund
EIP-AGRI	European Innovation Partnership for Agricultural Productivity and Sustainability
ESIF	European Structural and Investment Funds
EU	European Union
FADN	Farm Accountancy Data Network
FAS	Farm Advisory System

A more detailed Glossary is available in Annex 10. A full-fledged glossary including definitions on the CAP can be found on the internet page of the Directorate General for Agriculture and Rural Development: European Commission (2015) Glossary of the Common Agricultural Policy, (DG AGRI).

Farm Net Value Added
Good Agricultural and Environmental Condition
Impact Assessment
Integrated Administration and Control System
Joint Research Centre (European Commission)
Links between actions for the development of the rural economy
Land Parcel Information System
Land Use, Land Use Change and Forestry
Multi-annual Financial Framework
Member States
Programmes d'Options Spécifiques à l'Eloignement et à l'Insularité (for Outermost Regions)
Rural Development Programme
Sustainable Development Goals
Small Farmer Scheme
Statutory Management Requirements
Treaty on the Functioning of the EU
Utilised Agricultural Area
Voluntary Coupled Support
Water Framework Directive
World Trade Organisation

1. Introduction: Political and legal context

This impact assessment accompanies the legislative proposals for the Common Agricultural Policy (CAP) Post 2020 in the context of the next Multi Annual Financial Framework (MFF). With first steps already undertaken with the establishment of an Inter Service Steering Group (ISSG) and the publication of an Inception Impact Assessment in February 2017, the work was reorganised in mid-2017 to align it to the requirements established within the Commission for the preparation of the next MFF and to fulfil the requirements of the Financial Regulation in respect of preparing an ex-ante evaluation.

Other programmes relevant for the CAP are assessed in separate Impact Assessments for the new MFF:

- While the European Agricultural Fund for Rural Development (EAFRD) is part
 of the European Structural and Investment Funds (ESIF) other Funds are
 pertinent: European Regional Development Fund (ERDF), European Social
 Fund (ESF), European Maritime and Fisheries Fund (EMFF) and the
 Cohesion Fund, as Article 174 of the TFEU governing cohesion refers to
 particular attention to be paid to rural areas.
- The 9th Framework Programme for Research and Innovation (R&I), that includes a component on agriculture promotion of Food and Nutrition Security and the Sustainable Management of Natural Resources aiming at supporting the growing innovation needs of a modernised CAP through stronger synergies through the development of an ambitious, integrated strategic R&I Agenda.

1.1. Scope and context

As foreseen in its Programme of Work for 2017, the Commission consulted widely on the simplification and modernisation of the CAP to maximise its contribution to the Commission's ten priorities and to the Sustainable Development Goals (SDGs). This focused on specific policy priorities for the future without prejudice to the financial allocations for the CAP in the next MFF.

The process included a large consultation, as well as analysis of available evidence on the performance of the CAP, including the relevant REFIT Platform opinions.

The outcome was presented in the Communication adopted on 29 November 2017 and entitled "the Future of Food and Farming". This policy document outlined challenges, objectives and possible avenues for a "future-proof" CAP that needs to be simpler, smarter and modern, and lead the transition to a more sustainable agriculture.

In particular, the Commission identified higher environmental and climate action ambition, the better targeting of support and the stronger reliance on the virtuous Research-Innovation-Advice nexus as top priorities of the post-2020 CAP.

European Commission (2017) <u>The Future Of Food And Farming</u>, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM 713 final of 29 November.

It also **proposed** to improve the performance of the CAP based on **a new delivery model** that shifts the policy focus from compliance to performance and rebalances with more subsidiarity the responsibilities between the EU and the Member State (MS). The new model aims at better achieving EU objectives based on strategic planning, broad policy interventions and common performance indicators, thus improving policy coherence across the future CAP and with other EU objectives.

Public debate on the ideas presented in the Communication focused on the new delivery model of the CAP: while there is a general support to a movement towards a more result-based policy and more flexibility in its implementation, concerns have been raised regarding the need to preserve the common dimension of the policy with the appropriate safeguards at EU level that could guarantee a level-playing field as well as the adequate ambition in reaching the new objectives.

The Commission Reflection paper on the Future of EU Finances of 28 June 2017³ set out options and scenarios for the future direction of the EU budget, calling for a shift towards new, sustainable growth and stronger focus on the provision of public goods.

The Communication "A new, modern MFF for a European Union that delivers efficiently on its priorities post-2020" recalled that a modernised CAP must enhance its European added value by reflecting a higher level of environmental and climate ambition and address citizen's expectations for their health, the environment and climate. The document referred to "a prominent suggestion ... to reduce and better target direct payments, in line with the objectives of the policy", with changes to the system of direct payments considered providing an opportunity to focus on expected results, such as sustained agricultural production in less profitable or mountainous regions, a focus on small and medium sized farms, investments in sustainable and resource efficient production systems and better coordination with rural development measures.

On 2 May 2018, the European Commission adopted its proposals for a new MFF for 2021-2027⁵. Under these proposals, the CAP will have a budget of EUR **365.2 billion** (current prices) for the EU-27 over this period. This represents a 5% cut compared to the CAP allocation foreseen for 2020 (after deducing budget pre-allocated to the UK).

The MFF Communication stated that direct payments to farmers would remain an essential part of the policy but would be streamlined and better targeted via capping or degressive payments. This means that support is redistributed towards medium-sized and smaller farms, and possibly to rural development. Moreover, direct payment levels per hectare will continue to converge across MS towards the EU average. The Commission further specified ways to enhance the environmental and climate ambition.

European Commission (2018) A new, modern Multiannual Financial Framework for a European Union that delivers efficiently on its priorities post-2020, Communication from the Commission to the European Parliament, the European Council and the Council, COM 98 final, 14 February.

European Commission (2017) <u>Reflection Paper on the future of EU Finances</u>, COM 358 final of 28 June.

European Commission (2018) A Modern Budget for a Union that Protects, Empowers and Defends, the Multiannual Financial Framework for 2021-2027 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – COM 321 final, 2 May.

This impact assessment report prepared the ground for the decisions of the MFF proposals and focuses on the changes and policy choices which are specific to the CAP.

1.2. Lessons learned from previous programmes

Established in the early sixties around goals enshrined in the Treaty, the CAP is deeply rooted in the construction and in the development of the European Union (EU). It has since undergone several waves of reforms to improve the competitiveness of the agricultural sector, to foster rural development, to address new challenges and to better reply to societal demands.

The most recent major reform was adopted in 2013 under co-decision, a first in the ordinary legislative procedure for CAP. In the context of **the 2013 reform**, the **general objectives of the CAP were streamlined** around three blocks:⁶

- i. Viable food production
- ii. Sustainable management of natural resources and climate action
- iii. Balanced territorial development

To assess progress towards achieving the above objectives and identify future challenges, a wide consultation process encouraged a structured debate with all stakeholders, including non-agricultural actors.

This process included an open public consultation (with more than 322.000 submissions), structured dialogue with stakeholders, five expert workshops, opinions of the REFIT Platform, contributions from the European Economic and Social Committee, the Committee of the Regions, and from National Parliaments. The results were presented in a public conference in July 2017(see Annex 2 for details).

The process also considered recommendations of the Agricultural Market Task Force (AMTF)⁷ and the Cork Conference on Rural Development (2016).⁸ Furthermore, **evidence on the performance of the CAP** was gathered from a wealth of information available on the CAP (briefly summarised in Box 1 below), which served as background for assessing the achievements and shortcomings of the CAP over the years, but especially with respect to its most recent reform.

Building on these sources for evidence and opinion, major findings about the current performance of the CAP with respect to its 2013 reform objectives are summarised in the following section, with emphasis on relevant challenges for the future CAP. In summary, these findings point towards significant successes in previous reforms of the CAP in the economic and social cohesion area, while progress in the environmental contribution of the policy has been more mixed, and especially in the need of major improvements to meet broader future challenges.

European Parliament and Council Regulation (EU) No 1306/2013 (article 110(2)) of 17 December 2013 on the financing, management and monitoring of the common agricultural policy (...)

Report of the Agricultural Markets Task Force (the AMTF report) (2016) <u>Improving market outcomes</u> enhancing the position of farmers in the supply chain.

European Commission (2016) Cork 2.0: European Conference on Rural Development, website.

- 1. Evidence collected through the Common Monitoring and Evaluation and Framework (CMEF) which serves for measuring the performance of the CAP.⁹
- 2. A series of evaluation studies scheduled over the current Multiannual Financial Framework (2014-2020) to assess current CAP objectives, with first findings available in 2017/18 (see Annex 3).¹⁰
- 3. Results concerning progress towards targets and corresponding financial envelopes available in the Annual Implementation Reports (AIR) for Rural Development.
- 4. Additional background documents, data, facts, figures relevant for the impact assessment have been published on the internet page of DG AGRI:

https://ec.europa.eu/agriculture/statistics/facts-and-figures_en

https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-modernising/eco_background_final_en.pdf https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-modernising/env_background_final_en.pdf https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-modernising/soc_background_final_en.pdf

Note: Annex 9 includes references that served as a basis for the impact assessment.

1.2.1. Viable food production

Direct payments fulfil multiple roles. Initially introduced to support the adjustment process of the sector to a more market oriented policy environment, they currently provide an income safety-net that supports the resilience of 7 million farms, contributing to more than 40% of the average income of the EU farming community (a proportion that is much higher in the most deprived regions and in some sectors). 11

With income from agricultural activities still significantly below average wages in the overall economy (around 46% in 2017), the CAP supports the reduction of income gap between agricultural and other sectors and between Member States and regions. Without this income support, farming will not be economically viable in many parts of the EU and farmers. Beyond the negative impact on food security, phasing out the CAP would lead to land abandonment in some regions and concentration in the most productive areas. 12

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M'barek, R. et al. (2017) Scenar 2030 - Pathways for the European agriculture and food sector beyond 2020, Study to the European Commission.

Established in art. 110 of European Parliament and Council Regulation (EU) No 1306/2013 of 17 December 2013 on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations and the Commission Implementing Regulation (EU) No 834/2014 of 22 July 2014 laying down rules for the application of the common monitoring and evaluation framework of the common agricultural

¹⁰ European Commission (2017) Evaluation and studies plan 2017-2021, Directorate General for Agriculture and Rural Development.

European Commission (2016) Annual Activity Report: annexes, DG AGRI, p. 210.

Several evaluations confirm that direct payments enhance income and provide relative income stability to farmers facing significant price and production volatility - which helps to keep the EU's vital food production base spread around the Union. At the same time, evidence suggests that the distribution of these payments, their targeting and their complementarity with interventions under rural development can all be improved.¹³

This is further supported by preliminary findings of the on-going evaluation of CAP measures addressing the general objective of "viable food production" which also indicate the administrative and management costs of the current CAP as considered to be generally higher than in the previous period.

In addition to direct payments, **market instruments** come into play to support farm income – mainly in times of crisis (to avoid distortion of market signals). Initial assessment of the exceptional measures deployed since 2015 confirm their effectiveness; while measures included in the dairy package were popular, their evaluation points to the risk of problems being moved forward instead of addressed, in particular as regards market imbalances.¹⁴

Rural development policy makes a substantial contribution in various ways. Among other things, in 2007-2013 it supported investments (e.g. 470 000 farm modernisation projects, through which EUR 10 billion of EAFRD funding led to total investment of EUR 49 billion), knowledge-building (e.g. 6.8 million days of training for farmers and others), and supply chain organisation (400 000 farms became involved in quality schemes).

Planned support from rural development programmes in 2014-2020¹⁵ widened provisions for innovation¹⁶ and risk management. However, evaluations point to the need to better use synergies in programming and designing measures, not only within rural development but also with other types of funding. According to the draft ex-post evaluation of the 2007-2013 Rural Development Programmes (RDP), the Objective "Improving the competitiveness of the agricultural and forestry sector" was achieved to a moderate extent at EU level. This was mainly due to trainings and investments in modern machinery and technology, improving the productivity of both human and physical capital. The average value for the related indicator change in labour productivity was estimated at 4 %. A greater potential is seen in the offer of so-called multi-functional measures which had positive effects for several fields of activity at the same time.¹⁷

EU **risk management** tools complement direct payments and safety net systems to support income. In practice they are made available under RDPs, as the European Agricultural Fund for Rural Development (EAFRD) enables multi-annual payments. Causes of low uptake of EU risk management schemes have been widely analysed.¹⁸

Ecorys et al. (2016) Mapping and first analysis of the CAP implementation, Study to the European Commission.

Interim results for the forthcoming evaluation of the impact of CAP measures towards the general objective of viable food production.

All planned outputs/results stated for 2014-2020 rural development programmes valid as of September 2016 (Cork 2.0 Conference on Rural Development). Some programmes have been modified since then.

Especially through the European Innovation Partnership for Agricultural Productivity and Sustainability – <u>EIP-AGRI</u> – which brings together researchers, farmers and others to turn research into practical innovation.

Ecorys (forthcoming) Synthesis of Rural Development Programmes (RDP) ex-post evaluations of period 2007-2013 (forthcoming).

See references in Annex 1 for various sources: Commission, Agricultural Market Task Force, OECD, etc.

They include too stringent WTO Green-Box requirements (e.g. too high loss thresholds to receive compensation), budget unpredictability, lack of farm-level data, unfamiliarity of stakeholders with novel tools, and the likelihood of ex post public support reducing incentives for an ex-ante risk management approach at farm level.

Amendments introduced in the Omnibus package have addressed some of these issues, notably by lowering loss thresholds for certain instruments and introducing a new sector-specific tool for income losses.¹⁹

More attention should be paid to the enabling environment, such as functioning financial markets (futures to allow the development of insurance products), more transparent information exchange and overcoming the knowledge gap on risk management instruments at farm level. ²⁰

However, any action in this domain would need to allow for flexibility for both MS and farmers, since evidence confirms that a single model of risk management cannot be generalised across the EU.²¹

1.2.2. Sustainable management of natural resources and climate action

Land-based measures remain pivotal to achieving the environmental and climate-related goals of the EU, including clean energy production. **Direct payments** and associated mechanisms (cross compliance and greening) cover a large portion (90%) of the EU's farmed area and aim at mainstreaming practices beneficial for the environment.

Cross-compliance contributes to related EU objectives through the statutory management requirements (SMR) and good agricultural and environmental conditions (GAEC). However, the level of ambition for GAEC varies across MS, with the Court of Auditors noting an insufficient scrutiny role for the Commission. ²²

Since the 2013 reform of the CAP, a share (30%) of the national ceilings for direct payments is allocated to practices beneficial for climate and the environment, to be applied by farmers benefitting from direct payments, throughout the EU. The overall effects of the "greening" layer of direct payments, as currently applied, on farm management practices and the environment/climate are uncertain but appear to be fairly limited, although there are variations across MS. Its implementation is qualified as complex to manage and sometimes less ambitious than intended. ²³ ²⁴ ²⁵ ²⁶

Ecorys et al. (Forthcoming-2018) Study on risk management in EU agriculture, Study to the European Commission.

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Amendments to the basic acts of the CAP adopted under co-decision in 2017.

Workshop on Risk Management: https://ec.europa.eu/agriculture/events/cap-have-your-say/workshops en.

European Court of Auditors (2016) Making cross compliance more effective and achieving simplification remains challenging, Special report No 26.

European Commission (2016) Review of the Greening after one year, Staff Working Document, 218 final.

European Commission (2017) <u>Implementation of the ecological focus area obligation under the green direct payment scheme.</u> Report from the Commission to the European Parliament and the Council, COM 152 final of 29 March.

European Court of Auditors (2017) Greening – a more complex income support scheme, not yet environmentally effective, Special Report No 21.

Alliance Environment *et al.* (2017), Report of the evaluator for the Evaluation study of the payment for agricultural practices beneficial for the environment and climate.

The **area-based payments** co-funded **under Rural Development Policy** build on this foundation, providing support to move beyond cross-compliance and requirements associated to direct payments. In 2007-2013, among other types of intervention, **agrienvironment and climate** measures (AECM) paid farmers to care for soil, water, air and biodiversity in ways going beyond their legal obligations, on 48 million ha (around 25% of utilised agricultural area, UAA).

Support for **investment** and **knowledge**-building made a further contribution. Specific targets related to carbon sequestration, cutting greenhouse gas emissions and raising the efficiency of irrigation systems (on 15% of irrigated land) were added for the period 2014-2020.

The experience with agri-environment-climate measures shows that their potential could be better used, in particular to tackle local needs. Their design is not always sufficiently focused on environmental needs, often because some MS emphasise easier verifiability to reduce the risk of financial error.²⁷ In particular, co-ordinating the "greening" layer and agri-environment-climate payment has been challenging.²⁸

Ex-post evaluations of RDPs for 2007-2013 conclude that support under Rural Development has contributed to a high extent to **climate change mitigation** and **water management**, and to a moderate extent to the **protection of natural resources and landscape**. Regarding the supply of renewable energy, most of the reports that have recognised a positive impact, also declared that the extent of the impact was difficult to determine and quantify. Climate change has in the meantime become an even more urgent priority, as well as clean energy transition, with important costs and opportunities to be faced by the farming community in the future.²⁹

In conclusion, it is clear that the "greening" measures have not fully realised their intended potential to provide ambitious benefits for climate and environment. Also, the current environmental and climate architecture of the CAP has proved to be somehow difficult to manage and complex. Both farming community and other stakeholders generally share this assessment.³⁰

1.2.3. Balanced territorial development

The CAP currently helps to achieve balanced territorial development both through support for the farm sector (which has strong links to the rest of the rural economy) and through direct assistance to non-farm entities and local strategies.

In 2007-2013, the CAP supported 280 000 projects related to **non-farm micro-enterprises**, **local basic services** (childcare, healthcare etc.) and other aspects of rural life – in addition to a further 170 000 projects under **community-led local development** (CLLD) **strategies**.

European Commission (2017), Directorate General for Agriculture and Rural Development, Background Document on climate and environmental challenges facing agriculture and rural areas.

Workshop on Agri-Environment-Climate Measures (AECMs): Challenges of controllability and verifiability, 07/12/2016, Brussels.

Pérez Domínguez, I. et al. (2016): An economic assessment of GHG mitigation policy options for EU agriculture (EcAMPA 2). JRC Science for Policy Report, European Commission, Luxembourg: Publications Office of the European Union.

European Commission (2017) Consultation on modernising and simplifying the common agricultural policy (CAP), Directorate General for Agriculture and Rural Development.

Ex-post evaluations for Rural Development Plans (RDP), strategies and frameworks for the period 2007-13 are predominantly positive about the contribution of RDPs to environment and climate action, as well as for growth and jobs. On the latter, the economic crisis was part of the limiting factors. Outcomes for the quality of life, diversification and innovation are more nuanced. Prioritisation within limited budget resources has had a limiting effect on innovative approaches. This support delivers benefits at the micro-level. There have sometimes been obstacles to effective targeting, including where this has required effective co-ordination with other EU funds (e.g. concerning infrastructure).³¹

In the period 2014-2020, **investment** in the general rural fabric is continuing: further improvements to local basic services should cover a total area which is home to 51 million citizens, while 153 million people should be covered by CLLD strategies (LEADER). There is a sharper focus on ICT: 18 million citizens should be covered by better ICT services and infrastructure. Ex-ante evaluations point to a need to further enhance needs prioritisation and internal coherence.³²

A recent addition on evidence from CAP's contribution to **balanced territorial** developments came from the publication of the World Bank's study of the CAP (preliminary results of which were presented to one of the IA Workshops).

While stressing the need for better targeting of support in the future, the report argues that the CAP was associated with the reduction of poverty and the creation of better jobs for farmers across the EU, although this role differs depending on where a country finds itself along the process of structural transformation. The report also stresses the positive impact of decoupled support in increasing productivity and in structural adjustment (while it does not find a significant or similar impact from coupled support). 33

A recent report underlines that EU funding will be essential for the development of the support services sector in Europe, especially in rural areas where services are scarcer and less developed.³⁴

While acknowledging that the design of the 2014-2020 programming framework was more ambitious, the European Court of Auditors (ECA) noted that the implementation was affected by significant shortcomings, for instance programmes did not started earlier than in the previous period, despite efforts. To make the programming process more manageable and efficient, the Court encourages the Commission to review the design of programming documents with a view to simplifying their content and reducing the number of requirements for the **post-2020** programming period.

ECA further recommended that the Commission defines the various types of indicators more accurately to have a common set of result-oriented indicators that are more suitable for assessing results and the impact of interventions.³⁵

See, for example, European Court of Auditors (2015) <u>EU support for rural infrastructure: potential to achieve significantly greater value for money</u>, Special Report N°25. Note that this refers to the 2007-2013 programming period.

Kantor (2015) Synthesis of ex ante evaluations of rural development programmes 2014 - 2020, Study to the European Commission.

World Bank on the European Union (2017) <u>Thinking CAP Supporting Agricultural Jobs and Incomes in the EU</u> EU Regular Economic Report 4.

Arroyo De Sande *el al.* (2018) Provision of social care and support services in remote rural areas: Challenges and opportunities, European association of service providers for persons with disabilities.

Specific measures for agriculture have been implemented in **Outermost Regions** (OR) through the POSEI scheme (Programme of options specific to the remote and insular nature of the outermost regions). In its report presented in December 2016 after an external evaluation of the scheme, the Commission concluded that POSEI appears critical to maintaining agricultural production in these regions and to ensure a sufficient supply in agricultural products. Following the Communication adopted by the Commission in December 2017 on a stronger and renewed strategic partnership with the EU's outermost regions, 7 no change was considered in this impact assessment for the specific provisions applying for agriculture in these regions.

1.2.4. Cross-cutting issues

Several concerns on cross-cutting issues emerged from the public debate and from studies and evaluations on the CAP. The REFIT Platform put emphasis on the perception of an excessive **administrative burden** of the current greening measures, the control and audit system and the growing overlaps between direct payments and rural development.³⁸ The stakeholders of the REFIT Platform called for a reduction of the regulatory burden of the CAP and an improvement of its value for money while ensuring the achievement of the objectives and increase its integration with other policy areas, especially with other European Structural Investment Funds (ESIF).

A study mapping the implementation of the 2013 reform of the CAP confirmed that the policy became more **complex** with the new flexibilities.³⁹ For the CAP Post 2020, MS are encouraged to establish a long-term strategy that better takes into account the CAP objectives including simplification. The public consultation on "modernising and simplifying the CAP" confirmed a widespread consensus on the idea that the current **CAP** tools successfully **addresses current challenges to some extent only**. A consensus also emerged on the **EU value added of the CAP**, but the excess of bureaucracy was highlighted as a key obstacle preventing the current policy from successfully delivering on its objectives.

Criticism about fairness and targeting was reiterated while the distribution of direct payments appears to remain unchanged, on average 20% of farmers still receive 80% of direct payments (although figures differ among MS). This ratio reflects land concentration, with half of CAP beneficiaries coming from very small farms while most of the payments go to medium-sized farms. ⁴⁰

European Court of Auditors (2017) <u>Rural Development Programming: less complexity and more focus on results needed</u>, Special report N°16.

European Commission (2016) The implementation of the scheme of specific measures for agriculture in favour of the outermost regions of the Union (POSEI) Report from the Commission to the European Parliament and the Council, COM 797 final.

European Commission (2017) "A stronger and renewed strategic partnership with the EU's outermost regions" COM 623 final.

REFIT Platform Opinions on "Cross Compliance", "Greening", "Overlaps between pillar I and II", "Control and Audit", "Rural Development support" and "EU legislation on the Farm subsidies reform". Available at: European Commission (2016) REFIT Platform Recommendations: Agriculture and Rural Development, website.

Ecorys *et al.* (2016) Mapping and analysis of the implementation of the CAP. Study to the European Commission.

European Commission (2017) <u>Direct Payments, Directorate General for Agriculture and Rural Development.</u>

Another cross-cutting concern is **generational renewal**: only 5.6% of all European farms are run by farmers younger than 35 years. Access to land, reflecting both land mobility and farm succession constraints, together with access to credit, are often cited as the two main constraints for young farmers and other new entrants.⁴¹ ECA recommended that CAP support should be better targeted to foster effective generational renewal.⁴²

The creation of the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP) gave an impetus to **knowledge** creation and sharing, but important efforts should continue to be made to facilitate the access of farmers to knowledge.⁴³

Finally, contributions in the public debate highlighted concerns on **food-related** issues, in particular food security, safety and quality.

2. THE OBJECTIVES

2.1. Challenges for the programmes of the next MFF

The total MFF allocation for the CAP for 2014-2020 in current prices amounts to EUR 408.3 billion for the EU-28, including an effect of phasing in of direct payments for Bulgaria, Romania and Croatia.

In its proposal for the next MFF, the Commission proposed an allocation of **EUR 365 billion** for the period 2021-2027 for the EU-27. After deducting the UK budget contribution, this amount represents a 5% cut compared to the CAP budget allocation for the EU-27 in 2020.

Within this background of the proposed CAP budget, EU agriculture and rural areas face **developments** that **have significantly changed the broader environment** and the challenges **within which EU's agriculture and the CAP will have to operate**. This is evident from the three major changes that have taken place since the 2013 CAP reform was implemented:

- i. **higher market-price uncertainty** has replaced the high price/high volatility and high co-movement environment after the financial crisis,
- ii. **trade negotiations** have **moved** from multilateral **to bilateral and regional agreements**, while
- iii. **new EU international commitments on Climate Change** and on **Sustainable Development Goals** added new dimensions to the challenges and opportunities facing the CAP.

43 Coffey et al. (2016) Evaluation study on the implementation of the new European Innovation Partnerships (EIP) for Agricultural Productivity and Sustainability, Study to the European Commission.

The survey on the needs of young farmers provided full evidence on these barriers: Ecorys (2015) Pilot project: Exchange programmes for young farmers, Study to the European Commission; question Number 8 of the on-line public consultation confirmed this (See Annex II); see also (EP) Young Farmers – policy implementation after the 2013 CAP reform, (EC) Young Farmers in the EU – structural and economic

European Court of Auditors (2017) <u>EU support to young farmers should be better targeted to foster effective generational renewal</u>, Special Report N°10.

These shifts are reflected in the **EU Agricultural Outlook**, which provides updated projections for agricultural markets until 2030 under an unchanged policy assumption.⁴⁴ This outlook points to an agricultural income decline in real terms up to 2030 at sectoral level, but income per agricultural working unit is expected to increase driven by the continuous labour outflow from agriculture.

The public consultation confirmed the challenges identified with the lessons learnt from the latest CAP reform: replies about future CAP highlighted the continuous need for income support, although questions were raised about whether the current distribution of CAP support leads to the best possible outcomes, requests were made for agriculture to be more environment and climate-friendly, and expectations were advanced about farming's contribution to rural employment. Moreover, answers also reflected further societal demands about food (organic, quality) and animal welfare, while the most common answer to the open question on modernisation was sustainability.

Box 2. Stakeholder views on the CAP

- The participants to the public consultation considered that the current CAP successfully addresses the existing challenges to some extent only (57%). This view is shared among different types of respondents (farmers, other citizens and organisations).
- All types of respondents (farmers, other citizens and organisations) also share a negative reply when assessing to what extent the current CAP addresses the environmental challenges (63%).
- The excess of bureaucracy and lack of attention to sustainability was often highlighted as the main problems/obstacles preventing the current policy from successfully delivering on its objectives.
- At the same time, "greening", aid applications and controls are identified as the most burdensome and complex elements.
- The call for a reduction of administrative burden is a generalised demand in the papers submitted by farmers and public administrations.
- The wider public also raised a series of concerns on how agriculture interacts with the environment, climate, animal welfare, food safety and consumer protection, health standards and broader sustainability challenges.

The public consultation also reiterated the call for simplification when it comes to future CAP, with specific suggestions including the reduction of overlaps between Rural Development and other CAP measures, better use of new technologies and e-government tools to reduce controls.

European Commission (2017) <u>EU Agricultural outlook for the agricultural markets and income 2017-2030</u> (DG AGRI with the support of the Joint Research Centre), presented in a conference with stakeholders in December 2017.

The public consultation and subsequent analysis **also revealed concerns around three significant tensions that characterise modern agriculture** in its transformation towards what is often termed as Farming 4.0 (digital farming). These tensions relate to:

- the need to improve simultaneously the economic and environmental and climate performance, which sometimes creates a short-term trade-off (the public consultation illustrated different perceptions on economic and environmental challenges);
- the **risk for employment from efforts to raise productivity and growth**, especially in the primary farm sector;
- the often-complex trade-off between simplification and targeting, and the appropriate degree of subsidiarity in the context of very different structural characteristics in the farming sector of 28 MS.

Turning such tensions into synergies would be the litmus test for **the capacity of the future CAP to deliver in a coherent manner** to its objectives, as well as those of related EU policies and priorities. Such priorities include CAP' contribution **to many Union priorities**, including to key priorities (Jobs, growth and investment; the Digital Single Market; Energy Union and climate action; a Stronger Global Actor; and Migration).

Synergies also link successive reforms of the CAP, that aimed at improving the sustainability of agriculture and rural areas since the adoption of the EU sustainable development strategy in 2001, to a number of **UN Sustainable Development Goals** (SDGs), in line with the "European Action for sustainability", which outlines that "sustainable development is an essential guiding principle for all policies".⁴⁵

Based on the lessons learnt from earlier reforms, a broader and more prospective analysis was carried out to identify problems and challenges, to anticipate needs up to 2030, in line with the horizon for the next MFF and SDGs.

Considering all the above, detailed **analysis** led to the classification of these challenges according to the three dimensions of sustainable development and linked them to the assessment of the related **achievements and shortcomings of the CAP reviewed** ahead of the Communication on "the Future of Food and Farming". ⁴⁶ (These are summarised in Table 1).

Cross-cutting broader challenges such as those linked to food security, food safety, food quality, and sustainability are assumed to overarch the above challenges, and are thus not included in this table. The same applies for other cross-cutting challenges: simplification and modernisation.

European Commission (2016) Next steps for a sustainable European future: European Action for sustainability Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM 739 final.

Annex 1, and especially European Commission (2017) <u>Background documents on challenges facing EU agriculture and rural areas: economic, social, environmental and climate</u>, Directorate General for agriculture and rural development and reports of workshops for the present impact assessment.

Table 1. Main challenges facing EU agriculture and their consequences

Dimension	Challenge	Consequence		
Economic	Pressures on farm income	Low standard of living		
	Weaknesses in competitiveness	Low farm income margins		
	Imbalance in value chains	Fragile farm bargaining power		
Environmental	Climate change	Extreme climate events,		
and climate		droughts, heatwaves, pests,		
		forest fires		
	Ammonia emissions from agriculture	Impact on human health and the		
		environment		
	Unsustainable soil management	Erosion, degraded soils,		
	practices	salinization, sub-optimal carbon		
		sequestration		
	Inputs of nutrients and pesticides, over-abstraction (irrigation)	Water pollution and scarcity		
	Loss of nature and landscapes,	Loss of ecosystem and their		
	habitats and land conversion	services, reduced public goods,		
		unfavourable conservation status		
Socio-economic	Low growth, under employment,	Depopulation, farm aging,		
	poor generational renewal	low job creation		
	Sub-optimal infrastructure and	Lower quality of rural life		
	services, social resilience			
	Inequalities between territories and	Rural/urban divide,		
	groups	rural poverty		

Complexity in terms of eligibility requirements and variety of measures leads to increased burden for beneficiaries (time for familiarising with information obligations and extent of information/evidence to be provided with applications) and lack of economies of scale for administrations. Gold-plating further increases burden as it adds unnecessary national requirements. A trade-off should be found between **simplification** and the need for accountability of the budget spent.

Major drivers for various problems include insufficient levels of **innovation** and **knowledge**, whether in products and processes or the provision of services. With investments in certain areas of R&D falling and difficulties in translating the results of research into practical innovation, the level of **knowledge** was deemed unsatisfactory.

Despite relevant CAP provisions on the **Farm Advisory System**, weaknesses and gaps in quality remain. Rural areas show lower participation in education and training than urban areas (in 2015 19% of the population of rural areas had tertiary education, compared with 27% of people in all areas).

2.2. Objectives for the programmes of the next MFF

CAP objectives are stemming from three different layers - the Treaty objectives, the broader policy objectives that link the CAP to other EU policies, and specific objectives stemming from the more immediate challenges identified above.

Treaty objectives

The CAP objectives, set out in Art. 39 TFEU, aim at: (a) increasing agricultural **productivity** (including through technical progress and optimum usage of the factors of production); (b) thus ensuring a **fair standard of living** for the agricultural community (including by increasing earnings); (c) stabilising **markets**; (d) ensuring the **availability of supplies**; and (e) ensuring that supplies reach consumers at **reasonable prices**.

Broader policy objectives: Simpler, smarter, modern and more sustainable CAP

However, achieving the above objectives in the current context necessitates **adjustments** to the CAP's objectives, which are herewith suggested as follows (see table 2).

Based on the Communication, this Impact Assessment as well as the broader EU political priorities, the corresponding **policy objectives** of the CAP can be summarised as follows:

- Foster a **smart and resilient agricultural sector** ensuring food security;
- Bolster **environmental care and climate action** and contribute to the environmental and climate objectives of the EU;
- Strengthen the **socio-economic fabric** of rural areas, including generational renewal.

These objectives correspond to the three dimensions of sustainability and complemented by the cross-cutting objectives pertaining to modernisation and simplification can be summarised in a **cross-cutting** manner:

- Further improve **sustainable development** for farming, food and rural areas; this includes addressing societal expectations about **food and health**;
- Promote **modernisation** by fostering knowledge, innovation and digitalisation in the agricultural sector and rural areas;
- Address **simplification** by streamlining the design and delivery of the CAP on relevant EU objectives through a shift from compliance to performance, in line with the requirements of Budget Focused on Results.

All the above is in line with the cross-cutting objectives for the next Multiannual Financial Framework: coherence, synergies, simplification and performance. The bulk of CAP expenditure is currently pre-allocated to MS to provide a degree of stability to MS and beneficiaries over the medium-term, but flexibility is offered to MS in the implementation of allocations within a newly defined EU framework.

These policy and cross-cutting objectives are broken down into **more specific objectives** which reflect the emphasis required by the identified challenges, Commission priorities and UN SDGs. Based on challenges highlighted in the previous section, table 2 summarises the general architecture of objectives. For evaluation and monitoring, these objectives were complemented by operational criteria that serve for the impact assessment as well as for setting up indicators (see Annex 5.3).

Compared to objectives stemming from the 2013 reform of the CAP, based on identified challenges, emphasis and/or wording are changing for some objectives and cross-cutting objectives are made more explicit within a streamlined architecture. Having three policy objectives - each of which is encompassing three specific objectives - aims at improving

the **balance** across the dimensions of sustainable development. Moreover, the crosscutting objective on sustainable development, alongside with the objectives of simplification and modernisation, are mainstreamed as part of this new architecture. These objectives apply to the whole CAP - they are the **entry point** for a single strategic planning encompassing both pillars (see section 3.3).

Table 2. Architecture of CAP objectives

Policy objectives	Specific objectives			
Foster and smart and resilient agricultural sector ensuring food security Bolster environmental care and climate action and contribute to the relevant EU objectives	Support viable farm income and resilience throughout the territory Enhance competitiveness and market orientation Improve farmers position in value chains Contribute to climate change mitigation & adaptation Foster sustainable and efficient management of resources			
Strengthen the socio-economic fabric of rural areas	Preserve nature and landscapes Attract new farmers and facilitate business development as well as generational renewal Promote employment, growth and local development in rural areas Address territorial imbalances, rural poverty and social inclusion			
Cross-cutting objectives Further improve sustainable development for farming, food and rural areas Promote modernisation by fostering knowledge, innovation and digitalisation in agriculture	Address societal expectations on food and health Co-create innovation and share knowledge, including across generations			
and rural areas Address simplification and policy performance	Streamline CAP design and delivery on relevant EU objectives			

3. PROGRAMME STRUCTURE AND PRIORITIES

In its Communication for the MFF for 2021-2027⁴⁷, the Commission confirmed that it would propose a reformed, modernised CAP. This will allow maintaining a fully integrated **single market**, ensuring **food** security, safety and quality, as well as placing greater emphasis on the **environment** and **climate**. The reform should "support the transition towards a fully **sustainable** agricultural sector and the development of vibrant **rural areas**".

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⁴⁷ COM(2018) 321 final, full quotation under 4.

3.1. Why act through an EU-level policy?

3.1.1. Legal basis

The main legal basis for EU action stems from the Treaty (Arts. 38 to 44 TFEU), which enshrines an obligation to establish and implement a CAP. See previous section for the objectives set out in Art. 39. Other Articles of the Treaty are also relevant. Arts. 174 and 175 on economic, social and territorial cohesion include a reference to rural areas, as do Art. 191 to 193 on the environment.

This fundamental legal basis is interpreted in various legislation emphasising the strong links of agriculture to the wider economy (especially the rural economy) and to the natural environment. Art 11 states that environmental protection requirements must be integrated into the definition and implementation of Union policies and activities, in particular to promoting sustainable development. Additionally, the Charter of Fundamental Rights of the European Union provides for protection of intellectual property that includes geographical indications (Article 17).

3.1.2. EU Added value

Most of the challenges identified above have **cross-border** and **global nature** which require a common action at EU level:

- Firstly, the **single market for goods and services** offers substantial economic opportunities to farmers as well as important pressures which require a common safety net, including a system of income support that avoids potential distortions of competition, and underpins food security as well as food safety.
- Secondly, the effects of **increased exposure to world markets**, resulting from previous CAP reforms and trade agreements can only be addressed at EU level.
- Thirdly, key sustainability challenges like climate change, water use, air quality and biodiversity are cross-border, and also require **EU action to meet EU-wide objectives**.

In other areas, a strong EU-wide dimension needs to be combined with more subsidiarity. These areas include food quality, public health and nutrition, rural area challenges (with big gaps in rural unemployment existing between MS), poor rural infrastructure and services, and weaknesses in research and innovation. An appropriate EU-level response to these challenges allows more effective and efficient action when combined with more flexibility at MS level. A common budget enables all MS and regions to respond to the challenges and objectives set out, including those with limited financial resources. In this respect it supports **solidarity** and limits gaps between regions. Furthermore, the CAP promotes networking, spreading of good practices and supports the delivery of public goods across the EU. Both the World Bank study on the CAP and the JRC study on Scenario 2030 provided additional evidence on the value added of the CAP.

M'barek, R. *et al.* (2017) <u>Scenar 2030 - Pathways for the European agriculture and food sector beyond 2020, Study to the European Commission.</u>

One of the tested scenarios in the JRC study shows notably that removing the CAP would result in an 18% drop in farm income on average in the EU, threatening the economic viability and attractiveness of rural areas, a sizeable decline in production affecting food security, land abandonment, a decline in permanent grassland and a stronger production intensification, which can lead to more pressure on the environment.

3.1.3. Subsidiarity and proportionality

The Communication on the Future of Food and Farming suggests a new delivery model for the CAP which, by rebalancing responsibilities between the EU, MS and beneficiaries, is expected to enhance subsidiarity and flexibility for MS as described in sections 3.3 and 3.4 below.

The future policy approach set out in section 3.3 is proportional. The economic, environmental and social challenges facing the EU's farm sector and rural areas require a substantial response which does justice to the EU dimension of those challenges. The greater power of choice to be offered to MS in selecting and adapting available policy tools within the CAP to meet objectives, in a more results-based model, should make it even less likely that the CAP oversteps a proportionate level of action.

3.2. Critical mass of funding/projects required

The CAP is currently implemented under shared management, with MS setting up their specific governance structures in order to ensure sound management of EU funds. With regard to a critical mass of "projects" to meet its economic, environmental and social objectives the CAP needs to offer funding to large numbers of farmers and other beneficiaries in rural areas, and improve its targeting, so that farm income, food security, food safety, environmental and climate ambition and the diversity of rural areas are adequately addressed. However, this will take place efficiently only if the total available budget is adequate.

The notion of a critical mass of projects is unlikely to be an issue for the CAP as a whole. Nevertheless, this could be critical for some MS/their authorities in some cases or for some measures. In a policy such as the CAP – which addresses large numbers of potential beneficiaries and a large physical area – there is a possible danger that support is spread too thinly to have a significant effect. The risk is perhaps greatest in the case of area-based payments (not only direct payments but also various environmental payments) but is also present in other types of support, e.g. for investment.

3.3. Envisaged changes in the scope and structure of programmes

Against the background of a difficult budgetary context, the May Communication for the 2021-2027 MFF proposes a moderate cut for the CAP budget (- 5%). 49 Nevertheless, a **significant** part of the EU budget should continue to be dedicated to this common policy of strategic importance.

COM (2018) 321 final as referenced under 4) as well as related documents, in particular <u>Factsheet on the Common Agricultural Policy</u>

The Communication further confirmed that the reformed policy would continue to be built around two **pillars**. In current prices, the following allocations are proposed:

- EUR 286.2 billion allocated to the European Agricultural Guarantee Fund (EAGF) pillar I.
- EUR 78.8 billion for the European Agricultural Fund for Rural Development (EAFRD) pillar II.

These agricultural funds are complemented by additional funding of EUR 5 billion from Horizon Europe, out of an allocation of EUR 10 billion proposed to support **research and innovation** in food, agriculture, rural development and the bio-economy.

A more balanced distribution of **direct payments** (pillar I) will be promoted through either compulsory capping at farm level or degressive payments. Direct payments will also continue to converge towards EU average.

For **rural development**, a 10% increase in national co-financing rates is proposed to rebalance the financing between the EU and Member States' budgets, in line with what is foreseen for the other European Structural and Investment Funds. The distribution of EAFRD support will be based on objective criteria linked to the policy objectives and taking into account the current distribution across MS.

A certain level of **flexibility** for transfers between pillars will be offered to MS. Up to 10% can be transferred between direct payments and EAFRD, in both directions. A higher percentage can be transferred from direct payments to EAFRD allocation for interventions addressing environmental and climate objectives and installation grants for young farmers.

Although no significant changes are envisaged in the **structure** of the programmes of the CAP, major changes in the **delivery** mechanism and the scope of various interventions are proposed to respond to the urgency, the range and seriousness of the identified challenges.

On the one hand, the CAP will continue to operate through **two funds**. In general terms, the EAGF – (CAP pillar I) will finance the bulk of income support payments for farmers as well as market instruments, while the EAFRD – (CAP pillar II) will be the source of funding for most other types of intervention, as at present. The two-fund structure is kept, reflecting differences between the respective types of support concerned: annual and fully Union-financed (pillar I) vs. mainly multi-annual and mainly co-financed by EU and MS (pillar II).

On the other hand, the **complementarity** and the **synergies** between the two pillars will be enhanced thanks to a **single strategic planning** process.

As proposed in the Communication on the Future of Food and Farming and confirmed in the MFF Communications (February and May), a **new delivery model** will bring a fundamental shift in the CAP, moving away from compliance with detailed EU-level rules towards placing more emphasis on achieving results against the policy's common objectives, defined and agreed at EU level.

This draws on the lessons learnt from the implementation of policy and from the public consultation. Having detailed EU rules raises issues about the **complexity** of the policy, the limitations of a "one size fits all" approach, the **effectiveness** and the **efficiency** of the policy, including the excessive administrative burden. Moreover, there is need to strengthen the **coordination** and **synergies** between CAP pillars and interventions, and to maximise the CAP contribution to EU priorities. While striving to accommodate the diversity of situations and challenges, the policy became more and more complex and its **main purposes** lost visibility.

Against this background, it is proposed to further simplify the CAP and to improve its performance (Chart 1). With the proposed new delivery model, CAP design and implementation is streamlined around the EU objectives spelled out in section 2. These objectives, to be agreed at EU level, should be clearly outlined in a new basic act of the CAP that should bring together the two pillars under a **common planning strategy** (proposal for a regulation for CAP Strategic Plans).

EU Specific objectives

Indicators

Broad types of interventions

Identification of needs in MS's CAP Plan

Tailor CAP interventions to their needs

Implementation / Progress towards targets

Chart 1. The new delivery model for the CAP - key elements

Annex 4 provides detailed explanations and illustrations on the new delivery model, as well as an analysis of opportunities and challenges and related safeguards. In essence, each MS will draw up a "CAP strategic plan" – covering interventions planned under both CAP pillars to meet quantified targets (based on result indicators set out in EU legislation) linked to EU-level CAP objectives. The targets and planned interventions (with financial allocations) will be justified by an analysis of strengths, weaknesses, opportunities and threats (SWOT) which the MS in question will carry out with regard to its farm sector and rural areas, taking into account their planning tools emanating from EU environmental, climate and energy legislation.

MS will also need to identify how their plan performs in terms of simplification and reduced administrative burden and justify when national rules add additional administrative burden for beneficiaries.

The Commission will **assess** whether the draft plan sets appropriate targets and a credible approach to meeting them, and request modifications as necessary before **approving** it. The approval process is designed as a strong safeguard to ensure strategic planning and enhanced efficiency. While effectiveness of national CAP plans will be assessed on the basis of the needs analysis, simplification can be assessed based on the MS description of administrative burden reduction, but it can also be estimated on the basis of the complexity of the planned strategy. Identifying potential issues early on at planning stage will allow adapting the national plans and increasing their coherence with the EU CAP objectives, including simplification.

The progress of the plans will be assessed each year against the targets set in terms of result **indicators** (all of which will be, by their nature, closely linked to the CAP). When targets are missed by a significant margin, the Commission would request Member State to submit a formal **action plan** to remedy the situation. Where the intended remedial actions have not been implemented or the Member State is not willing to engage, the Commission may **suspend** payments. Should the problem not be solved, the suspended amounts would be definitively lost by the Member State. Such EU corrective actions would not apply at the level of beneficiaries.

The above-mentioned process will be the main means of "steering" what the CAP does, albeit in a manner less prescriptive and detailed than at present. Legislative acts will become more focused on creating a framework for MS to achieve EU-wide objectives in a more flexible way, while ensuring an EU level playing field and keeping accountability for results, in line with the principle of Budget Focused on Results.

This can be illustrated for **environment** and **climate** (Annex 4 also offers other examples). As previously mentioned, the current "green direct payments" have been heavily criticised. Among other things, what was originally supposed to be a short list of simple, generally applicable requirements expanded to encompass a mass of numerical thresholds and exemptions, and there have been loud calls for change.

But this does not mean that the new CAP will be shorn of environment - and climate-related rules connected to support payments.

A proposed new system of "conditionality" will draw on the most relevant aspects of cross-compliance and green direct payments. An extension of the scope is envisaged. This would lead to adding new requirements, for instance a ban on converting or ploughing wetlands or peatlands to protect carbon-rich soils, the use by farmers of a Farm Sustainability Tool for Nutrients that would reduce ammonia and N_2O emissions, with reduced nutrient leaching and run-off expected to improve water quality.⁵⁰

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The situation with respect to the Water Framework Directive will be further assessed based upon the forthcoming Commission report on the implementation status of this Directive.

Other requirements could be more demanding than at present (e.g. crop rotation instead of crop diversification, which would bring multiple benefits such as helping replenish nitrogen in soil, reducing erosion, increasing the water infiltration capacity of the soil and preventing weeds - thus reducing pesticide use; ban on converting or ploughing any permanent grassland in Natura 2000 areas to preserve biodiversity and maintain carbon stocks).

The scope and definition of the elements included will ensure a solid foundation for a positive influence of the CAP on the environment and climate – especially as MS' planned implementation of conditionality will be assessed and approved in CAP strategic plans. But the level of prescriptiveness in EU legislation will be below that of green direct payments (i.e. with basic descriptions of the practices concerned, leaving MS to propose the details of implementation), giving MS sufficient flexibility to take into account the wide diversity of farming conditions across the EU.

This flexibility is essential for MS to meet their targets. In this respect, MS would also be able to deploy **voluntary** interventions promoting the provision of environmental and climate public goods, going beyond business as usual. In particular a new intervention is proposed under pillar I, the eco-scheme, aimed at enhancing the environmental and climate performance of the CAP, going beyond the basic conditionality. Additional commitments can be further supported under rural development (pillar II).

Chart 2 illustrates the changes proposed in the "green architecture" of the CAP. Enhancing current cross-compliance to a strengthened conditionality will work as a safeguard for related requirements stemming from EU legislation embedding statutory management requirements pertaining to public, animal and plant health (including relevant provisions of food law), as well as animal welfare, in addition to climate and environmental requirements.

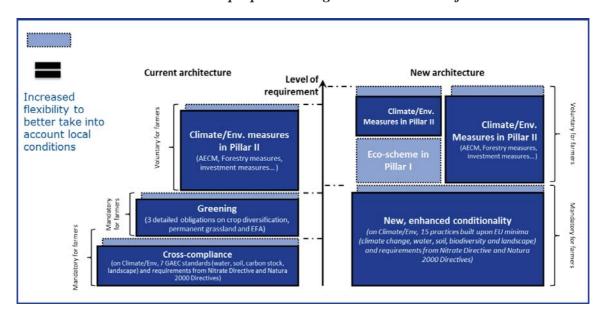


Chart 2. Current and proposed new green architecture of the CAP

Conditionality also ensures that **direct payments** continue to serve several objectives (economic, climate and environmental, social). Their integration into strategic planning will further strengthen the linkage between needs, types of intervention and results. This new EU framework will still include some basic requirements, needed to ensure a level playing field, but it will enable MS to better target the implementation of direct payments according to needs.

The **types of intervention** which may be funded through CAP strategic plans will remain broadly like those available today – with possible amendments - and will be laid down in CAP legislation but bundled into broader categories (with fewer rules attached, as already indicated). In the following Box 3, a non-exhaustive list of such interventions is presented.

Box 3. Broad CAP interventions considered under the new delivery model

Interventions generally funded under pillar I

- decoupled direct payments;
- *voluntary coupled support;*
- new approaches for the environment and climate voluntary for MS and farmers (e.g. eco-schemes, top-ups);
- some sectorial programmes;

Interventions generally funded under pillar II

- payments related to constraints (i.e. payments in areas facing natural constraints

 ANCs as well as payments related to the Natura Directives⁵¹ and the Water Framework Directive⁵²);
- (area- and animal-based) payments for voluntary management commitments;
- *support for investments of various kinds;*
- support for business development (including for farmers setting up for the first time);
- risk management tools;
- *support for co-operation (including innovation and the Leader approach);*
- support for building human capital (training, other knowledge transfer etc.).

The approach of steering policy design and implementation through plans rather than through compliance with detailed EU rules will mark a bigger change for pillar I rather than pillar II, as the new "planning" process for both pillars will have elements in common with the process for drawing up and implementing rural development programmes in the current period.

European Parliament and Council Directive 2000/60/EC of 23 October 2000 establishing a framework for Community action in the field of water policy.

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European Council (1992) Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora and European Parliament and Council Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds.

To summarise these main changes:

- **Objectives**: are streamlined into a limited number of general and specific objectives, applying to both pillars of the CAP.
- **Interventions**: the essence will remain the same but there will be a reorganisation. Current "measures" will be bundled into broader "types of intervention". More significantly, the number and detail of related EU rules will be cut back to what is strictly needed at EU level to ensure level playing field.
- CAP Plan: Member States will submit a single strategic document for both CAP pillars for their entire territory. However, where elements of the CAP Strategic Plan are established at regional level, the Member State will ensure the coherence and the consistency with the elements of the CAP Strategic Plan established at national level.
- **Length of plans/programmes**: the intention is that CAP strategic plans will contain less detail than current rural development programmes though enough to judge whether MS are presenting a credible approach to meeting the objectives.
- Factual basis for designing plans/programmes: the obligation to base future CAP strategic plans on sound evidence will not mark a theoretical change from what should happen with current rural development programmes. However, a new policy period offers a chance to correct some cases of poor application of this principle. For pillar I, this implies moving from notifications to planning (MS must integrate interventions into their strategic analysis and plan, Commission must approve).
- **Reporting**: instead of annual notifications and implementation reports, annual performance reports will focus on outputs and results, with common indicators.
- **Technical assistance and networks** will be extended to cover both pillars.

In view of the large number of beneficiaries from CAP support, **shared management** remains the main implementation mode for the major part of the policy. Shared management provides for the possibility to establish tailor made instruments which take into account the envisaged geographical distribution.

The existing **CAP** governance bodies set up in the Member States, notably the paying agencies and certification bodies, have shown their effectiveness in protecting the EU budget and ensuring sound financial management and reasonable assurance. The new CAP delivery model acknowledges this situation by conferring more **flexibility** to Member States in deciding and managing the control systems in place. Changes in the **assurance** framework are explained in Annex 4.

The new delivery model for the CAP will involve a shift from compliance towards results and performance and a **new distribution** of responsibilities between the EU and Member States, involving substantial changes at three different levels:

1) A multi-annual programming approach that will cover the two pillars of the CAP (direct payments, sectorial strategies under the current CMO and rural development), based on a common set of objectives, indicators and a common catalogue of broad types of interventions.

- 2) A new system of monitoring and steering policy implementation
- 3) An adapted approach to get assurance and perform audit

This policy shift comes with challenges and risks that are analysed in great detail in Annexes 4 and 5. The related safeguards to minimise these are further analysed in section 4 below. Section 5 outlines changes considered in the Common Monitoring and Evaluation Framework to improve performance reporting. These various checks and balances of the policy cycle are summarised in Chart 3.

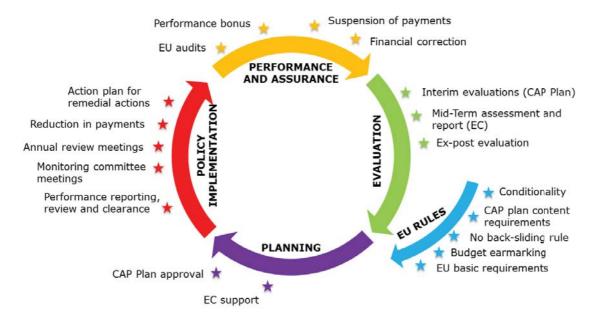


Chart 3. The checks and balances of the policy cycle

The funding mechanisms should remain mainly **grants**, mixed with financial instruments in the EAFRD as currently. Financial instruments may be used independently or in combination with grants. On CAP plan level they may contribute with additional financing in particular for revenue generating projects. The use of financial instruments under Rural Development is to be further encouraged in the next MFF as access to capital for the sector differs very much between MS. A limiting factor for further use of financial instruments is the lack of experience of the MS authorities. Specific actions under technical assistance will also be necessary in future to facilitate the implementation. Furthermore, the preparation and programming of financial instruments needs to be simplified.

3.4. Types of action to be prioritised

For the sake of preserving the balance across the dimensions of sustainable development, all the objectives identified in section 2 do matter. However, within their CAP strategic plans MS will respond to the EU objectives in ways which reflect the analysis of their situation and needs. A wealth of evidence drawing on the experience of implementing the CAP over many years points to a need for various types of support through the CAP – along the lines of those described in section 3.3.

The best way to meet the CAP's objectives is to strike the right balance between common rules established at EU level and flexibility granted to MS in selecting broad intervention types and designing measures within this framework. In such a way MS can better prioritise the appropriate interventions to address the objectives considering the economic, environmental and social conditions prevailing on their respective territories.

In the proposed future CAP, MS will address potential difficulties in the choices which they make (within CAP strategic plans) about how to allocate funding on their territory to achieve objectives. The easiness or difficulty of this exercise depends partly on available funding.

Significant involvement and oversight from the Commission will ensure a level-playing field with common requirements, for instance on conditionality, indicators and minimum target setting and accountability (see section 5). In the areas of the environment and climate it emerged that, although voluntary tools have a very large role to play, they need to be complemented by a certain level of "mandatory" standards, especially (but not only) regarding domains in which there is no EU legislation but nevertheless commitments for action, such as that of soil. 53

Options testing various degrees of emphasis on EU objectives/broad interventions are assessed in the next section.

4. DELIVERY MECHANISMS OF THE INTENDED FUNDING

Options were designed to test how EU objectives can be best met (Table 2 in section 2), while reflecting broad ideas of the ongoing public debate, i.e. better **targeting** of payments, increased **environmental and climate ambition** and fostering of **modernisation** and **simplification**. In addition, the **greater subsidiarity** given to MS under the new delivery model to plan CAP interventions against EU objectives and to shift from compliance to performance is assessed. This section summarises the options tested in this impact assessment and presents key impacts that would result from a shift in priorities to address EU objectives (more details are available in Annex 5).

4.1. Which options are assessed?

The baseline for the period post 2020 takes into account the fully phased-in envelopes by MS and the distribution between direct payments and rural development as currently in place (i.e. after applying the flexibility between pillars). A "post-Brexit baseline" for the EU-27 deducting UK pre-allocated envelopes and related contributions was developed.

The overall budgetary envelopes for options were determined by assuming that the withdrawal of the UK would translate into an 8.9% reduction in CAP budget. In this assessment, the budget for market measures is kept unchanged as their share in total CAP support is now very small (reaching 5% of the total CAP budget).

EU soil thematic strategy aiming at protecting soils and preventing soil degradation, SDGs, FAO voluntary guidelines for soil sustainable management.

With these instruments offering limited possibilities for cuts since they perform an essential role in times of price declines, in particular as safety net, a higher cut for direct payments (-10%) was simulated instead. Since options tested in this impact assessment could not prejudge the next Multiannual Financial Framework (MFF), they did not include assumptions on EU resources and kept the distribution of envelopes between MS unchanged. Specifications about proposals tabled by the Commission for the future MFF can be found in the summary section (4.2.7).

Since MS potential choices in their future **CAP Strategic Plans** are not known, options should be interpreted as illustrative of different ways to achieve these objectives, more particularly in terms of environment-climate performance as well as for targeting and redistributing support. Because of this design, **options are not mutually exclusive**, **and results should not be interpreted as indicative of a preferred option**. Sub-options were defined to reflect the degree of **subsidiarity** left for MS under the new delivery model and possible differences in the level of ambition in the environmental and climate priorities of MS, as these are the areas where most uncertainty exists about these possible differences. Both voluntary and mandatory (conditionality) approaches were tested to achieve higher environmental sustainability (insights on behavioural differences for those approaches summarised in Annex 8).

To ensure an increase in environmental and climate ambition, a new basic conditionality is proposed; it includes some additional minimum requirements going beyond the current cross-compliance rules (as explained in section 3.3). While the Commission reaffirmed the need to enhance the environmental and climate ambition, this new conditionality applies to all options with different ways of articulating with voluntary measures. (see 4.2.2).

4.1.1. Policy options⁵⁴

All assessed options assume the 2013 CAP reform fully implemented and 2030 market environment as described in the EU agricultural Outlook,⁵⁵ with a value of production increasing on average by 2 % per year in nominal terms, i.e. almost stagnating in real terms and subject to risks of output variability. The initial baseline was updated to incorporate the post-Brexit budgetary envelopes.

Option 3 (incentives for environment, climate action and health) tests the potential of a voluntary eco-scheme to increase environmental sustainability. It also examines the potential role of risk management tools with lower direct payments in supporting farmers' income. Two sub-options reflect different MS environmental ambitions and approaches to direct payments:

- Option 3a: Stronger priority on environment than on economic sustainability
- Option 3b: Lower environmental ambition than in 3a, but greater focus on direct payments redistribution.

Initially, an Option 2 was developed to assess the value-added of the CAP (for more details see footnote 46), but this option was not retained in this impact assessment as phasing out CAP would not be in line with the Treaty obligations. However, to avoid confusion, the original numbering of options was kept as in the inception impact assessment.

EU Agricultural outlook for the agricultural markets and income 2017-2030.

In **option 4** (**jointly address environmental and economic sustainability**), direct payments are better targeted and the implementation of conditionality is more ambitious in order to improve the joint economic and environmental performance of the CAP, as well as address climate challenges. Sub-options are also developed to illustrate possible differences in MS ambition regarding environmental targets.

- Option 4a: Environmental and climate ambition addressed via higher requirements exceeding basic conditionality
- Option 4b: No requirements beyond basic conditionality (already more ambitious than currently).

Option 5 (focus on small farms and the environment) places strong emphasis on environmental care and employment – and shifts the focus on small and medium size farmers to keep jobs in rural areas. MS are obliged to allocate 30% of pillar I payments to provide top ups for four schemes that would be voluntary for farmers, organic farming, permanent grassland, Areas with Natural Constraints (ANC) and linear landscape elements. This ring-fencing obligation would further encourage climate action and sustainable management of natural resources.

4.2. Assessment of the analysed options

Chart 4 summarises the elements included in the analysed options and sub- options.

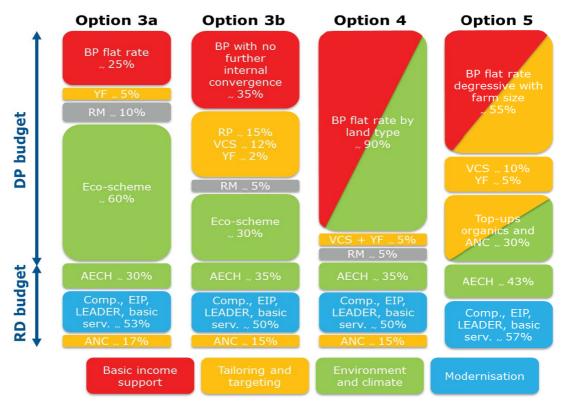


Chart 4. Summary of main assumptions for IA options⁵⁶

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See Tables 1.1 and 1.2 in Annex 5.

Note: The above allocation of funds to different policy interventions in the various options is purely based on assumptions for purposes of analysis and is in no-way indicative of preference of a specific option. Some differences were on purpose made wide so that differential impacts could be better assessed. Options 4a and 4b are similar in terms of direct payments.

Interventions: BP= Basic Payment, RP= Redistributive Payment, YF= Young Farmers, RM= Risk Management, AECH = Agri-Environmental-Climate and Health, VCS= Voluntary Coupled Support, Comp= Competitiveness, EIP= European Innovation Partnership, ANC= Areas with natural constraints.

The different budget allocations and interventions were translated into more detailed schemes and payment levels for modelling purposes. Some environmental requirements were selected in view of their modelling feasibility for the purpose of testing the options. In particular, a number of requirements considered under the new conditionality could be assessed (crop rotation, winter soil cover, nutrient management, minimum share of area devoted to non-productive features, restrictions on permanent grassland...).

These were applied at farm level, regional or national level depending on the model used and results could be aggregated at EU level. More explanations on what was precisely modelled in this impact assessment can be found in Annex 5.1. In addition, to cover the items which are not sufficiently captured by the models, and to summarize the impact of the options vis-à-vis the baseline, Multi-criteria Analysis, including an extensive literature review, was used (See Annex 5.2).

4.2.1. Impact on farm income

The **role of direct payments in stabilising farm income** is generally recognised, but both the Communication on the Future of Food and Farming and the MFF related documents called for a more balanced distribution of support. This possibility was further explored across the various options in three ways: a compulsory capping of direct payments, degressive payments as a way of reducing the support for larger farms, and with enhanced focus on a redistributive payment in order to be able to provide support in a targeted manner e.g. to small-medium sized farms.

A different focus on environmental and climate payments also affects the distribution of support, and thus income. In option 3 basic payments are significantly reduced and support is targeted towards a new voluntary eco-scheme; option 3a is more environmentally ambitious, but entails no further redistribution of support (as direct payments are reduced), while option 3b is less environmentally ambitious, but combined with more redistribution, capping and coupled support. Option 4 tests jointness by coupling direct income support with extra environmental requirements, while also redistributing towards permanent grassland; the latter is associated with lower incomes. Option 5 targets small and medium size farms.

A note of caution is necessary about the interpretation of results. In this analysis, farm income decline is overestimated, as the model used does not account for structural change, iterative price feedbacks and longer term benefits due to changes in production systems. Nonetheless, the analysis gives an accurate indication of the relative performance of the various options in the short-term, as well as of the expected impact on different farm types and sectors.

Cumulating budget cuts, redistribution and higher requirements weighs on the scoring of options

The quantitative assessment of income impacts (see Table 3) shows that the baseline pre-Brexit outperforms all options (given the higher budget). The baseline post-Brexit (which implies a linear cut) already has a significant impact on income in some sectors (Graph 1). In addition to the **budget reduction**, **alternative allocations** (e.g. towards risk management), **redistribution of support** (e.g. towards small farms and regionalisation) **and the additional environmental requirements in the options bear on the final impact** of options on average EU income level.

Table 3. Impact of policy options on EU average farm income

Relative to baseline pre-Brexit			Relative to baseline post-Brexit				
	Post Brexit	3a	3b	4a	4b	5	
Direct payments	-10%	-75%	-40%	-6%	-6%	-26%	
Total support	-10%	-11%	-7%	-4%	-4%	-6%	
Income	-2%	-10%	-5%	-8%	-5%	-5%	

Note: Direct payments include BP, RP, YF, VCS; Total support includes Direct payments, eco-schemes and ANC. Source: JRC, IFM-CAP

Compared to the post-Brexit baseline, farm income declines on average by 5% in option 3b, 4b and 5; the decline in options 3a and 4a is higher, 10% and 8% respectively. The latter difference is explained by the very low basic payment in option 3a as budget is devoted to other measures. When adding other criteria, such as targeting smaller farms and farms with lower incomes, option 5 outperforms the other options in terms of income distribution. However, this result is also conditional to the fact that the total level of support (EU and national) is maintained in **areas with natural constraints** (**ANC**). ⁵⁷

Sectorial impacts differ and are substantial (Graph 1 and 2). The **cut in direct payments** (baseline post-Brexit and option 3) has a strong effect on cattle, crop, sheep and olive producers because direct payments represent a large share of their income. In addition, cattle and sheep sectors, where significant **coupled support** is currently granted, are by definition more affected when coupled support is removed (option 3a).

Furthermore, the stronger the link to high historic references the higher the income drop due to the **regionalisation** of the basic payment (flat rate) and to **capping** (options 3a and 4). This is typically the case for olive growers, intensive livestock and cereal producers. The **redistribution of support to smaller farms** (options 3b and 5) leads to higher income drops for larger farms (mostly cereal producers and extensive livestock farms), while olive growers (on average 65% smaller than the average EU farm) benefit from this redistribution.

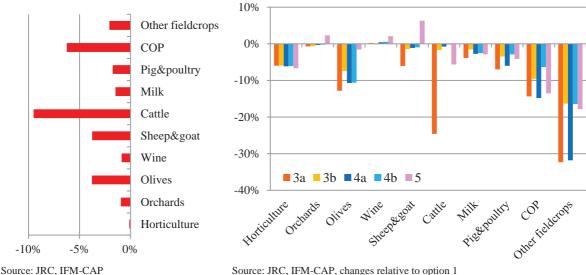
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In this simulation, total ANC support (EU and national) was maintained in all options, including in option 5 where ANC support is granted in pillar I via a top-up at fixed level. This level is below the current level of EU and national support in several MS. It was assumed that the gap was bridged with national funds. However, this co-financing of pillar I interventions is unlikely.

By contrast, the **redistribution of support to permanent grassland** benefits to extensive systems (option 4 and 5). Finally, the **higher requirements to increase environmental performance** have a bigger impact on crop producers; a 3 year rotation affects particularly sugar beet and potato producers.

Graph 1. Impact of a 10% linear cut in support on EU income by type of farming

Graph 2. Impact of a shift in priorities applying on top of a support cut on EU income by type of farming



Impact on income depends on choice of target

The *quantitative analysis* shows that targeting **small and medium size farms** can be best achieved with **decoupled payments modulated by size** (combining both degressivity of payments by size and capping). However, this redistribution results in undesired effects: a strong reduction in support for very large farms (more than 500 ha, employing 20 persons on average), an increase in basic payments for more intensive farms (smaller on average, selecting products with higher returns), as well as a decline of support to most extensive farmers.

Therefore, in option 5, whose support redistribution is based on such a mechanism, the latter effect can partly be compensated with coupled support to extensive livestock systems and top-ups to permanent grassland. Granting a redistributive payment (top-up on first hectares of the farm, as applied in option 3b) is another possibility to redirect support to small-and medium-sized farms, while limiting undesired effects of a payment modulated by size.

Coupled support, if not well tailored, can lead to unfair competition and affect the EU level playing field. In addition, contrary to decoupled payments and pillar II support, it hampers productivity gains. However, it can address specific issues that the decoupled payment would otherwise leave unresolved. Coupled support could be limited and granted to sectors identified by MS as undergoing certain difficulties, in line with the EU legislative framework.

Targeting EU support to environmental benefits via top-ups to permanent grassland, organic farming and biodiversity-enhancing elements could be envisaged by MS in their CAP strategic plans (option 5). However, the analysis shows the difficulties linked to obliging MS to have the same share of pillar I envelope to be dedicated to these top-ups and ANC due to significant differences in these features across MS.

Capping direct payments per farm can address concerns about the high level of support received by few large beneficiaries. However, a correction for salaries paid could be considered since often these large farms provide a large number of jobs, all the more since they are mainly located in central Europe where income levels are lower. In the absence of further convergence of direct payment level (option 3b), capping per hectare (proportional to the national or regional average payment) could limit differences in support between farmers. However, this will have more negative effects on Southern MS and on certain sectors (e.g. olive oil, cattle).

In addition, the introduction of a capping with the objective to create savings could go against cohesion and convergence, concentrating the burden on a few MS (notably BG and RO, which one would expect on the contrary to benefit from convergence). By contrast, it could be envisaged to redistribute the capped amount to smaller beneficiaries. Finally, lower available budget and shifts in priorities as well as possible reductions in direct payment imply potentially lower capped amounts.

Overall, *quantitative analysis* demonstrates that the most effective way to achieve a **reduction in support concentration** is to modulate decoupled payments by size (e.g. by classes of hectares as included in option 5) and, second, to introduce a redistributive payment.

In mountain areas, farmers' income is nearly 40% below the income of farms located outside **areas with natural constraints** (ANC), and in other ANCs the income is more than 30% lower. Any cut in this support might threaten the viability of farms in ANC, which have a key role for the vitality of rural areas and for the provision of environmental services. This result is also supported by findings of the recent World Bank study, which shows that the CAP contributes significantly to poverty reduction in rural areas. This is why maintaining support to ANCs is key, even when other interventions are cut. Thus, for MS with large ANC area, it is better to keep ANC payments in pillar II, where co-financing allows granting higher support, while keeping EU funds to address other challenges. In addition, income disparity between ANCs and outside ANCs can be reduced with a redistribution of support to permanent grassland (options 4 and 5) and increasing support to ANCs.

4.2.2. Impact on higher environmental and climate ambition

The higher ambition of the new CAP in terms of environmental sustainability is reflected in an **increase of minimum green requirements** of the new conditionality applying in all options. These green requirements, applying in the whole EU, go beyond the current cross-compliance rules and account for current greening provisions while overcoming some drawbacks in its implementation identified in previous analyses. In addition, the removal of exemptions automatically broadens the area covered by conditionality.

Beyond these minimum requirements, MS would have the possibility to define **stricter conditionality** requirements and opt for **voluntary schemes**, via an **eco-scheme** or via **agri-environment**, **climate action and health interventions** (AECH). Moreover, the assumed budget allocation to AECH, EIP and FAS is another determining factor partly explaining the difference in the environmental performance of the various options.

Voluntary schemes come with more uncertainty

From the Multi-Criteria Analysis (MCA), which combines a *qualitative assessment* with elements from the *quantitative assessment*, it emerges that the more **ambitious environmental schemes** (options 3a and 4a) **perform best in terms of addressing environmental and climate ambition**.

The MCA also finds that **the overall environmental outcome** depends on the **uncertainty** surrounding the coverage and implementation of measures by MS. An approach based on ambitious **conditionality** (option 4a) seems to be more effective than a voluntary approach as it is easier to control and it avoids annual budget swings. Most importantly, it **ensures the engagement of all farmers**: conditionality works as a **safeguard** to enforce the law and any additional requirements set at EU or MS level. ⁵⁹

Furthermore, enhanced conditionality could perform better where there is no existing regulation in place (e.g. for soil) or if the issue is of general concern (e.g. climate change). As enhanced conditionality needs to apply to all farmers concerned, it will be necessarily less demanding/targeted compared to the eco-scheme. Option 5 also scores high on environmental outcomes as it combines both conditionality and environmentally targeted top-ups. But the effect of these top-ups is not uniform across MS, as highlighted in the previous section, because of the significant differences in features across MS, such as permanent grassland and organic area.

A voluntary eco-scheme is more effective in the case of hot spot problems as it can better target the desired **environmental outcome**. Typically under a voluntary eco-scheme, those already performing well will sign up, while those lagging behind will hesitate to engage if the provided incentive is not high enough, all the more as the economic incentive remains key for farmers to change practices (see Annex 8 on behavioural insights).

Thus, in order to stimulate ambitious environmental and climate choices, additional safeguards (e.g. target setting or budget earmarking) would be needed. The approval of CAP plans by the Commission will serve as a first safeguard to ensure sufficient ambition is translated into adequate targets and financial means, while performance reporting, and incentives for performance, will bring MS to follow up on their ambition.

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AECH include the agri-environment-climate measures as well as the support to organic, Natura 2000, water framework directive payments, animal welfare, forestry and non-productive investments.

Farmers face a possible reduction of their CAP support if they do not comply with these requirements.

All analysed options show potential for climate and environmental gains

Previous analysis shows that there is a need to give an **incentive to farmers** in order to reduce GHG emissions. The EcAMPA project showed that, in the absence of a compulsory emission reduction target for agriculture, a subsidy covering 80% of the costs of mitigation technologies, could deliver significant non-CO₂ emission reductions, with little negative impact on EU production.

However, a widespread adoption of these practices by farmers would come with considerable budgetary and unitary costs and imply substantial incentives. The fact that such incentives are not explicitly included in the present analysis (also because of its budget-neutral assumption) explains why only small **reductions in** non CO₂ **emissions** compared to baseline are reached in this assessment.

In the present *quantitative assessment*, the main driver for the reduction in N_20 emissions is the introduction of a **farm sustainability tool for nutrients with reduction targets of N-surplus**. Close to 60% of the total reduction in GHG emissions is achieved via mitigation technologies in option 4a, while it is around 25%-45% in the other options. The major part of the reduction is due to precision farming and the use of nitrification inhibitors out of four farming practices modelled.

However, the positive effect of a reduction in GHG emissions is partly offset by leakage of emissions to other parts of the world. This effect is the strongest in option 3a due to the strong decline of EU beef production replaced by imports from less efficient regions in terms of GHG emissions/kg of product. The *qualitative assessment* considered that the main factors to reduce non-CO₂ emissions are policy measures that impact on cattle numbers and fertiliser use (included in options 3a, 4a and 5); not all such measures could be modelled in this exercise.

The analysis assumes that the minimum conditionality requirement to **maintain** the share of **permanent grassland** in UAA and the redistribution of support towards permanent grassland (option 4 and 5) both favour the **preservation and sequestration of carbon**, and therefore reduce CO₂ emissions. This might also lead to the maintenance of animal numbers, but the net impact on emissions is always difficult to assess. The protection of wetlands and peatlands under basic conditionality in all options is clearly seen as an improvement compared to current policy as it preserves or restores the large existing carbon pool.

The assessment explored how the introduction of **farm sustainability tool for nutrients** combined with nutrient reduction targets could contribute to **improve water quality**, concentrating the analysis on nitrogen and introducing reduction targets, differentiated by regions according to their N surplus and to the possibility they have to trade manure.

The imposed reduction targets were met with an average reduction for the EU of close to 4% of N-surplus in the most constraining scenario. Farmers take advantage of more N-efficient technologies and are reducing significantly the use of mineral fertiliser, by 1.5% (option 3b) to 5% (options 3a and 4a).

The analysis shows that **cover crops can potentially reduce soil erosion** on arable land by 15% and on permanent crops by 30% with a cover rate at 75% in the EU. They can also produce additional biomass for energy (e.g. biogas) and non-energy uses, without land use competition (although these impacts were not assessed in the model simulations). However, soil cover is not systematically used by farmers and not sufficient to decrease soil erosion. Therefore, the winter soil cover requirement would need to be combined with other measures e.g. crop rotation, in order to reduce erosion to acceptable levels in all MS. Crop rotation obligation leads notably to a decline in grain maize and durum wheat area, which are more often cultivated in monoculture.

The simulated obligation to dedicate 3% of the UAA to non-productive elements such as set aside, fallow land, linear elements and afforested area is binding in several MS (and thus for many farmers) and should contribute positively to improving **biodiversity**.

This IA shows the efficiency of some specific requirements in addressing challenges. Within the EU legislative framework, based on the analysis to draw their strategic plans, MS should select the most relevant interventions and requirements to address local and national needs.

> 4.2.3. Strong CAP needed to address societal expectations on food and health

As stated during the public consultation and in the Communication on the Future of food and farming, the CAP is expected to respond better to consumer demands on food and health. Related societal expectations stretch over various food-related aspects such as food security, safety and quality, affordability of food, health issues such as pesticide load and antimicrobial resistance, food waste and agricultural losses as well as responding and anticipating to changing demands. These issues are covered across several of the objectives against which the different options are tested⁶⁰.

Regarding **food security**, the Scenar 2030 study ⁶¹ clearly shows the negative impact of removing the CAP on EU production and trade balance. In addition to the overall level of production (-6%), the impact on its localisation needs to be considered (concentration in most productive areas, abandonment elsewhere). For the other options tested in this Impact Assessment, the quantitative analysis⁶² shows a predominantly negative effect on the EU's net trade balance due to the increased environmental climate requirements, the redistribution of support and the budget cut.

The impact on **food safety** is not assessed as it is part of the basic requirements and should be ensured in all options. On top, advances in reduction of pesticide load and antimicrobial resistance are analysed for the different options in the qualitative part under the environmental objective.

Reference see footnote 47.

Annex 5 p73 and onwards.

⁶² Annex 5 p.25, Table 2.10. Also in the qualitative part (Annex 5 p. 48-49) the impact of the policy options on trade is assessed, with broadly similar conclusions.

The many **societal expectations on food and health** touch upon several economic, social and environmental objectives. None of the tested options achieves best scores on all items, hence the interest of complementary approaches. As an example, to quickly transmit consumer demands to farmers, the policy should not blur market signals (e.g. through excessive use of coupled support), provide for a well-functioning advisory system, create synergies along the value chain (e.g. by organising farmers in producer organisations) while also leaving room for short supply chains. Food waste and agricultural losses can be reduced by stimulating efficiency gains (through advice, extension and investment support) and further embedding agriculture in the bio-economy (innovation, investment on farms and in rural areas).

4.2.4. Assessing how options address specific objectives

From the *quantitative analysis* it becomes clear that budget cuts together with changes in income support and higher environmental ambition have strong negative effects on farmers' income, with a **decline of overall farm income** in the options compared to the baseline. CAP support is crucial in reducing the income gap between agricultural income and other economic sectors and between Member States and regions.

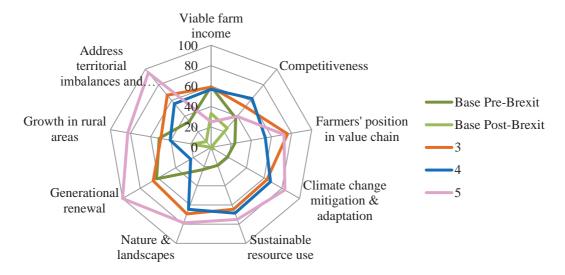
The analysis further shows that budget cuts have strong negative effects on farms viability for cattle, sheep and cereal producers, sectors for which direct payments represent a large share of income. A re-allocation of support to production systems contributing to environmental sustainability, notably through coupled support to extensive livestock production systems and redistribution of support to permanent grassland, can attenuate their drop in income.

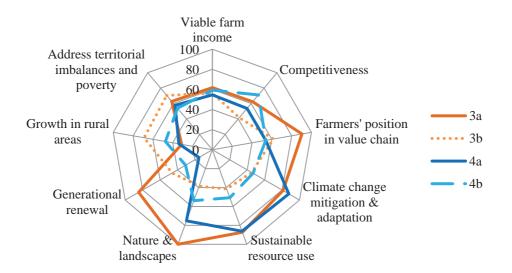
The *qualitative assessment* on its turn shows that none of the options come close to the theoretical maximum (100), so combining the strong points of the different option designs will further increase the performance (Graph 3). In general, the policy compensates for the provision of public goods, which are not sufficiently rewarded by the market, resulting in better scores on the environmental and social objectives.

From the analysis, several **trade-offs** emerge. Enhancing the environmental and climatic performance of the CAP will contribute to preserve natural resources (e.g. the soil) to **produce in a more sustainable way**; over the medium and long term, this is expected to have **positive effects on productivity**. However in the short term, it could come at an economic cost for farmers and the agri-food sector.

In particular, the extended requirements considered under the new conditionality (e.g. obligation to dedicate more land to non-productive elements, land re-allocation to fulfil crop rotation and cover crop costs) lead to a significant decline in cereal area in favour of set aside and fallow land, and thus to a decline in market revenue of arable crop producers as well as to a deterioration of the EU trade balance. Approaches supporting the **shift towards different production systems and new technologies are necessary to smoothen the impact on farm income and food security**.

Graph 3. Effectiveness of the options towards the policy objectives (details for sub-options a and b below)





Also from options comparison, **potential trade-offs** between policy objectives emerge. This is for example clear for sub-options 4a and 4b, with 4a scoring better on **environmental** objectives, while 4b scores better on **economic** objectives, as it is less environmentally demanding. From a pure economic point of view option 3a performs best because the stronger reduction in the basic payment is supposed to trigger faster structural change, making the agricultural sector, after an abrupt transition, more efficient and resilient (for example by using more risk management tools). This comes at the detriment of the **social** (and potentially environmental) dimension, as fewer farms will survive. By contrast, option 5 contributes greatly towards social objectives but attains a lower score on the **economic** objectives. As explained in Annex 5, according to the Multi-Criteria Analysis, its strong focus on small farms is hampering structural change driven by economies of scale.

Regarding **consumers' demands on food and health**, the (sub-) options scoring better on price and economic efficiency underperform somewhat with respect to contributing to **healthier lifestyles and sustainable use of pesticides and antibiotics**. So also here there is a trade-off between **higher priced food** with higher environmental and health quality attributes versus lower priced food.

A transfer of funding from direct payments to **risk management tools** could potentially help farmers facing income variability. Risk management tools should be seen in combination with the direct payments and market measures that also provide a buffer against volatility. As shown in Annex 5, compensating income drop via an income stabilisation tool for all EU farmers is very costly. 63 It would need to be targeted to those that are more frequently exposed to high income variability and have fewer alternative tools available (futures, insurances, etc.).

This targeting could drive support away from sectors where the main problem is the level of income rather than its variability, for which direct income support remains a better solution. Furthermore, there is no guarantee of uptake given the complexity of such tools and the need for farmers to get organised (e.g. to create mutual funds). ⁶⁴

Rendering the access to a possible agricultural **crisis reserve** conditional to the use of risk management tools at farm or sectorial level might result in penalising certain farm types, especially the most vulnerable and unprotected, not always in the best position to adopt risk management tools. In addition, it would generate deadweight losses as those who already receive compensation from their risk management schemes would also benefit from the crisis reserve. Finally, the heterogeneity of risks and tools related to price, income or climate makes compliance to conditionality difficult to assess at farm level.

4.2.5. Research and innovation can turn tensions into synergies

Agriculture research may deliver new insights which often remain confined to the scientific world only; also, the agricultural sector itself has a considerable and under-used innovation capacity. Overall, with take up of new knowledge and technology still rather slow, bridging the gap between research and farming practice is key.

The tensions identified in the previous sections between enhanced environmental ambition and viable farm income can be partly bridged and turned into synergies in a **well performing Agricultural Knowledge and Innovation System** (AKIS). Current technological advances offer an unprecedented opportunity to move toward modern farming - more sustainable, resilient, and productive, to a significant extent also based on EU advanced technologies (e.g. Copernicus). Nature-based solutions can also be further considered, and knowledge from their applications better spread. However besides advice, farmers need support to adopt innovation, as the positive effect on income comes after several years and some environmental requirements will lead to lower returns, at least in the short/ medium term.

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The average annual cost of an IST for all EU farmers was estimated close to the current pillar II budget.
See footnotes 17 and 19.

The basis for enabling an innovation environment is a well-functioning AKIS, where the actors and potential partners in innovation projects can meet and discuss the main challenges, and be fed with innovative knowledge. The efficiency and effectiveness of advisory services can best be upgraded by improving their connections within the AKIS and sharing knowledge and innovative applications more intensively.

Enhancing interactive innovation is essential to develop solutions which are more ready to be applied in practice and cover real needs. Supporting digital transition in agriculture is needed to make sure the potential of digital technologies is fully realized.

All options score significantly better in this area, especially compared to the baseline post-Brexit. The CAP plans should include a strategic approach towards modernisation, which will be followed up in the performance reporting. Experts consider that most significant impact on this objective is to be expected from the EIP, hence its budget allocation is significantly increased in the alternative options. Other instruments, such as the young farmer payment, or additional budget for competitiveness or infrastructure and services, are also important to facilitate innovation uptake.

A digital farm dossier, as well as organising the data gathering and sharing through the whole supply chain can lead to the simplification of the CAP administration, monitoring and management systems; together with the building of efficient learning networks useful for cross-policies implementations. (Additional insights are available in Annex 6)

4.2.6. Synergies from greater flexibility and focus on performance

Annex 7 assesses the **simplification** under the new delivery model, driven by the shift towards performance and a streamlined CAP implementation approach. Simplification of programming and notification procedures, better adaptation to local needs and better coordination of the actions of the two pillars can reduce administrative burden and can also improve the acceptance of the CAP.

Higher **policy coherence** could also result in simplification for administrations and farmers alike.⁶⁵

Less prescriptive EU compliance elements and less detail for measures and eligibility rules would allow economies of scale for checks and reduce burden for planning and applications as less time would be required for familiarising with information obligations. Performance-orientation allows putting less emphasis on ex-ante checks, reducing further administrative burden for applications (less evidence to collect/submit) and for administrative checks (less evidence to check). Cutting down on EU requirements also provides for simplification of audits performed by the Commission.

Option 4 holds potential for improved performance with **reduced administrative burden** because of the lower uncertainty of conditionality compared to eco-schemes, which are dependent on their uptake by farmers. High potential reduction in administrative burden stems from the lower variety and complexity in the schemes taken

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European Commission (2018) <u>Annex</u> to the Communication on the Multiannual Financial Framework for 2021-2027 COMM (2018) 321 final, P. 54

up by MS, which simplifies administrative processes at all levels. While orientation towards performance is assessed as comparable for options 3 and 5, uncertainties in simplification derive from the divergences in ambition and related interventions, and how these translate into the administrative processes. With regard to proportionality of administrative burden options 3a and 5 score best, due to their higher effectiveness. However, under greater subsidiarity, the development of national CAP Plans and the way administrations implement them at beneficiary level will strongly determine the resulting **simplification and performance**.

Safeguards and mitigating measures built into the policy cycle should guarantee that both are met. The **EU legislation** will include a number of safeguards for anticipation of risks such as imbalanced strategies, inadequate targeting or lack of ambition. Safeguards include requirements for content of CAP plans, more ambitious EU basic requirements (e.g. conditionality), a rule on no back-sliding/increased ambition, and budget earmarking.

The need to increase the environmental performance requires securing some **minimum** requirements (current cross-compliance plus greening) via conditionality. This was tested across all options, as their basic conditionality contained higher environmental requirements compared to the baseline. The comparison of the options indicates that setting minimum requirements works well. In option 4a, minimum requirements for environmental and climate action were set at a higher level, resulting in a better environmental performance compared to the baseline. At the same time, the level of prescriptiveness in EU legislation will be lower and MS will define the details of implementation of conditionality leading to simplification.

While ambition under measures like conditionality can bring some certainty on performance, enhanced incentives (some degree of **budget earmarking**, performance bonus) to performance could also be needed. As the comparison between option 3a and 3b shows, when more budget is allocated to the eco-scheme, the environmental and climate performance also improves.

Approval of CAP plans is thus an essential safeguard to assess the completeness, consistency, coherence and effective contribution to the CAP objectives of the national strategy. CAP plans should include elements related to simplification and reduced administrative burden for final beneficiaries. Synergies between economic, social and environmental objectives can be achieved from better targeting on local needs. Planning based on needs analysis allows for adequate targeting of measures to regional needs.

The **setting of targets** in the CAP plans is an important safeguard to monitor whether MS action is genuine and delivering on the ground. Appropriate attention should be paid to translating these targets at regional and beneficiary level. It is hence at planning stage that possible issues can be first detected, such as imbalances, incoherencies, lack of ambition and gold plating. The continuous and strengthened technical assistance from the Commission throughout the planning process can help for a better understanding of EU requirements in terms of planning and so avoiding delays at time of approval. The scope of the current network for rural development will be extended to the first pillar, to cover the whole CAP Plan.

The **annual performance review process** constitutes a further basis for detecting upcoming risks, such as issues with data quality or first signs of underperformance. In case of underperformance or deficiencies, the European Commission will be able to take **corrective actions** including the request to Member States for an action plan for remedial actions, suspension of payments and financial correction. Last but not least, timely evaluation will identify remaining issues, by assessing the effectiveness of the CAP and the realised administrative burden reduction, and allow taking on board lessons for the next MFF.

4.2.7. Summary of results in the context of the next MFF

The results of the present analysis point out that difficult trade-offs are inherent when the basic parameters of a policy addressing diverse objectives are significantly changed.

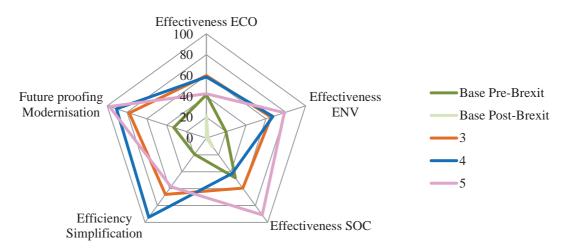
With respect to farm income, both the level and the distribution of support matter. Securing an adequate level of support and thus farm income remains a key element for the future, in order to ensure food security, environmental and climate ambition, as well as rural vitality. In a context of growing market uncertainties, there are limits in pushing the uptake of risk management tools, as they come at a significant cost and are not equally available and efficient in all sectors and regions. Moreover, **targeting support** to small and medium sized farms and areas with natural constraints can help keeping more jobs on farms and farming activity on the whole territory, hence strengthening the socioeconomic fabric. In addition, capping and degressivity can improve the distribution of direct payments. It is clear that any option that significantly redistributes direct payments towards farms and regions of lower productivity will, in the short-term, lead to a reduction of EU competitiveness, while it enhances the protection of environment.

Less clear, however, is the appropriate combination of measures that could mitigate negative income and competitiveness effects, while at the same time better addressing challenges that are also pertinent for agriculture - such as environment and climate, and **societal expectations**. This requires incentivising adjustments that improve both the economic as well as the environmental performance of the sector and its **modernisation**.

Contributions from the stakeholder consultation and analyses demonstrate that this is possible, provided that the necessary accompanying measures addressing a **higher environmental and climate action ambition** enable the adoption of best practices (in both conventional and other forms of farming) that include **knowledge**, **innovation** and the latest pertinent technology. In addition, as shown in various analyses, the economic incentive for farmers remains a key element to promote the uptake of these practices.

On the basis of the assumptions and choices made in the present analysis, Graph 4 below summarises the potential trade-offs in the achievement of economic, environmental and social objectives of the CAP, as well as with respect to its desired modernisation and simplification. In summary, redistribution could lead to manageable income impacts, and support the desired increased ambition of environmental and climate action and other **CAP synergies**. This, however, would require that the sector and the policy grasp the opportunities offered by innovation and technologies already allowing modernisation and simplification.

Other assumptions and choices would certainly alter this graph, but not its underlying message – that the preferred option for the future CAP should combine the most performing elements of the various options, but avoid their weaknesses by introducing the necessary safeguards to ensure an EU level-playing field. This implies the need for clear criteria for the level and the distribution of income support, the climate and environmental conditionality and overall ambition, the incentives for modernisation and the appropriate degree of subsidiarity/simplification.



Graph 4. Overall assessment of options performance towards policy objectives

On the basis of the assessment of all these options and combinations thereof, further specifications can be added on elements included in the **proposals for the next MFF** for the CAP (both under the May MFF Communication and the CAP legislative proposals):

- Cut in CAP budget: the cut of 5% proposed by the Commission is within the range assessed in this impact assessment, and appears moderate in the difficult context for the next MFF. While accounting for revealed MS preferences as regards transfers between pillars, options tested various combinations of allocations between broad interventions. This shows that the combined effect of the cut in budget, the redistribution of support and the emphasis put on environment and climate is significant. Distribution of support across broad interventions matters for achieving common objectives assigned to the CAP, hence the relevance of considering some degrees of earmarking/ring-fencing.
- External convergence: It is proposed that all MS with direct payments below 90% of the EU average will close 50% of the existing gap to 90%, in continuation of the process started in the period of 2014-2020. All MS above average will contribute to financing this external convergence of direct payments levels. It means that the envelopes distribution between MS proposed is somewhat different from the one used in this impact assessment. Further analysis confirmed that external convergence contributes to cohesion by reducing differences between MS.

- Capping or degressivity of direct payments will promote a more balanced distribution of support. As shown in the analysis, the impact of capping or degressivity should not be used to create savings and should remain budgetary neutral for MS. Therefore, it is proposed that the product of capping could be used to finance a redistribution of support to smaller farms within the same MS or potentially be transferred to pillar II. Within this impact assessment, capping was tested in all options, with a ceiling ranging between EUR 60 000 and 100 000. Moreover, the analysis pointed to the importance of taking into account labour cost when applying capping, to avoid negative effects on jobs. To further acknowledge family labour, related costs could also be taken into consideration, especially with a low ceiling.
- **Rural Development**: In line with other ESIF, it is proposed to increase the national co-financing rate for rural development by 10%. However, less developed regions should continue to benefit from higher EU co-financing rates. This should also apply to interventions of EU priority such as LEADER and the payments for Agri-Environment, Climate and Health.

• Higher level of environmental and climate ambition, thanks to safeguards:

- The strengthening of conditionality: the analysis showed that this works as a safeguard for ensuring observance of the requirements covered by the extended conditionality.
- o The introduction of voluntary eco-schemes in pillar I.
- The ring-fencing of a significant part of pillar II funding for environment and climate action.
- O Climate mainstreaming: in line with the Paris Agreement and the commitment to the United Nations Sustainable Development Goals, the Commission proposes to set a more ambitious goal for climate mainstreaming across all EU programmes, and thus the CAP, with a target of 25% of EU expenditure contributing to climate objectives. This should be seen together with ringfencing, as many interventions deliver win-win effects for both climate and environment.
- Market measures: against the background of budget cut and needs for external convergence, a limited reduction of pre-allocated amounts is proposed. On the other hand, the operation of the crisis management reserve is smoothened. Moreover, it is proposed to transfer part of the interventions currently undertaken under the Common Market Organisation (CMO) with sectorial programmes under the CAP Strategic Plans. This will enhance the coherence of sectorial interventions with the objectives of the CAP. Based on the effectiveness of existing programmes, it is proposed to extend this possibility to other sectors within a given budget allocation.
- **Crisis reserve**: A new agricultural reserve will be established in the EAGF, to provide additional support for the agricultural sector for the purpose of market management or stabilisation or in case of crises affecting the agricultural production or distribution.
- **Risk management:** Access to the crisis reserve will be conditional on the set-up of a risk management strategy at national level (not at farm-level). Risk management tools are to be included into the CAP strategic plans, and a platform will facilitate exchange of experience.

5. HOW WILL PERFORMANCE BE MONITORED AND EVALUATED?

A shift towards a more performance-oriented policy requires the establishment of a solid performance framework that, based on a set of common indicators, will allow the Commission to assess and monitor the performance of the policy.

The current **Common Monitoring and Evaluation Framework (CMEF)** and the current monitoring system of Direct Payments and Rural Development would be used as a basis for monitoring and assessing policy performance, but they will have to be streamlined and further developed (including consistency between the two pillars). Further investment into developing appropriate indicators and ensuring sufficient data streams would be needed.

A new **Performance Monitoring and Evaluation Framework (PMEF)** will cover all instruments of the future CAP: the CAP strategic plans as well as those elements of the CAP not covered by the CAP plans (some parts of the Common Markets Organisation, specific schemes). Performance would be measured in relation to the Specific Objectives of the policy by using a set of common indicators.

5.1. Experience from the current Common Monitoring and Evaluation Framework

5.1.1. Two different Monitoring and Evaluation approaches

The 2013 reform of the CAP established, for the first time, a monitoring and evaluation framework that would cover the whole CAP (both pillars). This framework has undergone some changes in terms of promoting simplification and coherence while still maintaining an in-depth coverage of policy interventions. The monitoring and evaluation framework for the CAP 2014–2020 is set out by EU regulations at different levels:

- The horizontal regulation (Regulation (EU) No 1306/2013, Article 110) establishes a common monitoring and evaluation framework with a view to measuring the performance of the CAP. It covers all instruments related to the monitoring and evaluation of CAP measures and in particular direct payments, market measures and rural development measures.
- More specifically, for pillar II (rural development), the monitoring and evaluation system is set out by: the common provisions regulation (Regulation (EU) No 1303/2013), which defines the common monitoring and evaluation elements for the European Structural and Investment Funds (ESIF); and the rural development regulation (Regulation (EU) No 1305/2013), which addresses the specificities for the rural development programmes.

In the current framework, the performance of the CAP measures is assessed in relation to the three general objectives of the current CAP (i.e. viable food production, sustainable management of natural resources and climate action, and balanced territorial development) and, in the case of pillar II, in relation to the thematic objectives and rural development priorities for the Europe 2020 strategy for smart, sustainable and inclusive growth.

Despite the important advance in developing a single framework for monitoring and evaluation of the CAP based on the current three general objectives of the CAP, the existence of different delivery models among the two pillars of the CAP imply, in practical terms, the coexistence of two different systems to assess performance: a programming approach in pillar II implies a set of rules and mechanisms for monitoring and evaluation that coexist with the general mechanisms for the whole policy.

5.1.2. Evaluations

These two approaches also imply different allocation of responsibilities concerning evaluations:

- Evaluations of pillar I measures and of CAP horizontal issues (covering both pillar I and pillar II) are carried out by independent external contractors under the responsibility of the Commission services on the basis of a multiannual evaluation plan. The independent external contractor carries out the evaluation according to the terms of references under supervision of a steering group in a given, contractually fixed time period.
- For pillar II, the CMES established that MS report on implementation and are responsible for evaluating their rural development programmes (ex-ante evaluation, evaluation replies in 2017 and 2019, ex post evaluation). MS must also submit the ex-post evaluation reports to the Commission by the end of 2024. The Commission is responsible for the syntheses at EU level of the *ex ante* and ex post evaluations (the latter are planned for 31 December 2025).

The process of alignment of the objectives of the policy and the growing overlaps among the instruments of the two pillars require a more consistent and coherent evaluation system covering all the instruments of the CAP.

5.1.3. Indicators, data and reporting obligations. Key lessons learnt

In 2018, the Commission will present an initial report on the implementation of the current Common Monitoring and Evaluation Framework, including first results on the performance of the CAP⁶⁶. With a view to this report, some findings have already been identified:

• *Number of indicators*. Apart from 45 context indicators describing general operational environment of the policy current CMEF contains 166 indicators which are used to determine whether the CAP is achieving its objectives. It includes 16 impact indicators, 41 result indicators (16 for pillar I and 25 for pillar II), 24 target indicators for pillar II and 85 output indicators (58 for pillar I, and 26 for pillar II). Indicators should give an overview of the achievements of the policy. Experience has shown that currently there are too many indicators (and sub-indicators). Therefore, the new framework will propose a significant reduction of the number of indicators.

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Art. 110 of European Parliament and Council Regulation (EU) No 1306/2013 of 17 December 2013 on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations and the Commission Implementing Regulation (EU) No 834/2014 of 22 July 2014 laying down rules for the application of the common monitoring and evaluation framework of the common agricultural policy.

- Suitability of the indicators to their monitoring purposes. The current output and result/target indicators used in the Rural Development policy aim at the follow up of targets set by MS for the programming period. Therefore, the indicators defined and their specific reporting requirements (e.g. with regard to frequency and timing) do not always make them suitable for monitoring purposes on annual basis. Therefore, the new framework should ensure that the indicators used for monitoring purposes are, taking into account programming transition period, available on annual basis.
- Overlapping in the reporting obligations. The current implementation has allowed Commission services to identify the coexistence of different reporting obligations covering the same or similar information. For example, the data reported to CATS-Combo for audit purposes and data reported in the RD Annual Implementation Report. A future CAP organised under a single CAP Strategic plan and a single set of reporting mechanisms should allow for important simplification in this domain.
- **Reliability/quality of data.** There are quality concerns on available data: beyond material errors in the notification, inconsistencies among data from MS have been detected. Therefore, for the future CAP, certification bodies should ensure the quality of the data before the data is sent to the Commission.
- Availability of data. The current framework includes result and target indicators for which the data should be obtained via surveys by evaluators in MS. Problems have been identified concerning the availability of this data. Therefore, future output and result indicators should primarily be based on data which are directly available via existing systems. Timing of data delivery should be clear. Particular attention is needed with regards to data availability for the agro-environmental, biodiversity and climate related indicators.
- Sharing of data: the future set of indicators should take into account increasing reluctance from MS to introduce new indicators and their decreasing administrative capacity to follow-up existing ones. This is why the use of new technologies, new data sources and optimisation of existing administrative data oriented procedures should be encouraged.

5.2. The new Performance Monitoring and Evaluation Framework (PMEF)

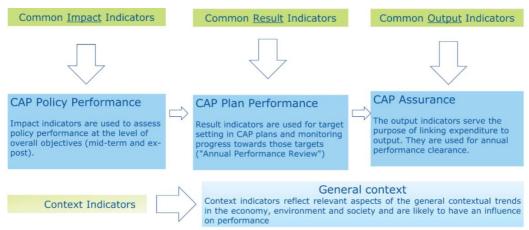
5.2.1. Basic principles – indicators

The new model will be organised around the following principles:

- **Context** indicators remain pertinent, as they reflect relevant aspects of the general trends in the economy, environment and society, and are likely to have an influence on performance.
- A selection of a limited, but more **targeted set of indicators** should be made primarily in a way to choose those that reflect as closely as possible whether the supported intervention contributes to achieving the objectives versus established baseline and using clear definitions.

- Overall policy performance will be assessed multi-annually on the basis of
 impact indicators. Regular policy performance follow-up will rely on the full
 list of result indicators by using different means of analysis to arrive at
 conclusions on policy efficiency and effectiveness.
- **Output** indicators would annually link expenditure with the performance of policy implementation. The latter is an annual exercise, and relies on a list of (primarily already available) output indicators.
- The **reliability** of relevant performance indicators can be facilitated by synergies between statistical and administrative data, but requires the presence of a system of quality controls.

Chart 5. Rationale of sets of indicators



In essence, what is being proposed is a shift in responsibilities and opportunities within a common framework, clearly defined and enforced, to deliver on more than one key objective at the same time, namely simplification, result-orientation (rather than compliance) and policy efficiency and effectiveness.

The new performance-based delivery model requires a solid evidence base composed of indicators which are reliable, comparable and available on time. Both the Commission and MS have to commit themselves to producing and using them.

It is proposed to organise the monitoring and evaluation of the future policy on the basis of a common set of indicators that was developed in line with the impact assessment (see Table on indicators in the legislative proposal on establishing rules on support for CAP strategic plans).

5.2.2. Annual Performance review

An annual performance review is foreseen as the key element of the ongoing monitoring and steering of policy implementation. In order to make an annual performance review operational, adequate output indicators and result indicators will have to be submitted jointly in an annual report on the implementation of the CAP plan, the so-called *Annual Performance Report*. MS will report annually on financial allocations, along with realised output and expenditure as well as distance to targets set for the whole period, expressed as values of common and programme specific result indicators.

In cases of delayed progress towards the targets set for results for the whole period, or where schemes/interventions are failing to take off, MS will carry out an analysis of shortcomings and will include in the report proposals for remedying actions. The assessment of those reports would trigger interaction with MS in view of helping them to implementing the planned policy in an efficient way. This exercise would also involve the continuous exchange between MS and the Commission including in a regular *Annual Review* and *Monitoring Committee* meetings, on the state of play of the evolution of programme implementation towards the targets. In this context, on the basis of the provided information and available evidence, the Commission could provide pertinent recommendations to MS.

5.2.3. Evaluation planning and reporting obligations

The following steps are foreseen as regards evaluation planning and reporting obligations:

- MS are responsible for evaluating their **strategic plans** (ex-ante, on-going and ex-post) and report yearly on implementation. MS also establish and carry out a specific evaluation plan for their strategic plan.
- The Commission will provide a **synthesis** of the MS ex-ante and ex-post evaluations.
- On top of the annual reporting by MS on their strategic plans, the Commission will launch **specific evaluations** on specific topics during the programming period. These evaluations will combine the information facilitated by MS with the evidence directly available to the Commission.
- Evaluations are **planned** in accordance with the policy cycle and the study and evaluation plan of DG AGRI (which is publicly available).
- All CAP evaluations should be based on robust **methodologies**, using counterfactual approaches where feasible.
- The Commission will carry out a **mid-term assessment of the performance of the policy** when the available evidence permits a meaningful causality link of the policy to results (e.g. after the first 3 years of implementation).
- The Commission would present two **reports** to the European Parliament and the Council on the implementation of the CAP strategic plans. These reports would be based on information collected from the PMEF, covering all instruments of the future CAP: the CAP strategic plans as well as those elements of the CAP not covered by the CAP plans. It also includes common context, output, result and impact indicators. This would include findings from both MS CAP strategic plan evaluations and from the Commission evaluations. The Commission could present an initial report, including first results on the performance of the CAP by December 2025 and a second report by December 2031.

5.2.4. Data / Sources of information

The new focus on policy performance requires comprehensive, complete, timely and reliable information on EU agriculture and rural areas. Existing data sources need to be adapted and strengthened to match better with the new policy and where needed, new data sources should be explored and mobilised in order to reduce the burden for farmers and administrations, while at the same time improving policy evidence base.

The **FADN** database is already widely used for analytical and evaluation purposes but FADN coverage needs to be expanded to provide the best possible representation of market-oriented farms in the EU. This may require a revision of variables in the farm return (also taking into account the recommendations of the **FLINT** project⁶⁷), and the way in which CAP beneficiaries participation in the FADN data collection is organised.

Agricultural statistics will continue to play a major role in CAP performance assessment. The ongoing modernisation of agricultural statistics is providing the foundation for future data availability and aims to ensure continuity of core data combined with an element of flexibility for new and urgent data needs.

Further development of data quality especially in relation to impact indicators linked to agro-environmental, biodiversity and climate related issues is needed in order to make them more fit for purpose to evaluate the performance of the CAP.

A key challenge lies in **cross-linking existing data sets** such as administrative databases stemming from application forms (IACS, LPIS) and registers maintained by MS and data collected and coordinated by Eurostat (Farm Structural Survey, land use and livestock surveys, agro-monetary and agro-environmental statistics) and FADN in DG AGRI. Close cooperation between the European Statistical System (ESS), European institutions and MS' administrations is crucial to ensure that data collected for administrative purposes can also be used for statistics and analyses and for overall functioning of the evaluation framework of the future CAP.

In addition, new sources of data such as satellite monitoring (Copernicus), big data solutions, and cooperation with specific data providers should be better utilised.

LEI- WUR *et al.* (2016) <u>Farm Level Indicators for New Topics in policy evaluation project (FLINT)</u>, financed under the FP7, website.



Brussels, 1.6.2018 SWD(2018) 301 final

PART 2/3

COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

Proposals for a

- Regulation of the European Parliament and of the Council establishing rules on support for strategic plans to be drawn up by Member States under the Common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulation (EU) No 1305/2013 of the European Parliament and of the Council
 - Regulation of the European Parliament and of the Council on the financing, management and monitoring of the common agricultural policy and repealing Regulation (EU) No 1306/2013
- Regulation of the European Parliament and of the Council amending Regulations (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products, (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs, (EU) No 251/2014 on the definition, description, presentation, labelling and the protection of geographical indications of aromatised wine products, (EU) No 228/2013 laying down specific measures for agriculture in the outermost regions of the Union and (EU) No 229/2013 laying down specific measures for agriculture in favour of the smaller Aegean islands

{COM(2018) 392 final} - {COM(2018) 393 final} - {COM(2018) 394 final} - {SEC(2018) 305 final}

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1. LEAD DG(S), DeCIDE PLANNING/CWP REFERENCES

DG Agriculture and Rural Development

2. ORGANISATION AND TIMING

This impact assessment supports the legislative proposals for the CAP Post 2020 in the context of the next MFF. The first steps were already undertaken with a view to the adoption of the Communication on the Future of Food and Farming¹, including, the publication of an Inception Impact Assessment and the launch of a public consultation in February 2017. This process followed the logical sequence of assessing the current performance of the CAP, taking into account the consultation, identifying challenges, considering EU value-added, objectives and policy options.

The Inter Service Steering Group (ISSG) was set up in December 2016, with an invitation sent to all Directorates General (DGs). Up to 29 DGs participated in ISSG meetings (in addition to SG and AGRI)².

Five meetings were held in 2017, including on the draft for the above-mentioned Communication. In 2017, the ISSG was also invited to participate in 4 workshops as well as in the Conference where the outcomes of the public consultation were shared with stakeholders (see Annex 2).

By Mid-2017, the work was reorganised to align with requirements established within the Commission for the preparation of the next MFF. Under these new settings, the ISSG held 4 meetings in 2018, including a presentation of the draft legislative proposals. In addition, the ISSG was invited for a new workshop (on measuring environmental and climate performance) and 3 technical meetings were organised with DGs expressing interest/comments on specific issues, as well as bilateral meetings.

Documents were made available on a Collaborative Work Space.

3. CONSULTATION OF THE REGULATORY SCRUTINY BOARD (RSB)

Informal upstream meetings with RSB representatives were held on 9 January 2017 as well as on 16 January 2018 (the latter included participation of representatives of SG, DG BUDG and JRC). During this discussion Board members and representatives of the horizontal Services provided early feedback and advice on the basis of the updated inception impact assessment. Board members' feedback did not prejudge in any way the subsequent formal deliberations of the RSB.

The RSB examined the draft Impact Assessment Report on 18 April 2018. It issued a negative opinion on 20 April 2018. Following resubmission of a revised version of the documents, the Board gave a positive opinion with reservations on 8 May 2018.

European Commission (2017) The Future Of Food And Farming, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of

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the Regions, COM 713 final of 29 November.

AGRI, BUDG, CLIMA, CNECT, COMM, COMP, DEVCO, DIGIT, ECFIN, ECHO, EMPL, ENER, ENV, ESTAT, FISMA, GROW, HR, IAS, JRC, MARE, MOVE, NEAR, OLAF, REGIO, RTD, SANTE, SG, SJ, TAXUD, TRADE.

The Board's initial recommendations were addressed in revised versions of the Impact Assessment documents, re-submitted to RSB on 27 April 2018. While the main comments of the Board focused on the proposed new delivery system, an annex (new Annex 4) was added to provide detailed explanations, examples and to further assess challenges and risks as well as proposed safeguards to mitigate them. The main report, as well as in existing annexes, were adjusted accordingly. Explanations were also added in the glossary.

The following tables provide an overview of the adjustments made to the text to meet the requirements of the Board's opinions.

Table 1: First opinion of the Board and related adjustments

RSB recommendations	Adjustments
Main considerations	References to the requested
The Board appreciates the ambition to	elements were added in the main
modernise the Common Agricultural Policy and	report and further developed in a
gear it towards a simpler and more results-	new Annex (4). Lessons learnt
oriented funding system. The report presents	from previous reforms and results
well the current programme and the challenges	of the impact assessment on the
it faces. It analyses in-depth different scenarios	implications of the new delivery
that usefully highlight the trade-offs between	model were better explained in the
the policy objectives. It identifies potential	main report.
simplifications.	
However, the Board gives a negative opinion,	
because the report contains an important	
shortcoming that needs to be addressed, given	
its central role in the envisaged reform of the	
CAP:	
The announced policy intention to introduce a	
new performance-based delivery system	
represents a significant departure from the	
current management mode. The report does not	
sufficiently explain elements of the system. It	
does not analyse the challenges and risks	
attached to the new system and proposed	
safeguards to mitigate them. It is not	
sufficiently clear how the new system would	
function in practice.	
Further considerations and	
recommendations for improvement	
1) New Delivery Model	
The report should better explain the rationale ,	Explanations were added in the
feasibility and functioning of the new	main report and further developed
performance-based management system.	in the new Annex 4.

DOD 1.4	
RSB recommendations	Adjustments
It should be clearer on what spending	Specifications were added in the
instruments and requirements the programme	main report and further developed
would fix centrally , and which ones would be	in the new Annex 4, including
determined by each Member State , both for	many charts showing the
pillars I and II, national and regional level. The	breakdown of responsibilities
report should clarify the 'shift in	across Commission and MS, the
responsibilities and opportunities' that the	changes in linkages with farmers,
new performance-based management system is	examples for both pillars.
intended to bring, in particular for Member	
States, regions and individual beneficiaries.	
It should clarify how the performance-based	Annex 4 includes explanations and
management system works at the stage of	charts showing key steps in the
strategic planning, implementation, annual	policy cycle.
checks and results-based checks (timing,	
procedure).	
Given the key importance of the new system, it	Annex 4 identifies opportunities
is essential to analyse the limits of the system,	and risks, as well as potential
the risks and potential mitigating measures.	mitigating measures and
Possible risks include the capacity of Member	safeguards. The implications of the
States to develop appropriate Strategic Plans	new delivery model were also
resulting in possible implementation delays,	assessed in the Multi-Criteria
threats to coherence and lack of appropriate	Analysis, as well as changes in
level of ambition at the level of the Member	administrative burden and
States.	performance (Annexes 5 and 7).
	Corresponding results are
	summarised in the main report.
The report should explain how key overarching	Explanations were added in the
objectives (national impact targets) will	main report. Annex 4 includes
translate into adequate programming at	further specifications and charts
intervention and regional level. The report	showing the linkage with
should explain safeguards to ensure	objectives, which are the entry
achievement of the broad and specific EU	point for the new delivery model.
objectives for environment, climate change, and	
food security and safety.	
The report should add examples of specific	Annex 4 develops illustrations for
interventions on the application of the new	both pillar I and II. The main
management system over the programming	report includes an example for
cycle. It should include Pillar 1 examples where	environment and climate change.
linking output to result indicators is challenging	
The report should explain implications for the	Annex 4 includes detailed
programme and for the beneficiaries of	explanations and addresses risks
underperforming on a target. The report	related to underperformance,
should also clarify whether there will	related elements are included in the
realistically be possibilities for the Commission	main report.
to apply budgetary corrections to Member	
States that underperform. Is there a risk that the	
underperformance is identified at a stage where	
only limited remedial action can be taken?	

RSB recommendations	Adjustments
The report should clarify what the	A table with estimates was added
administrative burden will be for the different	in the Annex assessing the
actors, and whether this represents a	administrative burden (page 23,
simplification, the status quo or an increase in	
	Annex 7)
comparison to the current system.	A 4 '1 1 4' 1
It should explain the new control and audit	Annex 4 provides explanations and
system	charts.
The detailed annex 5 on simplification	In addition to the table in Annex 7,
indicates that little reduction in administrative	explanations on changes between
burden will happen for Pillar I. It could even	proposed new conditionality and
become more demanding on conditionality and	cross-compliance were added in
cross-compliance in some of the scenarios	the report.
2) Programme description and options	
When describing the new programme, the	Annex 4 provides comparisons in
report should more clearly present the	various forms. Some explanations
differences from the current programme. It	were added in the main report.
should in particular indicate whether the	
intention is to keep EARDF scope and types of	
interventions unchanged.	
There is no need to include an option on having	This option was removed (however
no CAP.	the numbering of options was kept
	as in the Inception Impact
	Assessment).
The report should clarify how budgets will be	At the time of drafting the initial
divided between instruments and pillars, and	version of the report, budgetary
whether flexibility between the pillars will	arrangements considered for the
work at national level.	forthcoming MFF were not known
	to services. Flexibility between
	pillars is addressed in the options.
3) Assessment of options	1
The report develops different options reflecting	The main criteria for combining
policy responses to the challenges the CAP will	the most performing elements were
face. It shows the main trade-offs between the	added in the summary of results.
policy objectives at stake. It should however	Additional references to safeguards
better clarify whether and under what	were inserted.
conditions combining the most performing	Drawing on the Annex on MCA, a
elements of the options would reconcile	section on food-related issues was
economic objectives with objectives of	added.
environmental sustainability, climate change	
and food safety. It should better identify and	
discuss the necessary safeguards that would	
accompany such a policy choice	
In this respect, but also more generally, the	Additional elements on
report should more systematically include	stakeholders views were added in
	L STANCHURUCIS VICWS WELE AUDEU III
- · · · · · · · · · · · · · · · · · · ·	
stakeholder views, in particular of Member	Annex 2 (consultation) and in the
- · · · · · · · · · · · · · · · · · · ·	

RSB recommendations	Adjustments
4) Monitoring and evaluation framework	
The report contains a comprehensive and	A date was added (2025) in section
streamlined set of indicators which will make	5 of the report.
monitoring and evaluation more effective. The	
evaluation planning should ensure that an	
interim evaluation will be available in time	
before political decisions on the successor	
programme.	
5) MFF proposal	
The Board notes that this impact assessment	At the time of drafting the initial
will eventually be complemented with	version of the report, budgetary
specific budgetary arrangements and may be	arrangements considered for the
substantially amended in line with the final	forthcoming MFF were not known
policy choices of the Commission's MFF	to services.
proposal.	

Table 2: second opinion of the Board and related adjustments

RSB recommendations	Adjustments
Main considerations	References to the requested
The Board acknowledges improvements to the	elements were added in the main
report, which now better explains the new	report.
delivery mechanism of the CAP and better	
analyses the related risks and challenges.	
The report still contains significant	
shortcomings that need to be addressed. As a	
result, the Board expresses reservations and	
gives a positive opinion only on the	
understanding that the report shall be adjusted	
in order to integrate the Board's	
recommendation on the following key aspect:	
The report does not specify the precise	
safeguards for mitigating the identified risks. It	
does not discuss how and on what basis	
mitigating measures such as horizontal EU	
conditionality and budget earmarking will be	
determined.	

RSB recommendations	Adjustments
Further considerations and adjustment	
requirements	
1) The report better explains the main changes linked to the new funding model. Risks are better presented and analysed and a number of mitigation measures are put forward in general terms. However, the report should clearly identify how and on what basis these safeguards for mitigating possible risks will be made operational. This is particularly relevant for the exact content of horizontal EU conditionality and for budget earmarking. To the extent that the legal proposal will define these safeguards, the report should discuss possible alternative solutions, where relevant.	Specifications on mitigation measures were added in section 3. A chart and explanations on conditionality were added in section 3. Analytical results on conditionality and ring-fencing were better explained in section 4. As the need to enhance environmental ambition was reiterated in several Commission Communications, extended cross-compliance (i.e. new conditionality) was assessed in all options, with different degrees of gradations and combinations with voluntary measures.
2) The report should improve how it presents stakeholders' views . The description of stakeholders' views should not only focus on the performance of the system, but also on environmental sustainability, climate change and food safety issues	Additional references to the outcomes of the public consultation on those topics were added in Box 2, based on Annex 2.
3) The report explains that the level of administrative burden introduced by horizontal EU rules should diminish. However, Member States get significant leeway to introduce specific rules. This might increase administrative burdens, so the overall change in the burden level is uncertain. The report should examine to what extent including elements related to simplification and reduced administrative burden in the CAP plans is likely to result in lower administrative burdens overall. The report could examine additional safeguards to help ensure burden reduction.	More elements were added in section 3 on simplification and administrative burden (in addition to those already included in section 4).

RSB recommendations	Adjustments
4) The report should clarify when evaluations	Explanation added: the assessment
would take place. It should include an interim	will be carried out when the
evaluation of the programme that would be	available evidence permits a
available in time for the preparation of the	meaningful causality link of the
following MFF.	policy to results (e.g. after the first
	3 years of implementation). The
	proposal for a mid-term
	assessment is in line with other
	programmes for the new MFF. The
	suggestion to present at the end of
	2025 (i.e. ahead of Post 2027
	MFF) a report taking into account
	this mid-term assessment was kept.
	A reference to policy cycle and
	DG AGRI evaluation and study
	plan was added.
5) There is no need for a no-CAP scenario on	The reference to no-CAP was
food security.	removed from the paragraph
	relating to food security.

4. EVIDENCE, SOURCES AND QUALITY

Annex 1.1 lists a selection of references focussing on evaluations and other studies carried out for/by the **EU Institutions**, as well as data emanating from **International Organisations** and pan-European sources.

Evidence collected through the Common **Monitoring** and **Evaluation** and Framework (CMEF)³ serves for measuring the performance of the CAP. Section 5 of the report includes elements on lessons learnt from the CMEF.

An internet-based **Statistical Annex** was set up in Mid-2017, and has been updated to support this impact assessment.

https://ec.europa.eu/agriculture/statistics/facts-and-figures_en

This impact assessment benefitted from the support of several services of the Joint Research Centre (**JRC**), based in Sevilla, Ispra and Brussels.

Commission services (DG AGRI in cooperation with other DGs, including JRC) organised five **workshops** to share knowledge between Commission officials and external experts, including scientists. Related documents, including summaries, are available on the site of the July 2017 Conference. A synthesis is included in Annex 2.

The **European Environmental Agency** also participated in workshops and exchanges.

An external **consultant** analysed and summarised the results of the **public consultation**, in addition to in-house work.

policy.

-

Established in art. 110 of European Parliament and Council Regulation (EU) No 1306/2013 of 17 December 2013 on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations and the Commission Implementing Regulation (EU) No 834/2014 of 22 July 2014 laying down rules for the application of the common monitoring and evaluation framework of the common agricultural

Main References (Annex 1.1)

While a wealth of information is available, this list focuses on evaluations and other studies carried out for/by EU Institutions, as well as International Organisations.

Relevant evaluations carried for the Commission (DG AGRI)

- Evaluation of the Greening of the CAP- (report of the evaluator available since December 2017 staff working document and review by RSB scheduled for March 2018)
 https://ec.europa.eu/agriculture/sites/agriculture/files/leaflet_en.pdf
- Evaluation of the impact of the CAP measures towards the general objective of viable food production (first findings/overview on CAP impact on farm income, competitiveness and prices available, finalisation of Staff Working Document SWD by Mid-2018)
 http://ec.europa.eu/smart-regulation/roadmaps/docs/plan 2016 526 evaluation cap viable food production en.pdf
- Ex-Post evaluations on Rural Development Programmes 2007-2013 (individual RDP evaluations carried out in Member States and the synthetic overview are available; finalisation of Staff Working Document by 2nd Quarter 2018)
 http://www.eesc.europa.eu/en/our-work/opinions-information-reports/information-reports/ex-post-evaluation-rural-development-programmes-2007-2013-information-report
- Synthesis of ex ante evaluations of rural development programmes 2014 2020 (2015)
 https://ec.europa.eu/agriculture/evaluation/rural-development-reports/ex-ante-rdp-synthesis-2014-2020_en
- Evaluation of Article 68 measures specific support, (Nov 2015)
 https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/article-68_en
- Synthesis of ex ante evaluations of rural development programmes 2014 2020 (2015)
 https://ec.europa.eu/agriculture/sites/agriculture/files/evaluation/rural-development-reports/2015/ex_ante_rdp_synthesis_2014_2020/fulltext_en.pdf
- Forestry in rural development (SWD 2nd quarter 2018)
- Horizon 2020 interim evaluation on societal challenges.
 Homepage: http://ec.europa.eu/research/evaluations/index.cfm?pg=h2020evaluation
 Societal challenge 2: https://ec.europa.eu/research/evaluations/pdf/ec-rtd_interim_evaluation_studies-and-report.pdf

Studies carried out for the Commission (DG AGRI)

pdf

- Study "mapping and first analysis of the CAP implementation" (November 2016)
 https://ec.europa.eu/agriculture/external-studies/mapping-analysis-implementation-cap_en
- Distribution of the added value in the organic food chain
 https://ec.europa.eu/agriculture/external-studies/2016-organic-food-chain_en
- "Scenar 2030" (JRC): This study provides the analytical background for the options' assessment (published in December 2017)
 - http://publications.jrc.ec.europa.eu/repository/bitstream/JRC109053/kjna28883enn.pdf
- "Ecampa2 study" on greenhouse gas mitigation policy options for EU agriculture will be used to assess
 the specific needs of the EU agricultural sector (2016)
 http://publications.jrc.ec.europa.eu/repository/bitstream/JRC101396/jrc101396_ecampa2_final_report.
- Evaluation study on the implementation of the new European Innovation Partnerships (EIP) in agriculture (Nov 2016)
 - https://ec.europa.eu/agriculture/external-studies/2016-eip_en
- Study on risk management in EU agriculture (Results available, publication 2018)

Studies carried out for the Commission (DG ENV)

- Integration of Natura 2000 and biodiversity into EU funding (EAFRD, ERDF, CF, EMFF, ESF)
 http://ec.europa.eu/environment/nature/natura2000/financing/docs/Natura2000_integration_into_EU%
 20funds.pdf
- NEC impact assessment http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52013SC0531
- Studies on air quality
 http://ec.europa.eu/environment/air/clean air/review.htm.
- Commission Staff Working Document SWD(2016) 472 final fitness check of the EU Nature Legislation (Birds and Habitats Directives) (16/12/2016)
 - http://ec.europa.eu/environment/nature/legislation/fitness check/docs/nature fitness check.pdf
- Commission Staff Working Document 'Agriculture and Sustainable Water Management in the EU' SWD(2017) 153 final
 https://circabc.europa.eu/sd/a/abff972e-203a-4b4e-b42e-a0f291d3fdf9/SWD_2017_EN_V4_P1_885057.pdf
- Key descriptive statistics on the consideration of water issues in the Rural Development Programmes 2014-2020
- Guidance on a "Good Practice" RDP from a water perspective
- Mid-term review of the EU Biodiversity Strategy to 2020 (COM/2015/0478 final) http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52015DC0478
- Service contract to support follow-up actions to the mid-term review of the EU biodiversity strategy to 2020 in relation to target 3A – Agriculture
 - $\frac{https://publications.europa.eu/en/publication-detail/-/publication/cd1c6a81-969e-11e7-b92d-01aa75ed71a1/language-en$

Other relevant documents

- Report from the Commission to the EP and Council and accompanying SWD(2017) 121 final on the implementation of the ecological focus area obligation under the direct payment scheme http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52017SC0121&from=EN
- Commission Staff Working Document SWD (2016) 218 final Review of the Greening after one year http://ec.europa.eu/transparency/regdoc/?fuseaction=list&coteId=10102&year=2016&number=218&language=EN
- Report from the Commission to the European Parliament and the Council, Development of the dairy market situation and the operation of the "Milk Package" COM (2016) 724 final.
 https://ec.europa.eu/transparency/regdoc/rep/1/2016/EN/COM-2016-724-F1-EN-MAIN.PDF
- REFIT Platform Opinions on "Cross Compliance", "Greening", "Overlaps between pillar I and II",
 "Control and Audit", "Rural Development support" and "EU legislation on the Farm subsidies reform".
- REFIT Platform Opinion on the Effectiveness and Efficient of the CAP (20/09/2016).
 https://ec.europa.eu/info/law/law-making-process/evaluating-and-improving-existing-laws/refit-making-eu-law-simpler-and-less-costly/refit-platform/refit-platform-recommendations-and-otherwork en

As part of recent reports and/or studies emanating from other EU Institutions

- Court of Auditors:
 - Special Report n°21/2017: "Greening: a more complex income support scheme, not yet environmentally effective"
 - https://www.eca.europa.eu/Lists/ECADocuments/SR17_21/SR_GREENING_EN.pdf
 - Special report No 16/2017: "Rural Development Programming: less complexity and more focus on results needed"
 - https://www.eca.europa.eu/Lists/ECADocuments/SR17_16/SR_RURAL_DEV_EN.pdf
 - Special report No 10/2017: "EU support to young farmers should be better targeted to foster effective generational renewal"
 - https://www.eca.europa.eu/Lists/ECADocuments/SR17_10/SR_YOUNG_FARMERS_EN.pdf

- o Special report 26/2016: "Making cross-compliance more effective and achieving simplification remains challenging"
 - https://www.eca.europa.eu/Lists/ECADocuments/SR16_26/SR_CROSS_COMPLIANCE_EN.pdf
- Special report 1/2016:"Is the Commission's system for performance measurement in relation to farmers' income well designed and based on sound data?"
 - https://www.eca.europa.eu/Lists/ECADocuments/SR16_01/SR_FARMERS_EN.pdf
- Special Report 25/2015, "EU support for rural infrastructure: potential to achieve significantly greater value for money"
 - https://www.eca.europa.eu/Lists/ECADocuments/SR15 25/SR RURAL EN.pdf
- Special report N°20/2015 "The cost-effectiveness of EU Rural Development support for nonproductive investments in agriculture"
 - https://www.eca.europa.eu/Lists/ECADocuments/SR15 20/SR15 20 AGRI INVEST EN.pdf
- Special Report N°12/2015 "The EU priority of promoting a knowledge-based rural economy has been affected by poor management of knowledge-transfer and advisory measures" https://www.eca.europa.eu/Lists/ECADocuments/SR15 12/SR RURAL TRAINING EN.pdf
- Special Report N°04/2014 The Court of Auditors report "Integration of EU water policy objectives with the CAP: a partial success"

– European Parliament:

- Research for AGRI Committee: CAP reform Post 2020 Challenges in agriculture (2016).
 http://www.europarl.europa.eu/RegData/etudes/STUD/2016/585898/IPOL_STU(2016)585898_EN.pdf
- Research for AGRI Committee: Young farmers policy implementation after the 2013 CAP reform (2017)
 - $\underline{http://www.europarl.europa.eu/RegData/etudes/STUD/2017/602006/IPOL\ STU(2017)602006\ EN.pdf}$
- o <u>Precision agriculture and the future of farming in Europe</u>, Scientific Foresight Study, European Parliamentary Research Service (2016).
- Flexibility given to Member States state of play and perspectives (2017)
 http://www.europarl.europa.eu/RegData/etudes/STUD/2017/601975/IPOL_STU(2017)601975_EN.pdf

Other background

- Report of the Agricultural Markets Task Force (AMTF) November 2016
 https://ec.europa.eu/agriculture/agri-markets-task-force_en
- Public consultation on modernising and simplifying the CAP (published in July 2017)

Homepage: https://ec.europa.eu/agriculture/consultations/cap-modernising/2017 en

Summary of the results (320 pages):

 $\underline{https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-modernising/summary-public-consul.pdf}$

Summaries of workshops on Impact Assessment (published in July 2017)

Homepage: https://ec.europa.eu/agriculture/events/cap-have-your-say/workshops en

"Best practices addressing environmental and climate needs" (23/24 March 2017): https://ec.europa.eu/agriculture/sites/agriculture/files/events/2017/cap-have-your-say/env-clima-workshop/summ_en.pdf

"Risk management" (18/19 May 2017):

https://ec.europa.eu/agriculture/sites/agriculture/files/events/2017/cap-have-your-say/risk-management/summ_en.pdf

"Food related issues" (31 May 2017):

https://ec.europa.eu/agriculture/sites/agriculture/files/events/2017/cap-have-your-say/foodworkshop/summ_en.pdf

"Socio-economic issues" (9 June 2017):

https://ec.europa.eu/agriculture/sites/agriculture/files/events/2017/cap-have-your-say/soc-ecoworkshop/summ_en.pdf

 Background documents on challenges facing EU agriculture and rural areas: economic, social, environmental and climate (December 2017) Homepage: https://ec.europa.eu/agriculture/future-cap en

Economic challenges for the agricultural sector:

https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-

modernising/eco background final en.pdf

Challenges related to environment and climate change:

https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-

modernising/env background final en.pdf

Broader socio-economic challenges facing agriculture and rural areas:

https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-

modernising/soc background final en.pdf

- EC, DG AGRI, EU Agricultural outlook for the agricultural markets and income 2017-2030 (2017) https://ec.europa.eu/agriculture/markets-and-prices/medium-term-outlook en
- World Bank, Thinking CAP: Boosting Agricultural Incomes in the EU (2017)
 http://pubdocs.worldbank.org/en/369851513586667729/Thinking-CAP-World-Bank-Report-on-the-EU.pdf
- "Delivering on EU food safety and Nutrition in 2050 future challenges and policy preparedness"
 https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/delivering-eufood-safety-and-nutrition-2050-future-challenges-and-policy-preparedness
- OECD (2017), Evaluation of Agricultural Policy Reforms in the European Union: The Common Agricultural Policy 2014-20, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264278783-en
- Study on the simplification of delivery mechanisms focussing in particular on simplification for beneficiaries through the ESIF High Level group for simplification
 - <u>http://ec.europa.eu/regional_policy/en/policy/how/improving-investment/high-level-group-simplification/</u> (factsheet, report, reflection paper)
 - $\underline{http://ec.europa.eu/regional\ policy/en/information/publications/reports/2017/esif-simplification-hlg-proposal-for-policymakers-for-post-2020}$
- Existing analysis for the implementation of relevant EU legislation and policies.

Annex 2: Stakeholder consultation

1. SCOPE OF THE STAKEHOLDER CONSULTATION

The Commission Work Programme 2017 established that the Commission would take forward work and consult widely on simplification and modernisation of the Common Agricultural Policy to maximise its contribution to the Commission's ten priorities and to the Sustainable Development Goals. This process focused on specific policy priorities for the future, taking account of the opinion of the REFIT Platform, and without prejudice to the Commission proposal to revise the Multiannual Financial Framework.

Taking into account this mandate, the European Commission designed an ambitious consultation strategy based on the following four objectives:

- collect views on the performance of the current policy and on the challenges facing EU agriculture and rural areas;
- collect and assess ideas on how to adapt the policy to these emerging challenges;
- gather the widest possible range of views and concerns about EU agriculture in an open and transparent manner;
- enlarge the debate on the CAP to the wider public and encourage more people to take part in the policy discussion.

On the basis of the previous consultation exercises and the available evidence, a mapping exercise of the stakeholders confirmed the need to develop a broad and extensive consultation process that would reach a large and heterogeneous community of stakeholders (affected and interested in the future of the CAP). The process would involve, in particular: farmers and their organisations, a wide range of enterprises across the food chain (upstream-downstream), multiple networks of NGO's and civil society organizations (in particular, environmental NGOs) and all types of public authorities (regional, national, international...).

Taking into account the growing interest that EU citizens show for food, agriculture and rural areas⁴, appropriate mechanisms were introduced to allow the individual citizens and consumers to contribute directly to the consultation process. The consultation process of a policy which concerns 500 million consumers and manages 48% of the EU territory had to go beyond the existing organised interests and the institutionalised channels of dialogue at EU level. At the same time, there was a need to guarantee and facilitate the access across the EU territory and overcome the linguistic and technical barriers.

Thus, the following consultation activities were foreseen:

- An on-line public consultation in 23 languages, aiming to reach all interested citizens across the EU territory;
- Meetings of the "Civil Dialogue Groups", as an institutionalized channel between the key stakeholders' associations and the Commission;
- Specialized workshops focused on the most relevant policy areas, to collect the evidence needed from experts.

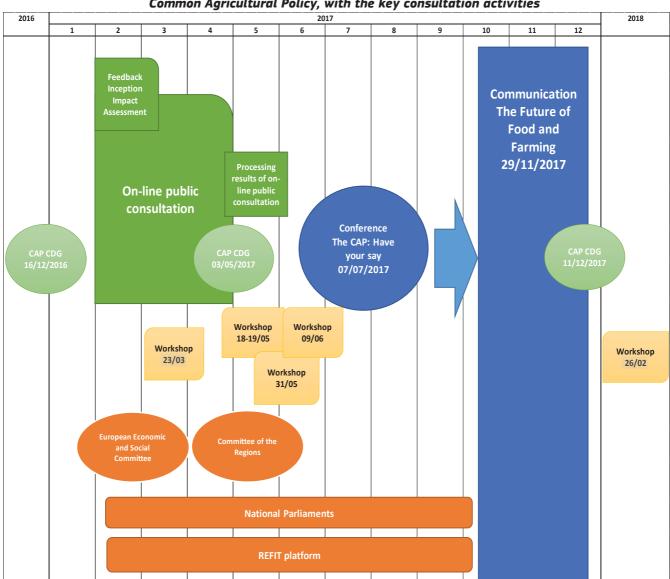
See European Commission (2017) <u>Eurobarometers on the Common Agricultural Policy</u>, website.

In parallel, the process incorporated the views from three different institutional platforms:

- A formal input from the two consultative bodies of the EU: the Economic and Social Committee and the Committee of the Regions;
- Specific input on simplification of the policy from the REFIT Platform;
- Contributions from National Parliaments.

Last but not least, a large Conference took place on the 7th July of 2017 to share the outcomes from the different consultation activities and advance on the integration of the evidence collected into the Commission preparatory work.

This process has converged in the Communication "The Future of Food and Farming": based on the results of the different consultation activities, this key policy document aimed to frame the debate and advance in the dialogue with the other EU Institutions before the presentation of the legal proposals.



Graph 1 Timeline and overview of the Stakeholder consultation process on the future Common Agricultural Policy, with the key consultation activities

2. ON-LINE PUBLIC CONSULTATION

2.1. Basic information

The on-line public consultation took place between the 2nd February and 2nd May 2017. Intensive communication actions via the Commission Representations in the 28 Member States and the social networks were carried out in order to encourage a large participation across the EU territory. The public consultation was available at the Commission site and the questionnaire used the EU survey site.

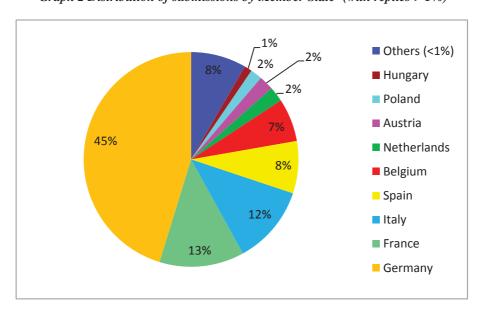
The questions formulated covered both the assessment of the performance of the current policy as well as the views on future policy design. The 33 questions were structured in 3 sections: a) Agriculture, Rural Areas and the CAP today; b) Objectives and Governance; and c) Agriculture, Rural Areas and the CAP tomorrow

The questionnaire included 28 closed questions (multiple choice) and 5 open questions: these ones included two questions on performance of the current CAP, one on additional objectives (beyond the ones from the closed list suggested) and two on specific ideas for the future (covering both simplification and modernisation). The questionnaire also included the possibility to upload concise documents (up to 5 pages), such as a position paper.

2.2. Description of the participants and coverage

The on-line public consultation collected 322 916 submissions (including large public campaigns) and 1 423 position papers.

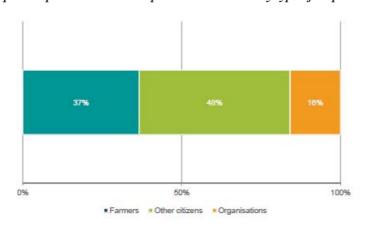
The level of participation went beyond expectations and largely exceeded participation of EU citizens in previous consultations on the future of the CAP (the 2010 public debate reached 5700 submissions). Furthermore, there were submissions across the EU territory, from all the 28 Member States.



Graph 2 Distribution of submissions by Member State⁵ (with replies > 1%)

Based on submissions by country of residence.

After the separate analysis of public campaigns, the overall figure of replies was reduced to **58 520 replies to the on-line questionnaire**, which included 21 386 farmers (36.5%); 27 893 other citizens (47.7%); 9 241 organisations (15.8%) covering private companies, public authorities, trade, business or professional organisations, NGOs and platforms, and research and academia.



Graph 3 Replies to the on-line public consultation by type of respondent

The high level of participation of citizens outside the farming community (almost 48%) confirms the growing interest on agriculture and the CAP across the EU society and the awareness that CAP impacts go much beyond the agricultural community.

With this public consultation the European Commission managed to gather the widest possible range of views and concerns about EU agriculture, enlarge the debate on the CAP to the wider public and capture the rich and diverse views which exist across the society.

All submissions to the public consultation via EU Survey are available at the following site: https://ec.europa.eu/eusurvey/publication/FutureCAP

A detailed statistical analysis of the replies to all the closed and open questions can be found at the following site:

 $\underline{https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-modernising/summary-public-consul.pdf}$

2.3. Most relevant conclusions from the on-line public consultation

2.3.1. Keeping a strong Common Agricultural Policy at EU level

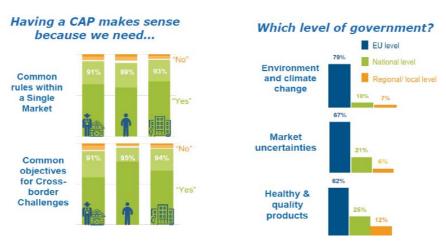
The outcome of the public consultation shows a high interest in keeping a common EU policy on agriculture and rural development. A consensus emerges on the EU value added of the CAP.

The need to guarantee a level playing field within the single market and the existence of cross-border challenges like food security, environment or climate change (with a positive reply of more than 90% of the respondents) emerge as key reasons that justify an agricultural policy commonly managed at EU level.

Other justifications include the need for a common framework for sharing best practices (91%), the need to maintain economic, social and territorial cohesion across the EU (86%) as well as the need to have a common position at international level (83%). There is also widespread support for a common budget as this is considered more efficient (62%). Furthermore, with a consensus among the different stakeholders, the EU emerges

as the appropriate level of government to mitigate and adapt to the impact of climate change (85%), contribute to a high level of environmental protection across the EU (73%), address market uncertainties (67%) and encourage the supply of healthy and quality products (62%).

Graph 4 Key replies on the EU Added Value of the CAP by type of respondent



Views differ between farmers and the other citizens as regards ensuring a fair standard of living for farmers, securing food supply at reasonable prices and the development of rural areas. While there is a consensus on the need for EU action (and a clear opposition to the renationalisation of the policy), the positions provided by organised stakeholders differ as regards the specific allocation of responsibilities between the EU and the Member States: while some stakeholders call for more flexibility at national/regional level in order to adapt the policy implementation to their specific local needs, other organisations ask for a stronger action at EU level in order to guarantee a level playing field.

This debate on the future governance of the policy and, in particular, the rebalancing of powers among the different levels of government has been addressed by the new delivery model outlined at the Communication "*The Future of Food and Farming*".

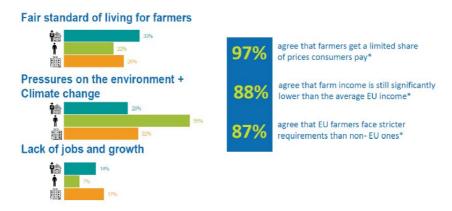
2.3.2. Confirming challenges ahead

The public consultation highlights the fair standard of living for farmers, the pressures on the environment and climate change (both mitigation and adaptation) as the three most pressing challenges that EU agriculture and rural areas have to face. As regards the specific environmental challenges, clear priority is given by respondents (both farmers and non-farmers) to the protection of biodiversity, reduction of soil degradation and a more sustainable use of pesticides and fertilisers.

At the same time, it shows a strong public awareness of the lower level of farm income as compared to the EU average (88%), of the fact that farmers get a limited share of prices consumers pay (97%) as well as of the existence of stricter production requirements in the EU than outside the EU (87%). Access to land and low profitability are clearly identified as the most relevant barriers to becoming a farmer.

European Commission (2017) <u>The Future Of Food And Farming</u>, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM 713 final of 29 November.

Graph 5 Key challenges identified at the public consultation by type of respondent



2.3.3. *Need for a simpler and more effective policy*

The participants consider that the current CAP successfully addresses the existing challenges to some extent only (57%). This view is shared among different types of respondents (farmers, other citizens and organisations). All types of respondents (farmers, other citizens and organisations) also share a negative reply when assessing to what extent the current CAP addresses the environmental challenges (63%).

The excess of bureaucracy and lack of attention to sustainability are often highlighted as the main problems/obstacles preventing the current policy from successfully delivering on its objectives. At the same time, "greening", aid applications and controls are identified as the most burdensome and complex elements. The call for a reduction of administrative burden is a generalised demand in the papers submitted by farmers and public administrations.

In line with this conclusion from the public consultation, the future CAP will increase the environmental ambition and address the environmental challenges in a more efficient way. As indicated in the Communication "The Future of Food and Farming", any new CAP should reflect higher ambition and focus more on results as regards resource efficiency, environmental care and climate action. Taking this into account, the current green architecture of the CAP will be replaced and all operations integrated into a more targeted, more ambitious yet flexible approach.

Graph 6 Word cloud based on the replies to the open question "Which elements of the current CAP are the most burdensome or complex and why?"

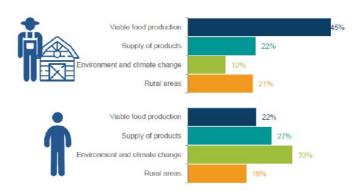
The size of the words is weighted relative to number of times mentioned



2.3.4. Different perceptions on the economy and environment

Asked about the contributions of farmers to our society, contrasting views emerge: farmers see themselves as responsible for supplying healthy, safe and diversified products as well as ensuring that enough food is available; the other citizens also see farmers as suppliers of healthy and safe products but this productive role goes hand in hand with the responsibility to protect the environment and ensure animal health and welfare. These different views also emerge in the definition of the objectives of the CAP: while farmers put the focus on ensuring their fair standard of living, other citizens pay greater attention to the supply of healthy and quality products and contributing to a high level of environmental protection.

Respondents also differ when examining the role of the CAP vis-à-vis the 10 Commission priorities for 2014-2020: while farmers consider that the CAP should do more on boosting investment, growth and employment as well as strengthening the EU single market, the other citizens focus the attention on mitigating and adapting to the impact of climate change and providing renewable energy.



Graph 7 Key replies on objectives of the CAP by type of respondent (farmer v. other citizens)

2.3.5. Emergence of new societal demands

However, beyond the already known economic and environmental objectives, the public consultation confirms the call to pay greater attention to new societal demands within the scope of the CAP. Animal welfare, organic farming and quality products emerge in the demands for new objectives of the CAP. Consumer protection and the incorporation of health standards appear also in the written contributions submitted by the non-farmer participants and certain stakeholders.

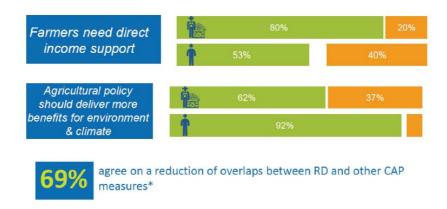
The Communication "The Future of Food and Farming" has recognized this need. Thus, the CAP will continue to respond to these concerns, for instance by modernising organic rules, supporting the objectives of the Sustainable Use of Pesticides directive and address critical health issues such as those related to antimicrobial resistance (AMR) caused by inappropriate use of antibiotics.

2.3.6. Agreement on the call for a modern and simpler CAP

Respondents to the public consultation agree with the need to improve farmers' position in value chains (96%) as well as with the need to support targeted investments (81%), the need to deliver more benefits for environment and climate (77%) and the need to provide income support for farmers (66%). When asking which criteria should be used for allocating direct support, farmers give a clear preference to compensating farming activities in Areas with Natural Constraints/High Natural Value Areas, establishing limits

in the support for large beneficiaries (capping) and supporting young farmers. The other citizens consider that practices with the highest environmental benefits as well as small producers deserve attention when allocating direct support. Water (quality and quantity), soil protection and biodiversity clearly emerge as the most relevant environmental objectives under the CAP.

Graph 8 Key replies for future policy design (by type of respondent when differences existed)



In parallel, the most relevant actions considered to better address climate change are the reduction of GHG emissions, carbon storage and sequestration, climate change adaptation as well as diversification of the farming systems. In this domain, farmers largely agree on the idea that the CAP would be simpler if more choice was given in terms of environmental measures.

Graph 9 summarises replies to the open question on further ideas for modernisation. Sustainability appears as the catch word. "Pillars" are also often quoted, however there is no consensus on whether to keep two pillars or to end that differentiation. Reducing bureaucracy comes out high, in both open questions on modernisation and on simplification.

Graph 9 Word cloud based on answers to the open question on modernisation



Finally, in terms of specific suggestions for simplification, there is a clear agreement among stakeholders on the positive effects of reducing the overlaps between Rural Development and other CAP measures (69%), the better use of databases and technologies (remote sensing, smartphones) to reduce farms inspections (62%) as well as the use of a more extensive use of e-government tools (63%).

2.4. Overview of the position papers

In parallel to the replies to the 33 questions foreseen in the on-line questionnaire, more than 1423 respondents complemented their replies with the submission of short documents. In order to capture this qualitative information Commission services carried out a specific analysis.

The analysis of the 1423 contributions showed the existence of 693 different papers which included **426 submissions from organisations and 267 submissions from individuals.** The submissions from the organisations included mainly NGOs or networks (148), business or professional organisations (124) and public authorities (58); the individual contributions included 117 submissions from farmers and 150 from other citizens.

The papers sent by **farmers** put emphasis on the reduction of administrative burden, the need to address market challenges (price volatility) and ensuring a fair standard of living for farmers (highlighting income and profitability). A large share of these contributions made reference to specific sectorial concerns, in particular to the situation of the livestock sector and dairy. A clear preference was seen on the need to improve the targeting of the support towards real and small farmers. The individual papers from **other citizens** put a strong focus on the need to improve sustainability, with a clear general preference for improving animal welfare and consumer standards. These contributions called for a stronger action to support organic and local production and for a redesign of the policy in favour of small and environmentally-friendly farms.

The analysis of the papers from the organisations showed a clear difference between the position from the **economic stakeholders** (business and professional organisations, enterprises...) and the **non-economic stakeholders** (all types of NGOs and civil society networks).

The **economic stakeholders** showed a consensus for improving the current CAP (rather than an overhaul) and highlighted the need to preserve the common market and the level-playing field. For this reason they called for a **strong CAP at EU level and opposed any attempt of renationalisation**. They also insisted on the need to protect farmers from emerging risks, keep income support as a key instrument of the policy and enhance research and innovation.

On the other hand, the **non-economic actors** showed a clear preference to redefine the policy under the approach "public money for public goods" by calling for a more environmentally and climate-friendly CAP. These organisations called for the inclusion of health and nutritional objectives in the future policy and showed a clear preference for the 2nd pillar type of instruments. Among these actors, two opposing groups were detected concerning the organisation of the policy: those calling for a **stronger EU-action at EU level** and the ones calling for **more flexibility for the Member States in the design of the policy.**

These two opposed views as regards the future governance of the policy were also detected among the wide range of **public authorities** (including 19 national authorities).

Despite the difference on this aspect, the public authorities converged in their insistence on reducing the administrative burden and improve the programming and the targeting of the support. The public authorities also shared the view of the need to support areas and regions in difficulty and to pay a greater attention to risk management tools as well as a focus on food in all its dimensions (from food supply to consumer concerns).

An overview of these written contributions can be seen at the following presentation: https://ec.europa.eu/agriculture/sites/agriculture/files/events/2017/cap-have-your-say/170702-coturni.pdf

The positions reflected across these position papers confirmed the existence of two tensions:

- On the one hand the tension between the short-term trade-off between the **economic and the environmental/climate challenges**: The general awareness on the need to improve simultaneously both the economic and the environmental/climate is translated into two opposing views depending on the type of stakeholder. The analytical work of the Impact Assessment pays special attention to this tension.
- On the other hand, the general consensus on the need to reduce of the administrative burden is accompanied by strong calls for **better targeting** (either to certain farming models, specific sectors or new concerns...). The capacity to address type of demands at the same time (simplification and targeting) will be one of the key challenges of the future policy design. The new delivery model aims at providing an answer to this.

3. CIVIL DIALOGUE GROUPS: ORGANISED DIALOGUE WITH THE KEY STAKEHOLDERS

3.1. Basic information

A key consultation activity has been the three meetings of the Civil Dialogue Group (CDG) of the CAP. This group is the institutionalised channel of dialogue between the Commission and the representatives from 30 EU-wide organisations (professional associations and other non-governmental organisations which are involved in farming, rural economy, food production, food processing, agricultural trade, environment, consumer protection and other related matters). Thus, participants in this group cover the whole range of economic, social and environmental aspects of EU agriculture and the CAP⁷.

3.2. Main messages from the meetings

The consultation process was presented to Members of the CDG in **December 2016**. In particular, participants in the **CAP CDG** (16 December 2016) provided first views on the "modernization and simplification of the CAP". Broad questions were asked on that occasion, enabling to test the relevance of some of the questions foreseen for the on-line public consultation.

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The composition of the Civil Dialogue Group is available at:

https://ec.europa.eu/agriculture/sites/agriculture/files/civil-dialogue-groups/composition-cap_en.pdf

The meeting of the 3rd May 2017 consisted of two parts: on the one hand an organised debate on simplification on the potential for simplification of the policy, taking into account the most recent discussions around the Omnibus regulation and based on the questions foreseen in the on-line public consultation; on the other hand, the Commission provided a first presentation of the factual summary on the participation to the on-line public consultation (closed the day before). A general exchange of views also took place among the stakeholders on the most relevant issues highlighted in the public consultation.

The meeting of the 11th December 2017 provided for a first organised exchange of views around the Communication "The future of food and farming".

The different discussions of this CDG highlighted the important differences among the organised stakeholders, as seen in the analysis of the on-line public consultation. As platform of representation of the EU-wide organisations, discussions at the CDG reflected the positions that the same organisations transmitted through the on-line public consultation (see section 2).

The views expressed at the CDG CAP confirmed the tension between the economic and the environmental challenges and the different views across the stakeholders to address this tension. On the other hand, as representatives from organisations at EU level, the views expressed shared special attention on the need for a strong CAP at EU level, the EU added value and the level-playing field. Furthermore, discussions confirmed a general demand for a better targeting of the CAP support and the need to better address price volatility.

All documents of the meetings of the Civil Dialogue Group on the CAP can be found at: https://ec.europa.eu/agriculture/civil-dialogue-groups/cap_en

4. SPECIALISED WORKSHOPS TO COLLECT EVIDENCE

In order to gather evidence/knowledge from experts on CAP-related issues a set of specialised workshops were organised between March 2017 and February 2018. These workshops allowed exchanging views between experts and Commission officials and advancing in the formulation of the key conclusions/key issues to take into account in the modernisation and simplification process.

The five issues to be tackled by workshops were selected in order to cover the most relevant areas where gaps on knowledge and disagreements on policy approaches had been detected. The workshops were designed according to a similar methodology based on the following: 1) collection of the latest evidence available at the level of institutions; experts/academics/practitioners/international 2) focus on practical on ground; assessment the the 3) on potential technologies/approaches to improve future policy design in the specific area covered.

The summaries of the workshops and presentations are available at: https://ec.europa.eu/agriculture/events/cap-have-your-say/workshops_en

4.1. Workshop 1: Best practices addressing environmental and climate needs

This two-day workshop (23/24 March 2017) involved a wide range of experts on the environmental and climate challenges. It started by examining the tools available for assessing the environmental needs at EU level and, in particular, the modelling practices

and technologies (with the experience in climate mitigation and the potential for environmental provided by CAPRI and IFM-CAP). Second, it explored the experiences from the environmental analysis by MS: this included specific practices, like the use of the EFA calculator to target areas for biodiversity measures (in Italy), the lessons from NL on the implementation of greening, the specific issue of the landscape features and buffer zones for biodiversity, and specific management practices (like the Integrated Pest Management, nutrient management plans, soil organic carbon management, manure techniques, agroforestry actions and beef genomics).

The workshop also examined in detail how to improve the uptake of the measures (with a focus on the role of behavioural approaches) and the use of new technologies as well as their potential for policy design and control.

The workshop highlighted that one-size-fits-all solutions on environmental challenges are rarely efficient, thus a need to focus on the EU objectives and allow MS/regions to adapt actions to their local needs. At the same time, it confirmed that no consensus exists on the best combination of mandatory and voluntary approaches for the first environmental layer of the CAP: the dilemma between a compulsory and more prescriptive approach and a voluntary approach was confirmed as the most relevant dilemma to be faced in the design of the environmental architecture of the future CAP. Options 3, 4 and 5 develop assessed in the impact assessment in detail these different conceptions/approaches to enhance the environmental performance of the policy.

Last but not least, it was confirmed that research, innovation and advice is at the heart of the future implementation of agri-environmental policy. In order to advance towards a more performance-oriented policy in this domain, important efforts need to be done at the level of **data collection**.

4.2. Workshop 2: Risk management

This two-day workshop (18/19 May 2017) tried to advance in the collection of evidence in the debate on the tools to support the farming community to better face the production, price and income risks.

After examining the challenges of the EU market safety net and the recent developments in the risk management system in force in the US, this workshop focused on practices from the ground: the case of future markets in the EU, the EU agricultural insurance and reinsurance sector, the case of a public-private partnership (Spain) and the crop insurance scheme in Poland. The workshop also advanced the discussion concerning behavioural aspects of risk management, including facilitation via the farming community.

The workshop confirmed a consensus around the idea that farmers' capacities to deal with risks need to be strengthened and the potential for market-based risk management tools should be improved. It also confirmed the need to encourage risk sharing along the food chain.

As regards future policy design, the workshop highlighted the importance of risk management tools as a complement to the main mechanism of income support (direct payments) as well as the need to expand the use of these tools while keeping the current market orientation of the policy and empowering the farming community to use them.

Any action in this domain will certainly need to allow for flexibility for both MS and farmers, since evidence confirms that a single model of risk management cannot be generalised across the EU.

These ideas have been incorporated in the Communication "The Future of Food and Farming". Furthermore, the impact assessment has analysed a scenario with a transfer of expenditure from direct payments to risk management actions (option 3).

4.3. Workshop 3: Food and related issues

Food consumption is influenced by series of factors, which require a mix of interventions. The workshop on food and related issues (31 May 2017) confirmed that, despite the multiplicity of factors, the CAP can help. It is well aligned with food safety requirements; it already includes schemes that promote healthy diets (e.g. school schemes) as well as specific instruments to develop quality products and short supply chains.

However, to what extent can the CAP further facilitate farmers' adaptation to changes in consumption patterns? Anti-Microbial Resistance warrants increased attention: recording of anti-microbial use on farms should be improved, awareness should be raised via farm advisory services, and synergies with action plans should be developed. While there is **no consensus for developing a Common Food and Agricultural Policy at EU level**, the governance of food systems requires a **coordinated approach across policy domains**.

4.4. Workshop 4: Socio-economic issues

The workshop on socio-economic issues (9 June 2017) focused on the analysis of the dynamics of growth and jobs in EU agri-food sector. Starting from the evidence that CAP payments reduce the outflow of labour in EU-15 (but no impact found in EU-13), this workshop examined the links between global agriculture and food value chains in the EU from both a conceptual perspective and a practical perspective, based on case-studies.

The workshop confirmed, as indicated by the World Bank study "Thinking CAP. Supporting Agricultural Jobs and Incomes in the EU" (discussed at the workshop and finalised by the end of 2017), that agricultural jobs and income help reduce poverty across EU: structural transformation is well underway and relatively successful; the gap between agricultural incomes and incomes in other sectors is closing and, across the EU, agricultural incomes are converging. As labour moved out of agriculture, the CAP supports the creation of reasonably remunerative jobs for the workers who remained behind in agriculture, while poverty in agricultural areas was reduced.

The workshop also examined the links with upstream sectors, the territorial dimension of the CAP (CAP support, despite its correlation with higher regional GDP growth, benefits mainly poorer regions) and highlighted the need to improve the number as well as the quality of jobs/invest in human capital. It confirmed the job-productivity paradox in agriculture and stressed the challenges for a future policy design: need for not only retain jobs, but promote productive jobs and identify win-win solutions.

4.5. Workshop **5:** Measuring the CAP environmental and climate performance

The adoption of the Communication "The Future of Food and Farming" has stimulated a lively debate on which basic policy objectives can be set at EU level, how they can be implemented at Member State level, and whether they can be monitored, controlled and evaluated. This is particularly relevant for environmental and climate performance, as related indicators are often more difficult to measure (e.g. biodiversity) and/or take time to have a measurable impact (e.g. soil fertility).

At the same time, the Impact Assessment process has shown that there is a growing amount of information and expertise (e.g. Member States notifications on environment/climate legislation, scientific expertise in the Joint Research Centre, satellite information, etc.) that can set the basis for informed EU policy decisions, robust Member States implementation and efficient monitoring, control and evaluation.

This additional workshop (26 February 2018) was an opportunity to exchange views on how the performance of the new CAP can be measured and what indicators can be used. It was organised around five sessions: water, biodiversity, soil, air and climate change.

While there are still diverging views about how much some of the potential results indicators can assess policy performance and policy coherence, the analysis that was presented at the workshop showed that result and impact indicators in certain environmental domains are in reach but often need further technical developments and data availability/analysis. In particular for biodiversity, more groundwork, data collection and coordination are needed.

It also became clear that analysis and support of the Joint Research Centre will even be more needed in the future in supporting MS in providing scientific evidence to identify their challenges to be addressed in the CAP plans, to help assess those plans and to support in their monitoring and evaluation.

5. INSTITUTIONAL CONSULTATIVE BODIES: ACTIVE ROLE OF THE EESC AND COR

In order to guarantee an adequate involvement of all the stakeholders, the Commission has worked in close cooperation with the two consultative bodies.

The First Vice-President of the Commission formally asked the EESC and CoR to provide their exploratory opinions to the consultation process on the modernisation and simplification. Both institutions have been very proactive in providing specific opinions, involving the Commission in their works and participating in the different platforms of discussion (as the case of the Conference "The CAP: Have your say" of the 7/7/2017).

Furthermore, on the 11th January 2018, a specific session took place at the Committee for Agriculture and Rural Development of the European Parliament to exchange views on the opinions adopted by the EESC and CoR regarding the future CAP.

5.1. European Economic and Social Committee (EESC)

The EESC adopted two specific opinions on the future of the CAP:

- Opinion of the EESC "The main underlying factors that influence the Common Agricultural Policy post-2020" (own initiative opinion, Rapporteur: Tiainen SIMO) adopted on the 15th December 2016. Opinion and hearings available at: http://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/factors-influence-cap-post-2020-own-initiative-opinion
- Opinion of the EESC "A possible reshaping of the Common Agricultural Policy" (Exploratory opinion, rapporteur: John BRYAN), adopted on the 1st June 2017. Opinion and hearings available at: http://www.eesc.europa.eu/en/ourwork/opinions-information-reports/opinions/possible-reshaping-cap

In these reports, the EESC calls for a budget of the CAP adequate to address existing and new demands as well as additional financial demands resulting from Brexit. The EESC supports the retention of the two-pillar model of the CAP and key role for direct payments in order to support farm incomes as well as a rural development policy based on the objectives set down in Cork 2.0. Specific attention is paid to the role of the CAP as a provider for public goods.

The most relevant elements highlighted by the EESC reports have been incorporated in the design of the future CAP: this is the case of the two-pillar structure, the maintenance of direct support as the main policy tools, a new environmental architecture (replacing greening) and the principles of Cork 2.0. Furthermore, specific ideas stressed by this consultative body, such as the incorporation of programming elements into the Pillar I or the extension of the use of nutrient management plans will be present in the new policy design of the CAP.

5.2. Committee of the Regions

The Committee of the Regions (CoR) has taken a different approach, by adopting several specific opinions which addressed their most urgent concerns (such as price volatility, the future of rural areas or young farmers, together with a general broad opinion on the future of the CAP:

- Opinion of the CoR "**The CAP post-2020**"; Rapporteur: Guillaume CROS (FR/PSE), Vice-president of the Regional Council of Occitanie. In this report, the CoR calls for a fair, sustainable and supportive agricultural policy for the benefit of farmers, areas, consumers and citizens.
- Opinion of the CoR "Regulating price volatility of agricultural products"; Rapporteur: Jacques BLANC (FR/PPE), Mayor of La Canourgue. According to this report, the mechanisms to safeguard farmers' incomes need to be strengthened significantly to reduce the negative impact of the high volatility of prices of agricultural products and inputs, in order to make European agri-food sectors more competitive, maintain agriculture throughout the different areas, encourage modernisation and innovation, and preserve vibrant rural communities.
- Opinion of the CoR on "Supporting young European farmers"; Rapporteur: Arnold HATCH (UK/ECR), Member of Craigavon Borough Council. According to this report, the shortage of young people pursuing careers in farming is jeopardising the economic and social sustainability of rural areas. Supporting young farmers is a prerequisite for maintaining agriculture throughout the EU and for keeping rural areas alive, in order to meet the territorial cohesion objective mentioned in the Lisbon Treaty.
- Opinion of the CoR "Revitalisation of rural areas through Smart Villages"; Rapporteur: Enda STENSON (IE/AE), Council Member of the County of Leitrim). According to this report, the rehabilitation of rural areas has to try to meet the long-term challenge of depopulation, through actions to encourage and support sustainability, generational renewal and the ability of rural areas to attract newcomers.

These reports are available at the following site: http://cor.europa.eu/en/activities/opinions/Pages/opinions-and-resolutions.aspx#

The most relevant elements highlighted by the CoR have been incorporated in the design of the future CAP: this includes, for example, a strong system of direct support, the movement towards a fairer distribution of the support, an enhanced focus on generational renewal or the support to digitalization of rural areas.

6. LISTENING ON SIMPLIFICATION: REFIT PLATFORM OPINIONS ON THE FUTURE CAP

6.1. Basic information and submissions received

Commission Work Programme 2017 explicitly mentioned that the Commission would take into account the opinion of the REFIT Platform in the upcoming work on the simplification and modernization of the CAP.

The Commission has set up the REFIT Platform⁸ to receive advice from Member States and stakeholders on how EU laws can be made more effective and efficient. The REFIT Platform collects suggestions from external stakeholders and has to assess and respond to all. Due to the administrative burden of the CAP, 'Agriculture and Rural Development' was identified by the Stakeholder Group of the REFIT Platform as one of three priority policy areas for Platform to address.

To this date, 289 relevant suggestions have been received by the REFIT Platform. Agriculture is the policy area which has attracted the highest input from stakeholders with 44 submissions (i.e. 15 %). Those submissions have been made by a variety of stakeholders – ranging from NGOs (EEB – European Environment Bureau), to businesses (DBF – Danish Business Forum, NNR - Board of Swedish industry and commerce for Better Regulation), governmental organizations (Finnish government via its stakeholder survey, Freistaat Sachsen) or citizens.

In total, 10 opinions⁹ have been adopted by the Platform in the field of agriculture, covering 30 submissions (28% of the total number of submissions followed by an opinion). These opinions touch upon the following topics: *Effectiveness and efficiency of the CAP* (EEB); *Cross Compliance* (DBF, NNR); *overlaps between pillar I and II* (Freistaat Sachsen); *Control and Audit* (NNR); *Greening* (NNR); *Marketing Fresh fruit and Vegetables* (DBF); *relations between ESI and EAFRD* (Freistaat Sachsen); rural development support (NNR); *and farm subsidies reforms* (Finnish Survey for Better Regulation).

6.2. Key messages from the REFIT Platform

The stakeholder group of the REFIT Platform called for a **strategic review** of the CAP, with a view to **reduce the regulatory burden** of the CAP, improve its **value for money** while ensuring the achievement of the objectives and increase its **integration with other policy areas**¹⁰. At the same time, the different opinions approved by the Platform put the focus on the excessive administrative burden and **lack of effectiveness** of the current environmental architecture, with particular attention to the **greening and cross compliance**.

In general terms, the submissions of the REFIT Platform show a critical approach to the changes introduced in the last CAP reform: This is the case of the mandatory requirements associated to the greening payment, which, according to the REFIT

Decision C(2015)3261 of 19/05/2015, following the Communication Better Regulation for Better Results — An EU Agenda, COM(2015)2015 of 19/05/2015.

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REFIT Platform opinions are available at: https://ec.europa.eu/info/law/law-making-process/overview-law-making-process/overview-law-making-process/evaluating-and-improving-existing-laws/reducing-burdens-and-simplifying-law/refit-platform-recommendations_en.

REFIT Platform Opinion on the submission by the European Environmental Bureau on Effectiveness and Efficiency of the Common Agricultural Policy

Platform, require a fundamental review (due to the high costs associated to a limited benefit)¹¹. At the same time, the Platform criticizes the introduction of policy elements under the two pillars of the CAP (environmental actions, young farmers, ANC support): this is seen as a source of risk of additional compensation and further administrative burden in managing consistently the respective measures¹².

The Commission has examined in detail all the contributions of the REFIT Platform and has been directly associated to its works. Some technical aspects related to the implementation of the current legislative framework have already been taken on board in the different simplification exercises carried out since 2015 (including the Omnibus Regulation adopted in 2017).

As regards the more fundamental comments from the REFIT Platform (such as the effectiveness and efficiency of the policy, the design of the environmental architecture and the overlaps between pillars), the inputs from the Platform have confirmed the need for a change in the delivery model of the CAP: the submissions from this Platform confirm the difficulties of the last CAP reform to increase the effectiveness of the policy under a model strictly based on compliance of rules defined in detail at EU level.

The introduction of a strategic approach covering both pillars and the lack of pre-defined eligibility rules at EU level (by providing larger subsidiarity for the Member States in the design of the specific actions) will provide the framework for a policy more focused on performance rather than on compliance. The new delivery model of the CAP (with a policy more focused on results) replies to a large extent to the main concerns of the REFIT Platform.

7. NATIONAL PARLIAMENTS

The following National Parliaments have contributed to the consultation process:

7.1. Assemblée Nationale and Sénat (FR)

On the 10th March 2017, the French *Assemblée Nationale* (first chamber of the French Parliament), adopted a Resolution on the Future of the Common Agricultural Policy after 2020. In this opinion, the French Chamber calls for a refocus of the policy, which should evolve towards a "*Common Food and Agricultural Policy*"; the future policy should focus the support on holdings which create employment, in particular small and medium and the most fragile ones (such as the young or the most vulnerable sectors). While asking for a rebalance within the food chain, the *Assemblée Nationale* asks for support to the most environmentally-friendly holdings, with a focus on the challenges related to biodiversity, soils, emissions and climate change. The French Assembly also calls for a more inclusive engagement of the national and local authorities in the design of the future policy.

On the 20th July 2017, the Committee of European Affairs of the French Senate also contributed to the consultation process. The *Sénat* calls for a strong CAP with appropriate budget that should protect the farmers from the volatility of the markets and

REFIT Platform Opinion on the submission by the Swedish Industry and Commerce for Better Regulation (NNR) on 'Greening'.

REFIT Platform Opinion on the submission by the Freistaat Saachsen on the overlaps between Pillar I and II of the Common Agricultural Policy (CAP).

support their resilience. The French Senate also asks for the implementation of the recommendations of the Agricultural Market Task Force, for the appropriate incentives to support the diversification of income and the establishment of reciprocity in the future international agreements. Finally, this chamber insists on the need to reinforce the support to the installation of young farmers, as a key tool to guarantee generational renewal.

7.2. Oireachtas (IE)

The Joint Committee on Agriculture, Food and the Marine of the Oireachtas (first chamber of the Irish Parliament) sent an Opinion in April 2017.

In this opinion, the Irish chamber considers necessary to maintain the CAP as the fundamental policy of the European Union providing basic income support for farmers, protecting the environment and supporting rural communities. Key issues are raised, like the need to support farm incomes and employment, particularly among young farmers, to strengthen the position of farmers in the food chain, to support environmentally friendly agricultural practices and to contribute to the fight against climate change.

7.3. Joint Parliamentary Declaration by chambers from France, Italy, Poland and Ireland

On the 11th April 2017, a Joint Declaration was agreed by the French Senate's European Affairs Committee, the Italian Senate's European Affairs Committee, the Polish Senate's Agriculture and Rural Development Committee and the Committee of Agriculture, Food and Marine of the Oireachtas (Irish Parliament).

This Joint Parliamentary Declaration considers that the CAP remains a strategic priority for the Union which should be allocated, for the 2020-2026 period, a budget which matches its ambitions, based on maximum effectiveness. According to this Joint Declaration, a properly resourced CAP is integral to a Union-wide response to the challenges of the coming years. The future policy should keep the market orientation, advance on the simplification agenda, advance on the integration of the food chain and keep the unity of the internal market.

8. Integrating opinions and evidence: Conference 7th July 2017 "Have your say"

The ambitious stakeholder consultation process on the CAP post-2020 involved several consultation activities that were done simultaneously during the first part of the year 2017.

The important messages that emerged from the on-line public consultation could not be assessed in isolation; at the same time, the process of collection of evidence (carried out in the first 4 workshops) needed the broader perspective of the debate which was taken place in the public sphere thanks to the public consultation.

Evidence collected from experts had to be compared with the outcomes of the public opinion and stakeholders: this process is particularly relevant in the domain of the CAP, where public opinion does not necessarily correspond to the technical evidence.

The Conference "*The CAP: Have your say*" of the 7th July 2017 gathered more than 500 stakeholders and experts with the goal of taking stock of the results of the consultation and inform all interested parties on the scientific evidence compiled by the Commission.

Participants to the Conference included the members of the Civil Dialogue Group of the CAP, members of the REFIT Platform, EESC and CoR, representatives of Member States and of the European Parliament, as well as experts. The Conference was also web streamed, hence open to all interested citizens.

The debates of the Conference allowed the Commission to advance in the definition of the key priority areas to be covered in the Communication "The Future of Food and Farming": environmental and climate action; risk management; new societal demands; and the socio-economic dimensions. The debate between stakeholders and experts highlighted the **different perceptions between public opinion and experts** in some domains such as the distribution of the support of the CAP. It also confirmed the important differences between **economic and non-economic stakeholders** in addressing the environmental and economic challenges ahead (as explained in section 2).

Last but not least, the Conference showed the growing consensus among a wide range of stakeholders on the **need to keep a strong CAP at EU level** and, at the same time, **improve the targeting of the policy** and design a more **flexible approach for its implementation** with a view to increase its effectiveness.

All the presentations and information related to this conference is available at: https://ec.europa.eu/agriculture/events/cap-have-your-say_en

9. COMMUNICATION "FUTURE OF FOOD AND FARMING". PUBLIC DEBATE ON THE NEW DELIVERY MODEL OF THE CAP.

The outcome of the whole consultation process converged at the **Communication adopted on 29 November 2017 and entitled "the Future of Food and Farming"**. This policy document outlined challenges, objectives and possible avenues for a "future-proof" CAP that needs to be simpler, smarter and modern, and lead the transition to a more sustainable agriculture.

Public debate on the ideas presented in the Communication focused on the new delivery model of the CAP: while there is a general support to a movement towards a more result-based policy and more flexibility in its implementation, concerns have been raised regarding the need to preserve the common dimension of the policy with the appropriate safeguards at EU level that could guarantee a level-playing field as well as the adequate ambition in reaching the new objectives.

9.1. Council of the European Union

On the 19th March, the Council of Ministers adopted Presidency Conclusions on the Communication, supported by 23 Member States¹³. In these conclusions¹⁴, the Council endorsed the view that Member States should enjoy more subsidiarity and flexibility to take account of their national and regional specificities and to contribute to a more efficient delivery of the policy. Furthermore, the Council also agreed with the shift towards a more result-oriented policy. However, it highlighted a potential risk of fragmentation of the CAP and called on the Commission to continue ensuring a level

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Belgium, Bulgaria, Czech Republic, Denmark, Germany, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Luxembourg, Hungary, Malta, Netherlands, Austria, Portugal, Romania, Slovenia, Finland, Sweden and United Kingdom. The five remaining Member States did not support the conclusions, due to differences on the specific references to the external convergence.

Available at: http://data.consilium.europa.eu/doc/document/ST-7324-2018-INIT/en/pdf

playing field among Member States and the integrity of the internal market through basic common rules at EU level.

The Council also stressed that the new delivery model should bring substantial and tangible simplification and reduction of administrative burden for both beneficiaries and national/regional administrations and called for simple CAP Strategic Plans. According to the Presidency conclusions, these plans should allow flexibility in their design and subsequent amendments, taking into account the division of competences within each Member State.

9.2. European Parliament

The European Parliament is currently drafting its own initiative report (Dorfmann report) to react to the Communication. It will be voted at plenary session in May.

In the draft report, the European Parliament shows support towards the willingness of the Commission to advance towards a more result-oriented policy and providing more flexibility to the Member States in the final design of the actions. However, it insists on keeping the integrity of the single market and keeping the 'C' in the CAP, avoiding the renationalisation of the policy. The draft report of the European Parliament stresses the fact that Member states should follow a uniform approach to programming and eligibility as to avoid distorting competition. The new approach should also respect the distribution of powers within each Member State, notably respecting the legal competences of the EU's regions when implementing policies (for example in the 2nd pillar).

9.3. European Court of Auditors

The European Court of Auditors (ECA) published in March 2018 a "Briefing paper" on the future CAP. This Briefing paper¹⁵, the ECA pays a special attention to the new delivery model: in their view, the success of the new model will require measures based on sound scientific and statistical evidence (that will clearly deliver the desired results); relevant, ambitious and verifiable targets for the new "CAP strategic plans", aligned with EU objectives; a robust performance monitoring and evaluation framework; and a solid accountability and audit chain, providing assurance on both compliance and performance.

9.4. Stakeholders

Two meetings of the CDG CAP took place on December 2017 and April 2018. These meetings allowed for an institutionalised dialogue among the European Commission and the most relevant stakeholders organisations around the content of the Communication and, in particular, on the implications of the new delivery model proposed.

The reactions form the **agricultural community** showed an agreement with the willingness to reduce the rules at EU level and reinforce the performance of the policy. The main concerns focused on the need to well preserve the level-playing field.

Environmental organisations also showed a positive reaction to a more result-based policy but show particular concerns on the safeguards to guarantee a high ambition in the environmental and climate action. A specific study of the **Institute of European**

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Available at:
https://www.eca.europa.eu/Lists/ECADocuments/Briefing paper CAP/Briefing paper CAP EN.pdf

Environmental Policy (IEEP) assessed the implications of the new delivery model on the environmental and climate actions, with a particular attention to the indicators to use¹⁶. At the CDG of the 20th April 2018, this study was presented and discussed among stakeholders and the Commission representatives.

Study "Measuring the CAP's environmental and climate performance" from the Institute of European Environmental Policy. Available at: https://ieep.eu/publications/measuring-the-cap-s-environmental-and-climate-performance

Annex 3: Relevant Evaluations

Evaluations and studies already carried out that served as input for the impact assessment: a synthesis

Alongside with evaluations that remain to be finalised, evaluations carried out in the past years can serve as valuable input.

In particular the following evaluations are relevant:

The evaluation of income effects of direct support (2011) pointed to the important role of direct support for farm income and maintaining viability of farms.

The evaluation of structural effects of direct support (2013) highlighted the role that decoupling might have played in accelerating reduction of labour use intensity in the farm sector as well as an increase in specialisation.

The Economic analyses carried out in the context of *the evaluation of Article 68* measures (2015) showed that optional support for specific needs helped reduce disadvantages in terms of viability in a number of sectors such as sheep and goat, cotton or durum wheat but had a very limited effect on competitiveness and sustainability of primary production and industries. Coupled support sometimes generated competition distortion. Concerning environment, varied measures were designed and results were uneven. Arable crops rotation and diversification were the most significantly implemented type of measures, with some positive impacts.

The study *Mapping and analysis of the implementation of the CAP (2016)* reveals that the Member States' strategy to reach the objectives of the 2013 CAP is not sufficiently documented: the implementation choices are more influenced by the consideration to "maintain the status quo" than by a long-term strategy that takes into account the general CAP objectives. The degree to which funds have been targeted to certain needs might not be sufficient to have a significant impact.

The synthesis of ex ante evaluations of rural development programmes (RDPs) 2014-2020 concludes that the process of the ex-ante evaluations and the external coherence of the RDPs are well documented and satisfactory, while the internal coherence, in terms of needs' prioritisation and description of links between the planned actions - outputs and expected outputs - results, needs to be further enhanced.

The Synthesis of ex-post evaluations of Rural Development Programmes 2007-2013 (forthcoming) covers effectiveness, causal analysis, efficiency, coherence and EU value added. Full aggregation of results is not possible due to missing data or differences in approaches. Replies to evaluation questions are predominantly positive about the contribution of RDPs to environment and climate action as well as for growth and jobs. Outcomes for the quality of life and diversification are less straightforward, due to unclear interrelation and measuring standards. Lack of priority and budget seem to have had a limiting effect on innovative approaches, and improvement in broadband access was delayed due to processes (amongst other late implementation).

The SWD accompanying this synthesis will to be submitted to the RSB in 2018.

The evaluation report (2017) on the payment for agricultural practices beneficial for the climate and the environment found that the greening measures have led to only small changes in management practices, except in a few specific areas. As a result, their environmental and climate impacts have been limited and locally specific. They have had a negligible effect on production or economic viability of farms and the additional administrative costs associated with them have been relatively low. (Staff Working Document covering this evaluation is presented to the Regulatory Scrutiny Board in March 2018).

Evaluation of the impact of CAP measures towards the general objective of "viable food production" (forthcoming). Initial findings confirm the impact of direct payments on enhancing and stabilising income. So far coupled support appears to have limited effects on the level playing field between MS, but this depends on sectors and aid intensity. The effectiveness of exceptional market measures varied depending on sectors and conditions. The administrative and management costs of the current CAP are considered to be generally higher than in the previous one. The coherence with other objectives and policies is found to be good.

All evaluations relating to the CAP are available on the site of DG AGRI

https://ec.europa.eu/agriculture/evaluation/market-and-income-reports_en

https://ec.europa.eu/agriculture/evaluation/rural-development-reports_en

Summary of relevant evaluations /studies carried out in the past years (chronological order)

Evaluation of income effects of direct support (2011)

The evaluation concluded that direct payments have contributed to enhancing the income of farmers and have played an important role in generating farm income. The study underlined the role of direct payments in strengthening the cohesion between regions, in particular Less Favoured Areas (LFAs). It also showed that direct payments have contributed to reducing the existing gap between the average farm income per labour unit of small and large farms.

The analysis indicated that direct payments have reduced the existing differences between farmers' income in non-LFA areas and, respectively, in LFA areas and the subgroup of mountain LFA areas. The analysis carried out among the farms in LFA areas confirmed the general conclusion that direct payments contributed also to reducing the gap between farmers' income and the regional GDP/employee.

In terms of income stability, direct payments have had larger effects on farmers' income stability in LFA areas in comparison to non-LFA areas.

The conclusions of the evaluation indicate that direct payments have been crucial in ensuring the economic viability of farms, in particular those specialised in field crops, grazing livestock, mixed farming and, partly, dairy farming.

The results of the statistical analysis pointed out that direct payments have been coherent with the measures under the single Common Market Organisation and Rural Development measures in relation to the objective of enhancing and stabilising farmers' income.

The evaluation showed also that direct payments have been coherent with the compensatory allowance given to specific farms in LFA areas. Moreover, in the regions having implemented the hybrid and the regional Single Payment Scheme (SPS) model, the coherence between direct payments and compensatory allowance has increased. However, the analysis by type of farming and by groups of regions based on the SPS model identified also cases where farmers receiving both the compensatory allowance and direct payments have higher income than other farmers (i.e. farmers not located in LFA areas and farmers located in LFA areas but not receiving the compensatory allowance).

https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/2011-income_en

Evaluation of the structural effects of direct support (2013)

The evaluation examined the effects on farm structural changes of all direct support schemes governed by Council Regulation (EC) 1782/2003: decoupled and coupled payments and all implementation Single Farm Payment (SFP) models: Single Payment Scheme (SPS) with historical, regional and hybrid models and Single Area Payment Scheme (SAPS).

While the decline in the number of farms has been a long-term trend, the 2003 reform has contributed either to speeding up the exit of smaller-sized farms from the agricultural sector or to the growth in size of part of these farms. Farm concentration increased slightly in the EU-15 Member States (applying the SPS historical and hybrid models) and in a more pronounced way in the EU-12 (applying SAPS and regional models). However, greater concentration in the Member States applying the SAPS model may have been influenced also by other factors, such as the end of the centrally planned economy and subsequent land reforms.

The evaluation concluded that direct payments did not have an impact on land use changes after 2005 nor they affected the legal status of agricultural holdings. On the other hand, holdings' organisational form seems to be indirectly affected by the policy change.

The reform and in particular decoupling of support may have contributed, together with other factors, to accelerate reduction of labour use intensity in the farm sector. However, in the Member States applying SAPS model, this decrease appears to be related more to the reduction of excess labour force from former large cooperatives and state farms, existing in the pre-reform years.

Both coupled and decoupled payments have had a rather limited effect on increasing farm capital. Nevertheless, direct payments have induced some incentives to substitute capital for labour.

Decoupling of support from production has contributed to an increase in the number of specialised farms. This is caused by the greater freedom of production decisions brought about by decoupling which has stimulated part of the holdings to focus more on production activities from which market conditions allowed higher profitability.

The policy change has had a differentiated effect on farm investment in the regions implementing SPS historical and hybrid models (the EU-15) and those implementing the SAPS (the EU-10): decreasing farm investments in the former and increasing farm investments in the latter. This suggests that investment decisions could have been facilitated by the additional financial resources from direct payments, especially in the regions where direct support was introduced following EU accession.

The direct payments have not played a role in influencing marketing strategies at farm level such as membership in producer organisations, direct relationship with processing industry/retailers or direct sale of farm products from farm.

Finally, the analysis showed that farm diversification activities concerned a limited number of holdings (generally below 10%). There was only a limited increase in the number of farms with diversified activities after the reform. The only marked increase was observed in the regions of EU-10 in the case of 'contract work for others' in the regions applying SAPS and 'processing of farm products' in the regions applying regional model. However, these diversification choices may have been supported also by other factors, such as rural development aids and other national policies.

http://ec.europa.eu/agriculture/evaluation/market-and-income-reports/structural-effects-direct-support-2013_en.htm

Evaluation of the EU legislation on organic farming (2013)

The evaluation examined the relevance, effectiveness and European added value of Council Regulation (EC) No 834/2007 (hereunder 'the Regulation') and its implementing rules

The evaluation concluded that the scope of the Regulation is mostly adequate to match the current needs of the organic supply chain but not fully adequate to meet the need of consumers of organic products.

The underlying principles of organic production are made operational in the Regulation by a number of production rules. The evaluation concluded that the production rules are generally adequate to achieve the global objectives of the Regulation and the objectives of organic production. Sound scientific evidence exists that the Regulation has established a framework which guides farmers to adopt practices supporting the objectives of organic farming of higher levels of biodiversity, increase soil fertility and minimising water and air pollution. The system of exceptional rules was considered not fully adequate. For the sectors examined, covering the use of non-organic young poultry, feed and seeds, the evaluation noted that the current system of exceptional rules appears rather to hinder than support the development of organic supplies.

The overall control system of organic farming was considered largely adequate in terms of achieving the global objectives of the Regulation but with some shortcomings in implementation. Some elements of the control system were not consistently implemented across the Member States, such as the evaluation of organic products with respect to residues or the application of different sanctions for the same infringement. As regards the national systems of supervision over control bodies, in some Member States competent authorities may not fulfil their supervisory role fully due to inappropriate procedures for supervision and limited resources.

Currently, three import procedures are operational for assessing equivalence of production and control rules of third countries. The evaluation concluded that the import rules are largely adequate in terms of achieving the global objectives of the Regulation but with some shortcomings in implementation. The import procedure based on the recognition of third countries led in general to an adequate assessment of equivalence but following up on the equivalence assessment of third countries entails a heavy workload for the Commission services. As regards the expiring procedure based on import authorization, there is a clear risk of different interpretations of equivalence by control

bodies and various approaches adopted for issuing import authorizations by Member States. The import procedure based on the recognition of control bodies addressed those risks by shifting the responsibilities from the Member States authorities to the Commission and to control bodies. This shift however requires significant administrative input from the Commission services as well as from the control bodies which in turn need strict instructions to assess the equivalence in a more uniform manner.

http://ec.europa.eu/agriculture/evaluation/market-and-income-reports/organic-farming-2013_en.htm

Synthesis of Mid-Term Evaluations of Rural Development Programmes 2007-2013 (2012)

The synthesis of Mid-Term Evaluations (MTEs) was based on the MTE reports of the 92 national, regional and network Rural Development Programmes (RDPs) 2007-2013. Overall, uptake of the RDP measures was observed to have been slower than expected; measures with less technical requirements and most continuity from the last period were the quickest to be implemented. Economic, Environmental and Social/Quality-of-life impacts were assessed, however a large proportion of MTE conclude that it is too early to judge overall impact. In terms of economic impacts, roughly two thirds of the reports state a net positive impact on growth and employment creation. However, calculation methods were not always found to be sound. While some promising examples for assessment of Quality-of-life and environmental impacts could be extracted, these impacts were generally not convincingly assessed. The synthesis therefore recommends that the future monitoring and evaluation framework could invest more into methods to gain more effective information on these topics.

The MTEs assessed the monitoring and evaluation system as good overall and as ensuring a relevant set of data. However, the system was often regarded as too complex. In terms of the indicators analysed, output indicators displayed a high level of availability and quality of quantitative information. On average 38% of the target values were achieved with differences between the axes (axis 1 on average 30%, axis 2 on average 40%, axis 3 divergent and LEADER below anticipated numbers at 20%). However, only about 30% of the reports report on both target and achieved values for result indicators. Achievements vary greatly between indicators and axes (axis 1: 24%, axis 2: 90% and axis 3: 48%). Overachievement of targets occurred mainly in axis 2.

Concerning the menu of RDP measures, the evaluation concludes that a more limited number of measures seems to be desirable, and the cost effectiveness ratio of some measures should be examined for return on investment. However, it is underlined that it will be necessary to observe the full programming period in order to judge whether measures should be dropped altogether. It is pointed out that LEADER principles were not well incorporated in RDPs and LEADER lags behind in implementation.

https://ec.europa.eu/agriculture/evaluation/rural-development-reports/synthesis-mte-2007-2013_en

Synthesis of sapard ex-post evaluations – update: Bulgaria, Croatia, Romania (2013)

The evaluation assessed the impacts of the SAPARD programme and the extent to which it has been successful in reaching its general objectives as defined in article 1 of Regulation (EC) No 1268/1999 in the three countries concerned. The main findings of

the evaluation are:

SAPARD made a clear contribution to the implementation of the acquis communautaire concerning CAP and related policies, by requiring the set-up of structures and procedures, which simulated the RDP implementation framework, and by promoting compliance to EU standards and by fostering participation, subsidiarity and communication. In BG and RO it was less successful in solving priority issues and specific problems for the sustainable adaptation of the agricultural sector and rural areas at a large scale; in HR this result was similar but much more limited given the programme's limited dimension and extremely short implementation time.

By its dimension SAPARD interventions had to remain limited. Moreover, the already limed budgets were further reduced due to the payment interruption and funds recovery in BG and RO following audit findings. The situation of final beneficiaries improved, but they were few in number and usually larger and more dynamic enterprises, i.e. not characteristic for the holdings structure.

The administrative procedures designed by the national SAPARD Agencies and authorities rendered participation in the programme difficult. They were driven by the urge of the authorities to achieve absorption, but also to avoid complications during controls and to manage workload by keeping the number of applications within the range of available administrative resources. Eligibility requirements changed often, thus creating confusion among applicants, became increasingly demanding, hence excluding potential final beneficiaries. These problems were accentuated by the lack of consulting services, financing opportunities and overall poor level of documentation at the holding level. In addition, the need to ensure high absorption of funds led to the reallocation among measures on an "absorption capacity" rather than a "need" base.

SAPARD Agencies and authorities were quick in setting up the administrative and delivery systems according to the EU requirements, but these systems were hampered by the lack of experience of the personnel and by the need to develop all the detailed operating rules, procedures and manuals in a step by step, "learning by doing" manner. While this situation influenced negatively the implementation of SAPARD, the performance of the system in the delivery of the RDP 2007-2013 improved through SAPARD.

https://ec.europa.eu/agriculture/evaluation/rural-development-reports/sapard-update-2013 en]

Evaluation of the market implications of veal and young cattle meat standards (2014)

The evaluation examined the relevance and effectiveness of the veal and young cattle meat marketing and labelling rules established by Regulation (EC) No 700/2007 (hereunder 'the Regulation') with respect to achieving the objectives laid down in this regulation , as well as its coherence with other relevant measures applied under the CAP. The eight key veal producing Member States were covered.

The evaluation showed that the main impact of the Regulation was to lead Dutch producers to reduce the fattening cycle from twelve to eight months, for part of the veal calf production. Other market trends remained unchanged: national consumption, internal trade and breeders' income. Overall, the Regulation led to a clarification of the situation on the market caused by a previous lack of definition of 'veal' and improved functioning of the yeal market.

The evaluation also showed that consumers were little aware of these labelling rules and that the existence of different sales descriptions depending on the country, even when they share the same language, could be confusing.

The information available through control systems implemented by National Authorities, under the European Commission supervision, did not allow drawing a judgement on adequacy of the control system. However, the reporting of the Member States to the Commission was considered not sufficient to allow a proper monitoring of the controls.

Three recommendations were proposed: seek consistency between sales descriptions from one Member State to another, increase consumer awareness about the standards, and improve the reporting quality of the control system.

http://ec.europa.eu/agriculture/evaluation/market-and-income-reports/veal-marketing-standards-2014_en.htm

Evaluation of CAP measures for the cotton sector (2014)

The evaluation covered the cotton-growing EU countries: Spain, Greece and Bulgaria. It examined the effectiveness, efficiency, coherence and relevance of the measures applied to the cotton sector under the CAP

In 2004, the coupled support regime for the cotton sector was overhauled to improve its coherence with the 2003 CAP reform: decoupling of 65% of the aid and coupled support of 35% for the planted area (crop-specific aid for the sector). Decoupling led to a relative drop in the profitability of cotton compared to alternative crops. Crop-specific aid remains essential: total decoupling would have reduced the planted areas by nearly 65%. The combined effects of the reform on the planted areas and yields, as well as on the evolution of the market, led to a net reduction in the production volume of ginned cotton. Between 2005 and 2008 production decreased with 49%. The introduction of the obligation to harvest and price increases led to a recovery.

Single payment and coupled aid have contributed effectively to maintaining family income for farms specialised in cotton production. The aid represents an essential proportion of producers' income. Nearly 15 000 jobs ("Full-Time Equivalents") in the agricultural and more than 1 100 in the industrial sector have been maintained by the CAP measures applied to the cotton sector; these jobs remain heavily dependent on the continuation of EU aid. The efficiency of the support system for the sector has been improved. The partial decoupling in particular reduced the extent of checks and red tape, as the delivery controls linked to price support became redundant.

https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/cotton2014 fr

Evaluation of the Investment support under rural development policy (2014)

This evaluation analyses three questions in relation to the evaluation of investment support in Rural Development Programmes (RDP) of the Common Agricultural Policy (CAP). Different evaluation methods are classified according to their appropriateness and suitability to measure efficiency, effectiveness and impact of investment support measures. In order to evaluate the causality between policy interventions and outcomes a number of specific econometric methods or experiments are necessary. Theory-based assessments and qualitative participatory approaches cannot be used to derive quantitative results. In order to obtain such results, economic modelling approaches like input-output analyses or econometric methods must be used. A further element of the

analysis is to estimate efficiency, effectiveness and impact of investment support measures in eleven programme areas of the EU. The quantitative analysis shows a wide range of results that depend on structural aspects of the regions under consideration and programme-specific factors. With the data available, a causal statistical link between efficiency and targeting was not found. However, a case study demonstrated that targeting via eligibility criteria is more transparent than selection through ranking while aid intensity differentiation does not always have statistically significant effects on targeting.

https://ec.europa.eu/agriculture/evaluation/rural-development-reports/investment-support-rdp-2014_en

Evaluation of Preferential Agricultural Trade Regimes, in particular the Economic Partnership Agreements (2014)

The evaluation concluded that there is evidence that the EU Preferential Trade Agreements (PTA) have been positive and effective at promoting agricultural trade of the countries from Africa, Caribbean and Pacific (ACP). The implementation of EU preferential agricultural trade regimes was found to be relevant, coherent and efficient with regards to their objectives:

A high level of relevance between PTA objectives and needs and priorities of target countries and beneficiaries, as well as enhancement of supply capacity and achievement of high economic growth was found in all case studies.

In almost all case studies, coherence was judged by respondents as particularly high, primarily in the cases of the enhancement of supply capacity, the increase of competitiveness and poverty reduction, and secondarily in the promotion of investment, and trade creation.

Case studies led to the conclusion that preferential market access is regarded as the most efficient and main driving force behind the expansion of exports to both the EU and other international markets and the development of the sectors investigated in this study.

https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/epas-2014_en

Evaluation of Article 68-measures (2014)

This evaluation assesses the possibility of granting optional support for specific needs, under the Article 68 of the Health Check Regulation, within a limit of 10% of direct payments. It draws on standard statistical approaches as well as on the analysis of the measures' notifications to the EC and on information collected during ten National Studies. The scheme was implemented between 2009 and 2014 by 26 Member States. However, few Member States implemented it in a significant way. Measures most frequently implemented aimed at supporting competitiveness or enhancing the environment. Extensive livestock sectors were the most supported. Economic analyses showed that Article 68 helped reduce disadvantages in terms of viability in sheep and goat, cotton, durum wheat and tobacco sectors but had a very limited effect on competitiveness and sustainability of primary production and industries. It sometimes generated competition distortion. Concerning environment, varied measures were designed and results were uneven. The most significantly implemented type of measures was arable crops rotation and diversification, with some positive impacts. National control arrangements were effective but monitoring and evaluation systems were weak.

Relevance issues arose from competitiveness measures. Optionality was relevant but Rural Development measures would have been more adapted for several cases.

https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/article-68_en

Evaluation of EU beef labelling rules (2015)

The evaluation of the EU beef labelling rules (Title II of Regulation (EC) No 1760/2000 of the European Parliament and of the Council) shows that the compulsory labelling rules, among other measures, had a positive influence on the restoration of consumer confidence following the BSE crises. However they were not sufficient to alleviate the structural decline in demand for beef which started in 2008. A renationalisation of the markets has occurred in the retail sector coupled with an internationalisation of the markets in the catering sector. This has led to an increase in the consumption of imported beef in most of the Member States. According to a theoretical approach, the cost of compulsory labelling represents around 6% of the beef processing costs.

Consumer demand for beef of national origin was met through the retail channel. Compulsory labelling fulfils the expectations of consumers. Yet, consumers do not know or understand batch and plant reference numbers displayed on labels. The market share represented by products sold under voluntary labelling is significant. Voluntary labelling can also sometimes be confusing. The design of control systems complies with EU legislation. Audits conducted by the Commission have highlighted shortcomings in the implementation of traceability and labelling. It is impossible to make any firm judgement on the adequacy of the exchange of information between the Commission and the Member States. The estimates of control costs suggest that they are limited. Nevertheless, as the functioning of control systems is not fully effective, its efficiency could be improved. Beef labelling rules are coherent with all related European food labelling rules. Three recommendations are proposed: simplify beef labelling by replacing all the compulsory reference codes by a single 'traceability number', assess the effect of Regulation (EU) No. 653/2014, and enhance control procedures.

 $\underline{https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/eu-beef-labelling-rules\ en}$

Evaluation of the Information Policy on the CAP (2015)

This evaluation examines the information policy on the CAP implemented in the period 2006-2013, focusing primarily on assessment of more recent information actions, i.e. direct and indirect actions implemented as part of the external communication strategy on the CAP for the period 2010-2015. All evaluation findings presented in the report are based on evidence obtained from interviews with EU officials, key EU- and national-level stakeholders and beneficiaries of analysed information actions, findings of 16 case studies and three different surveys, as well as outcomes of extensive desk research. All relevant data for making judgements and drawing of evaluation conclusions and recommendations were either collected by the research team or provided by officials of the Directorate-General for Agriculture and Rural Development of the European Commission. The evaluation concludes that implementation of the information policy on the CAP was useful and generated positive results, despite the limited budget available for its implementation. At the same time, areas where planning and implementation of the information policy on the CAP should be improved are pointed out.

https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/information-policy-2015_en]

Synthesis of ex ante evaluations of rural development programmes 2014-2020: Final report (2015)

This evaluation study concerns the analysis and synthesis of the ex-ante evaluations of Rural Development Programmes and National Rural Network Programmes 2014-2020, with a focus on four evaluation themes: a) process of the ex-ante evaluations, b) intervention logic and internal coherence, c) external coherence and added value and d) six thematic clusters including (i) investments, (ii) knowledge transfer, advisory services and European Innovation Partnership, (iii) agri-environment-climate, (iv) forestry, (v) young farmers, small farmers and areas with natural constraints, and (vi) risk management. The findings incorporated in the study are based on evidence obtained by geographic experts through a) desk research, b) interviews with representatives from the Managing Authorities and c) a survey addressed to Managing Authorities and key stakeholders. The study concludes that the process of the ex-ante evaluations and the external coherence of the RDPs are well documented and satisfactory, while the internal coherence, in terms of needs' prioritisation and description of links between the planned actions - outputs and expected outputs - results, needs to be further enhanced. The dissemination of good practices, especially regarding new measures and co-ordination mechanisms, is highlighted as the key recommendation.

https://ec.europa.eu/agriculture/evaluation/rural-development-reports/ex-ante-rdp-synthesis-2014-2020_en

Evaluation of measures for agriculture carried out for the outermost regions (POSEI) and the smaller Aegean islands (2016)

The evaluation assessed the impact of measures carried out for the Outermost Regions (ORs), and, given the similarities in terms of objectives and measures, those for the Smaller Aegean Islands (SAI). The overall performance of POSEI/SAI programmes is assessed positively as regards their ability to address the particular agriculture-related problems associated with the specific geographical location of the OR. The evaluator found that the programmes are effective in covering most specific needs.

Production levels have been maintained (except for tomatoes for export and olives in the Small Aegean Islands) but are not necessarily secured for the long-term future. Efficiency levels are diverging in the main traditional sectors. The OR/SAI increasingly face price competition from EU imports due to liberalization of several production activities at EU level, further intensified by external factors (wide availability of pork and milk powder due respectively to the Russian embargo and to the end of milk quotas).

The evaluation also found that the specific supply arrangements and support to local productions are implemented coherently, and that the POSEI/SAI programmes are coherent with the second pillar of the CAP and national support. While the POSEI programmes contribute to the 3 general CAP objectives, the capacity of current CAP measures and instruments (e.g. direct payments) to cover the specific needs of the ORs/SAI has not been demonstrated.

https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/outermost-regions-smaller-aegean-islands en

Evaluation on the payment for agricultural practices beneficial for the climate and the environment (2018)

The report of the evaluator assesses the Pillar 1 greening measures with respect to the general objective 'sustainable use of natural resources and climate action'. It reviews the implementation of the measures between 2015 and 2017 in the EU28, with a specific focus in 10 Member States (Austria, Czech Republic, France, Germany, Latvia, Netherlands, Poland, Romania, Spain and the UK). It examines the drivers influencing Member State and farmers' implementation choices; the effects of the measures on farming practices, production, the environment and climate; administrative costs and efficiency; coherence with CAP objectives and measures, as well as broader environmental and climate legislation; their relevance in addressing EU, national and regional needs and their EU added value. The study found that overall the greening measures have led to only small changes in management practices, except in a few specific areas. As a result, their environmental and climate impacts have been limited and locally specific. They have had a negligible effect on production or economic viability of farms and the additional administrative costs associated with them have been relatively low. The report includes series of recommendations, in particular to encourage the uptake of Ecological Focus Areas (EFAs) and to ensure that the measure for Environmentally Sensitive Permanent Grassland (ESPG) is implemented more widely, both within and outside Natura 2000 areas. MS are invited to better design greening measures according to specific conditions.

 $\underline{https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/greening-of-direct-payments_en}$

Evaluation of forestry measures under rural development (forthcoming)

The report found that the forest measures available to Managing Authorities under Rural development provide a coherent set of measures capable of covering the needs of the forest sector and fostering sustainable forest management in rural areas. The flexibility of the Rural Development Programmes enables the Managing Authorities to adapt the measures to local needs and peculiarities, and to provide highly targeted support. However, the effectiveness of the forest measures remains highly dependent on the detail of the measure design at RDP level, and where, when and for how long it is implemented by the beneficiaries.

Synthesis of ex-post evaluations of Rural Development Programmes 2007-2013 (forthcoming)

This synthesis, based on ex-post evaluation carried out in Member States for Rural Development Plans (RDP), strategies and frameworks, covers effectiveness, causal analysis, efficiency, coherence and EU value added. Full aggregation of results is not possible due to missing data or differences in approaches. Replies to evaluation questions are predominantly positive about the contribution of RDPs to environment and climate action (50% to 70% of answers are positive), as well as for growth and jobs (40%). On the latter, the economic crisis was part of the limiting factors. Outcomes for the quality of life and diversification are less straightforward (30% of positive answers), due to unclear interrelation and measuring standards. Lack of priority and budget seem to have had a limiting effect on innovative approaches, and improvement in broadband access was delayed due to processes (amongst other late implementation). The SWD accompanying this synthesis will to be submitted to the RSB in 2018.

Evaluation of the impact of CAP measures towards the general objective of "viable food production" (forthcoming - 2018)

The purpose is to evaluate the impacts of CAP measures towards the general objective of viable food production with a focus on the specific objectives of supporting agricultural income, competitiveness and market stability. The evaluation covers all relevant CAP measures, markets, direct payments and rural development, with specific questions on the usual dimensions of evaluation. This analysis faces specific challenges, as the implementation of the latest CAP reform started in 2015, in the midst of market turbulences. First intermediate results are available on the effects on markets, income and competitiveness. Initial findings confirm the impact of direct payments on enhancing and stabilising income. So far coupled support appears to have limited effects on the level playing field between MS, but this depends on sectors and aid intensity. The effectiveness of exceptional market measures varied depending on sectors and conditions: support for private storage enabled some market relief in the pigmeat sector, exceptional measures for fruit and vegetables were effective (despite some issues on timeliness); while measures included in the dairy package were popular, the evaluation points to the risk of problems being moved forward.

The administrative and management costs of the current CAP are considered to be generally higher than in the previous one. In most of the measures, in particular greening measures and voluntary coupled support, the increased costs are connected with the high complexity of rules and required controls. Considering this, they lower the value of generated benefits. The Active Farmer Clause measure is found to be inefficient as costs are higher than benefits.

The level of coherence with the other CAP objectives varies and depends strongly on the level by which particular CAP measures are implemented in MS. The coherence with other EU policies is found to be good.

Selected Studies

Evaluation Study on European Innovation Partnership – AGRI (2016)

This report is an evaluation study of the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP), as implemented in 96 out of 111 Rural Development Programmes across 26 Member States.

The evaluation found that the EIP's premise on incentivising innovative farming practices to foster a competitive and sustainable agriculture and forestry sector is seen as valid and important. Innovation actors, especially farmers and forest managers, emphasised a need for projects linking research and practice. The EIP is found to be a flexible tool that is addressing this in in a way that can be adapted to divergent circumstances and policy contexts. Farmers are more likely to become involved in the innovation process under the EIP as compared with other funding streams for innovation in the agricultural sector.

To help improve EIP implementation over time, the evaluation made recommendations. The EIP's effectiveness could be enhanced by: making better use of multiplication actors; by simplifying national and regional administrative implementation and by adapting rules at European level to incentivise participation (e.g. enabling advance payments). By reducing fragmentation and improving knowledge flows, the EIP provides a crucial opportunity to build coherent national / regional agricultural knowledge and innovation systems (AKISs). These should be interlinked into an integrated EU-wide AKIS.

https://ec.europa.eu/agriculture/external-studies/2016-eip_en

Study Mapping and analysis of the implementation of the CAP (2016)

This study provides a review of the choices that have been made by the 28 Member States in the two Pillars as well as a qualitative analysis of the potential impact of these choices. The study confirms that the CAP became more complex: the new flexibilities resulted in a more diversified implementation, with measures being used in many different ways and in wide array of combinations. The study reveals that the Member States' strategy to reach the 3 CAP objectives is not sufficiently documented: the implementation choices are more influenced by the consideration to "maintain the status quo" than by a long-term strategy that takes into account the general CAP objectives. The study also raises concerns about the potential impact of the CAP: the degree to which funds have been targeted to certain needs might not be sufficient to have a significant impact. In the short term, it is recommended to encourage the exchange of good practices between countries to promote smart simplification and reduce administrative burden. For the CAP post 2020, Member States should be encouraged to establish a long term strategy that takes into account the CAP objectives.

https://ec.europa.eu/agriculture/external-studies/mapping-analysis-implementation-cap_en

Study on the impact of EU trade agreements on the EU agricultural sector (2016)

The study on the impact of EU trade agreements on the agricultural sector shows that the agreements with South Korea, Mexico and Switzerland have increased EU agri-food exports by more than 1 billion Euro and raised value added in the agri-food sector by 600 million Euro. The increased exports have supported almost 20 000 jobs in the agri-food sector, of which 13 700 jobs are in primary agriculture, and have also generated around 7 700 jobs in other sectors. Imports from the partner countries have likewise increased, giving EU consumers and processors better access to agri-food products. The study highlights the importance of activities that allow EU exporters to make full use of trade opportunities, such as promotion and information actions and resolving Sanitary and Phytosanitary (SPS) barriers.

https://ec.europa.eu/agriculture/external-studies/2016-bilateral-trade-agreements en

Study on risk management in EU agriculture (forthcoming)

This study provides a mapping of relevant risks in EU agriculture. Information on availability and use of risk management instruments was collected in all Member States though consultations with public authorities, farmers' associations and insurance companies. The final report is complemented by eight case studies: six on specific risk management instruments in selected Member States and two on risk management in agriculture in the United States and Canada. The study finds that European farmers are increasingly exposed to a wide range of risks while the availability of risk management instruments lags behind. Insurance remains the most commonly used instrument, while both availability and uptake of other instruments such as mutual funds and contractual price agreements (including futures) is more limited. There is a need to strengthen capacity to design and implement risk management instruments. The report elaborates several recommendations, including on how to gain experience on the ground.

Annex 4: A New Delivery Model for the CAP

$Glossary^{17}$

Term or acronym	Meaning or definition
AECM	Agro Environment and Climate Measures
AKIS	Agricultural Knowledge and Innovation Systems
ANC	Areas facing Natural Constraints
CAP	Common Agricultural Policy
СВ	Certification Bodies
СМО	Common Market Organisation
DP	Direct Payments
EAFRD	European Agricultural Fund for Rural Development
EAGF	European Agricultural Guarantee Fund
ESIF	European Structural and Investment Funds
FAS	Farm Advisory System
GAEC	Good Agricultural and Environmental Conditions
IACS	Integrated Administration and Control System
ICT	Information and Communications Technology
LPIS	Land-parcel identification system
MCA	Multi Criteria Analysis
MFF	Multiannual Financial Framework
PA	Paying Agencies
RD	Rural Development
REFIT	Regulatory Fitness and Performance
SMR	Statutory Management Requirements
SWOT	Strengths, Weaknesses, Opportunities, and Threats
VCS	Voluntary Coupled Support

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https://ec.europa.eu/agriculture/sites/agriculture/files/glossary/pdf/index_en.pdf

A full-fledged glossary including definitions on the CAP can be found on the internet page of the Directorate General for Agriculture and Rural Development (DG AGRI):

1. INTRODUCTION

The current CAP is based on an implementation concept focusing on Member States' compliance with detailed EU rules. This leads to the perception that the CAP is essentially a policy that, instead of being driven by objectives, relies almost exclusively on the enforcement of rules through controls, penalties and audit. As a consequence, whether in the form of the potential loss of funds for farmers and Member States or in the form of pressure on the Commission to keep a low error rate and thus get assurance and discharge of the European Parliament, the present system leads at all levels to a strong focus on ensuring and enforcing compliance.

This has a number of tangible effects: on the administrative burden, on very tight controls and on requests at all levels for more and more precise rules and interpretative assistance from the Commission (e.g. through interpretation notes and guidelines). Against this background, the current system is entangled in a vicious circle that inevitably leads to increasing complexity.

The assessments of the performance of the CAP show the difficulties to apply the same detailed rules throughout the current EU, taking into account the **very diverse agricultural and socio-economic conditions**. The experience of the last CAP reform confirmed the strong difficulties and contradictions on having a common set of detailed rules which required, in order to be implemented, a large set of choices and exceptions across many policy tools.

The limitations of a "one-size-fits-all" approach, due to the different impact that the same measure could have in different territories, have also been highlighted by analyses, both in the environmental and the economic domain. The experience of the current CAP also showed limited coordination between the implementation of the two pillars of the CAP and the need to strengthen the synergies between policy instruments, in a context of growing calls for a more targeted policy design based on needs assessments that would increase the **effectiveness and the efficiency of the policy**.

Taking all these elements into account, and based on the input of the public consultation on "modernising and simplifying the CAP", the Communication "The Future of Food and Farming" confirmed the need for the CAP to streamline its governance and improve its delivery on the EU objectives and to significantly decrease bureaucracy and focus on results and the EU added value.

This Annex describes the new delivery model of the CAP, its feasibility and it shows how it would function in practice using specific examples (sections 2 and 3). Beyond the presentation of the model proposed, sections 4 and 5 will summarise the opportunities, risks and challenges attached to it and will present the proposed safeguards to mitigate the identified risks.

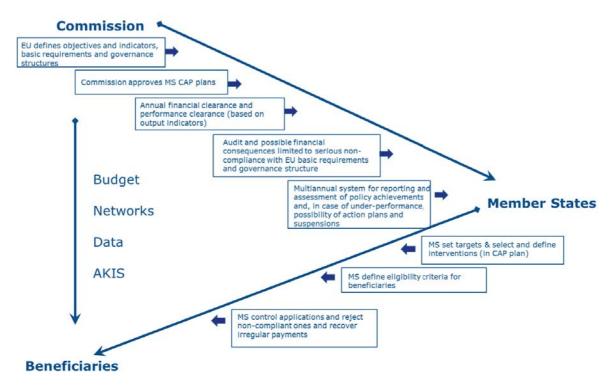
2. THE NEW DELIVERY MODEL EXPLAINED

The new delivery model for the CAP will involve a shift from compliance towards results and performance and a new distribution of responsibilities between the EU and Member States, involving substantial changes at three different levels:

1. A multi-annual programming approach that will cover the two pillars of the CAP (direct payments, rural development and sectorial strategies under the current CMO), based on a common set of objectives, indicators and a common catalogue of broad types of intervention

- 2. A new system of monitoring and steering policy implementation
- 3. An adapted approach to get assurance and perform audit

Chart 1. The new relation between Commission, Member States and beneficiaries



2.1. Programming approach based on a common set of objectives and indicators

The EU will set the legal framework needed to ensure fund implementation in line with common CAP objectives. The EU framework which will apply to Member States will define:

- Common objectives (general and specific ones)
- Types of interventions and their basic requirements; and
- Set of general rules for the performance assessment (e.g. common indicators)

Member States will design their CAP plans and set the terms for implementation towards individual beneficiaries so that these will:

- 1. assess their needs against the specific objectives of the CAP based on a territorial and sectorial SWOT analysis,
- 2. design and develop the interventions together with corresponding budget allocations and specific requirements (e.g. eligibility criteria, support rate) to address their needs and to contribute to the common specific objectives, and

3. establish, in line with these objectives, quantifiable targets, based on result indicators, to steer implementation and to allow the assessment performance and ambition of the CAP Strategic Plans.

Member States will submit a single strategic document for both CAP pillars (**CAP Strategic Plans**) for their entire territory. However, where elements of the CAP Strategic Plan are established at regional level, the Member State will ensure the coherence and the consistency with the elements of the CAP Strategic Plan established at national level.

Targets are defined in the CAP Strategic Plan. The assessment on progress towards these targets (reflected in the annual performance report) and corrective mechanisms to steer policy implementation where necessary, will have no implications at the level of beneficiary (for details see below)



Chart 2. From objectives to interventions

2.1.1. Content of the CAP Strategic Plan

The CAP Strategic Plans will be the central programming tool for both pillars (EAGF and EAFRD): they will be drafted by Member States, stakeholders will be consulted according to the partnership principle and they will be subject to formal approval by the European Commission.

The CAP Strategic Plans will contain the following elements: a) an assessment of needs vis a vis the specific objectives based on a SWOT analysis; b) an intervention strategy; c) a description of elements common to several interventions; d) a description of the direct payments and rural development interventions specified in the strategy; e) a description of the sectoral programmes and their interventions; f) target and financial plans; g) a description of the governance and coordination structures including an assessment of the enabling conditions (ex-ante conditionalities); h) a description of the elements that ensure modernisation of the CAP and the digitization of agriculture and rural economy; i) a description of the elements related to simplification and reduced administrative burden for final beneficiaries.

At the same time, the CAP Strategic Plans will contain Annexes regarding: a) the examte evaluation and the Strategic Environmental Assessment (SEA); the full analysis of strengths, weaknesses, opportunities and threats (SWOT); information on the mandatory consultation of the partners; additional national financing provided within the scope of the Plan.

2.1.2. Types of interventions, funds allocations and basic requirements

In the **CAP Strategic plans** Member States will choose and configure the interventions to be implemented both under the 1st and 2nd pillar from the types of interventions set out by the EU basic act.

In that context, Member States will be bound by basic EU requirements concerning key fundamental aspects: a) compliance to the rules of the World Trade Organisation concerning domestic support; b) "conditionality" applicable to beneficiaries receiving direct payments and area-based payments under rural development; c) minimum requirements for the Farm Advisory System. The following **types of interventions** will be provided for at basic act level:

EAGF (Pillar I)	EAFRD (Pillar II)
Basic income support for sustainability	Payments for environment, climate and other management commitments
Complementary Redistributive income support for sustainability	Payments for natural constraints or other region-specific constraints
Complementary Income Support for Young Farmer	Investments
Voluntary schemes for the climate and the environment "eco-schemes"	Support to young farmers installation and rural business start-up
Coupled income support	Risk management tools
Sectorial interventions (CMO)	Cooperation
	Knowledge exchange and information

For each of these types of interventions, the EU legislation will establish general principles. Member States will be responsible for developing schemes and interventions based on this list, by determining their specific design, including all the requirements that can ensure an effective contribution of the intervention to the specific objectives. This will include the eligibility rules (currently defined at EU level). Member States will also detail in the CAP Strategic Plans the annual planned outputs for the intervention, and where relevant, the applicable support rates.

Furthermore, Member States will fix in their CAP Strategic Plans the allocation of budgetary resources for each intervention. The level of this allocation should reflect both the needs assessment and the CAP objectives.

2.1.3. Approval of the CAP Strategic Plans

The Commission will assess and approve the CAP Strategic Plans. The assessment of the Plans will be done on the basis of:

- a) the completeness of the plans;
- b) the consistency and coherence with the general principles of Union law and the requirements defined at EU level;
- c) their effective contribution to CAP specific objectives and identified needs;
- d) the impact on the proper functioning of the internal market and distortion of competition;
- e) the level and proportionality of administrative burden on beneficiaries and administration.

In its assessment, the Commission will pay particular attention to the adequacy of the CAP plan strategy, the corresponding specific objectives, targets, interventions and the allocation of budgetary resources to meet the specific objectives of the CAP Strategic Plan. The proposed set of interventions will be assessed on the basis of the analysis of the situation in terms of strengths, weaknesses, opportunities and threats ("the SWOT") and the ex-ante evaluation.

In the current CAP, only the Member States' Rural Development Programmes (EAFRD) are subject to Commission approval. By contrast, as regards direct payments (EAGF), Member States' choices among numerous options made available by the relevant basic regulation are only subject to notification and not subject to formal approval by the European Commission.

Chart 3. The current CAP and future CAP.

Key notifications (by implementation stage)

Key notifications (by implementation stage)			
	Current CAP	Future CAP	
	Planning		
Pillar I	MS notifications for Direct Payments, including greening options and GAEC Strategies- work/support programmes for the Sectorial programmes	CAP Strategic Plan	
Pillar II	Rural Development Programmes		
	Policy Implement	ation	
Pillar I	MS annual notifications on implementation + control data Annual communications on Sectorial programmes	Annual Performance Report	
Pillar II	Annual Implementation Report		
	Performance and As	surance	
	Annual Accounts (PA)	Annual Accounts (PA)	
Pillars I / II	Management declaration (PA)	Management declaration (PA)	
		Annual performance report (PA)	
	CB audit opinion	CB audit opinion	
	Evaluation		
Pillar I	Evaluations at EU level (some covering also Pillar II) Ex-ante, Mid-term and Ex-post evaluation of RDPs by MS, synthesis of ex ante and ex post by COM	Ex ante and Interim evaluations by MS (CAP Strategic Plan) Mid-term assessment on performance (EU level) and ex pos evaluation of the CAP; additional evaluations according to evaluation plan	

2.2. Monitoring progress and steering policy implementation

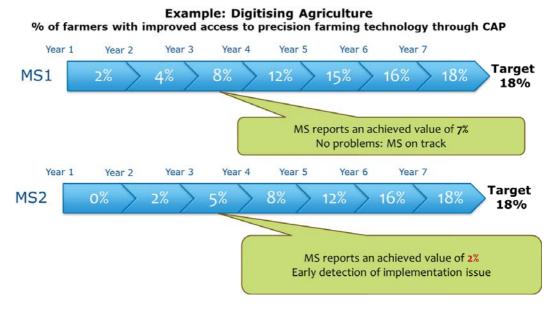
2.2.1. Annual performance review

An **annual performance review** is foreseen as a key element of the ongoing monitoring and steering of policy implementation. In order to make an annual performance review operational, Member States will submit an Annual Performance Report with information

about realised output and expenditure as well as progress towards the targets set for the whole period which have been set using common result indicators.

In cases of slow or insufficient progress towards achieving the targets set for the CAP Strategic Plan, MS will be required to carry out an analysis of shortcomings and will include in the report proposals for remedial actions (Chart 4 illustrates a fictive example of reporting from two Member States).

Chart 4. Annual Performance review. Monitoring progress towards target (results)

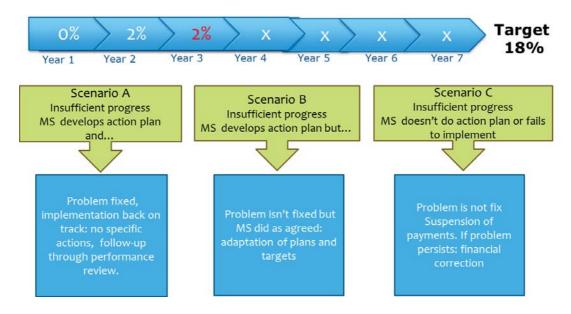


The assessment of those reports would trigger interaction with MS in view of helping them to implement the planned policy in an efficient way. This exercise would involve a continuous exchange between MS and the Commission including in a regular Annual Review and Monitoring Committee meetings, on the state of play of the evolution of programme implementation towards the targets. The Commission will play a supporting role by facilitating the exchange on good practice and providing pertinent recommendations to MS. If needed, the Commission would request Member State to submit a formal action plan to remedy the situation.

Where the intended remedial actions have not been implemented by Member States or the Member State is not willing to engage with the Commission to fix the problem the Commission may suspend payments. Should the problem not be solved, the suspended amounts would definitively lost by the Member State (see below for more details on possible corrective actions).

Chart 5. Case of an action plan agreed by EC and MS and implemented by the MS.

Potential scenarios



2.2.2. Incentive system for environmental and climate performance

At a certain stage of the policy implementation (2026), a performance bonus may be assigned to Member States to reward satisfactory performance in relation to the environmental and climate targets.

The performance bonus will correspond to a specific % of Member States allocations of the EAFRD. Based on the performance review of the year (2026), the performance bonus may be attributed to this Member State if the respective environment and climate targets have been achieved at a level of at least 90% of their target value for the year [2025].

Where the target values are not achieved, the performance bonus shall not be allocated to the respective Member State.

2.3. Assurance framework

2.3.1. Principles of the new approach to assurance and audit

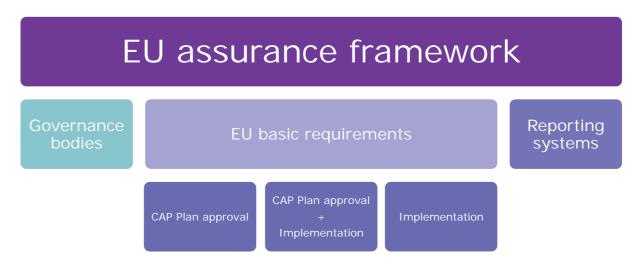
The CAP is implemented in shared management by the EU and the Member States. The existing **CAP governance bodies** set up in the Member States, notably the paying agencies (PA) and certification bodies (CB), have shown their effectiveness in protecting the EU budget and ensuring sound financial management and reasonable assurance.

The new CAP delivery model acknowledges this situation by keeping the CAP governance bodies in place while conferring more flexibility on Member States in deciding and managing the control systems. In this context, EU legislation will provide for a general set of rules addressed to Member States which will have to create the legal arrangements applicable to individual beneficiaries. In line with the budget focused on results approach, CAP strategic plans will be assessed in relation to their expected performance; payments will be granted on the basis of outputs, realised in order to reach the pre-established result targets. Thus, the CAP will link the eligibility of EU financing to the actual achievements on the ground.

The Commission will ensure that the governance structures set up in the Member States are functioning effectively, will reimburse the payments incurred by the accredited

paying agencies and will clear the accounts assessing the achieved outputs reported by the Member States.

Chart 6. Elements of the new EU assurance framework

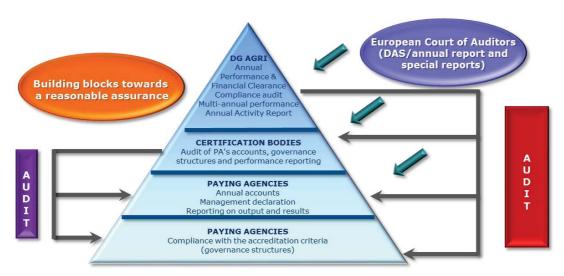


Therefore, the **assurance framework** for the post-2020 CAP would focus on governance structures, which covers the following areas:

- Governance bodies: this will cover accredited Paying Agencies and where applicable, Coordinating Bodies, Certification Bodies, Competent Authorities, the Bodies responsible for the CAP plan. No major changes are foreseen in this domain.
- **EU requirements**, as defined in the CAP legislation and further developed in the CAP plan (Integrated Administration and Control System -IACS, conditionality, genuine farmer, WTO requirements, public procurement...etc.). As compared to the current situation, the EU-level rules will be substantially reduced, since the eligibility criteria and all detailed implementing decisions are left to the Member States.
- Reporting systems, in particular the reliability of data reported.

The new delivery model will make full use of the **single audit approach** will be fully in place, with regard to both compliance and performance. This means that Certification Bodies (CBs) should provide the necessary assurance that the governance structures are in place, the EU rules have been respected at Member States level and the reporting systems are reliable. The Commission will then assess the work of the CBs. **The focus of Commission audits will shift from checking compliance with rules at the level of beneficiary to assessing the delivery of outputs with the necessary governance structures in place.** Therefore, the audit would take place at system level, following the current experience in auditing the internal control system of the paying agency and the fulfilment of the accreditation criteria. Some procedures and controls which are part of the internal control testing may not be tested on an annual basis (but their testing could be rotated on a 3-year rolling basis).

Chart 7. Assurance framework: single Audit principle



In addition to this framework, assurance is also built on the delivery of outputs (performance) which will determine the eligibility of the expenditure, as explained below.

A key novelty of the new system is the two-tier approach concerning the clearance:

- **Annual financial clearance** would, as the existing system, solely concern the accuracy, veracity and correctness of the accounts in financial terms. No changes are proposed in this respect; some simplification in reporting would come automatically from the new delivery model and the fewer EU requirements.
- **Annual performance clearance** would relate to the eligibility of expenditure (as newly defined, in relation to the outputs) and would:
 - Review the reporting on the outputs;
 - Check that the certification body's opinion on the reliability of the performance reporting for the annual performance clearance can be accepted; the opinion would cover the outputs obtained on the basis of the fixed output indicators (and not anymore the legality and regularity of expenditure in relation to the eligibility rules set for the beneficiaries, as today);
 - Determine if the outputs have been achieved, according to planned output and related expenditure.

The assurance package, as laid down in the Financial Regulation, will continue to be submitted by the 15 February year n+1 with the same elements as currently, adding the annual performance report. It will hence include:

- Annual accounts;
- Management declaration;
- Annual performance report, including outputs (new);
- CB audit opinions.

Taking this timing into account, the reporting should always refer to the financial year n (16/10/n-1-15/10/n) that is subject to the annual performance clearance.

2.3.2. The annual performance report in the context of the annual performance clearance

The **annual performance report** will not only be used to monitor and assess the progress towards targets at result level, it should also cover the outputs achieved and the expenditure declared for each intervention approved in the CAP strategic plan.

The CAP strategic plan would include the annual planned expenditure for each intervention, identifying the planned annual outputs to be obtained and, where possible, a planned average cost per output, meaning the ratio between planned expenditure and planned outputs.

For instance:

CAP strategic plan						
Intervention	Output year n	Expenditure year n	Average cost per output			
Scheme for preserving biodiversity	5 000 ha	2 000 000€	400€			

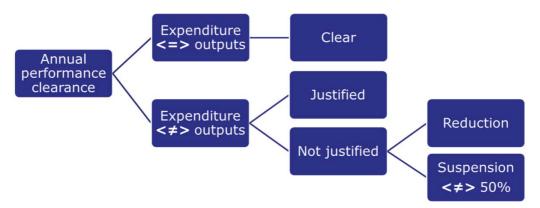
Annual performance report							
Intervention Output (achieved) Expenditure (paid) Average cost per							
	year n	year n	output (actual)				
Scheme for preserving	4 000 ha	1 600 000€	400€				
biodiversity							

In order to tackle situations where the planned outputs are not obtained with the expenditure declared and MS cannot provide a duly justified reason for this deviation (using a contradictory procedure, if requested), the Commission should have appropriate mechanisms to protect EU financial interests. In the framework of this annual performance clearance, for such a situation, a mechanism of **reduction in payments** should be put in place. If the expenditure declared corresponds to the output achieved, the expenditure is cleared without reduction.

Moreover, where the Commission establishes that the difference between the expenditure declared and the relevant output indicators reported is more than 50% and the Member State cannot provide a duly justified reason, the Commission may suspend payment for that given intervention(s).

As explained above, the annual performance clearance will assess the expenditure paid and the outputs achieved by the Member State and therefore, payments to individual beneficiaries are not affected by this procedure. Similarly, reaching or not the result targets agreed will have no impact on the individual payments to beneficiaries.

Chart 8. Annual performance clearance



2.3.3. Possible corrective mechanisms for cases of serious non-compliance with governance structures, including EU basic requirements

The Commission needs to have adequate corrective mechanisms that can be triggered when deficiencies in the governance structures are found. The gravity of the deficiency and the expenditure affected would normally define the type of corrective mechanism to be applied. There are 3 types of corrective mechanisms:

- **Action Plans:** An action plan is a corrective tool by which the Member State and the Commission agree to remedy a specific deficiency in the governance structures. The action plans normally have an effect in correcting the situation in the planned expenditure but not the previously incurred one.
- **Suspension of payments:** The suspension mechanism should be triggered to protect the EU budget in cases of deficiencies identified in the governance structures or reliability of reporting.
- Financial correction (only for serious deficiencies): The financial correction after a conformity procedure recovers the expenditure incurred and paid to the Member State which is considered to be non-eligible or not in compliance with the applicable law,

EU defines objectives and indicators, basic requirements and governance structures

MS select and define interventions and set targets within EU frame

MS define eligibility criteria for beneficiaries

MS manages and controls applications and claims

MS pay and if necessary, recover, to re-use

Annual financial and performance clearance

Audit and possible financial consequences limited to deficiencies in governance structures, including EU requirements

Multiannual system for reporting and assessment of policy achievements

CAP plan reviews

Chart 9. Managing the new CAP in practice

3. THE NEW DELIVERY MODEL ILLUSTRATED: EXAMPLES

This section aims to illustrate with practical examples what the consequences of the application of the new governance model/management system would be.

It is important to underline that this change will imply an important shift in the way the CAP is managed. From a highly prescriptive policy, with extensive basic regulations, delegated and implementing acts and guidance documents, it will become a performance-oriented policy focusing on results rather than EU controls of the compliance with detailed eligibility rules.

Three examples are presented to cover environmental and socio-economic objectives. The examples encompass interventions under both pillars and put the focus on the differences between the current framework and the new proposed approach.

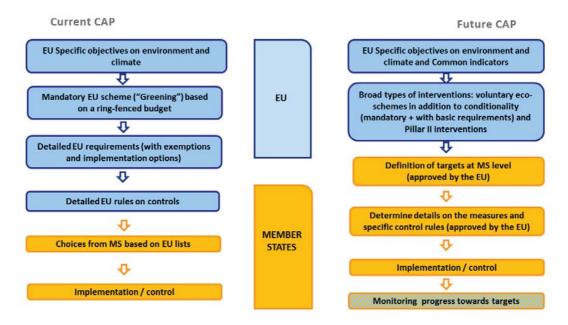
3.1. Example 1: Rewarding practices beneficial for the environment and the climate under pillar I (Greening/eco-schemes)

Today, the CAP, in particular its first pillar, is made of a **long list of very detailed rules defined at EU level** which apply **in a uniform way** throughout the EU. This approach may not always take into account the very diverse agricultural, climatic, environmental and socio-economic conditions around the EU and has led to a considerable degree of complexity (driven by the paradoxical combination of an increasing volume of implementing rules, guidance documents and legal interpretations needed to meet requests for legal certainty and the number of exemptions needed to address this diversity).

Since 2015, 30% of the direct payments are associated with the mandatory implementation of a set of practices beneficial to the environment and the climate ("greening"). These practices are governed by a set of very detailed and prescriptive EU rules, which do not only indicate the number and types of practice, but also regulate aspects directly linked to the farm/beneficiary level. Such aspects include, for example:

- The requirement to dedicate a set percentage of arable land per farm to areas beneficial to biodiversity (ecological focus areas EFAs)
- A list of 13 types of features or areas that can be qualified as EFA for which the eligibility conditions are detailed (e.g. maximum size of gaps in hedgerows, maximum width of the space between two adjacent features) accompanied with a set of weighting and conversion factors to acknowledge their differences in terms of importance for biodiversity and standardise their measurement;
- Four types of exemption according to the size of the farm, the presence of grassland and the ratio of forest to agricultural land;
- Two alternative options framed by several conditions relating to collective or regional implementation of this requirement;
- Creation of an additional layer in the Land Parcel Identification System (LPIS) established by all Member States for control purposes (so-called "EFA layer").

Chart 10. Greening versus eco-scheme under the new delivery model



For the CAP under the new MFF, it is proposed that the new delivery model of the CAP introduces a new division of responsibilities for defining and implementing the rules between the EU and the national (regional) level. In practical terms, this would mean the following:

- The EU will set the framework needed to ensure common achievements and veil over it: It will:
 - 1. define common objectives (general and specific ones) on environment and climate (e.g. under the general objective of bolstering environmental care and climate action and contributing to the achievement of EU environmental and climate objectives, to preserve nature and landscapes) as well as the relevant key result indicators for monitoring progress towards targets
 - 2. define types of interventions, such as **new voluntary schemes for the climate and the environment,** also called **"eco-schemes"**, which are specific funding streams in Pillar I to meet environmental and climate objectives without any pre-established requirements (in addition to conditionality rules and Pillar II interventions beneficial to the climate and the environment);
 - 3. set general rules for assessing performance based on impact indicators (e.g. Farmland Birds Index and share of agricultural land covered with landscape features)
- Member States will further break down the common framework and ensure implementation: They will:
 - 1. assess their needs against the common environmental and climate objectives based on a SWOT and an ex-ante evaluation including the SEA;
 - 2. fix the details of the types of interventions and the basic requirements (e.g. eligibility criteria, support rate) and devise a suitable mix of mandatory and voluntary measures for farmers in a way so as to contribute to the

environmental and climate objectives (e.g. allocate X% of the Pillar I envelope to a voluntary eco-scheme aiming at rewarding a high density of landscape features on farms or specific management practices for landscape features beneficial to biodiversity but also develop a wider range of supporting tools and schemes under EAFRD such as knowledge and innovation, investments and management commitments);

3. set targets for result indicators to assess performance against the objectives (e.g. Y% of agricultural land managed for supporting biodiversity conservation and restoration, including landscape features supported by the voluntary eco-scheme above-mentioned).

3.2. Example 2: Supporting fairly farmers' income through decoupled direct payments under pillar I

In addition to enhancing the sustainable management of natural resources (through the greening payment, see section 3.1), the current structure of direct payments contributes to achieving the two other main objectives of the 2013 CAP reform, namely ensuring viable food production and encouraging territorial balance. It also aims to improve the distribution of the income support, e.g. to the benefit of smaller farms. Therefore, the Regulation currently provides as **decoupled area-based payments**, in particular:

- A basic payment for farmers (BPS/SAPS¹⁸);
- A voluntary redistributive payment (RP) that MSs can use to grant farmers an extra payment for the first hectares, thus increasing the income support of smaller farms;
- A voluntary simplified scheme for small farmers (SFS);

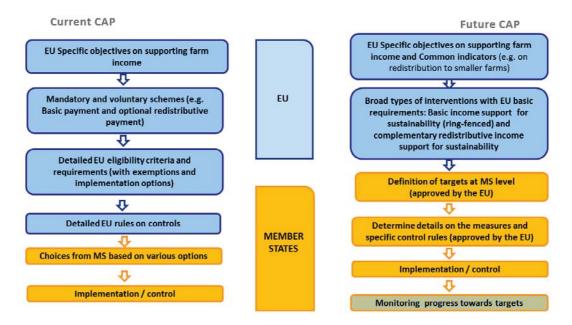
Besides the distinction of these various support schemes, which allows Member States to intervene on the distribution of direct payments, the set-up of the BPS by use of certain options plays an important role to target decoupled direct payments:

- internal convergence (i.e. degree of homogenisation of the value of entitlements);
- regionalisation, allowing Member States to define regions in accordance with "objective and non-discriminatory criteria" and to allocate differentiated budgetary envelopes which could be used in a way to differentiate these levels of payments according to support needs;
- limitation in the number of payment entitlements and reduction coefficients applied to the least productive areas.

Finally, the current EU legislation provides for an obligation to reduce basic payments (BPS/SAPS) received by the largest beneficiaries if a Member State decides not to implement the redistributive payment scheme. Thus, at least 5% of the amount exceeding EUR 150 000 of basic payments received by beneficiaries must be withdrawn. Steeper reductions and capping can be implemented, but they are not compulsory.

This refers to the Basic Payment Scheme based on payment entitlements and the Single Area Payment Scheme without entitlements dedicated to some EU-13 Member States.

Chart 11. Decoupled payments under the new delivery model



Under the proposal for the CAP Post 2020, the new delivery model will establish the following division of responsibilities for defining and implementing the rules on decoupled direct payments between EU and Member States levels:

- The EU will set the framework needed to ensure common achievements e.g. on redistribution of decoupled payments towards smaller farms. It will:
 - 1. define specific objectives to the CAP objective of fostering a smart and resilient agricultural sector (e.g. support viable farm income and resilience across the EU territory to enhance food security)
 - 2. define various types of interventions belonging to decoupled direct payments to meet the income support objectives, such as:
 - the Basic Income Support for Sustainability (to which a minimum share of the direct payments envelope should be allocated);
 - the mandatory Complementary Redistributive Income Support for Sustainability;

set the EU basic requirements in the form of a framework in which the Member States have to establish the eligibility conditions for receiving the decoupled direct payments (e.g. definitions a genuine farmer who could benefit from direct payments or eligible agricultural land, etc.);

established a mandatory reduction (degressivity) and capping on all direct payments, including decoupled direct payments.

3. set general rules for performance assessment based on impact indicators (e.g. agriculture income compared to general economy, evolution of agricultural income)

- Member States will further break down the common framework and ensure implementation: They will:
 - 1. assess their needs against the income support objectives, in particular;
 - 2. fix the details of the types of interventions and the basic requirements (e.g. eligibility criteria, support rate) and **devise a suitable mix of interventions** (basic income support and complementary redistributive income support or replace them by a lump-sum for small farms) in a way so as to contribute to the income support objectives (e.g. allocate X% of the Pillar I envelope to a redistributive income support aiming at increasing the income support towards smaller farms);
 - 3. set targets for result indicators to assess performance against the objectives, thus making explicit the degree of improvement expected from the targeting of decoupled direct payments towards smaller farms (e.g. X% of additional support per hectare for eligible farms below average size farm compared to average support per hectare).

3.3. Example 3: Supporting investments under pillar II

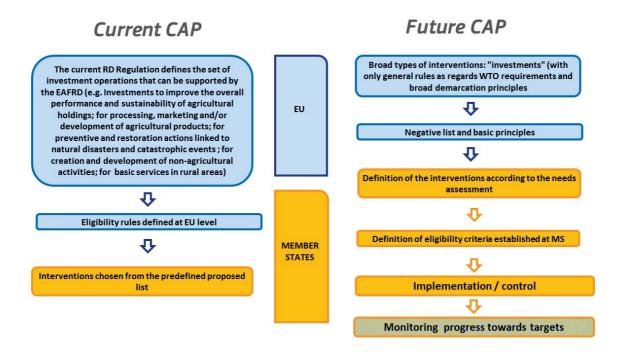
The current Rural Development Regulation defines 68 measures and sub-measures that can be supported, as well as related eligibility criteria. The degree of detail in those prescriptions can be illustrated in relation to **investment support**, which includes:

- Investments to improve the overall performance and sustainability of agricultural holdings, including precision farming;
- Investments for processing, marketing and/or development of agricultural products;
- Investment in infrastructure related to the development, modernisation or adaptation of agriculture and forestry;
- Non-productive investments linked to environment-climate objectives;
- Investments in preventive and restoration actions linked to natural disasters and catastrophic events;
- Investment in the creation and development of non-agricultural activities;
- Investments in the creation, improvement or expansion of all types of small scale infrastructure, including investments in renewable energy and energy saving:
- Broadband infrastructure, including its creation, improvement and expansion, passive broadband infrastructure and provision of access to broadband and public e-government;
- Investments in the setting-up, improvement or expansion of local basic services for the rural population including leisure and culture, and the related infrastructure:

- Investments for public use in recreational infrastructure, tourist information and small scale tourism infrastructure:
- Investments targeting the relocation of activities and conversion of buildings or other facilities located inside or close to rural settlements, with a view to improving the quality of life or increasing the environmental performance of the settlement;
- Afforestation/creation of woodland;
- Establishment and maintenance of agro- forestry systems;
- Restoration of damage to forests from forest fires and natural disasters and catastrophic events;
- Investments improving the resilience and environmental value of forest ecosystems;
- Investments in forestry technologies and in processing, mobilising and marketing of forest products.

Each of those forms of support corresponds to a given measure (or sub-measure), each of them subject to a number of specific or general eligibility conditions. Different aid intensities for the different types of investments and types of beneficiaries or projects are listed in an Annex to the RD Regulation. Some of the rules for investment support through rural development are currently given in the Common Provisions Regulation (use of financial instruments, simplified cost options, some eligibility conditions).

Chart 12. Supporting investments under the new delivery model



Under the new delivery model,

• The EU will set the basic rules needed to ensure common achievements

It is proposed to define in the CAP Regulation a unique broad type of interventions ("Investments") encompassing (without explicitly listing) at least the currently available forms of support and not matched by detailed eligibility conditions.

The basic act will also include a negative list of investment fields and specific conditions to ensure the sustainability of investments (e.g. in relation to irrigation, environmental ex-ante assessment, etc.) This to ensure the coherence and consistency of CAP plans with EU objectives. A ceiling for the maximum support rates will be established to safeguard a level-playing field between farmers in different Member States but also to ensure effective and efficient use of CAP funds and good project management.

The general principles for providing support will be defined at EU level (e.g., respect of state aid, support of working capital),

• Member States will develop the specific interventions and allocate budgetary resources:

Member States will have ample discretion to define specific conditions and target the use of the investment support to specific needs. The definition of specific intervention, together with eligibility criteria for investment operations (such as definition of eligible expenditure, payment of advances, working capital linked to investments, durability of operations, etc.), will be left to Member States/regions and therefore not included in EU legislation.

Furthermore, it will be up to the Member States to decide the allocation of budgetary resources to the specific interventions, in line with their needs assessment, and in view of maximising its contribution to the CAP specific objectives.

4. OPPORTUNITIES AND CHALLENGES/RISKS

4.1. Opportunities

The setting up of a new delivery model for the two pillars of the CAP based on the principles of strategic programming, assessments of the needs and result-orientation, has the potential to result in higher effectiveness and efficiency in the policy design if Member States make full use of the new possibilities offered. The new model will shift all actors' attention away from how the CAP is managed to what it should and actually has achieved.

The new model will improve the **complementarity and synergies** among all the interventions of the two pillars of the CAP: the unified strategic policy design, with a single set of objectives covering both pillars, will force Member States to carry out the assessment of the needs and the design of the intervention logic in a holistic way, thus avoiding the inconsistencies and overlaps of the current policy which leads to inefficient use of funds. The opportunities in this domain are particularly relevant in:

• the challenge to achieve balance between the economic, social and environmental objectives;

- the areas where different tools across the pillars currently address the same objective (environmental actions, young farmers, areas under natural constraints):
- tools with potential off-setting effects, especially with respect to environmental and climate effects.

Opportunities are also identified concerning the **better targeting of the tools to the needs** of local realities: the shift from a "one-size-fits-all" approach in the design of most of the tools of the CAP can be used by Member States to develop interventions that can contribute to the defined EU objectives in a much more efficient way than in the current model. This flexibility in the design of interventions within EU broad interventions provides an opportunity for Member States to take into account national and regional policies and thus enhance the effectiveness of CAP interventions.

The new delivery model also presents opportunities concerning the **reduction of administrative burden**: number and depth of EU rules are substantially reduced, incentivising Member States to establish simpler rules and apply them in a more pragmatic way than today. This is likely to pave the way to achieving a much higher degree of simplification of the CAP than this was possible in the last 15 years under the current system.

As explained in *Annex* 7, while the streamlining of the CAP and the shift towards performance provide for a significant potential for administrative burden reduction, the tools which Member States will take up in their national strategies as well as national requirements and criteria will be key. Despite the risk that Member States continue focusing on compliance by setting complex, additional and unnecessary national requirements, a considerable reduction in the number and depth of EU requirements will limit the fear of non-compliance with them by Member States, reducing therefore the incentives for gold-plating and for establishing additional national requirements. The new delivery model will also open a new chapter of transparency – beneficiaries will have clarity about where cumbersome rules stem from and whom to address to improve the situation. Likewise, the uptake of new technologies by Member States, such as digitisation and use of satellites, will have an important impact on administrative burden¹⁹.

As compared to the current situation (in which decisions taken by the Member States regarding implementation of direct support are not subject to approval by the European Commission), the new model reinforces the **supervisory role** of the European Commission in the **policy design and implementation** by Member States. With the approval process of the CAP Strategic Plans, the European Commission will play an important role in steering Member State decisions towards maximization of the EU objectives. This role of the Commission is particularly relevant in domains like coupled support or the environmental architecture, where the decisions adopted by the Member States could have important impacts on the **level playing field**. The supervisory role of the European Commission also provides important benefits concerning the **early identification** of potential implementation problems.

-

For a detailed analysis on the impact of the new delivery model on the reduction of administrative burden, see Annex 7 "Simplification of the CAP".

The Commission would also play an increasingly important role in **providing assistance** and facilitating exchange on best practices and mutual learning amongst Member States.

The shift towards a performance-based model has huge potential in terms **of promoting more integrated approaches** as well as more innovative ways of rewarding farmers for public goods. It has proven cumbersome and administratively burdensome to mainstream successful environmental pilot projects (for example collective approaches or result based schemes under LIFE) because of the predefined rules at EU level. The new delivery model will make it fully possible for MS to embrace these new approaches.

A similar conclusion applies to **innovation support**. In the current period, inflexible rules have made it impossible to give high support rates to high risk-low return projects developed under the EIP-AGRI. In a similar way, the pre-established rules on advance payments and durability of operations have hampered the effectiveness of the EIP-AGRI in terms of getting innovation projects off the ground.

Finally, the new delivery model is an opportunity to substantially enlarge the **role of evidence** in the policy design of the CAP, since both the analysis presented by the Member States (in the CAP Plans) and the Commission assessment will need to be based on the latest available evidence. In that context, monitoring of indicators will play a central role: An adequately planned assessment of data needs can allow data collection at time of applications, so limiting additional reporting effort from beneficiaries at a later stage. Other opportunities include linkage with other existing data sources and automatic generation of data for reporting.

This is also the case for the **monitoring of indicators**. An adequately planned assessment of data needs can allow data collection at time of applications, so limiting additional reporting effort from beneficiaries at a later stage.

4.2. Challenges and risks

While the new delivery model sets a flexible framework allowing tailored interventions which could result in higher effectiveness and efficiency, the main challenge lies in how Member States will grasp the opportunities. These risks have been raised in the public debate following the Communication "The Future of Food and Farming", and are being discussed below.

As already mentioned, **planning** is designed to be as simple as possible in terms of content and format. Nevertheless, significant analysis is required for the design and justification of an appropriate strategy. A similar assessment is already required for drafting of current rural development programmes, though the approach is new for interventions under pillar I. Member States may therefore need to extend or develop the appropriate capacity. Thus, the novelty of the plan can lead to delays in their finalisation and approval, which would result in delays in payments to beneficiaries and it is therefore essential that the Commission develops support capacity to help such MS.

The analysis of challenges under the current CAP identified key issues under all three main challenges, i.e. economic, environmental and socio-economic. The SWOT analysis required under the new CAP plan should cover all three dimensions. However, the **tensions** between these, as highlighted in the assessment of impacts of the options, translate in a clear risk that strategies may excessively favour one of these. This could lead to undesired imbalances and underachievement of some of the CAP objectives. For

example, the tension between environmental ambition and economic strength of the sector can result in insufficient environmental requirements set on farmers. It is hence essential that CAP plans propose a balanced national strategy between objectives.

Similarly, an adequate **targeting** of beneficiaries in terms of farm size, sectors and areas is needed. Here again, imbalances can be created and some beneficiaries can be significantly harmed. For example, setting too high requirements to identify genuine farmers can exclude too many beneficiaries from payments. The combination of interventions should also be well designed to avoid offsetting effects and the CAP plans should contain sufficient information to detect such unintended consequences.

Furthermore, while the shift towards performance and fewer EU requirements offers a real opportunity to lower the burden associated with the control of compliance, it is uncertain how the new approach will be put in place at national level, including of the eligibility criteria for beneficiaries, evidence to be submitted and national controls of compliance with nationally established rules.

This includes a risk with respect to the **level playing field**, in both directions: some MS might have lower eligibility requirements, others might add layers. Although the lower EU requirements reduces incentives for gold-plating, a risk remains that uneven national requirements are put in place, leading to unnecessary administrative burden for administrations, for checking these requirements, and beneficiaries, for complying with the requirements. There is also still scope for more cooperation between national administration and better use of information which has already been submitted by beneficiaries elsewhere.

Finally, while CAP plans also require an approach towards modernisation, there is a risk of insufficient means allocated towards **innovation**. Indeed, modernisation could require significant investment costs. On the other side, the significant opportunities for higher effectiveness and fewer administrative burdens over time would not be reached without this investment.

5. MITIGATING MEASURES/SAFEGUARDS

In order to be effective and efficient, the new delivery model should include a number of **safeguards and mitigating measures** at different stages of the process to prevent and early on detect risks and issues.

The framework which will be set up by EU legislation needs to be sound. While a zero risk scenario cannot be ensured, legislation will nevertheless include a number of **safeguards** to anticipate possible risks. This includes the common EU objectives, the basic EU requirements, the degressivity and capping of all direct payments, the requirements for conditionality, some degree of budget earmarking and the no back-sliding rule on certain policy objectives. These basic principles are meant to give a common direction to the CAP and can help preventing imbalances in national strategies.

Furthermore, the **requirements of CAP Strategic Plan** content will further mitigate risks: A sound assessment is required to justify the national strategy and choice of interventions; the mandatory consultation of partners will act as a supplementary safeguard for an appropriate strategy targeting national needs. The request to also cover administrative burden in the assessment is expected to have a positive role on the effectiveness and the proportionality of the interventions. It is important to remind in the basic act that the **general principles of Union Law** apply (objective and non-

discriminatory criteria, compatibility with internal market, no distortion of competition). The same applies for the protection of EU financial interests.

The approach for modernisation and the condition put on Agricultural Knowledge and Innovation Systems (AKIS) can act as an incentive to consider sufficient means towards knowledge and innovation in the national strategy.

Member States will be **supported by the European Commission** in the preparation of CAP plans. A continuous support throughout this process can help for a better understanding of EU requirements in terms of planning and so avoiding delays at time of approval. Based on objective criteria to ensure an equal treatment of each plan, the **approval process itself is an essential safeguard**, as it consists in a thorough assessment on the completeness, consistency and coherence and effective contribution to the CAP objectives of the national strategy.

It is at this stage that possible issues can be first detected, such as imbalances, incoherencies, lack of ambition and gold plating. Furthermore, **technical assistance** will need to play a more important role: in that context, the scope of the current European Network for Rural Development (ENRD) will be extended to the first pillar, in order to cover the whole CAP Plan thus promoting best practices and networking across all the whole policy.

Annual performance reporting constitutes a further basis for detecting upcoming risks. Issues with data quality or first signs of underperformance can be detected during the review process. Identified problems in the progress towards targets can result in changes in the CAP Strategic Plan and, if persist, in corrective actions. At this stage, Member States should draw up an action plan for remedial actions, informing on their strategy to correct the course. The review will be supplemented by bilateral annual review meetings and by monitoring committee meetings, also involving stakeholders. A framework is foreseen to protect the EU budget in case of gross negligence by Member States.

EU audits will cover and be able to detect issues of non-compliance with basic EU requirements, including governance structures. For unresolved or more serious cases of deficiencies, the European Commission will be able to take further corrective actions during the performance and assurance stage. These include suspension of payments and financial correction. On the contrary, good performance on environmental objectives is incentivised through bonuses.

Last but not least, appropriate **evaluation requirements** have to be designed to allow a timing assessment of the performance of the policy as well as take on board lessons for the next programming period. In that context, Member States will be responsible for evaluating the CAP Strategic Plans and the Commission will be bound to present a midterm assessment of the policy performance. Based on the evidence provided by the evaluations of the CAP, including the evaluations on CAP Strategic Plans, the Commission will present a report on the first results on the performance of the CAP before the end of 2025.

Chart 13. Stages for addressing risks

Risks Stages for addressing risks Imbalance between economic, environmental and social dimensions Lack of support towards modernisation Lack of ambition with regard to targets **EU** legislation Complex or incoherent strategy Inadequate targeting of beneficiaries Deficiencies in governance structures **Planning** Un-level playing field between farmers Uneven national requirements Unfair treatment of CAP plans **Policy implementation** Delays in approval of CAP plans Inadequate planning of data monitoring Inappropriate capacity for planning Performance and assurance Insufficient use of innovative solutions for checks and monitoring Insufficient uptake of intervention **Evaluation** Insufficient quality of monitoring data

Timely evaluation results

Insufficient performance

Chart 14. Mitigating measures and safeguards across the policy cycle





Brussels, 1.6.2018 SWD(2018) 301 final

PART 3/3

COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

Proposals for a

- Regulation of the European Parliament and of the Council establishing rules on support for strategic plans to be drawn up by Member States under the Common agricultural policy (CAP Strategic Plans) and financed by the European Agricultural Guarantee Fund (EAGF) and by the European Agricultural Fund for Rural Development (EAFRD) and repealing Regulation (EU) No 1305/2013 of the European Parliament and of the Council
 - Regulation of the European Parliament and of the Council on the financing, management and monitoring of the common agricultural policy and repealing Regulation (EU) No 1306/2013
- Regulation of the European Parliament and of the Council amending Regulations (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products, (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs, (EU) No 251/2014 on the definition, description, presentation, labelling and the protection of geographical indications of aromatised wine products, (EU) No 228/2013 laying down specific measures for agriculture in the outermost regions of the Union and (EU) No 229/2013 laying down specific measures for agriculture in favour of the smaller Aegean islands

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Annex 5: Results of quantitative and Multi Criteria Analysis

Acknowledgments

DG AGRI would like to thank colleagues in JRC for the support and close collaboration on the modelling of the impacts (JRC Seville) and the environmental aspects (JRC Ispra). Also for the qualitative assessment on environmental aspects, JRC Ispra was involved.

$Glossary^1$

Term or acronym	Meaning or definition
AECH	Agro Environment, Climate and Health measures
AKIS	Agricultural Knowledge and Innovation Systems
AMR	Antimicrobial Resistance
ANC	Areas facing Natural Constraints
AWU	Annual Work Unit
BAS	Baseline
BP	Basic Payment
BPS	Basic Payment Scheme
CAP	Common Agricultural Policy
CATS	Clearance Audit Trail System
CO ₂	Carbon dioxide
COP	Cereal, Oilseed and Protein crops
DG	Directorate-General
DP	Direct Payments
EBA	Everything but arms
ECO	Economic Challenges Working Group
EEA	European Environment Agency
EIP	European Innovation Partnership
ELS	Entry-Level Scheme
ENV	Environmental and Climate Challenges Working Group
ES	Economic Size
FADN	Farm Accountancy Data Network
FAS	Farm Advisory System

A full-fledged glossary including definitions on the CAP on: European Commission (2015) Glossary of the Common Agricultural Policy, (DG AGRI), website

FNVA	Farm net value added
GAEC	Good Agricultural and Environmental Conditions
GGE	Greenhouse Gas Emission
GHG	Greenhouse Gas
GI	Geographical Indication
GNB	Gross-Nitrogen Balance
H2020	Horizon 2020
ha	hectare
IA	Impact Assessment
IPM	Integrated Pest Management
IST	Income Stabilisation Tool
JRC	Joint Research Centre
kg	kilogramme
km	kilometre
LDC	Least Developed Countries
LFA	Less Favoured Areas
MCA	Multi Criteria Analysis
MO	Main (Policy) Objective
MS	Member States
N	Nitrogen
NMP	Nutrient Management Plans/Tools
NUTS	Nomenclature of Territorial Units for Statistics
Mt	Million tonnes
00	Operational Objective
PCD	Policy Coherence for Development
PO	Producer Organisation
pp	percentage point

RD	Rural Development
RM	Risk Management
SAPS	Single Area Payment Scheme
SDG	Sustainable Development Goals
SME	Small and medium-sized enterprise
SO	Specific Objective
SOC	Socio-economic Challenges Working Group
SPS	Single Payment Scheme
Т	Tonne
TAMS	Total Aggregate Measurement of Support
UAA	Utilised agricultural area
VA	Value Added
VCS	Voluntary Coupled Support
YF	Young Farmer
Yr	Year

1. Introduction

This annex first summarizes the quantitative results of the option comparison. The second part merges these results with qualitative results from a group expert judgement in a Multi Criteria Analysis (MCA). In annex a detailed description of the options (annex 5.1), the analytical tools and methods used (annex 5.2) and the objectives (annex 5.3) can be found. Annex 5.2 also details how the MCA was organized and which experts participated in the process. The qualitative assessment was organized to complement the modelling exercise as the applied models are not capable of capturing all effects of the tested instruments. Especially on the social (and to a lesser extend the environmental) dimension of the policy, expert judgement offers an important contribution to the analysis. The qualitative assessment also allows unveiling the reasons behind differences in option scores.

On some occasions the modelling and expert judgement diverge, which can be linked on the one hand to the fact that the models cannot capture all intended policy effects and on the other hand the under- (or over-) estimation of some effects by the experts. For these reasons it is fruitful to combine both approaches. Where appropriate, these differences are highlighted and discussed.

The following two tables highlight the assumptions for key CAP interventions.

Note: Baseline with the post-Brexit budget cut is referred to as Option 1 in Annex 5.

Table 1.1 Income support and redistribution in the options

	Option 1	Option 3a	Option3b	Option 4***	Option 5
Decoupled payments*	High	Very small MS flat rate	Medium	Strong flat rate by land type	Medium degressive with size
Voluntary coupled support	High	0	High targeted to EU goals and improving competitiveness	Small targeted to extensive livestock	Potentially high targeted to EU goals
Areas with natural constraints	Lower further to Brexit	Maintained in pillar II	Maintained in pillar II (higher national funds)	Maintained in pillar II (higher national funds)	Increased top up in pillar I
Payment redistribution	Top up to first ha in 8 MS. Degressivity in 14 MS from 150 000 EUR, % cut vary by MS from 5 to 50%**	0	To small-medium farms via a top up to first 30 ha	To farmers with lower income via an increase in support to permanent grassland	To small-medium farms via the modulation of support by size
Capping per farm (with salaries correction)	Limited, in 8 MS threshold from 150 000 to 500 000 EUR	100 000 EUR	100 000 EUR	100 000 EUR	60 000 EUR
Capping per ha			1 000 EUR		
Minimum requirements	Threshold in EUR or ha varies from 0.5 to 4 ha and from 100 to 500 EUR	2 ha	2 ha	2% of ag. income (varies by MS, from 100 to 1 000 EUR)	Status quo

^{*} includes the basic payment scheme, the single area payment scheme and greening

^{**} e.g. amounts above 150 000 EUR per farm (with salaries correction) are cut by 5% in BG and by 50% in IT.

^{***} options 4a and 4b are similar in terms of direct payments implementation.

Table 1.2 The green architecture in the options

	Option 1	Option 3a	Option3b	Option 4a	Option 4b	Option 5
Conditionality	+	++	++	++++	++	++
Other interventions				Support redistribution to permanent grassland and targeted coupled support to extensive livestock		Targeted coupled support to extensive livestock
Eco-scheme (voluntary)		++	+			
Top ups						++
AECH	+	+	+	+ +		++

2. RESULTS OF QUANTITATIVE ANALYSIS

The findings are presented according to the corresponding objectives

2.1. Support viable farm income and resilience across the EU territory

2.1.1. Provide income support in a targeted way

Negative impact of policy changes on average EU income level

Farm income is negatively affected in all options compared to baseline and option 1 for three main reasons:

- 1. The budget cut and redistribution of support (notably to small and medium size farms).
- 2. The reduction in direct payments because of re-allocation of funds to risk management (options 3 and 4): this leads to a decrease of the EU average income level in 'normal^{2'} years assessed here³. In years of strong yield or price drops, risk management tools can help farmers to mitigate negative impacts on income.
- 3. The changes in farm practises to increase the environmental and climatic performance of the CAP: the land re-allocation to fulfil crop rotation restriction, the costs to comply with the other green requirements and the obligation to dedicate more land to non-productive elements lead to a significant decline in cereal area in favour of set aside and fallow land, and thus a decline in market revenue.

Note of caution: farm income decline is overestimated, as the model used does not account for structural change, price feedback⁴ and longer term benefits due to changes in production systems. Nonetheless, the analysis gives an accurate indication of the relative performance of the various options in the short-term, as well as of the expected impact on different farm types and sectors.

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^{&#}x27;normal' in terms of climatic, sanitary and market conditions.

The risk management tools offered to farmers in options 3 and 4 to hedge yield or price drops and, thus, mitigate negative impacts on income is not taken into account in this quantitative analysis.

Risk of land abandonment and market effects are assessed with another model (CAPRI), price effects are relatively small in comparison. In addition, IFM-CAP does not fully capture the structural adaptation which will accompany potential changes in policy (and the reduction in the number of farmers to be expected because of demographic developments). Other caveats are worth mentioning: the extent of landscape elements is not well known and land re-allocation might be smaller as arable crop farmers might already have field margins or hedges, not all the green requirements could be modelled, some activities in IFM-CAP are aggregated leading to potential overestimation of rotation impacts, costs of certain requirements were assumed at the same level for all farmers (for cover in between trees e.g.), the potential effects of crop rotation on yields are not accounted for. In addition, no change in agri-environment-climate payments were modelled (because of the difficulty to target the farmers, change the costs and the practise), the old delimitation of less favoured areas was used instead of the new definition of areas with natural constraints.

This modelling exercise does not account for structural change, i.e. it assumes the same number and size of farms in all simulations. However, large income decreases such as those expected for certain sectors/options might push less efficient farmers out of business.

The largest income⁵ drop is in option 3a (-10% relative to option 1), where the switch of priority to risk management is the strongest and then in option 4a (-8%), the two options with the highest environmental ambition. The income decline is smaller and of a similar range in option 3b, 4b and 5 (around -5% compared to option 1). A linear cut (option 1) would drive a smaller drop on average (-2%) but without addressing the challenges ahead and certain sectors and MS would be more strongly hit.

In option 3, the uptake of the voluntary eco-scheme is simulated at EU level at 98%, varying from less than 90% in Portugal to 100% in MS with large areas of permanent grassland. It means that in view of the eco-scheme adoption costs and the unit payment level simulated here, only a small number of farmers chose to opt out from the eco-scheme. It shows that the unit payment level, which was set assuming a 100% uptake, is a significant incentive for farmers to adopt the changes in practises, all the more because of the importance of support in farmers' income. It highlights also the difficulty that MS will face in maximising environmental-climatic-health benefits and budget allocation at the same time on an annual basis. Said differently, it highlights the difficulty to predict in advance the level of uptake and the most appropriate aid level in view of the requirements.

Table 2.1 Impact of policy options on EU average farm income

	Relative to baseline	Relative to option 1 (baseline with cuts)						
	1	3a 3b 4a 4b 5						
Direct payments	-10%	-75%	-40%	-6%	-6%	-26%		
Total support	-10%	-11% -7% -4% -4% -6%						
Income	-2%	-10%	-5%	-8%	-5%	-5%		

Source: JRC, IFM-CAP

The impact of policy options varies strongly by type of farming

Cattle and sheep producers are strongly affected in options where support is significantly cut (option 1 and 3) and where coupled support is removed (option 3a). In option 1, the income of cattle producers is reduced by around 10%, an additional 25% cut compared to option 1 occurs in option 3a (Graph 2.2), where the number of cattle heads declines by 3% relative to option 1. The drop in income of sheep producers reaches 4% on average in option 1 and an additional 6% drop is implied in option 3a.

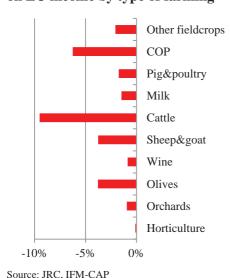
The drop in income is attenuated when these sectors benefit from re-allocation of support for their contribution to environmental sustainability via coupled support (options 3b, 4 and 5). The redistribution of support to permanent grassland (options 4 and 5) also contributes positively to the income of these farmers. In option 5, the redistribution of direct payments to smaller farms benefits to sheep farmers but affects negatively the income of cattle producers (on average 50% larger than the EU average professional farm). However, thanks to the redistribution of support to permanent grassland and to the coupled support to extensive livestock the fall in income is less drastic.

The income indicator used throughout this analysis is the Farm net value added (FNVA).

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Graph 2.1 Impact of a 10% linear cut in support relative to baseline on EU income by type of farming

Graph 2.2 Impact of a shift in priorities applying on top of a support cut on EU income by type of farming





Source: JRC, IFM-CAP, changes relative to option 1

For **milk** producers, the average impact is relatively lower; though it hides significant differences between production systems. Very extensive systems grass-fed have high income drops in options 3a and 5 and the reduction in income of most intensive farmers varies between 8% in option 3b and 14% in option 5. The income effects assessed in this analysis for **pigmeat** and **poultry** producers derive mainly from the changes in support and practises for arable land. 70% of pigs and 45% of poultry are produced on farms with more than 10 ha.

The income of **olive** producers, largely depending on direct payments and often granted higher per hectare payments⁶, drops significantly in all options, except in option 5 because olive growers are on average 65% smaller than the average EU farm. Changes in income of **wine** and **fruits** (orchards) producers are smaller, because, first, the share of direct payments in income is lower and, second, the simulated changes in farm practises related to permanent crops are less constraining (i.e. the adoption costs of permanent cover crop is relatively low compared to income.

The reduction and redistribution of direct payments, as well as the higher requirements to increase environmental benefits affect **COP** (cereal, oilseed and protein crop) producers in all options in 'normal' years⁷. The negative impact on producers of other field crops is amplified by the crop rotation obligation and by the removal of coupled support to **sugar beet** in almost all options.

The **cut in direct support** (options 1 and 3) has a strong effect on crop producers because direct payments represent a large share of their income⁸, 10% lower direct payments imply an income drop by 6% for specialised COP producers. In addition, in all options (except option 3b), direct payments are **regionalised**. It implies that in MS where the per hectare direct payment level still varies between farmers (mainly in relation to

More than 400 EUR/ha in the baseline, compared to 230 EUR/ha of UAA on EU average

If COP farmers would subscribe to risk management tools, ring-fenced in most options, their income could be more stable over time and higher on average than in this assessment.

See p.11 <u>Facts and figures on Direct payments</u>

historic references⁹), the income of COP farmers which traditionally received higher per ha payments is negatively affected by the introduction of flat rates (whether at MS level or by land type). In option 4, the redistribution of support to permanent grassland (with the unitary level increased by 20%) implies little changes in per hectare payment for arable crops in MS with arable area significantly larger than grassland in DK, while in DE and FR it leads to a drop by more than 5% and in the Netherlands by 20%.

Significant changes in land allocation to be expected

Conditionality requirements have a significant impact on crop producers notably in MS with a lower share of fallow land (12 MS have less than 2% of UAA with fallow land, see Annex 5.4). On average in the EU, in option 4b and 5 where only minimum requirements (3% of UAA with non-productive elements) apply, the share of fallow land and set aside in UAA increases by around 1 percentage point (pp) and by more than 2 pp in option 3a and 4a, where MS implement more ambitious green requirements. However, this effect is overestimated because of the lack of knowledge on landscape elements ¹⁰. To limit this overestimation, the requirement was modelled as the obligation to keep non-productive elements on 3% of the arable and permanent crop area (assuming that more linear elements are present on permanent grassland). This is one of the explanatory factors of the significant increase in permanent grassland simulated by the model (up to +4.5% in option 3a and 4a). Though overestimated, it shows that increased requirements could be an incentive for farmers not to plough temporary grassland.

The **crop rotation** obligation implies a switch from more remunerative activities such as horticulture and others field crops to less remunerative activities such as soft wheat, oilseeds and set aside. The difference in income drop between option 4a and option 4b can be directly interpreted as the effect of enhanced conditionality (modelled here as winter soil cover with catch crops, 3 year rotation and the obligation to have 2% more of UAA with non-productive elements). The simulated income drop is above 15% for potato and sugar beet producers and close to 10% for COP producers. The crop rotation¹¹ obligation leads more particularly to a decline in grain maize, durum wheat, sugar beet and potato areas. In this simulation, the income drop is also high for horticulture because in the model farmers producing only vegetables in open field can rotate only between tomatoes and other vegetables, while in reality the diversity of vegetables at hand of farmers is wider. The 2-year rotation does not lead to a decline in soft wheat area; on the contrary it increases in option 3b (+2% relative to option 1). For soft wheat, the 3-year rotation might play a role but a stronger factor is the drop in support; it can be seen in option 5 where the redistribution of direct payments to smaller farms (while COP producers are on average more than twice larger than the average EU farm) and to other production systems (organic, permanent grassland, hedges and areas with natural constraints - ANCs) leads to a 5% wheat area decline and contributes strongly to the 14% drop in income of COP producers relative to option 1.

⁹ 11 MS and the 2 Belgian regions did not opt for a flat rate and introduced a system of approximation towards a flat rate level.

The obligation to have 3% of UAA with non-productive elements (fallow land, afforested area and landscape elements) was modelled as an obligation to keep 3% of arable land and permanent crops with fallow or set aside, assuming that on permanent grassland the obligation was more often fulfilled.

Rotation was modelled as the obligation to have 50% maximum of one crop on arable land for the 2-year rotation and 33% for the 3-year rotation. On a long-term equilibrium this crop diversification mimics the effect of rotation. The selected alternative crop is preferably a crop already produced on the farm, ensuring the material is already available or traditional in the region. In some cases, to comply with the rotation requirement a farmer might need additional equipment and know-how.

The fact that COP farms tend to be larger explains also why farms subject to capping of support are mainly specialised in crop production.

The increase in oilseeds area derives mainly from the 3-year rotation obligation (options 3a and 4a), while the decline in protein crops derives from the removal of coupled support (option 3a, 4a and 4b) as well as the fact that nitrogen-fixing crops do not qualify either to fulfil conditionality requirements nor for the ecological focus area requirements set by MS with high green ambition (option 3a and 4a). The top-up simulated in option 5 (80 EUR/ha) implies an increase of pulses area by 44% relative to option 1, which is quite significant even though protein area is still small in the EU. It shows the positive effect on production of coupled payments for this crop with lower economic profitability.

Table 2.2 Changes in land allocation due to changes in support and green requirements (%)

	Cereals	Oilseeds	Protein crops	Sugar beet	Potato	Set aside and fallow land	Permanent grassland
Relative to baseline	•						
1	0.1%	-0.1%	0.3%	-0.6%	0.0%	0.1%	0.0%
Relative to option 1	-						
3a	-6%	5%	-23%	-23%	-10%	37%	4.5%
3b	-2%	1%	-12%	-8%	-2%	10%	3.7%
4a	-7%	6%	-9%	-23%	-10%	34%	4.5%
4b	-3%	-2%	-17%	-12%	-2%	19%	3.7%
5	-7%	6%	44%	-13%	-3%	15%	3.7%

Source: JRC, IFM-CAP, % changes based on FADN data covering 90% of EU land.

Table 2.3 Changes in land allocation applied to the 2030 EU agricultural outlook (1 000 ha)

	Cereals	Oilseeds	Pulses	Sugar beet	Potato	Set aside and fallow land	Permanent grassland
1	100	0	0	0	0	0	0
3a	-3 400	600	-300	-400	-100	2 000	3 400
3b	-1 100	100	-200	-100	0	600	2 800
4a	-4 000	700	-100	-400	-100	1 900	3 400
4b	-1 700	-200	-300	-200	0	1 000	2 800
5	-4 000	700	700	-200	0	800	2 800

Source: DG AGRI

The changes in land allocation resulting from the other model used in this analysis (CAPRI¹²) are smaller, especially for cereals, but indicate broadly the same trends. In addition, in CAPRI contrary to IFM-CAP, land abandonment is accounted for 13. All options result in a small reduction in UAA: 300 000 ha because of the budget cut and on top around 500 000 ha less in option 4a (-0.3% compared to option 1) and 400 000 ha in option 3a where more requirements apply. The decline is smaller in options 3b and 4b (260 000 ha and 200 000 ha respectively), while in option 5, the UAA remains almost

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In IFM-CAP, this phenomenon is captured partially via an increase of fallow land.

In this model, each region (Nuts2) is considered as one farm, thus the underestimation of constraints applied to farms and the difficulty to grasp redistributive effects between farms. Moreover, CAPRI accounts fully for market effects (and the price increases linked to production drops), which contributes to mitigate effects.

stable compared to option 1. In IFM-CAP, the UAA is assumed to be fixed in all scenarios.

The targeting of direct payments is significantly improved in options 4 and 5

The options test various ways of targeting direct payments and CAP support:

- to smaller and medium size farms via a payment level modulated by size (option 5), a redistributive payment (option 3b) and a capping system which all allow accounting for the economies of scale in larger farms.
- to farmers most in need via the support to areas with natural constraints, coupled support to extensive livestock, the redistribution of support to permanent grassland (allowing indirectly to target farmers with lower income in option 5).
- to incentivise farm practices more beneficial to the environment, climate and health, via conditionality, the eco-scheme and environmental top ups.

Targeting support to small and medium size farms

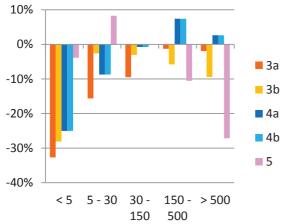
Note: This assessment was carried out with the IFM-CAP model, based on FADN representing commercial farms. These farms are on average larger than the whole farm population. In FADN, EU farms have on average 30 ha, accounting for all farms, the average farm size drops to 16 ha (farm structure survey 2013).

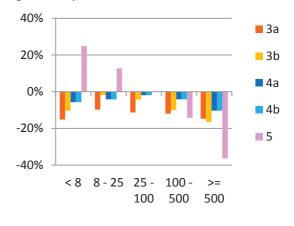
The modulation of the basic decoupled payment by size is an efficient way to redistribute support from larger to smaller and medium size farms in physical and economic terms currently receiving less support (option 5) and can almost fully offset the effect of budget cuts on farms with between 5 and 30 ha. However, the modulation simulated here implies a close to 30% reduction in support to farms with more than 500 ha and an income drop above 10%, while these farms employ more people (20 AWU on average, 13 times more than the EU average). The redistributive payment simulated in option 3b (80 EUR/ha from 2 to 30 ha) allows also a shift of support to smaller farms, with lower income drops for larger farms though.

Importantly, the increase in minimum requirements to be eligible to decoupled payments leads to a lower support granted to farms with less than 5 ha in option 3 and 4 (see also chapter 2.1.3). This percentage is particularly high (between -25% and -33%) because the support granted to these farms in absolute value is small (around 1 000 EUR/farm in option 1). In addition, farms below 5 ha can have a large economic size and higher income than average (wine, horticulture). Therefore, in terms of economic size, the change in support for smallest farms is lower (-15% in option 3a to -6% in option 4).

Graph 2.3 Change in support relative to option 1 by area size class (ha)

Graph 2.4 Change in support relative to option 1 by economic size class (1 000 EUR)





Source: JRC, IFM-CAP

Note: direct payments include the basic decoupled payment, the redistributive payment and coupled support. Total support includes the eco-scheme, the environmental top ups, the ANC payment and the agri-environment-climate measures.

The redistribution simulated in option 4 implies higher support to farms above 150 ha, because of the increased support to permanent grassland. However, this regionalisation by land type is efficient in shifting direct payments from more intensive farms to more extensive ones (Graph 2.6). In option 5, the higher direct payments granted to first hectares imply a relatively lower decline in basic payment to most intensive farms (smaller on average¹⁴) and a decline to most extensive ones. The latter effect is compensated with coupled support to extensive livestock and top ups to permanent grassland.

Targeting support to farmers most in need (with lower income)

The current policy is granting higher support to farms with higher income but also to the 10% farms with the lowest income (Graph 2.5): the latter receive 8 000 EUR/AWU, the 50% farms with the highest income receives around 12 000 EUR/AWU relative to between 2 000 and 6 000 EUR/AWU for the other farmers.

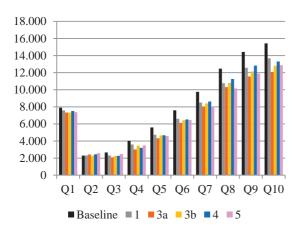
None of the options perform better than the baseline, because redistributive effects do not offset cuts and some support is re-allocated to risk management. Option 5 (decoupled payment modulation by size, coupled support for extensive livestock and top-up to permanent grassland and ANC) performs as well as option 1 to redistribute support from farms with higher income per AWU to those with lower income level. Option 4 (regionalisation by land type and redistribution to permanent grassland) performs slightly less. Provided farmers will largely adopt the voluntary eco-scheme to catch the premium, option 3b (redistributive payment) would **perform** as well as option 4. In any case, mainly because of the reallocation of support to risk management option 3a performs the least.

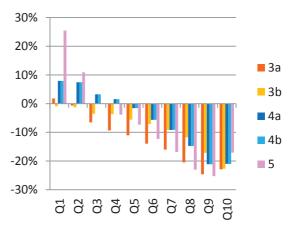
The 10% most intensive farms have an average size of 9 ha relative to 30 ha on average in FADN.

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Graph 2.5 Support per AWU by class of income (Q1 = lower to Q10 = higher income)

Graph 2.6 Change in support relative to option 1 by class of production intensity¹⁵ (Q1 = more extensive to Q10 = more intensive income)





Source: JRC, IFM-CAP

Source: JRC, IFM-CAP

In option 3a this shift in priorities affects negatively almost equally farmers of all economic classes. Option 3b with the redistributive payment allows maintaining the income of medium economic size farms (from 8 to 100 000 EUR) while support drops is higher for larger farms. In addition, would the uptake of eco-scheme be lower, support drops could be larger.

It is a well-known phenomenon that some years the farm net value added of farms is negative (market revenue + subsidies - total costs - depreciation), it does not mean that the cash flow is negative but that accounting for the loss of capital value the farm income is negative. If this situation lasts for several years it is threatening strongly the viability of the farm.

Table 2.4 Share of farms with negative income

Baseline	1	3a	3b	4a	4b	5
14%	15%	17%	15%	16%	15%	15%

Source: JRC, IFM-CAP

In the baseline, the share of farms with a negative farm net value added reaches 14%, this share increases to 15% in option 1 with the budget cut. In option 3a, with the shift of priority to risk management tools and the increased environmental-climatic ambition this percentage increases to 17%. In option 4b, the loss in revenue due to the same environment-climate ambition leads to 16% of farms with negative income. In the other options (3b, 4b and 5), the share is the same as in option 1.

It is important to note once more that structural change is not accounted here. But in a situation of income deterioration an increase of the number of farmers leaving the agricultural business might be expected. In addition, in this modelling exercise only intermediate costs vary with the changes in farming practices but fixed costs (labour, machinery, energy...) remain constant, while some adaptation might take place too.

A fairer distribution of support

Capping the level of DP farmers can be granted is seen as one way to reach a fairer distribution of support. In this simulation, two levels of capping per farm were tested:

The intensification is assessed based on the share of variable costs per hectare.

100 000 EUR (options 3 and 4) and 60 000 EUR (option 5). In this impact assessment, only the capping of the basic payment and the redistributive payment were simulated. Elements changing across options (the eco-scheme, the environmental top-ups and the coupled support implemented to address EU concerns and sectors in difficulty) were not part of capping, to facilitate comparison across options.

Currently, only 8 MS¹⁶ apply a capping from a threshold of 150 000 EUR to 500 000 EUR. In addition, direct payments are cut (by 5% to 50%) from 150 000 EUR per farm in 14 MS. It raises a capping product of 120 million EUR, coming mainly from HU, PL and BG. The capped farms have close to 50 employees on average (see Annex 5.5). It means that the current capping penalises farms providing numerous jobs. Despite the possibility to apply a correction for salaries HU, PL, SK and CZ do not apply it, because it is deemed too complicated. Lowering the capping threshold to 100 000 EUR or even 60 000 EUR could convince these MS to apply this correction, even to possibly consider family labour. It could also be looked at a simpler solution to deduct salaries, possibly based on MS average wage. In addition, with a capping level at 60 000 EUR the possibility to deduct opportunity costs for family labour could as well be considered.

Applying a capping of 100 000 EUR (with salaries correction) to the current basic decoupled payments (BPS/SAPS and greening) ceteris paribus would raise a capping product of 350 million EUR. Applied to all direct payments the capping amount could reach 920 million EUR. However, the budget cut and the shift in priorities could lead to much lower capping products: 0 EUR in option 3a (where the basic payment represents only 25% of pillar I envelope), 10 million EUR in option 3b, 50 million EUR in option 5 (despite a capping at 60 000 EUR).

In addition, in all capping scenarios, BG and RO are the 2 MS where most of the direct payments are capped, despite the correction of salaries. In HU, CZ and SK the salaries correction implies a strong drop in capped amounts. Would capped amounts be cut from MS envelopes it would raise a serious issue of cohesion, knowing that these two MS grant among the lowest support per ha and belong to the poorest MS of the EU.

This is why, in option 4, the capping is used as an actual tool of redistribution. Meaning that instead of cutting the envelope (by potentially more than 300 million EUR, out of which more than 60% in BG and RO), the budget is redistributed to smaller farmers by increasing the per hectare payment (by around 10% in BG and 6% in RO). It is not a simple budgetary mechanism but it addresses citizen concerns without damaging cohesion.

In the option where the link to historic payment levels is kept (option 3b), on top of the capping per farm, a capping per ha was introduced (1 000 EUR/ha of basic payment and redistributive payment in this simulation). The number of farmers affected is relatively low compared to how many farmers would have been affected if that capping would have applied in 2015. The main reasons are: the increasing convergence of direct payments per ha to take place in the coming years and accounted for in the baseline, the reduction of direct payments simulated in option 3b and the potential lack of representativeness of these farms in FADN. An assessment carried out on the 2015 payments (CATS database) showed that a capping per ha of the basic payment scheme, the single area payment scheme and the greening at 1 000 EUR/ha would have led to cut direct payments to

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Capping at 150 000 EUR in Flanders, IE, EL, AT, PL; 176 000 EUR in HU; 300 000 EUR in BG and 500 000 EUR in IT. CZ, IE, HU, PL and SK do not apply salaries correction.

more than 200 000 beneficiaries and to a capped amount of 1.5 billion EUR. The farms capped are mainly located in EL, IT and ES. They have an average of 4 hectares and received around 7 400 EUR per farm in 2015. Most of these farmers are olive growers but there are also some intensive livestock producers (cattle and sheep). With a capping at 600 EUR/ha, the number of beneficiaries capped would have raised to 600 000 and PT would be hit too. A capping level relative to the average direct payment per MS was tested too and revealed more proportionate.

Table 2.5 Capped amounts by option

	Baseline	Baseline+	-capping	3a	3b	4	5
Level of capping	various	100 000	100 000	100 000	100 000	100 000	60 000
Scope	BPS/SAPS	BPS/SAPS + greening	all DP	BP	BP and redistributive payment	BP	BP
Product of							
capping (MEUR)	120	350	920	0	10	0	50

Source: JRC, IFM-CAP

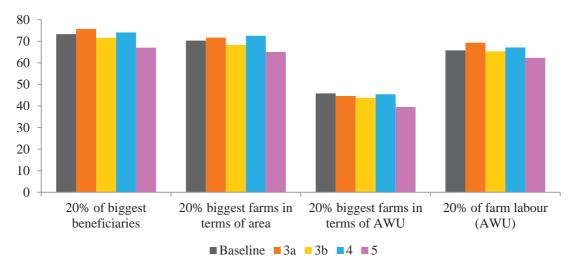
Capping is not the most efficient way to reduce the **concentration of direct payments**, when the funding no longer paid to large farms is removed from the direct payments budget altogether instead of being redistributed to smaller farms. Modulation of direct payments by size is more effective to reduce the share of direct payments received by the 20% biggest CAP beneficiaries as illustrated in the graphic below. In option 5, these beneficiaries capture 67% of direct payments, relative to 73% in the baseline¹⁷. This reduction might seem small in view of the huge redistribution to small and medium farms operated in option 5, however it highlights that support concentration derives from land distribution in the EU. Option 3b, allows for a drop in concentration of 2 pp only thanks to the redistributive payment. By contrast, options 3a and 4 imply a small increase in concentration of DP.

However, some of the large beneficiaries employ a lot of people, looking at the concentration of direct payments not by beneficiary but by worker, the level of concentration reduces to 66% for the 20% of farm labour employed on farms with largest direct payments per AWU in the baseline. In option 5, this concentration is 3 pp below.

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This figure is lower than the well-known 80% because it is calculated on the beneficiaries represented in FADN only.

Graph 2.7 Share of direct payments received by 20% farms 18



Source: JRC, IFM-CAP

Another measurement of support concentration is the Gini coefficient, varying between 0 and 1: the closer to 0 the lower the concentration. In the EU, the Gini coefficient of land concentration (again measured using the FADN sample) is 0.58, not surprisingly very close but slightly below the concentration of support in the baseline at 0.57. As concluded based on the measurement of the share of direct payments granted to 20% of biggest beneficiaries, option 5 allows for a reduction in support concentration (Gini coefficient of 0.55), while the concentration increases slightly in option 3b and 4 and more significantly in option 3a (0.61) due to the flat rate payments. In terms of income, the budget cut leads to a higher concentration of income (option 1, 0.735) relative to baseline (0.729). None of the tested options allows correcting this; on the contrary, as for support, options 4a and 3a imply a higher concentration of income in the hand of more efficient farmers in terms of income generation. The difference in Gini coefficient between option 4a and 4b shows the effect of the higher environmental-climatic ambition simulated here: the losses in market revenue implied by changes in farm practices slightly increases income concentration.

Table 2.6 Concentration of land, direct payments and income measured with a Gini coefficient

	UAA	Direct payments	Income
Baseline		0.570	0.729
1		0.570	0.735
3a		0.609	0.750
3b	0.579	0.575	0.739
4a		0.581	0.745
4b		0.581	0.738
5		0.552	0.739

Source: JRC, IFM-CAP, based on professional farms (FADN data)

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For the results by MS, see Annex 5.6.

2.1.2. Reduce inequalities between territories by supporting farms across the whole territory

Historically, direct payments granted to areas with natural constraints were lower and this gap was compensated by a specific aid to ANCs, programmed in rural development. The area in ANCs represents around 50% of EU area and 30% of the eligible area. In the baseline, farms in mountain areas are granted around 6 500 EUR of direct payments per farm while outside ANCs¹⁹ farms are granted around 8 400 EUR. Accounting for ANC support but also agri-environmental payments the average support increases to more than 10 000 EUR granted in mountain areas and around 9 000 EUR outside ANCs.

The share of pillar II envelope dedicated to ANCs is 17% in the current programming period. In all options, support to ANCs is maintained given the importance to keep farms on the whole EU territory to support employment in rural areas and also for the environmental benefits associated with farming activity. However, some MS dedicate a very large share of their rural development envelope, (especially France 37%, Ireland and Finland 32% and 29% in Luxembourg), meaning that in a context of reduced EU budget and of gaining importance of other priorities, to continue supporting farms in ANCs at the same level, MS might need to use additional national funds (as simulated here in option 3b for all MS and in option 4 where a maximum of 25% of pillar II envelope for ANC is tested implying a reduction in EU funds for ANCs in FR, IE, LU, CZ, SK, SI and SE).

In option 1, the budget cut implies a 10% reduction in support in ANCs. In option 3, provided ANC payments are maintained, total support in ANCs could remain equivalent to option 1, but support in less favoured areas not mountain would decrease further.

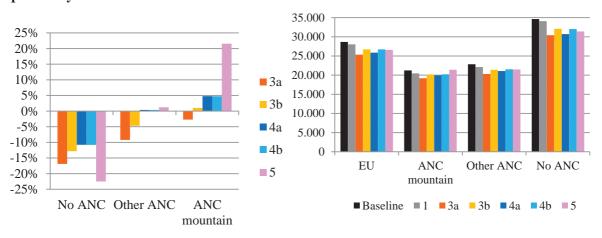
By contrast, option 4 by redistributing support to permanent grassland re-directs support to mountain areas but the most efficient way to support mountain areas is a specific top up granted in pillar I to ANC as in option 5 (provided farmers could keep the same level of aid in MS granting large national support to ANCs). However, in both options ANCs not located in mountain areas do not benefit from reallocation of support.

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In this simulation, the less favoured areas (LFA) classification is used and estimated a rather good proxy of the new ANC classification, which is not yet fully known.

Graph 2.8 Change in support relative to option 1 by ANC zone

Graph 2.9 Income per AWU by ANC zone



Source: JRC, IFM-CAP

Source: JRC, IFM-CAP

2.1.3. Simplify increasing thresholds to receive decoupled payments

In order to reduce the number of beneficiaries of very small amounts of aid, deemed not contributing significantly to farmers' income, thresholds apply currently. MS fix them in euros (varying from 100 to 500 EUR) and/or in hectares (varying from 0.5 to 5 ha). In this analysis, the introduction of a 2 hectares threshold is tested (option 3). This option would exclude from the direct payment system more farmers than the current system (options 1 and 5) and then a system based on thresholds in EUR accounting for the differences in standard of living (option 4).

An analysis based on the 2016 CAP beneficiaries shows that a 2 hectares threshold would have reduced the number of beneficiaries by than 1.5 million (24%) for a reduction in hectares paid by 1.3% only, 3% of the amount of basic payment, single area payment and small farmer scheme granted and 2% of total direct payments paid. These beneficiaries were granted on average 420 EUR in 2016. This amount varies between 85 EUR in LT to close to 3 300 EUR in NL (where the flat rate will apply from 2019 only).

A threshold at 2 ha might be too high in MT and CY where around 70% of beneficiaries fall under the threshold and are granted more than 40% of basic decoupled payments in MT and around 15% in CY. Similarly, large share of payments were granted to beneficiaries with less than 2 ha in 2016 in EL (15%), RO (10%), IT and PT (7%). However, this threshold could represent a real simplification in MS such as BG, SK, HU and LT where more than 15% of beneficiaries are granted less than 1% of the payments. A question remains about the importance of the aid contribution (around 80 EUR in LT, 200 in BG and in SK, 400 in HU) to these farmers' income.

Option 4 is testing a threshold in EUR, above the current thresholds applied, and corresponding to the equivalent of 2% of agricultural income. It means that to receive basic decoupled payments, farmers need to be eligible to a minimum of basic decoupled payment varying between 100 EUR (in RO, BG, PL, HR, SI) and 1 000 EUR in DK. Applied in 2016, such a system would have reduced the number of beneficiaries by 10% (0.6 million) and the amount of aid paid by 0.7% only and an average amount of 240 EUR granted per beneficiary. With a threshold at 200 EUR more than 60% of Maltese farmers would fall out of the direct payment system for a 33% share of basic decoupled payments. In the other MS, the share of payments granted to beneficiaries below the thresholds is smaller: 5% in CY, 4% in LT and 3% in IT.

A threshold in euros, can avoid excluding from the system potential beneficiaries of amounts of aid important for the living of farmers. However, a threshold in hectares is much simpler to manage than a threshold in euros, for which the calculation of payments needs to be done before beneficiaries can be excluded. MS could explore further the most adequate threshold level. In addition, in context of reduced direct payments the amounts of aid granted to beneficiaries below 2 ha would be smaller.

Table 2.7 Beneficiaries below tested thresholds in 2016

million	Beneficiaries	Area paid	Amount paid
Total in 2016	6.5	154	23 069
of which below 2 ha	1.5	1.9	640
	24%	1.3%	2.8%
of which below 2% of ag. Income	0.6	1.2	152
	10%	0.8%	0.7%

Source: DG AGRI, CATS, based on BPS, SAPS and SFS

To assess better who are the beneficiaries potentially excluded from direct payments with various thresholds, the analysis was run with the IFM-CAP model. Given it is based on FADN surveying only professional farms, the number of beneficiaries below thresholds is smaller.

In the baseline, farmers below threshold are many involved in wine production and horticulture, they are located at more than 30% in ES and also in RO, IT and FR. Some of them have a very large economic size (12% with more than 100 000 EUR of size). Would these farms have been granted direct payments their income would have increased by less than 1% for most types of farming.

As shown based on the 2016 payments, option 3 leads to a higher number of farmers excluded from the direct payments system. The reduction by half of the number of farmers below thresholds in option 5 compared to baseline, highlights the impact of the reduction in direct payments and at the same time the increased payments to smaller farms. This is why the number (and share) of farms below threshold from the lower economic class increases in this option.

In option 3, farms below thresholds are mainly mixed farms, located in RO and IT and of the smallest economic size. In option 4, the distribution of farms below thresholds by type is close to the baseline situation, with a higher share of sheep and dairy farms and RO though. In option 4, the number of farms below thresholds is lower than in option 3 but the impact on farms income is slightly higher, though rather low (estimated at 1% against 0.7% in option 3b). These thresholds would weigh more cattle producers with low income in option 4 and on olive producers in options 3 and 4.

Table 2.8 Identification of professional farms below thresholds

	Baseline	Option 3	Option 4	Option 5
Total number of farms	285 800	506 000	322 100	134 000
Change/baseline		77%	13%	-53%
Share by specialisation	100%	100%	100%	100%
Horticulture	25%	19%	22%	29%
Wine	21%	12%	15%	16%
Mixed	19%	27%	24%	26%
Orchards	15%	10%	10%	7%
Sheep&Goat	4%	9%	8%	6%
Milk	2%	8%	7%	4%
Other	14%	16%	14%	13%
Share by MS	100%	100%	100%	100%
ES	34%	6%	12%	14%
RO	20%	40%	36%	29%
IT	18%	22%	24%	16%
FR	12%	6%	11%	16%
BG	6%	6%	3%	4%
EL	2%	8%	1%	3%
Other	9%	12%	13%	19%
LFA	42%	40%	42%	42%
Not LFA	58%	60%	58%	58%
Share by size	100%	100%	100%	100%
2 - 8 000 EUR	37%	62%	53%	47%
8 - 25 000 EUR	31%	22%	23%	23%
25 - 100 000 EUR	20%	12%	16%	21%
> 100 000 EUR	12%	5%	8%	9%

Source: JRC, IFM-CAP

The small farmer scheme, which was introduced in the last reform as a simplified way to grant direct payments to smaller beneficiaries is not retained in the options because it is simpler for beneficiaries (thanks to the greening exemption notably) but not for the administrations.

2.1.4. Cope with price volatility and improve risk management

The 2014 US Farm Bill introduced a system with **risk-based** (countercyclical) **payments**. In the public debate this system was sometimes referred to as being more adequate compared to the EU system with direct payments complemented by risk management schemes. In order to evaluate its impact, an analysis with the Aglink-Cosimo model²⁰ was performed assuming the CAP to adopt some of the programs of the US Farm Bill 2014. For a comprehensive description of the US Farm Bill 2014 we refer to the USDA Farm Service Agency²¹. Specifically, two of the US Farm Bill 2014 programs were considered: the acreage risk coverage (ARC), which is substantially a revenue-risk insurance, and the price loss coverage (PLC), which is an insurance against prices dropping below certain levels. The analysis solely focused on maize, barley and

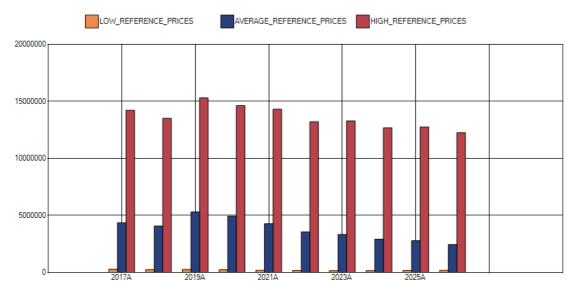
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https://www.fsa.usda.gov/programs-and-services/farm-bill/index

EC, JRC, Directorate D – Sustainable Resources, Economics of Agriculture Unit

soft wheat. For the PLC program, payments are triggered when the market price is lower than an arbitrarily chosen reference price level. For the ARC program, payments are triggered when the farm revenue goes below a specific revenue of reference, which in the US can be farm- or county-specific.

Graph 2.10 Deterministic results for baseline and three scenarios for EU total ARC and PLC payments (in 1 000 EUR)



Source: JRC, AGLINK-COSIMO

The analysis shows ARC payments in the order of approximately half a billion € in the worst years for the average set of reference prices. For the highest set of reference price levels the payments are in all 10 years above 1 billion €. A similar picture but with much higher absolute levels in monetary terms is shown for the PLC program payments at the EU-wide level. In this case there is a one-to-one correspondence between market prices being below the reference levels and the payments. Every time the market price is below the reference level, the PLC payments are triggered. This is not the same as in the ARC payments, where there is a simulated distribution of farmers' revenues and the benchmark revenue to trigger payments is the multiplication of Olympic averages of market price and yield. No PLC payments are expected if the low reference prices are chosen and medium reference prices trigger payments up to 5 billion € in the year 2019 when lowest prices are projected in the Outlook for the three crops considered under the ARC and PLC programs. High reference prices trigger PLC payments of 14 billion € for the 3 crops considered. For the ARC and PLC combined, with high reference prices, payments in the worst case scenario exceed 15 billion €.

The main conclusions are hence that a system based on risk-based payments creates significant **budget uncertainty** and presents a real danger for **budget overshoot**, depending on the chosen reference prices in relation to market developments. Note that the presented analysis only covers three crops. Furthermore, a system based on risk-based payments also does not sufficiently transmit market signals to farmers, as downward price pressure is cushioned, removing the incentive to adapt production to changing demand and can lead to overproduction.

The market orientation of the CAP has significantly increased over time and at the same time the exposure to world markets. In a context of climate change and higher occurrence of extreme events, farmers' exposure to yield, price and income variability will increase. Thus, the proposed increase in financial means dedicated to **risk management tools** in

option 3a (10% of pillar I²²) and options 3b and 4 (5% of pillar I), while option 5 remains status quo. Currently the uptake of risk management tools is rather low²³ also because farmers count on direct payments to buffer income changes, but simulated budget cuts and the shift in priorities towards less income support (option 3) might increase farmers' willingness to adopt these tools.

Based on FADN data, between 2007 and 2015, on average annually 30% farmers had a 20% or larger drop in sector income compared to the three previous years and 25% of EU farmers had a 30% drop in gross farm income (see Annex 5.7). Would an income stabilisation tool be available for all farmers, an EU budget between 13 and 15 billion EUR would have been necessary annually to compensate farmers. It is far more than the budget foreseen in options 3 and 4. Anyhow, the level of organisation required to set up a mutual fund to manage an **IST** imply that most probably only larger farmers would opt for that solution (also because for smaller farmers the main preoccupation might be their income level – better addressed with direct payments – rather than its variability). If only farmers with an economic size above 50 000 EUR would opt for an IST, the budget need could be almost divided by two. This would require nevertheless a larger budget than available.

MS are given the possibility to set up the IST for **specific** sectors, in the framework of the strategic plan. This provides an opportunity for MS to target sectors facing some years huge drops in income and for which other risk management tools are less available. For example, risk management tools are less developed in the livestock sector than for crops. Crop futures are well functioning and available to farmers but also to insurers to cover/hedge their risks, thus the wider availability of insurance products (which can be supported with EU funds too). By contrast, in the dairy sector, the volume traded on futures is still small (though increasing²⁴) and an IST could be of interest to farmers to protect themselves against market uncertainty. In other sectors, where the first issue in income level (beef and sheep for example), direct payments (included coupled support) can be best suited to support farmers.

Table 2.9 Estimation of annual compensation needs for an IST in the EU

		MEUR
Envelope made available for risk management	Option 3a	3 400
tools	Option 3b&4	1 700
EU compensation required if IST for all	Farm income, 30% drop	13 300
farmers	Sector income, 20% drop	14 900
Compensation required if IST for larger farmers (> 50 000 EUR of size)	Farm income, 30% drop	7 200
Compensation required if IST for selected	Milk	1 300
sectors (Sector income, 20% drop)	COP	2 600
	Sugar beet	200
	Olive	600
	Pig&poultry	1 400

Source: DG AGRI, AidsK, FADN data

It implies a transfer of funds to pillar II, given that needs vary strongly by year a multi-annual management of budget is necessary.

See Economic challenges facing EU agriculture and Agricultural market brief N°12: Risk management schemes in EU agriculture

See Agricultural market brief N°11: Managing risk in the dairy sector: how futures markets could help

2.1.5. Competitiveness

The options assessed here imply little change in the competitive position of the EU in terms of price competitiveness. Farmers opt for reducing production in view of lower expected returns and higher costs and the increase in production prices is very small. Therefore in all options, the relationship between costs and revenue remains more or less constant and farmers reduce their livestock (especially cattle, see above) and cereal area (grain maize and wheat).

Therefore a deterioration of the EU trade balance is to be expected, with increased imports of beef, sheep and poultry meat as well maize in almost all options and reduced exports of beef and wheat mainly. The trade of dairy products is not affected. The EU trade balance reduces most in option 4a and 3a, and then 3b and the lowest decline is simulated in options 4b and 5.

Table 2.10 Changes in trade by main commodity

	В	eef	Sheep meat	Poultr	y meat	Pigmeat Cereals		Oilseeds	Oilcakes	
	Exports	Imports	Imports	Exports	Imports	Exports	Exports	Imports	Imports	Imports
3a	-13%	20%	8%	-2%	2%	-3%	0%	1%	1%	-2%
3b	-3%	4%	3%	-1%	1%	-2%	-3%	6%	0%	0%
4a	-9%	13%	2%	-2%	3%	-4%	-1%	3%	1%	-1%
4b	-7%	9%	1%	-1%	1%	-1%	0%	-1%	0%	-1%
5	-9%	13%	-6%	-1%	1%	-1%	-1%	1%	0%	-1%

Source: JRC, CAPRI

2.1.6. Coupled support and competitiveness

Where the market fails to remunerate farmers for all the services they provide and where the lack of support could lead to land abandonment and closed landscapes (e.g. for extensive livestock in grassland areas) a coupled payment can be justified to help maintaining production in territories and sectors at risk.

The table below highlights the impact on production, productivity and prices of removing coupled support (in isolation from other changes) compared to the baseline: a decrease in area and herd, an increase in productivity (dairy and sugar beet) mitigating production effects, as well as a price increases.

Table 2.11 Changes in price and production would coupled support be fully removed

	Hectares or herd size	Yield	Supply	Price
Dairy	-0.7%	1.5%	0.7%	1.4%
Beef	-2.5%	0.2%	-2.4%	3.2%
Sugar Beet	-4.9%	2.2%	-2.8%	3.9%

Source: JRC, CAPRI

Coupled support has implications on the level playing field in the EU, because of the differences in implementation between MS, it might lead to unfair competition and to an increase in production. In addition, the World Bank in a recently published study, points out that coupled support prevents productivity increases contrary to decoupled and pillar II payments. The results also show that yield gains would have been higher without support for milk and sugar beet.

The voluntary coupled support, as currently implemented, addresses only in part EU concerns: close to 70% of the support is granted to the sheep, cattle and protein crop sectors. The targeting could be further improved by limiting support to extensive livestock providing positive amenities as proposed in options 4 and 5. For the rest of the coupled support currently granted, several issues can be pointed out:

- A lack of targeting: in the dairy sector for example, in several MS a large share of dairy cows are eligible, sometimes to small amounts (like in FR and BE, below 30 EUR/head) questioning the usefulness of the scheme and sometimes to large amounts (like in CZ and HU) questioning in this case the proportionality of the scheme and the competitive advantage given to these producers. Similarly, in MS granting a coupled payment to sugar beet, generally all the area is eligible.
- An impact on production.
- A contradiction with a market oriented policy. The use of coupled support can be questioned when it is used, like in the sugar sector, to compensate for the lack of competitiveness of a whole country (and not a specific territory). Clearly, in such cases MS have put forward the social dimension of the support which helps keeping employment in the related processing industry, however without addressing the structural issue.
- Competition issues. Coupled support introduces elements of unfair competition between MS. This can be illustrated with the coupled support granted to the sugar sector, where the aid granted in 2015 reached from 100 EUR/ha in FI to 800 EUR/ha in RO. In other words, in RO sugar beet growers received a coupled support of 20 EUR/t, while e.g. in BE where no VCS was granted, sugar beet growers signed contracts at 23 EUR/t. In addition, the CAPRI analysis shows that without support, RO would have produced 53% less.
- **Disproportionate unit amounts** may be paid: this happens, in absence of any **'safeguard'**, when to avoid unspent funds MS increase the unitary level of aid when there is a drastically smaller number of applicants than planned.

However, coupled support can address specific issues that the decoupled payment would otherwise leave unresolved. Coupled support could be limited and granted to sectors identified by MS as undergoing certain difficulties. This is why in options 4 and 5, coupled support was introduced to address some EU concerns. In option 3b, the possibility to grant coupled support was extended to sectors identified by MS as particularly important for social, economic, or environmental reasons, undergoing certain difficulties with the view to overcome these difficulties after a certain number of years.

2.2. Increasing the environmental and climatic benefits of the CAP

It is proposed in the new green architecture to remove EU exemptions and thresholds. It implies that all the potentially eligible area will be under minimum conditionality. In addition, in the options where entitlements can be removed (all except option 3b), the area covered by payments could increase and thus the area under conditionality (currently the area granted an aid is below 90% of the UAA). However, in this modelling exercise some exemptions were introduced to avoid overestimating effects of some requirements.

Reduce GHG emissions

Previous analysis shows that there is a need to give a dedicated **incentive to farmers** in order to reduce GHG emissions. The ECAMPA project (see Box 1) showed that, in the absence of a compulsory emission reduction target for agriculture, a subsidy covering 80% of the costs of mitigation technologies, could deliver significant non-CO₂ emission reductions, with little negative impact on EU production. However, this measure would come along with considerable budgetary and unitary costs if farmers are projected to widely adopt the technologies, estimated at around the current total pillar II envelope. The fact that such incentives are not explicitly included in the present analysis²⁵ (also because of its budget-neutral assumption) explains why only small **reductions in** non CO₂ **emissions** compared to baseline are reached in this assessment.

In addition, this assessment is an underestimation of potential GHG emissions reduction because the impacts of land use change and carbon sequestration are not fully captured in the CAPRI model. However, the model accounts for changes in livestock diets and for the adoption of some mitigation technologies. The potential impact of targeted measures and other effects to reduce GHG emissions that could not be covered by quantitative modelling were taken on board in the different options of the MCA analysis (section 3.2.4.1).

The budget cut (Post Brexit) implies a 0.1% reduction of GHG emissions compared to baseline. In addition, all options show a small decrease of non-CO₂ GHG emissions, ranging between 0.6% and 1.6%. Between 34% (4b) and 50% (4a) of the reduction comes from direct N₂0 emissions from the application of mineral fertilisers, followed by 22% (4a) to 36% (4b) from methane emissions from enteric fermentation. Even though the difference in impact between the options in terms of non-CO₂ GHG mitigation is a factor of three, this represents only between 2.6 and 7 million t CO₂ eq/year.

The main drivers for the reduction in non-CO₂ emissions are the introduction of a tool for nutrient management with reduction targets of N-surplus. As the reduction target of the NMP is higher in option 3a and 4a compared to the other options, it is quite logical that these scenarios show the biggest reductions in terms of GHG emissions.

Farmers may react to these reduction targets via production changes but also via the implementation of mitigation technologies. Around 56% of the total reduction in GHG emissions is achieved via mitigation technologies in option 4a, while it is around 25%-45% in the other options. The major part of the reduction is due to precision farming and the use of nitrification inhibitors out of four farming practices. The results show as well that there is no adoption of other mitigation technologies in absence of any other incentive directly targeting non-CO₂ mitigation technologies. It should be noted that in the ECAMPA2 study²⁶ (see also Box 1), a scenario with a subsidy covering 80% of the costs of mitigation technologies but no compulsory emission reduction target for agriculture, delivered about 13.5% of non-CO₂ emission reductions by 2030 compared to 2005, with little negative impact on EU production.

Final report ECAMPA2, 2016

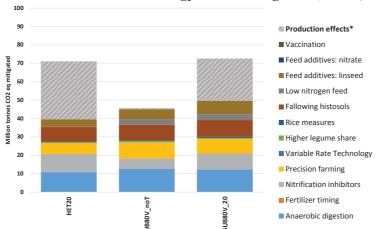
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These incentives were not included explicitly because: first, the modelling framework allowing for such an assessment in combination with the other elements of the CAP simulated here was available only recently; second, it would have required strong hypotheses on the availability of budget by MS dedicated to these specific technologies and finally the ECAMPA study was already available and could provide the necessary insights for the MCA.

Box 1: What's the potential of GHG emission mitigation in agriculture?

The options considered in this impact assessment do not include specific GHG emission reduction targets or policy obligations to mitigate GHG emissions from EU agriculture²⁷. While the possibility for uptake of emission mitigation technologies is considered in the quantitative analysis, adoption by farmers is low (see section 2.2.1), which explains why the GHG emissions reduction achieved in the different policy options is limited. This is in line with the main findings of the EcAMPA 2 study (Pérez Domínguez et al., 2016²⁸), which shows that adoption of mitigation technologies in the agricultural sector is unlikely to happen at a large scale without additional incentives.

In the EcAMPA 2 study, the role of emission targets and subsidies for the uptake of technological (i.e. technical and management-based) mitigation options was specifically addressed with the CAPRI model for year 2030. The study examined the impacts of policy instruments directly targeting non-CO₂ GHG emission reductions in the EU agricultural sector, concluding that without further policy incentives, EU-28 agricultural GHG emissions would decrease by about 2.3 % by 2030 compared with 2005. EU agricultural production would be significantly reduced if the sector was to deliver a -20% emission reduction without including subsidies for the adoption of mitigation technologies. Livestock herds would be substantially affected, especially cattle for beef production. Negative production impacts of a mitigation target would be more limited if the implementation of emission mitigation technologies by farmers would be subsidised. Furthermore, the study showed that considerable emission reductions could also be achieved when including subsidies for emission technologies without a specific emission target. In this case, emissions would decrease by about 13.5% compared to 2005, without negative impacts for EU agricultural production. However, EcAMPA 2 showed that the subsidies payed in the scenarios would lead to additional budgetary costs between 12.7 and 15.6 billion EUR (188 - 278 EUR/t CO₂ eq mitigated) depending on the scenario setting (i.e. voluntary vs. mandatory adoption modalities, cost and number of technologies available, etc.).



Graph 2.11: Contribution of each technology to total mitigation (EU-28, 2030)

Source: Pérez Domínguez et al. (2016). HET20 = Compulsory 20% mitigation target for EU-28 agriculture, cost-effective allocation by MS; SUB80V_20 = same as HET20, but with 80% subsidy for the voluntary application of mitigation

emission abatement in the agriculture sector.

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Pérez Domínguez et al. (2016): An economic assessment of GHG mitigation policy options for EU agriculture (EcAMPA 2), JRC Science for Policy Reports, European Commission, Luxembourg: Publications Office of the European Union.

The EU agriculture sector is included under the EU Effort Sharing Decision (ESD) and, therefore, should contribute to GHG emission reductions. However, ESD mitigation targets are specific to member states, but not individual sectors, and so far no explicit policy measures have been implemented to oblige GHG

The positive effect of a reduction in GHG emissions is partly offset by emission leakage, meaning increased emissions outside the EU, to produce agricultural products to be imported into the EU or to replace EU exports. Between 35% and 75% of the GHG emission savings are substituted by additional emissions outside the EU (the so-called leakage). This effect is the strongest in option 3a due to the strong decline of EU beef production replaced by imports from less efficient regions in terms of GHG emissions/kg of product²⁹ based on the historical emissions efficiency trends as the exact impact of the Paris Agreement in different parts of the world is yet unclear. In general, all measures that lead to production drops imply a reduction in gross GHG emissions. However, only a change in human consumption will translate into an actual reduction of GHG emissions worldwide (i.e. to avoid leakage).

These average results hide diverging impacts at national and regional level due to the prevailing farming systems in the baseline. Another explanatory element is the implementation of the tool for nutrient management assuming that regions with a high livestock density need to reduce the nitrogen surplus with a higher percentage than regions with a lower nitrogen surplus.

Table 2.12: Relative contribution of emission categories to total emission reduction (%) in the different options

	3A	<i>3B</i>	4A	4B	5
N_2O from application of manure	3	4	3	4	4
N_2O from grazing animals	7	3	5	9	8
N_2O from manure management	3	3	2	3	3
N_2O from application of mineral fertilisers	40	43	50	34	36
N_2O from organic soils	0	1	1	0	4
N_2O from crop residues	4	12	4	6	6
Indirect N_2O from runoff and leaching	5	4	6	4	4
Indirect N ₂ O from volatilised ammonia	3	3	3	2	3
Total N ₂ O	65	73	75	62	67
CH ₄ from enteric fermentation	33	24	22	36	31
CH ₄ from manure management	2	3	3	2	2
Total CH ₄	35	27	25	38	33

Source: JRC, CAPRI model

Increase carbon sequestration

The maintenance of permanent grassland – i.e. obligation not to convert permanent grassland to other land uses - is key for carbon sequestration and preservation, thus the obligation to maintain the share of permanent grassland in UAA in conditionality requirements. In addition, other policy instruments can contribute to maintain or even extend permanent grassland area: support to permanent grassland (option 4 and 5), support to ANC and support to extensive livestock. It is worth noting that any scheme granting lower payments to large farms (as simulated in option 5) is damaging for extensive farms with permanent grassland; thus the need to compensate these systems with targeted support. In addition, the increase in green requirements might lead to an increase in permanent grassland by reducing economic returns from arable land.

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GGLES report, 2010

Certain farming practices have also beneficial effects on soil organic carbon. There is substantial scientific evidence that cover crops reduce nitrate and phosphate leaching (water quality), increase the soil organic carbon content and reduce soil loss by improving soil structure and increasing infiltration.³⁰ Experimental results have shown that cover crops can reduce soil erosion by 20% (conservative estimation); thus, the proposal for more environmentally ambitious MS to specify an obligation of winter soil cover with cover crops (meaning that mulching would not be enough). Cover crops are applied currently on 6.5% of the EU-28 arable land, but large differences between MS exist.³¹ The use of green coverage between tree rows of permanent crops ranges between 5 and 10% in the EU.

For this impact assessment, 3 scenarios were developed and run by the JRC, using the Century model and RUSLE 2015³², to see the potential effect of cover crops on carbon sequestration and soil erosion, separately from the non-CO₂ modelling with CAPRI described above:

- Scenario 1: introducing a minimum rate of cover crops in the whole EU territory, several levels were tested: 25%, 50% and 75% of arable land and permanent crops. In areas were the cover crops application was larger no change was implemented ("Flat rate 25%, 50%, 75%").
- Scenario 2: introducing minimum cover rates of 10% everywhere, but with higher levels depending on the erosion status of the zone: 25% if soil erosion is above 2t/ha per year and 50% if soil erosion is above 5t/ha ("Minimum + target").
- Scenario 3: introducing targeted cover rates only where erosion rate are above 1t/ha: 25% if soil erosion is above 1t/ha per year, 50% if soil erosion is above 2t/ha and 75% if soil erosion is above 5t/ha ("*Target*").

Cover crops application on arable land improves carbon sequestration in all scenarios. Between 37 and 138 million t of additional carbon can be accumulated into the soil over a period of 15 years. The impact by MS is mainly driven by the number of hectares of arable land and the potential erosion risk. On a yearly basis, the impact represents between 0.5% and 2% of total agricultural non-CO₂ emissions (437 million t in 2015, EEA).

Table 2.13: Change in carbon sequestration cumulated over a period of 15 years due to different implementation strategies of cover crops on arable land

	Carbon	Scen	ario 1 ''Flat	rate''	Scenario 2	Scenario 3
MS	sequestration (Mt)	25%	50%	75%	+ target''	''Target''
AT	1.0	0.0	0.4	1.1	0.1	0.3
BE	0.2	0.0	0.3	0.6	0.0	0.1
BG	0.0	1.5	2.9	4.4	1.1	1.8
CY	0.0	0.0	0.0	0.0	0.0	0.0
DE	2.4	6.2	14.8	23.3	3.4	5.9
CZ	0.6	1.7	3.9	6.2	1.1	2.4
DK	0.0	0.7	1.4	2.1	0.3	0.1

Smith et al., 1987

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Farm structure survey 2010

See section 2.6 and 2.7 of Annex 5.2 for more information

	Carbon sequestration	Scen	''\linimum		Scenario 3		
MS	(Mt)	25%	50%	75%	+ target''	"Target"	
EE	0.1	0.3	0.6	1.0	0.1	0.0	
EL	0.0	0.4	0.8	1.2	0.3	0.5	
ES	0.5	2.1	4.7	7.4	2.0	3.7	
FI	0.1	0.8	1.7	2.6	0.3	0.1	
FR	6.0	6.4	18.6	30.8	3.1	7.2	
IE	0.1	0.4	0.8	1.3	0.1	0.1	
HU	0.2	2.9	5.9	9.0	1.8	2.6	
HR	0.0	0.0	0.0	0.1	0.0	0.0	
IT	0.4	2.5	5.4	8.4	3.1	5.4	
LT	0.1	1.3	2.7	4.0	0.5	0.4	
LU	0.0	0.0	0.0	0.1	0.0	0.0	
LV	0.1	0.4	1.0	1.5	0.1	0.1	
NL	0.2	0.1	0.4	0.7	0.0	0.0	
PL	1.6	4.2	9.9	15.6	1.8	3.2	
PT	0.0	0.2	0.3	0.5	0.1	0.2	
RO	0.2	3.2	6.7	10.1	2.4	3.8	
SE	0.4	0.8	2.0	3.2	0.3	0.4	
SI	0.1	0.0	0.1	0.2	0.0	0.1	
SK	0.2	0.9	1.9	2.9	0.8	1.3	
Total	14.4	36.9	87.3	138.2	22.9	39.8	

Source: JRC, Century model

2.2.2. Foster sustainable and efficient management of resources

Reduce N surplus and improve water quality

This assessment explores how the introduction of Nutrient Management Plans (NMP) could contribute to improve water quality. Nitrogen and phosphorus loads are big issues for water quality. However, since the balance of phosphorus is not complete in CAPRI, the assessment concentrates on nitrogen.

Two nitrogen-restricting measures are tested:

- 1. The obligation for all farms to elaborate a Nutrient Management Plan (NMP) (i.e. not only in nitrate vulnerable zones, as it currently applies) as minimum requirement, this scenario with a **tool for nutrient management** is called 'NMP'.
- 2. A reduction target of nitrogen balance, as proposed in options 3a and 4a, this scenario is called 'NMP+'.

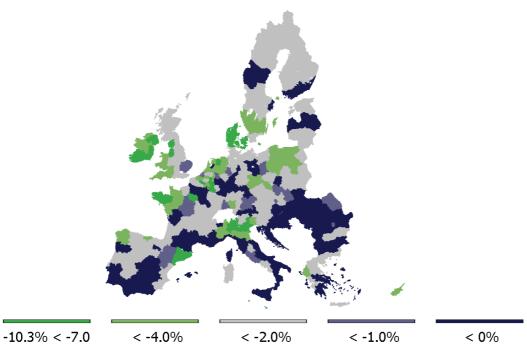
The JRC used the CAPRI model for the simulation. CAPRI approximates farm-level N-surplus with the Gross Nitrogen Balance (GNB). The GNB includes all N losses from housing, manure storage and management and soils. The two measures are mimicked as reduction targets of the GNB. The targets are defined relative to the level of the GNB per hectare of UAA in the baseline. EU regions are categorised according to their baseline N-surplus per hectare, and different reduction targets are applied for each category. For EU regions with already significant manure trade, lower reduction targets are applied. Reduction targets simulated are summarised in the table below.

Table 2.14: Relative N-surplus reduction targets in both scenarios

		Number of		
		NUTS2-	Target	Target
		regions	NMP	NPM+
$GNB < 40 \text{ kg N ha}^{-1} \text{ yr}^{-1}$		93	0%	0%
$40 \text{ N ha}^{-1} \text{ yr}^{-1} < \text{GNB} < 80 \text{ kg N ha}^{-1} \text{ yr}^{-1}$		95	0.6%	2%
$80 \text{ N ha}^{-1} \text{ yr}^{-1} < \text{GNB} < 120 \text{ kg N ha}^{-1} \text{ yr}^{-1}$		37	1.5%	5%
$120 \text{ N ha}^{-1} \text{ yr}^{-1} < \text{GNB} < 160 \text{ kg N ha}^{-1} \text{ yr}^{-1}$		17	3%	10%
$GNB > 160 \text{ kg N ha}^{-1} \text{ yr}^{-1} - Manure trading}$	BE, NL, DE	12	1.5%	5%
GNB > 160 kg N ha ⁻¹ yr ⁻¹ - <i>No manure</i>	BE, IT, PT,	7	3%	10%
trading	ES			

Source: JRC

Map 2.1: Reduction in N-surplus per ha of UAA (relative to baseline), NMP+ scenario



Source: JRC, CAPRI

Farms in CAPRI have two main options to reduce their N-surplus; they either adjust their current production structure (by e.g. reducing the number of animals, changing land allocation to crops or adjusting input use) or they can opt for more N-efficient farming practices. The latter effect is captured by a limited set of optional production technologies³³: precision farming, variable rate technology, a better timing of fertilising, nitrification inhibitors and low N-feeding. The adoption of these technological options comes at a cost for farmers.

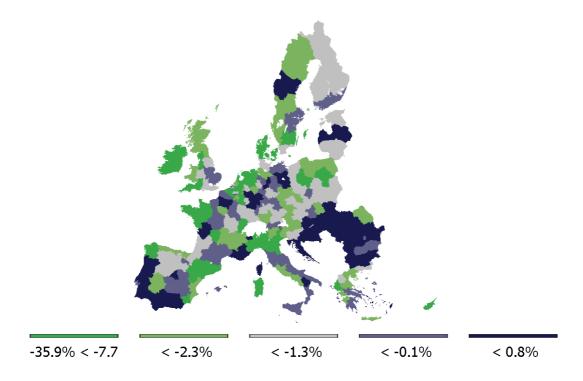
The imposed reduction targets are met in the scenarios, with an average reduction for the EU of 1% in the NPM scenario and close to 4% in the NPM+. Farmers take advantage of more N-efficient technologies, such as precision farming. Overall, the mineral fertiliser use is decreasing by 1.5% (option 3b) to 5.1% (option 3a) at EU level (see e.g. the mineral N use for cereals in the map below decreasing by more than 8% in the regions in

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For more details on the implementation of the technology options in CAPRI consult Pérez Domínguez, I., T. Fellmann, F. Weiss, P. Witzke, J. Barreiro-Hurle, M. Himics, T. Jansson, G. Salputra, A. Leip (2016): An economic assessment of GHG mitigation policy options for EU agriculture (EcAMPA 2). JRC Science for Policy Report, European Commission, Luxembourg: Publications Office of the European Union. http://doi.org/10.2791/843461.

dark green). The impact on agricultural income is very small, only about 0.2% in both scenarios for the EU. In the NPM+ scenario a small adjustment in the regional allocation of land use and animal production can be observed.

Map 2.2: Mineral N (fertiliser) use for cereals, relative change in kg of N use/ha, NMP+ scenario



Source: JRC, CAPRI

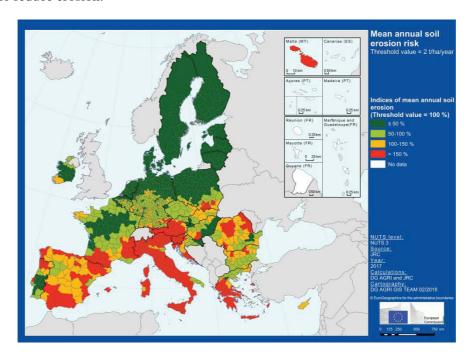
Reduce soil erosion

As illustrated in the map below, the regions requiring intervention to reduce soil erosion (regions in red and orange with a mean soil erosion above 2 t/ha) are numerous and located mainly in the southern part of Europe.

The same scenarios as for carbon sequestration were run for cover crops on arable land and on permanent crops to see its impact on soil erosion. The analysis shows that cover crops can potentially reduce average annual erosion on arable land by up to 15% and on permanent crops by up to 37% with a flat rate at 75% in the EU. Low requirement rates (below 10% of coverage of arable land and below 25% on permanent crops) would have little effect because MS apply already cover crops.

Map 2.3: Mean annual soil erosion

Green colours indicate regions without soil erosion issues, while regions in orange and red need to reduce erosion.



An implementation taking into account the on-site erosion risk would lead to similar reduction rates of soil erosion in the most vulnerable areas than a flat rate. However, it would have the advantage to be much better targeted to areas/countries with an erosion problem and would limit as well the additional burden to farmers.

Cover crops are clearly beneficial to reduce erosion but not enough: certain MS would still record erosion rates above 5t/ha per year for permanent crops and above 2t/ha per year on arable land in all scenarios. Therefore, the winter soil cover requirement would need to be combined with other measures, such as plant residues after crop harvesting, the increase of grass margins, contour farming in sloppy areas and reduced tillage, in order to reduce erosion to acceptable levels in all MS. Although it was not covered in the scenarios, several studies indicate that the type of cover crop (leguminous for example) and the duration of the vegetation cover are two factors that influence to a large extent the effectiveness of this farming practice.

Another way to reduce soil erosion is to develop and improve **crop rotation**. According to the H2020 Smartsoil project, improved crop rotations refer to specially tailored crop rotation regimes, such as alternating deep-rooted and shallow-rooted plants or alternating a series of crops with a period of grassland (grass-ley) and introducing catch or cover crops. These improved rotations can benefit farm soil by building soil organic matter, enhancing soil fertility and improving (deep) soil structure. Crop rotation has multiple benefits: it can help replenish nitrogen in the soil, reduce erosion, and increase the water infiltration capacity of the soil. Practicing crop rotation can also provide a simple technique for managing and preventing weeds, pests and diseases from building up when land is continuously planted with the same crop (monoculture) and thus contribute to the objective of reducing pesticide use. The simulation carried out by JRC showed that the rotation obligations proposed in the options imply indeed a reduction in grain maize and durum wheat areas more often cultivated in monoculture.

 $\begin{tabular}{ll} \textbf{Table 2.15: Change in erosion due to different implementation strategies of cover crops on a rable land \\ \end{tabular}$

	Erosion rate in	Sha	re of cover o	Minimum	Target		
MS	baseline (t/ha) ³⁴	25%	50%	75%	+ target	141500	
AT	4.0	-4.5%	-9.6%	-14.2%	-1.9%	-4.8%	
BE	2.1	0.0%	-3.1%	-8.5%	-1.6%	-6.1%	
BG	2.5	-5.0%	-10.1%	-15.1%	-4.1%	-8.9%	
CY	1.8	-5.0%	-10.0%	-15.0%	-1.0%	-5.0%	
DE	1.8	-3.5%	-8.7%	-13.8%	-2.6%	-6.5%	
CZ	2.5	-3.8%	-8.9%	-14.0%	-3.6%	-8.6%	
DK	0.6	-5.0%	-10.0%	-15.0%	-0.9%	0.0%	
EE	0.7	-3.8%	-9.0%	-14.2%	0.0%	0.0%	
EL	2.8	-4.7%	-9.8%	-14.9%	-4.9%	-9.8%	
ES	4.3	-3.5%	-8.7%	-13.9%	-5.3%	-10.4%	
FI	0.5	-4.9%	-7.4%	-10.7%	-0.6%	0.0%	
FR	2.0	-3.1%	-8.2%	-13.2%	-1.8%	-5.5%	
IE	1.3	-4.3%	-6.1%	-8.2%	0.0%	-3.7%	
HU	2.1	-4.8%	-9.8%	-14.9%	-3.9%	-8.2%	
HR	1.7	-4.6%	-9.6%	-14.7%	-1.7%	-5.8%	
IT	8.4	-4.3%	-9.4%	-14.2%	-8.6%	-13.6%	
LT	1.0	-4.8%	-9.9%	-14.9%	-0.8%	0.0%	
LU	4.5	-3.1%	-8.3%	-13.4%	-3.1%	-8.3%	
LV	1.0	-4.0%	-9.1%	-14.2%	0.0%	-4.0%	
MT	15.9	-5.0%	-10.0%	-15.0%	-10.0%	-15.0%	
NL	0.5	-1.9%	-5.9%	-11.2%	0.0%	0.0%	
PL	1.6	-3.7%	-8.8%	-13.9%	-3.1%	-6.7%	
PT	2.9	-5.1%	-10.4%	-13.3%	-6.7%	-11.8%	
RO	3.4	-4.7%	-9.8%	-14.8%	-7.5%	-12.5%	
SE	1.1	-3.5%	-8.7%	-13.8%	-0.5%	-2.2%	
SI	4.6	-1.3%	-6.5%	-11.7%	-2.4%	-7.6%	
SK	3.5	-4.2%	-9.3%	-14.4%	-5.6%	-10.6%	

Source: JRC, RUSLE 2015

3

Average annual erosion rate by water at MS level in the baseline

Table 2.16: Change in erosion due to different implementation strategies of cover crops on permanent crops

	Erosion		Flat rate		Minimum	Target	
MS	rate (t/ha) ³⁵	25%	50%	75%	+ target	iaigei	
AT	6.6	0.0%	-8%	-29%	-7%	-25%	
BE	1.5	0.0%	-3%	-25%	0%	-1%	
BG	5.9	-1.7%	-17%	-37%	-11%	-30%	
CY	5.4	-1.0%	-15%	-36%	-15%	-36%	
DE	6.1	0.0%	-4%	-24%	-3%	-19%	
CZ	4.4	-0.3%	-11%	-32%	-1%	-14%	
DK	0.8	0.0%	-5%	-27%	0%	0%	
EE	0.6	0.0%	-1%	-14%	0%	0%	
EL	7.9	-0.1%	-5%	-27%	-4%	-25%	
ES	8.8	-1.7%	-16%	-37%	-14%	-34%	
FR	5.5	-0.5%	-10%	-31%	-9%	-27%	
HU	4.9	-0.7%	-14%	-35%	-12%	-31%	
HR	10.2	-0.3%	-5%	-26%	-5%	-26%	
IT	16.7	-0.1%	-6%	-27%	-6%	-26%	
LT	0.8	0.0%	-1%	-20%	0%	0%	
LU	10.8	-0.6%	-2%	-22%	-2%	-22%	
LV	0.9	0.0%	-2%	-15%	0%	0%	
NL	0.5	-0.3%	-9%	-30%	0%	0%	
PL	1.2	0.0%	-1%	-21%	0%	-3%	
PT	5.4	-0.2%	-9%	-31%	-6%	-21%	
RO	9.8	-0.1%	-7%	-29%	-7%	-29%	
SE	0.9	0.0%	0%	-8%	0%	0%	
SI	32.1	0.0%	-3%	-24%	-3%	-24%	
SK	7.5	-0.3%	-9%	-30%	-9%	-30%	

Source: JRC, RUSLE 2015

Reduce ammonia emissions

Ammonia emissions reduce between 0.3% and 0.8% in the various options. As the mitigation technologies available in the model are not directly targeted to reduce specifically ammonia emissions, the reduction comes from changes in production and input use. The reduction targets from the NMP are determining to a large extent the differences between the scenarios. A similar reasoning applies to the results for nitrate leaching, indicating a reduction between -1.4% (scenario 4b) and -4.5% (scenario 3a and 4a).

3

Average annual erosion rate by water at MS level

2.2.3. Preserve nature and landscapes

Landscape elements

It is proven that landscape elements contribute to maintain biodiversity; thus, the green requirement of 3% of UAA with non-productive elements (fallow land, afforested area and landscape elements) proposed and the top-up for linear elements in option 5.

As explained above, this green-requirement and the effect of this top-up could not be fully assessed because of the lack of knowledge on the extent of linear elements in MS (not to mention at farm level). JRC ran a first attempt to estimate this area. To that aim, the JRC used the LUCAS transects database. This work would need to be continued and data crossed with Copernicus information, but is gives already relevant information. It was not always clear if the linear element surveyed was part of agricultural area or not, thus the identification of dubious cases.

Table 2.17: Landscape elements in the EU

	Excluding dubious cases		Including dubious cases		
	Length (1 000 km)	Area (1 000 ha)	Length (1 000 km)	Area (1 000 ha)	
Grass margins	4 750	2 850	5 880	3 530	
Shrub margins	690	420	1 170	700	
Single trees bushes	600	300	730	370	
Lines of trees	680	340	1 090	540	
Hedges	2 370	1 190	3 310	1 660	
Grove margins	120	70	240	140	
Stone walls	970	100	1 550	150	
Ditches	1 920	960	2 860	1 430	
Total	12 120	6 220	16 850	8 540	

Source: JRC, based on LUCAS

In addition, the JRC completed the work with the estimation of grass margins, shrub margins, single trees bushes, lines of trees, hedges and ditches at MS level. This estimation is to be taken with caution because of methodological caveats. However, it shows that two MS have more than 3% of their UAA with linear elements: NL and FI (see Annex 5.4).

Adding to this estimate Eurostat data on land fallow, it shows that the 3% of non-productive elements will be binding in 12 MS (CZ, LU, BE, BG, DK, IE, HR, SI, SK, DE, FR, AT), all the more because the obligation applies at farm level. It explains the strong increase in set aside and fallow land simulated in the various options, mainly at the expense of cereal area (Table 2.2 and 2.3). A CAPRI simulation modelling this green requirement in isolation confirms these results. The drop in cereal area is smaller though as part of land reallocation is due to rotation.

Land abandonment

Maintaining the agricultural activity is the first requirement to preserve nature and landscape. In all options, except option 5 result in a small reduction in UAA because the drop in support is threatening farm viability implying a decline in UAA of 300 000 ha in option 1 relative to baseline. On top, the increasing green requirements lead to a further reduction by close to 400 000 ha (-0.3% relative to option 1) in option 4a and 350 000 ha in option 3a. No additional land abandonment is recorded in option 5 because green

requirements are minimal and because several factors contribute to keep farmers in business in areas facing constraints: the top up to ANCs, to permanent grassland and the coupled support to extensive livestock.

Implementation of environmental top-ups in option 5

In this simulation, it was not possible to dedicate 30% of pillar I envelope of each MS to ANCs, permanent grassland, organic area³⁶ and linear elements: first because of the lack of knowledge on linear elements; second and more importantly because the provision of these area types is unequal between MS. With the level of top ups simulated here³⁷, the share of the envelope dedicated to these top-ups is 22%. This illustrates limits of strict ring-fencing.

However, without accounting for linear elements, the envelope required to grant these top ups is above 30% in 7 MS (AT, FI, SI, LV, PT, LU and SK). Some MS have indeed more than 50% of UAA with permanent grassland (IE, HR, PT, SI, EL, LU, AT), more than 50% of area in ANCs (FI, MT, LU, LV, SI, CY, SK, AT, PT and RO) and large organic areas (AT, SE, EE, IT and LV). In these MS, in this simulation, the envelope dedicated to the decoupled payment was therefore cut leading to stronger drop in support outside ANCs³⁸.

Conversely, in MS with less area classified with natural constraints and less permanent grassland, in this simulation the share of envelope dedicated to the tops ups was below 10% in DK and HU and below 20% in NL, BE, DE, BG, LT, PL and SE³⁹. In that case, the budget was allocated to the decoupled payment modulated by size.

In addition, in some MS the top-up simulated here was below the current ANC payment accounting for co-financing and national top ups. This highlights, in MS with large support to ANC relying currently on national funds, the potential difficulty to keep similar support levels in a pillar I framework. In these cases, it should be seen how the flexibility of the strategic plan could allow MSs to adapt the mix of interventions to maintain support in ANCs. Anyhow, in this simulation the current ANC support was always maintained.

Finally, would these top-ups be introduced, more flexibility on the envelope share should be envisaged. In addition, it might be needed to extend the scope of the top-ups to certifications.

2.2.4. Additional elements to enhance environmental and climate performance

To assess better the behaviour of farmers when confronted to the new green architecture proposed in the reform, the JRC organised focus groups with farmers. Farmers were separated in two groups: the farmers more inclined to adopt green practices 'Green farmers' and those more conventional. The first group associates green incentives to voluntary schemes, the latter to mandatory schemes. Voluntary schemes are perceived as more encouraging, though if not at the cost of reduced basic payments. Cross compliance (conditionality) is well accepted by farmers, but they are concerned for the level playing field when rules applied differ between MS but also as regards more competitive imports originating from third countries not complying with similar requirements. Greening is judged overall positive even though some concerns were expressed. As regards, agrienvironment-climate measures farmers mentioned that the key factor to enrol is the economic dimension. More details are available in Annex 8.

Increasing the unitary payment level was tested but not conclusive.

A 10% increase of organic area was assumed in the baseline.

⁵⁰ EUR/ha for permanent grassland and 100 EUR/ha additional if the area is organic, 400 EUR/ha for organic permanent crops, 200 EUR/ha for organic arable land, 120 EUR/ha for mountain areas and 50 EUR/ha for ANCs not mountain. An increase of organic area by 10% is assumed. In addition the payment level is modulated by MS according to the current level of pillar I payments per ha of eligible area, to account for the differences in purchasing power parity.

Except those with 100% of area declared ANC, MT and FI

Some additional key insights could be derived already from this work on farmers' opinion: the need for a better local knowledge to design coherent/meaningful incentives, the strong call for improving the level-playing field between farmers as regards voluntary schemes and the potential subsidiarity left to MS, the need to target incentive schemes to 'real' farmers and to small farmers and finally the need to better educate consumers.

The role of the economic incentive is further demonstrated by the economic analysis concluding to a high uptake of the eco-scheme, despite the associated costs due mainly to decreased agricultural production, because the aid is necessary to ensure the viability of the farm. In addition, according to the ECAMPA study carried out by JRC⁴⁰, adverse effects of binding emission reduction targets on EU agricultural production and emission leakage are significantly reduced if subsidies are paid for the adoption of technological GHG emission mitigation options. However, this comes along with considerable budgetary and unitary costs if farmers are projected to widely adopt the technologies.

3. MULTI CRITERIA ANALYSIS

3.1. Introduction

This part of the annex presents the results of the option comparison, combining both quantitative and qualitative approaches, as outlined in the Annex on Methods and tools. In section 3.2 the **Effectiveness** of the options towards the policy's Main Objectives (MOs) is assessed. Section 3.3 focuses on the **Efficiency** of these policy options, and assesses their contribution towards simplification, while section 3.4 addresses the crosscutting objective of **Modernisation**. Section 3.5 discusses policy **Coherence** while the final section focuses on the cross-cutting objective of **Sustainability**.

A detailed overview of the achievements and shortcomings of the current policy, resulting into the set of identified challenges from which the specific objectives originate, can be found in the Background documents (see Annex 1 to the IA report).

3.2. Effectiveness of policy options

3.2.1. Overall scores on effectiveness

Effectiveness analysis considers how successful the options could be in achieving or progressing towards the new CAP objectives⁴¹. Given the high aggregation level of the Main and Specific Objectives, this Annex describes effectiveness not only at these levels but also draws lessons from the Operational Objectives (OO) level (Annex 5.3). The group expert judgements were done at the level of OOs, to allow for sufficient refinement in the argumentation. The MCA exercise was prepared in DG AGRI in 2017 and run in January 2018.

Effectiveness is judged towards the economic, environmental and climate and social policy objective of the CAP. Graph 3.1 reflects the overall scores of the different options, including sub-options of 3 and 4. None of the options come close to the theoretical maximum (100), so combining the strong points of the different option designs will further increase the performance. One should however not neglect potential trade-offs between policy objectives, hampering a perfect score.

Adapted from: Tool 42, Better Regulation Toolbox, http://ec.europa.eu/smart-regulation/guidelines/docs/br_toolbox_en.pdf

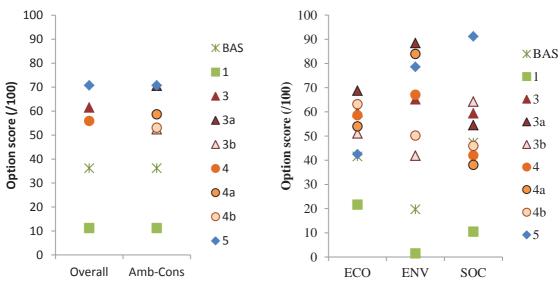
See An economic assessment of GHG mitigation policy options for EU agriculture (EcAMPA 2)

When applying an equal weight between the three main policy objectives option 5 attains the highest overall score. Option 5 combines several redistributive elements, especially towards smaller farms, with a strong EU—wide focus on environmental aspects.

When considering sub-options a and b in the other options, option 5 is matched by option 3a which offers high environmental ambition by means of a voluntary eco-scheme together with increased risk management instruments and cooperation measures. The sub-options help to test MS ambition in a delivery model based on increased subsidiarity. The distance in scores between options a and b reflect uncertainty regarding the level of MS' (mainly environmental) ambition. As a take away, if ambitious MS choices are desired, sufficient **safeguards** at EU-level should be put in place.

The distance in scores between options 4a and 4b is smaller compared to 3a and 3b. This is partly linked to increased uncertainty related to a voluntary incentive-based ecoscheme (option 3) vis-à-vis the compulsory enhanced conditionality (option 4a), and partly to the fact that option 4a and b have opposite preferences regarding the main policy objectives. This can also be seen in Graph 3.2. While option 4a is outperformed by option 4b for the economic and social objective, it is the opposite for the environmental objective, given its higher environmental ambition. Option 3a also scores high for the economic objective, as it is associated with faster structural change and hence productivity increase.

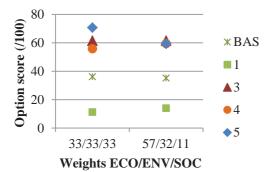
Graph 3.1. Option scores on overall Graph 3.2. Option scores on economic, effectiveness (100=maximum) environmental and social policy objectives



Note: Amb-Cons includes the ambitious (a) and conservative (b) sub-options of option 3 and 4

Graph 3.2 also shows that in general the options underperform on the economic objective, compared to the other 2 objectives. The policy compensates for the provision of public goods, which are not sufficiently rewarded by the market, resulting in better scores on the environmental and social objective. For the economic objective it remains a second best to properly functioning markets. The large spread between the ambitious and conservative sub-options (both for option 3 and 4) mainly originates from a different contribution towards the environmental objective, as the main option design differences relate to the environmental ambition. Option 5 achieves a remarkable score for the social objective as this option contains a mix of instruments which is geared towards the social objective.

Graph 3.3. Option scores on overall effectiveness when different weights are applied



When assessing the robustness of the results by testing different weighting for the policy objectives (as exemplified in graph 3.3) the gap between option 5, 3 and 4 is further closed. The alternative weights proposed here reflect the current budget allocation the different to objectives, and can be seen as revealed preference. So depending importance of the different policy objectives pursued, the mix of policy instruments should be different.

3.2.2. Economic Policy Objective: Fostering a smart and resilient agricultural sector ensuring food security

As stipulated in the Treaty, supporting farmers in attaining a fair standard of living is one of the cornerstones of the CAP. The way this support is distributed among farmers is often criticised, since 80% of support goes to 20% of the farmers, as mentioned in the Communication. The options test different designs for distributing support, with changes in emphasis on minimum requirements, redistribution, capping and targeting complemented with different budget allocations for RD instruments such as the competitiveness or cooperation measure or the EIP budget. Option 3a, with its ecoscheme, starts from low basic payments combined with an increased budget for risk management and an incentive scheme geared towards environmental ambition. Option 4 tests jointness by coupling direct income support with extra environmental requirements. It also redistributes towards permanent grassland, which is associated with lower incomes. Option 5 targets small and medium size farms.

Graph 3.1 shows that none of the options attains a high score. This indicates that none of the options has a set of instruments which is clearly preferred over the others. While some (combinations of) instruments might contribute more to one economic objective, they are less fit for another. The lower score also reflects the tension between instruments geared towards supporting income directly versus instruments which improve the productivity and competitiveness of farming and hence increase income indirectly.

A second observation relates to the large uncertainty surrounding options 3 and 4, as reflected by the scores of the respective sub-options a and b. A delivery model based on increased subsidiarity will perform significantly better when additional **safeguards** are in place. In relation to this, options 3 and 4 have a similar overall score, but variation is much wider between 3a and 3b compared to 4a and 4b. So for the economic objective one could consider option 4 to be the preferred in absence of a clearer idea whether MS choices in the new delivery model will be more ambitious or conservative.

Remarkable is also that option 4b is preferred over option 4a (as opposed to 3a versus 3b). Option 4b is less environmentally demanding and hence associated with higher economic performance. Both model results and experts seem to judge the trade-off between the economic and environmental objective to be stronger compared to potential synergies. The opposite is true for option 3a, but for a different reason. Many experts believe that a reduction in direct support, which is strongest in option 3a, will trigger faster structural change, where only more efficient and productive farms will survive,

resulting in a more economically performant agricultural sector. This off course comes at the detriment of the social (and potentially environmental) dimension. The low score of option 5 can also be interpreted in the same way. Its strong focus on small farms is hampering structural change and so limiting possible economies of scale. As shown in Graph 3.4, to reach the main economic objective the baseline with budget cuts is assumed the least appealing policy option. Main reasons for the low scores of the baseline with cut are the lack of targeting, strong VCS and low EIP spending, as well as the low budget for aid to producer organisations.

For the main economic objective, 3 Specific Objectives (SO) are identified:

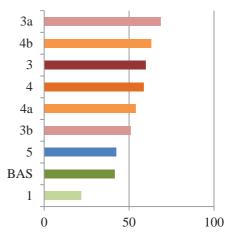
- SO1: Supporting a viable farm income and resilience throughout the territory
- SO2: Enhance competitiveness and market orientation
- SO3: Improve farmers' position in the value chain

In the group weighting exercise, SO1 received a weight of 33%, indicating that in order to reach the main economic objective, 33% of the weight should be put on this SO. SO2 is assessed to be the most important (weight of 43.5%) and SO3 the least (23.5%). The distribution of expert weights is fairly homogenous, with one part of experts more in favour of the direct effect of policy support on income via SO1, while other experts see more virtue in policy support to enhance farmers' competitiveness, with knock-on effects on income.

Table 3.1. Option scores for main economic objective and the 3 specific objectives

Options MO SO₁ SO₂ SO3 BAS 3a **3b** 4a 4b Weights⁴² 0.33 0.43 0.23

Graph 3.4. Option scores on main economic objective (100=maximum)



Taking into account the scores on the SOs, the baseline with cut has especially a low score for SO3, as all other options have a higher budget allocation to improve the uptake of PO's. Option 5 is especially outperformed on SO1 and 2, due to its lack of spending on risk management and the main focus on small farms which are, overall, deemed less efficient. Options 3 and 4 have fairly homogenous scores across SOs, with 3 preferred over 4 for SO3 as the strong structural change it brings will stimulate farmers to get better organized, while the maintenance of a strong direct payment in option 4 brings merits to SO1 and especially 2, as it allows farmers to invest in productivity enhancing investments while not distorting market signals.

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⁼ group average weights derived from individual experts' weights, see Annex 5.2 on Methods and Tools

3.2.2.1. SO1: Support viable farm income and resilience throughout the territory

This SO focuses on the income level and variation and hence considers the following 3 OOs:

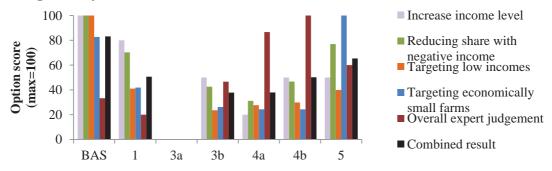
- OO1.1: Provide income support in a targeted way
- OO1.2: Cope with price volatility
- OO1.3: Improve risk management

The direct effect of the policy on the **income level and its targeting** is dealt with under OO1.1. One would expect a high weight for this OO given the importance of the direct payments in the overall CAP budget. This is only partially confirmed in the group weighting, as it receives 37% of the weights for this SO, but the SO itself only receives 33% of the weight of the Economic Policy Objective. The part on quantitative analysis (see section 2) already details the main messages. The relevant model outcomes are also integrated in the MCA, accompanied by the group scoring exercise. The following model indicators were considered in addition to the expert judgement (all equal weight for this OO):

- Increase income level in agriculture
- Targeting support to farmers most in need (with low incomes)
- Reducing share of farms with negative income
- Targeting payments to small and medium economic size (ES) farms

Graph 3.5 shows the virtue of combining both expert judgement and modelling results, when available. Although the modelling is not capable of capturing all intended policy effects, the experts seem to have underestimated the performance of the baseline and the baseline with cuts (option 1), while option 4 (a and b) were overrated. The high BP and the redistribution to farmers with lower income in option 4 (via increase in the permanent grassland payment and VCS to extensive livestock) are apparently offset by the budget reduction, other budget allocations (e.g. towards EIP or risk management) and the additional environmental constraints. For the other options the scores are in line. While the baseline outperforms the other options (given the higher budget), also option 1 performs well, almost similar to option 4b. Option 5 performs best given the budget cut, especially on targeting economically small farms and reducing the share of farms with negative income, given its redistribution towards small farms and the ANC payments in pillar 1. Option 3a is outperformed as it is targeting environmental needs and has a very low and flat basic payment.

Graph 3.5. Option scores on indicators associated with OO1.1 Provision of income support in a targeted way



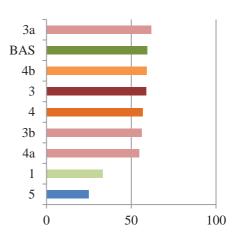
OO1.2 on coping with **price volatility** links to the safety net measures but also to other instruments such as futures markets and forward contracts. For these items there is not

much distinction between the options. All options embed the agreed Agricultural Omnibus. Option 3a scores best as the reduction in DP will benefit the more efficient farms and will stimulate the development of price risk management tools such as futures and contracts. The enhanced support for producer cooperation under 3a will also be beneficial as large cooperatives are the main users of these tools. VCS (considerable in option 3b and 5, small in 4) receives a negative marking given that it increases output and hence puts pressure on prices. Option 5 scores the least as it is not expected that small farms will become users of futures and the lack of structure might generate occasional mismatches between supply and demand.

Table 3.2. Option scores for SO1 Supporting viable farm income and resilience and its 3 OOs

Options	SO1	001.1	001.2	001.3
BAS	60	83	50	40
1	33	51	25	20
3	59	19	88	80
3a	62	0	100	100
3b	56	38	75	60
4	57	44	50	80
4a	55	38	50	80
4b	59	50	50	80
5	25	65	0	0
Weights	1	0.38	0.31	0.31

Graph 3.6. Option scores on SO1



OO1.3 on **risk management** (RM) complements the previous objective in addressing volatility (of production and income). The group expert judgement should be set against the observations made in the modelling section, among others on the high budgetary expense for sector-wide ISTs and the low uptake of RM tools. The group experts confirm the latter and link it to the income buffer provided by DP. In an environment with lower DP, RM tools would become more popular. The experts also stress the importance of cooperation (and tools stimulating this) to facilitate risk management uptake. The group exercise puts option 3a on top as the reduced levels of DP and the absence of VCS together with a high budget for RM and cooperation will stimulate the interest in IST. Part of the experts sees more virtue in option 4 with higher DP. Option 5 is considered worst as there are no specific measures to tackle risk management while the focus on small farmers might trigger a further need.

3.2.2.2. SO2: Enhance competitiveness and market orientation

The successive CAP reforms have improved the market orientation of EU farms. This is important for the competitiveness of the sector, also in the light of international agreements, and for matching EU consumer demands with respect to price and non-price product attributes. This SO can be broken down in 3 OOs:

- OO2.1: Productivity and efficiency gains
- OO2.2: Demand driven production models
- OO2.3: Add value to agricultural products

Weights

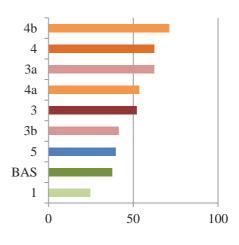
Table 3.3. C	option scores i	or SO2 Enf	iance
competitive	ness and its 3	OOs	
O 11	502	0021	0022

BAS 38	36	65	
		05	15
1 25	14	67	0
3 52	57	36	60
3a 62	64	47	73
3b 42	50	24	46
4 62	93	56	31
4a 54	86	35	31
4b 71	100	77	31
5 40	0	27	100

0.40

0.28

Graph 3.7. Option scores on SO2



Reaching the first OO on **productivity and efficiency gains** is judged by the experts to be the most important in contributing to the overall Economic Policy Objective (with a weight of 17% overall or within this SO of 40%). Productivity is only growing at a low pace in the EU, and its spread is uneven. The effect of DP on productivity is not unilateral. While the recent World Bank study⁴³ shows a strong and positive overall effect, DP are also associated with a slowdown in structural change as they allow less efficient farms to survive. DP are also partly capitalised in land prices, but as stable source of revenue they allow investments and can be used as collateral with banks. The positive effect of VCS is more contested as it draws away support from more to less productive sectors. For sectors in need VCS could act as a stimulus to enhance competitiveness. However, experts see the need for accompanying measures and a time limit to not distort competition in the single market. Other important measures are Producer Organisations (POs) as well as support for investment in physical assets and in human capital (knowledge and advice). Option 4 is judged best as it combines a high level of targeted DP with a high budget for competitiveness and EIP, while keeping VCS low. 4b is preferred as it is less environmentally demanding compared to 4a. 3a also scores well given that the low level of DP will trigger a restructuring in the sector. Absence of VCS and a high EIP budget are also judged beneficial. The baseline attains a fairly low ranking, despite the higher overall budget. Option 5 is judged worst as the focus on small farms makes reaching economies of scale more difficult.

0.32

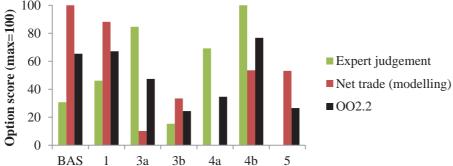
Stimulating demand driven production models (OO2.2) is also seen as important (overall weight of 12% or 28% for this SO). EU consumers are by far the most important buyers of EU agricultural products. To meet their evolving demands both price and nonprice attributes need to be aligned with consumer expectations. While OO2.3 focuses on adding value to agricultural products (the non-price attributes), this OO focuses on the price and trade component. EU prices in tune with world prices and a positive trade balance are indicative for a competitive EU farming sector. Group experts stress the importance of the capacity to adapt to changing market conditions and consumer preferences. Decoupled payments, as opposed to coupled payments, are seen as beneficial for market orientation, but, as in the previous section, they are assumed to slow down structural change. Higher environmental requirements are expected to put constraints on the production potential, with only limited pay-back from the market (see OO2.3). Strong support for competitiveness is positively associated with this OO.

⁴³ World Bank on the European Union (2017) Thinking CAP Supporting Agricultural Jobs and Incomes in the EU, EU Regular Economic Report 4.

According to experts, option 4b scores best, as it combines a high level of DP and EIP with low environmental constraints and low VCS. 3a also scores well, but here mainly because the reduced DPs and absence of VCS together with the high EIP and Competitiveness budget (which contains support for quality schemes, setting up of POs and investments under the RD pillar) will allow restructuring and hence more market orientation. For this OO, option 1 is judged better than the baseline, due to the lower DPs and VCS triggering market orientation. Option 5 is judged worst given high VCS and the focus on small farms which will not allow being price competitive. The modelling results on net trade on the other hand favour the baseline and baseline with cuts, while also option 5 scores better. This might indicate that the experts underrated the effects of the budget cut and the more stringent environmental requirements (Graph 3.8), as the baseline and option 1 perform much better while especially 3a and 4a much worse. The reduced budget and the environmental requirements result in production contraction, affecting the EU's export potential while increasing the imports. On the other hand, the CAPRI model is not capable of capturing the effect of all tested instruments simultaneously, e.g. redistribution towards smaller farms, showing the virtue of combining both quantitative and qualitative assessment.

net trade

Graph 3.8. Option scores for OO2.2 combining expert judgement and modelling results on



The third OO on **Adding value to agricultural products** (overall weight of 14% or 32% for this SO) is also seen as important in helping farmers to better respond to market demands and to retain more added value in the agricultural sector. Quality schemes, organic farming, Geographical Indications (GIs) and more integration in the bioeconomy are all associated with this OO. Both organic and GIs profit from support for quality schemes under RD, while GIs also benefit from the Promotion policy and organic farming is exempted from environmental obligations (such as greening under the current CAP). Several measures are currently promoting the integration in the bioeconomy, most notably Focus area 5c under RD and Leader. Group experts associate higher DPs with a lower incentive to convert to organic or to seek other ways of adding value. Massive conversion to organic could saturate the market, but with only 6.5% of the total UAA being organic, there is still ample room for growth. Option 5 is judged best given the top-up for organic, high expenditure on Leader, strong RD support for adding

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The bioeconomy encompasses the production of renewable biological resources and the conversion of these resources and waste streams into value added products. Within the EU-28, this diverse collective of activities employed 8.2% of the labour force and it generated 4.2% of GDP in 2015. Furthermore, primary agriculture, food manufacture, beverages and tobacco constitute three-quarters of bioeconomy employment and two-thirds of bioeconomy value added. In Northern and Western European Member States (MS), bioeconomy employment and value added are more concentrated in bio-based manufacturing sectors. On the other hand, in Central and Eastern European Member States, it is more concentrated in the primary agriculture and forestry activities, although the output gap suggests that there is significant potential for further development. Source: bioeconomy roadmap; forthcoming Ronzon et al

value and for the development of short supply chains. 3a follows as the low income support, together with an increased EIP and cooperation budget, will force farmers to seek alternative ways to add value. Option 1 is judged worst.

3.2.2.3. SO3: Improve farmers' position in the value chain

Important changes to the provisions for farmers to get organized were agreed within the Agricultural Omnibus. The options do not assume changes to these provisions, but assume a different budget allocation for the setting up of POs and short supply chains. Some indirect effects from other policy instruments are also expected to influence farmers' position in the chain.

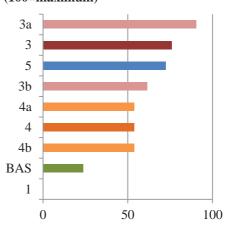
For this SO, 3 OOs were defined:

- OO3.1: Strengthening cooperation amongst farmers (horizontally)
- OO3.2: Enhance synergies within value chain (vertically)
- OO3.3: Support the development of local markets and short supply chain

Table 3.4. Option scores for SO3 on farmers' position in the value chain and its 3 OOs

Options	SO3	003.1	003.2	003.3
BAS	24	25	23	22
1	0	0	0	0
3	76	79	81	67
3a	90	100	100	67
3b	62	58	62	67
4	54	42	85	44
4a	54	42	85	44
4b	54	42	85	44
5	72	75	38	100
Weights	1	0.45	0.27	0.29

Graph 3.9. Option scores on SO3 (100=maximum)



Overall, the baseline with post-Brexit cut is the least preferred, as it is a status quo compared to the current situation with additional budget cuts which will bear on the farmers' ability to get organized. Option 4 is also less favoured, as not many additional actions are proposed to get farmers organized. Experts also do not see differences between 4a and 4b for this SO. Option 5 scores better, starting from the premise that small farms have more incentives to get organized compared to large farms, as well as an increased budget for the set-up of short supply chains, also associated mainly with small farms. Option 3 is assessed best, mainly due to the reduction in direct payments, together with a higher budget for risk management, which will stimulate cooperation among farmers, as they will have to become more efficient to gain more from the market.

To reach this SO, the OO3.1 focusing on the organization of farmers within POs, is expected to be most important (weight of 45%). The assumption across options that multiannual sectoral programs are brought under the CAP planning process is seen as beneficial for farmers getting organized. Option 3a is preferred as it combines stimulating measures under rural development for the setting up of POs (under the Cooperation measure) with a high budget for EIP and lowest budget cuts on Competitiveness. As said, lower DPs and enhanced risk management are also expected to contribute to farmers' cooperation. Option 5 also receive a high score given the assumption that (part of) small farms have more incentives to join POs given their low bargaining power, together with

high spending for setting up of POs and EIP. In option 4 there is strong focus on innovation, but no specific focus on producer cooperation and competitiveness.

OO3.2 on enhancing synergies in the value chain is associated with better price transparency and increasing added value creation in the food chain. This OO receives a weight of 27%. The experts assume that less income support would lead to disappearance of small and less efficient farms. The resulting increase in concentration would make it easier to bargain for the farming sector. There was also general agreement that VCS blurs market signals. Option 3a scores best given the low DP, which is an incentive towards cooperation, and more innovation. Option 4 also receives a high score given the high budget for innovation, low VCS and DP not distorting market signals. Favourable for 5 is the support for more basic services and the high EIP budget, while the strong VCS and vertical integration being harder to achieve for small farms are judged less effective.

For OO3.3 on local markets and short supply chains, with a weight of 29%, option 5 outperforms the other options as the redistribution towards small farms and the top-up for organic farms are also seen as positive for the development of alternative market channels. This is further stimulated by increasing the support towards short supply chains in RD and a higher budget for LEADER. The lower DP in option 3 will trigger (some) farmers to cope with market shocks by diversifying towards other market channels such as the short supply chains, so this is judged positive. The maintenance of high levels of DP together with lower budget for LEADER are seen as less positive for option 4.

3.2.3. Main Socio-Economic objective: Strengthen the socio-economic fabric of rural areas

The social dimension of the CAP is typically more difficult to measure and assess as many other policies and forces are at play as well. Rural dwellers other than farmers can profit from support under the second pillar, but with many challenges and a lower budget compared to the 1st pillar, the CAP's impact there remains limited.

For the main socio-economic objective, 3 Specific Objectives (SO) are identified:

- SO1: Attract new farmers and facilitate business development, as well as generational renewal
- SO2: Promote employment, growth and local development in rural areas
- SO3: Address territorial imbalances, rural poverty and social inclusion

In the group weighting exercise, SO1 received a weight of 23%, indicating that generational renewal is considered an important part of the socio-economic objective. SO2 is assessed to be the most important (weight of 42%) and SO3 the 2nd (35%). The distribution of expert weights is fairly homogenous.

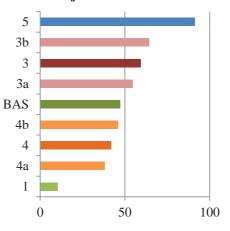
As the table shows, the baseline with cuts (option 1) is considered the least appealing, followed by option 4. It receives an overall mediocre score as it performs poorly on the first SO of generational renewal, given that there is no increase in support for young farmers, no additional expenditure on basic services and Leader while a high level of DPs is retained which incentivises older farmers to remain in business. Also on the 2nd SO it receives a fairly low score as it is expected to neither create much additional employment in rural areas nor give a stimulus to more provision of rural services and infrastructure. Option 3 scores better than the baseline and option 4 given more incentives for generational renewal (esp. 3a), rural employment and growth, while imbalances between territories and groups are better addressed (in 3b). Option 5 outperforms the rest as it is

built around redistribution towards small and medium farms, not containing extra minimum requirements. It also offers VCS, ANC payment, top-ups for organic and young farmers, high EIP, high AECH, high Leader and high basic services. One could say that this option was geared around the social pillar. In the group discussion the topic of short versus long run effects emerged as important. Social gains in the short run can be offset in the long run due to the erosion of the EU agriculture's competitive position and the creation of a "culture of dependency" to subsidies.

Table 3.5. Option scores for main socio-economic objective and the 3 specific objectives

Options	MO	SO1	SO2	SO3
BAS	47	62	52	33
1	11	0	19	7
3	59	65	50	58
3a	55	85	31	63
3b	64	46	69	71
4	42	23	41	38
4a	38	15	34	58
4b	46	31	47	54
5	91	100	83	95
Weights	1	0.23	0.42	0.35

Graph 3.10. Option scores on main socioeconomic objective

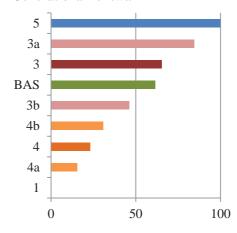


3.2.3.1. SO1: Attract new farmers and facilitate business development, as well as generational renewal

Only one OO, Fostering generational renewal in rural areas, is associated with this SO. Young farmers on average have larger farms, with more rented land. They relatively invest more and find access to land and credit constraining. Their income is about average. They are also more often engaged in organic farming. Main uncertainty during the group discussion related to the positive or negative effect of DP on generational renewal. With higher DP, older farmers are more reluctant to leave the sector, while part of the payments are also absorbed into land prices, making access more difficult (even if it was stressed that land capitalisation depends heavily on MS land regulation). On the other hand, as collateral DP can facilitate access to credit and they offer a stable source of income.

Option 5 ranks highest because of the high Young Farmer (YF) top-up under DP, the support to organic, more budget for Leader, for infrastructure and services, EIP, cooperation etc. 3a also scores well, given the high top-up for YF, and a high budget for Competitiveness, good for young farmers who want to invest, and the low DP which will force some farmers out of the sector. Given its higher budget, the baseline also scores well. 3b has less budget for YF and lower spending on EIP, but high budget for competitiveness and for basic services. 4 scores less as there is no elevated YF payment and lower budget for basic services and Leader, while the high DP keep older farmers in business.

Graph 3.11. Option scores on OO1.1 Generational renewal



3.2.3.2. SO2: Promote employment, growth and local development in rural areas

This SO2 brings together 4 OOs:

- OO2.1: Foster employment in rural areas
- OO2.2: Foster income and value added (VA) in rural areas
- OO2.3: Foster inclusive growth in rural areas
- OO2.4: Improve access to infrastructure and services in rural areas

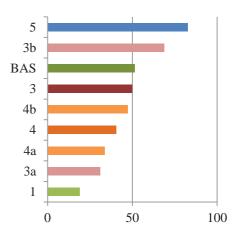
The OO on income and VA creation (with weight of 32%) is considered most important, followed by access to infrastructure and services (29%).

The OO on **fostering employment** covers both agricultural and non-agricultural sectors in rural areas, with the CAP being only one of the factors having effect on it. It considers both the creation and the maintenance of jobs in rural areas. Farmers only cover 12% of employment in rural areas. During the group discussion many uncertainties emerged. One relates to small farms, which are often occupied by part-time older farmers, to complement their pension. Incentivising these can be seen as socially desirable but not economically. Further, DP are less directly associated with the creation of jobs but they are more with the maintenance of jobs, while RD measures are more associated with the creation of jobs. The quality of jobs is also an important element, while low quality jobs in agriculture can be found in both big and small farms. A negative correlation between knowledge and innovation and employment is assumed, as it has the potential to replace labour by less costly inputs. Higher environmental demands may have a link with increased labour intensity but they also affect the available budget for other measures. Also VCS has pros and cons as it keeps people in otherwise less viable sectors but with long term negative prospects and additional pressure on sectors/regions where VCS is not applied. With respect to option scoring, option 5 is considered best as it directs support to more labour intensive farms (small, organic), it offers VCS, it has a high budget for Leader and Basic services and infrastructure, it promotes Cooperation and Diversification. 3b follows as it has highest Leader and Basic services, supporting offfarm employment, as well as VCS. The baseline is ranked third due to its higher overall budget for RD measures. The lower score under 3a is explained by the lower DP outbalanced by higher expenditure for Leader and Competitiveness. Option 4 is ranked lower given the lower expenditure for the relevant RD measures.

Table 3.6. Option scores for SO2 on employment and growth
in rural areas and its 4 OOs

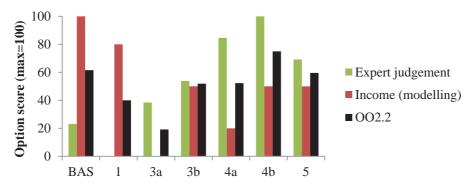
Options	SO2	002.1	002.2	002.3	002.4
BAS	52	62	62	70	22
1	19	0	40	36	0
3	50	65	36	38	61
3a	31	46	19	10	44
3b	69	85	52	66	78
4	41	23	64	50	22
4a	34	15	52	42	22
4b	47	31	75	59	22
5	83	100	60	76	100
Weights	1	0.22	0.33	0.16	0.29

Graph 3.12. Option scores on SO2



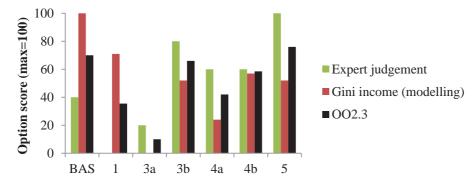
For OO2.2 on fostering income and VA, focus rests on the competitiveness of rural areas, while fairness is considered in other OOs. EIP is seen as particularly important as it can push economic development. Although there were different opinions among participants, option 4 was ranked highest, as it has the highest BP and lower VCS, which is associated negatively with competitiveness. Budget for EIP is also high. Financial instruments to compensate for the reduction in the Competitiveness budget were also perceived as beneficial, as opposed to the lower budget for Leader and Basic services. 4b ranked first as it is less environmentally demanding compared to 4a. There was strong disagreement about option 5's ranking, as some see it as the least efficient in the long run, while others see the virtue of measures such as organic, short supply chains, diversification, basic services to boost competitiveness. As a consensus the option was ranked after option 4. Option 3b follows, given its lower budget for EIP, but high Leader. Option 3a has high EIP, but also high environmental requirements, explaining its lower ranking. The baseline is not preferred as it has a lower budget on EIP and some other RD measures, while the option 1 receives the lowest score given the budget CAP on top of that. While farm income development is only indicative for general income development in rural areas, it is worthwhile including it to complement the expert judgement. As already discussed in paragraph 3.2.2.1, the modelling (Graph 3.13) shows that the experts have somewhat underrated the effect of the budget cut, the redistribution and the higher environmental requirements in the new options, which are bearing on farmers' income. Including modelling results pushes up the scores for the baseline and option 1, while especially option 3a and 4 have to be revised downward.

Graph 3.13. Option scores for OO2.2 combining expert judgement and modelling results on EU28 farm income



For OO2.3 on **inclusive growth**, the group discussion revealed the importance of covering both 'inclusiveness' and 'growth'. Important instrument are Leader, public services, minimum requirements, salaries correction for capping, ANC-top ups and budget for diversification as it can give an impetus to small businesses. According to experts, option 5 is ranked highest, as it has low minimum requirements, a strong redistribution to small, ANC-top ups, VCS and high RD-budgets. 3b follows given its high budget for Leader. 3a is judged low given the flat and low basic payment and no redistribution. This last point is confirmed when including modelling results on the ginicoefficient of income. Based on modelling results, the baseline and option 1 perform much better compared to the experts' expectations while 4a and especially 5 attain a lower score. This might indicate that the budget cut but also the additional requirements on environment are not compensated by the effects of a more targeted redistribution.

Graph 3.14. Option scores for OO2.3 combining expert judgement and modelling results on the Gini-coefficient for EU28 farm income



For the OO2.4 on access to basic services and infrastructure (that according to the experts should not only be limited to broadband), the assessment was straightforward given the specific RD measure devoted to this. Also Leader was taken into account. 5 scores best as it has the highest budget for basic services and Leader, followed by 3b. 4 scores similar to the baseline as the budgets for Basic services and Leader remain status quo.

3.2.3.3. SO3 Addressing territorial imbalances, rural poverty and social inclusion

This SO focuses on the 'fairness or equity part' of the policy, in addition to the OO on Providing income support in a targeted way, by investigating whether the distribution of support is able to close gaps between territories, including rural versus urban, and different groups, such as youth or women, within these territories. The modelling tools do not provide much insight, as they still lack necessary data and have difficulties to depict the effects of RD measures well. A recent study of the World Bank shows the beneficial effects of the current CAP towards poverty reduction, with a main role played by the direct decoupled support complemented by the RD payments. Similar to the previous SO, option 5 is generally perceived as the most fair, with its redistribution towards small farms, YF top up, ANC payments in pillar 1, and high budgets for Leader and basic infrastructure and services. Option 3b follows by a distance.

Following OOs are part of this SO:

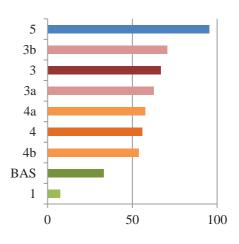
- OO3.1: Reduce inequalities between territories
- OO3.2: Reduce inequalities between groups
- OO3.3: Improve social capital and networks
- OO3.4: Contribute to healthier lifestyles

This last OO contributes to the cross-cutting objective of addressing societal expectations on food and health and does not only relate to rural areas. With a weight of 34% towards this SO it is perceived as most important. The other 3 OOs have a similar weight of around 20%.

Table 3.7. Option scores for SO3 on territorial imbalances and rural poverty and its 4 OOs

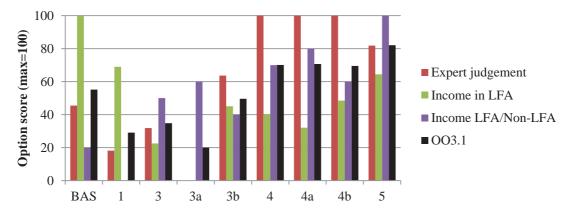
unu	and rural poverty and its 4 00s						
Op	tions	SO3	003.1	003.2	003.3	003.4	
BA	S	33	55	25	23	27	
1		7	29	0	0	0	
3		67	35	80	82	61	
	3a	63	20	87	82	44	
	3b	71	50	73	82	78	
4		56	70	53	55	22	
	4a	58	71	47	64	22	
	4b	54	70	60	45	22	
5		95	82	100	100	100	
We	ights	1	0.25	0.19	0.22	0.34	

Graph 3.15. Option scores on SO3



Regarding reducing inequalities between territories (OO3.1), no exact figures are available regarding the rural versus urban divide. From the modelling exercise we however know that farmers' income in general is deteriorating compared to the baseline, given the budget cut, the redistribution and increased environmental and climate ambition in the options. As a consequence, the current gap between farmers' income and the average wage in the economy is not expected to close further, on the contrary. Between territories in rural areas, the section on Less Favoured Areas (LFA currently named Areas with Natural Constraints – ANC) in the modelling part is informative. The expert judgement is complemented with modelling results on farmers' income in LFA and the ratio between income in LFA versus non-LFA (equal weight, see graph 3.16). The experts acknowledge the important role of basic services and Leader to help rural areas to catch up, with Leader working better in dynamic areas. They also share a concern that a delivery model with more flexibility for MS might lead to increasing disparities between MS territories as some MS might notably decide to further enforce some specific interventions in some regions while others may not. Concerns related to the probable absence of minimum regulatory spending were also been expressed; according to the experts, without such an obligation, MS would devote the biggest part of their budget to agriculture and not to rural services and other rural actions. Experts rank option 4 first as it contains redistribution towards permanent grassland (associated with lowest income) and VCS for extensive livestock (idem). Option 5 follows with the redistribution towards small, ANC for mountainous areas in pillar 1, the top-up for permanent grassland, VCS, enhanced support for basic services and Leader. The experts would rank the baseline with its higher budget higher, as it helps to close the rural-urban divide, but it lacks targeting compared to the other options. 3a ranks lowest as it does not distinguish between territories with a flat rate and no VCS. The expert judgement is largely in line with the modelling results, except for option 4 where the experts were too positive. Option 5 scores best on the ratio between income in LFA compared to non-LFA, so it's closing the relative income gap most, while the baseline has the highest income level in LFA, but it is still much lower compared to non-LFA.

Graph 3.16. Option scores on indicators associated with OO3.1 Reducing inequalities between territories



For **reducing inequalities between groups** (OO3.2), following vulnerable groups are distinguished: youth, women, elderly people, Roma people and migrants. While several tools in the 1st pillar target inequalities among farmers (such as redistributive payment, risk management tools, POs, support for young farmers, investment support), for rural dwellers in general only 2nd pillar payments are relevant (such as support for basic services, diversification, SMEs, Leader, ANC, knowledge development). Leader is the only instrument which currently can specifically target the most vulnerable groups cited above (with exception of young farmers' payment). Option 5 gains the highest ranking with the low minimum requirements, the targeting of small farmers, ANC in the 1st pillar, high expenditure for Leader and basic services, high EIP, YF payment, VCS etc. It is followed by 3b which also has a high expenditure for Leader and VCS as well as redistribution. Option 4 receives a lower score as expenditure on Leader is lower. Positive for 4 is the targeting towards extensive livestock farms, which tend to have lower incomes. The baseline and option 1 are ranked last given lower targeting and budget for Leader.

The following OO3.3, **improving social capital and governance in rural areas**, focuses on the virtues brought by stronger ties between rural dwellers but also between rural and urban citizens, as this stimulates the rural attractiveness and improves the social resilience. Local governance is also seen as positive, leading to stronger ties and trust between decision makers and beneficiaries. The main contributions from the CAP come from the investment in knowledge transfer and cooperation (under RD measure 1, 2 and 16), Leader, POs and networks such as the National rural Networks and EIPs. Regarding governance, a delivery model which is more geared towards addressing local needs is expected to enhance acceptability and trust by the end beneficiaries. Option 5 is ranked highest as the focus on small, together with higher EIP and Leader, will stimulate cooperation. Option 3a also ranks high with high spending on EIP, cooperation and innovation. The rest of the options are less favourable in stimulating networking.

Agriculture is the first link in the food chain and an important contributor to health through the nutritional quality of food and its adequate supply. Regarding OO3.4 on contributing to **healthier lifestyles**, the experts stressed the importance of basic services for public health. They also see innovation as important to produce healthier products. Environmental aspects can also have an impact on health, as illustrated by AECH measures on antimicrobial resistance. VCS could be targeted to support healthier products and quality schemes instead of to vulnerable sectors. The experts do not see a clear link between farm size and product quality. Lastly, research on the link between organic products and health is also still inconclusive. Option 5 is ranked best given the

large budget for AECH, basic services, the support for direct sales and the top-ups for organic. 3b also scores high given the high support for basic services and competitiveness, as well as Leader, although with lower EIP. 3a receives an equal score, given high EIP and Eco-scheme.

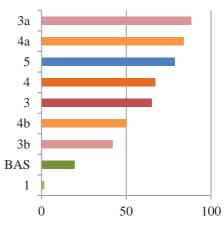
3.2.4. Environmental and Climate Policy Objective: Bolstering environmental care and climate action and contribute to the environmental and climate objectives of the EU

The environmental policy objective combines efforts towards mitigating and adapting to climate change with those contributing to care for soil, water, air and biodiversity, as well as valued landscapes. All options are geared towards improving the contribution towards the environmental and climate objective, with basic conditionality going beyond the current GAEC and cross compliance, complemented with additional environmental requirements. This is also reflected in the MCA-scores where the options outperform the baseline and the baseline with cuts (graph 3.17). Option 5 sets aside 30% of direct payment envelopes for environmental top-up payments (in relation to organic farming, permanent grassland, landscape features and ANCs). It complements this with an increased budget for AECH. Options 3a and 4a test subsidiarity and start from the premise that MS are willing to step up their environmental ambition, while options 3b and 4b reflect more conservative choices by MS. Option 3 tests the approach of an ecoscheme under pillar 1, which is an incentive based approach where farmers can engage on a voluntary basis. Option 4 on the contrary tests a conditional approach, with environmental requirements an integral part of the requirements to receive direct payments. Both approaches start from a needs assessment at MS or even regional level to identify the most appropriate measures.

Table 3.8. Option scores for the Environmental Policy Objective and its 3 SOs

Objective a	nd its 3 SOs		-	
Options	МО	SO1	SO2	SO3
BAS	20	19	19	23
1	2	3	1	0
3	65	63	64	69
3a	88	81	87	100
3b	42	45	42	38
4	67	67	68	65
4a	84	88	86	75
4b	50	47	51	54
5	79	83	75	79
Weights	1	0.32	0.43	0.25

Graph 3.17. Option scores on Environmental Policy Objective



As table 3.8 shows, options 3a and 4a are judged best and gain a comparable score, while option 5 follows at a short distance. However, as there is considerable uncertainty regarding the level of ambition of MS, a strong fall back can be noted when considering the more conservative versions (options 3b and 4b) of these options. This is more amplified for option 3 compared to option 4. Under uncertainty of MS choices, an approach based on conditionality seems to be more effective, as it assures engagements of all farmers, is easier to control and avoids budget swings and a mismatch between farmers' efforts and the granted incentive. Typically under an eco-scheme those already performing well will sign up, while the laggards will refrain from engaging, unless the provided incentive is high enough (but this will cause budget overshoot). In order to

avoid conservative choices by MS, additional safeguards, in the form of target setting, EU requirements or possible budget earmarking, will have to be pursued.

A second important observation relates to the focus of eco-schemes versus enhanced conditionality. Experts judge an eco-scheme to be more effective in the case of hot spot problems, while enhanced conditionality could perform better if there is no strong regulation in place (e.g. for soil) or if the issue is of widespread concern (e.g. climate change). As enhanced conditionality needs to apply to all farmers concerned, it will be necessarily less demanding/targeted compared to the eco-scheme.

3.2.4.1. SO1: Contribute to climate change mitigation and adaptation

Climate change is an important EU priority and the CAP is expected to contribute to the EU climate objectives by directing the farming community towards greater efforts for both mitigation and adaptation. The MCA analysis shows that the mix of policy instruments proposed in option 5 performs best to contribute to mitigation and adaptation. This mix includes among others a top-up for permanent grassland and organic farming, a large budget for AECH, VCS for extensive livestock only and high spending on EIP. Option 4 is slightly preferred over option 3, indicating that conditionality, applying to all farmers, is preferred over a voluntary eco-scheme. Main reasoning is that climate change is not location-specific and affects all, so joint measures are necessary. The experts judge the variation between the sub-options a and b quite large. In fact, option 4a with its enhanced eco-conditionality scheme is the preferred option. But, as can be seen from the considerably lower score of option 4b, experts question whether a delivery model with increased subsidiarity needs additional safeguards to guarantee high ambition from MS. In a similar sense, option 3a with its voluntary and ambitious ecoscheme also performs well, as opposed to 3b. All options outperform the baseline with cuts.

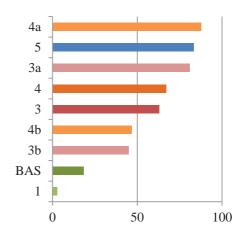
To make this SO more concrete, 3 OOs were identified:

- OO1.1: Prevent/reduce greenhouse gas (GHG) emissions
- OO1.2: Increase carbon storage
- OO1.3: Enhance farms adaptation capacity

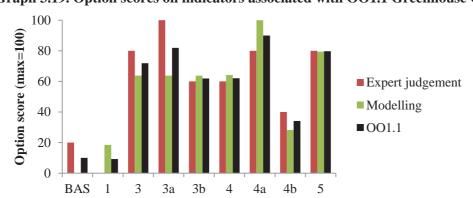
Table 3.9. Option scores for SO1 on climate change adaptation and mitigation and its 3 OOs

Options	SO1	001.1	001.2	001.3
BAS	19	10	23	21
1	3	9	0	0
3	63	72	54	68
3a	81	82	69	100
3b	45	62	38	36
4	67	62	77	57
4a	88	90	100	64
4b	47	34	54	50
5	83	80	85	86
Weights	1	0.31	0.43	0.26

Graph 3.18. Option scores on SO1



In 2015 agricultural **GHG emissions** (OO1.1) in the EU-28 amounted to 437 million tonnes of CO₂ equivalents, 10.1% of total emissions for that year. The long term trend of GHG emissions shows that emissions decreased, with a slowdown in the last years. Main sources of GHG emissions are enteric fermentation of ruminants, manure management, rice cultivation and agricultural soil management. Cropland is generally considered a source of GHG emission, while grassland is considered on average a sink for CO₂. To compare the options, the number of livestock and the fertiliser use are leading factors. For this OO, experts rank 3a first, as the large envelope for eco-schemes allows granting incentives targeting emission reductions and with VCS absent, no additional production stimuli are given to sectors which contribute to GHG emissions (especially cattle). 4a and 5 follow as the beneficial measures there are more relevant for soil carbon storage. 4b scores lower as the environmental ambition is considerably lower. On top of its low environmental ambition, option 3b allows granting VCS to all cattle, explaining its low score. The CAPRI modelling results were also accounted for in the MCA to complement the expert judgement (with an equal weight, see graph 3.19). The expert judgements and model results are fully in tune for options 3b, 4 and 5, while for option 3a experts were more positive compared to the modelling as they did not fully account for emission leakage higher in option 3a than in option 4a. Emissions leakage is due to higher beef imports to compensate for the decline in beef herd linked to the suppression of VCS.



Graph 3.19. Option scores on indicators associated with OO1.1 Greenhouse Gas Emissions

Regarding **soil carbon storage** (OO1.2), CO₂ emissions from the conversion or the implementation of certain farming practices are declining but represent still 60Mt CO₂/year⁴⁵. The main cause is the conversion from grassland to cropland, leading to a decline in soil organic carbon. The group experts have a preference for option 4a given the redistribution of DP in favour of permanent grassland, which is associated positively with carbon storage, and other measures such as winter soil cover. Option 5 also scores high as it contains top-ups for permanent grassland, landscape features and organic farming. Option 3a follows, among others due to the beneficial effects of the ecoscheme measure of winter soil cover on arable land. Option 4b also receives a positive score given the redistribution of DP towards permanent grassland. The basic conditionality in the options imposes a ban on ploughing of wet and peatlands, which is favourable for retaining carbon in the soil. The baseline and option 1 are hence seen as overall less ambitious towards increasing soil carbon storage.

Agriculture is highly vulnerable to climate change, so **climate change adaptation** (OO1.3) is considered an important priority. Impacts are highly place and crop specific. Option 3a is preferred as it contains the eco-scheme, worth 60% of DP, which allows

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MS notifications in the frame of UNFCCC reporting

targeted interventions and it has a high budget for risk management (10% of DP). Option 5 also scores high given the largest budget for AECH while also landscape features, for which a top-up to the DP is granted, help to build up resilience. 4a also scores reasonable well as the enhanced conditionality improves resilience, but the cut in RD payments for competitiveness is seen as negative.

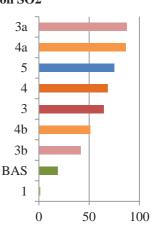
3.2.4.2. SO2: Foster sustainable and efficient management of resources

This second environmental specific objective groups the bulk of environmental objectives of the CAP – including elements related to soil, water, air, pesticides and antibiotics, and agricultural genetic resources. Option 5 targets 30% of the DP envelope to top ups for permanent grassland, organic farming, ANC in mountainous areas and landscape elements. Option 5 also contains a large budget for AECH. Under the assumption of ambitious environmental choices by MS, option 3a and 4a outperform option 5 on this SO. When MS take a more conservative stance (option 3b and 4b), the environmental performance drops back significantly. But, given the increased basic conditionality, among others with simple crop rotation and non-productive areas, all options outperform the baseline and the baseline with cuts.

Table 3.10. Option scores for SO2 on sustainable management of resources and its 4 OOs

002.1 **OO2.2** 002.3 002.5 **Options** SO₂ 002.4 BAS 3a 3b 4a b Weights 0.25 0.14 0.29 0.21 0.11

Graph 3.20. Option scores on SO2



For **improving soil condition** (OO2.1) both measures to increase the soil organic content and to reduce soil erosion are important. Some measures are already part of the current GAEC. In absence of an EU wide soil legislation, the experts see more virtue in a policy with enhanced conditionality, as it puts a lower boundary for all and assures large coverage, compared to a policy which targets hot spots via an incentive based ecoscheme. This enhanced conditionality could for example include winter cover crops and permanent cover. Because of this, but also because of the support for permanent grassland and extensive livestock, option 4a is preferred, followed by both 3a and 5. Option 5 has a large AECH budget and a top-up for permanent grassland. 3a allows targeting the real hot spots. The rest of the options have lower environmental ambition.

For **reducing air pollution** (OO2.2), ammonia emissions are the biggest concern. Agricultural activities in the EU-28 resulted in the emission of 3.7 million tonnes of ammonia in 2014 (EEA) or 94% of total ammonia emissions. The number of livestock animals is one of the main drivers of ammonia emissions, which originate from animal feed and manure. In addition, ammonia emissions may also occur from urea and ammonia based fertilizer application. Measures with impact on emissions are manure injection/animal feeding strategies, better stables and nitrogen use improvement. Unlike

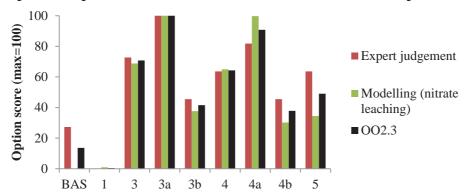
GHG, for ammonia it matters where emissions originate: reduction of intensive to extensive is important. Experts note that directing more support to permanent grassland (Option 4 and 5) can give indirect support to the livestock sector, increasing emissions. Also important is that for pig and poultry farmers there is little impact of DP, for them pillar II measures are more relevant. The ammonia emissions for the different options could be obtained from the modelling exercise. The resulting scoring (see graph 3.21) is very similar to the one obtained from the group expert judgement. 3a is the preferred option as the eco-scheme allows targeting the hotspots, while there is no VCS. 4a scores 2nd, due to the enhanced conditionality, although the redistribution to permanent grassland might give an incentive to livestock production. Option 5 also scores well, with its large AECH budget and the top-up for organic farms (which have better nitrogen balances), although the focus on small farms, which have fewer means to invest in different housing conditions (important for ammonia emissions), counts negatively. 4b scores better than 3b because of higher EIP.

100 80 60 40 BAS 1 3 3a 3b 4 4a 4b 5

Graph 3.21. Option scores on indicators associated with OO2.2 Reducing air pollution

The third OO focuses on **improving water quality and use**. Water quality can be linked to the gross nutrient balance and pesticide use while water use mainly links to water exploitation by agriculture compared to water availability, mainly through irrigation. The pressure from agriculture on water quality is decreasing, although not uniformly. In 2012, it was estimated that, despite reductions in agricultural inputs, diffuse pollution from agriculture is a significant pressure in more than 40% of rivers and coastal waters. The share of agriculture in EU water abstraction (24%) has wide variations (in Southern countries it is 65%), but water abstraction is generally declining. All options contain a nutrient management plan (although how it will be implemented was not specified for the qualitative exercise). Water abstraction problems are mainly relevant for the South. According to experts, 3a receives the best ranking as it allows to targeting at river basin level, closely followed by 4a as it can assure agriculture wide coverage. 5 scores lower as pillar 1 measures are not specifically targeting water, although beneficial effects might be expected from top-ups targeting organic farms (e.g. limiting pollution from pesticides) and landscape elements (e.g. limiting leaching). The high budget for AECH allows to also cover water related measures. 3b is ranked higher than 4b because the light ecoscheme might contain measures relevant for water. Measures for nitrate leaching from the modelling are also accounted for in the MCA. Expert judgements on this OO and modelling results are closely in line (Graph 3.22).

Graph 3.22. Option scores on indicators associated with OO2.3 Improve water quality/use



The sustainable use of pesticides and antibiotics (OO2.4), an objective which also contributes to the cross-cutting objective of societal expectations on food and health, largely depends on legislations implemented independently from the CAP. Hence the core impact is the result of requirements imposed from legislations relating to health and environment. However it is clear that agriculture is a major user of pesticides and antimicrobials. The CAP has currently and in the envisaged future instruments relevant for improving the use of these substances. The group experts see an important role for training (FAS) and EIP. For Integrated Pest Management (IPM), a systems approach is desirable (including training, advice, forecasting etc.). Antimicrobial resistance (AMR) is mainly an issue for intensive farming. With pig and poultry farms hardly getting direct payments, targeting might work better through AECH compared to the eco-scheme under pillar 1. 3a and 5 are considered the preferred options. 3a allows targeting and offers a layered approach with basic conditionality, an eco-scheme and AECH payments on top of that, while 5 has a large budget for AECH and a top-up for organic. In option 5 large intensive farms where pesticides are potentially more an issue, might escape. In that sense option 4a with enhanced conditionality could perform better. 4b scores higher than 3b as it offers a larger budget for EIP.

For the **preservation of agricultural genetic resources** (OO2.5), AECH measures (currently submeasure M10.2 on conservation of genetic resources, M10.1 on rare breeds and M11 organic) are most relevant. Support connected to the EIP and the development of niche supply chains is also important. Experts make the assumption that the ecoscheme will probably not contain measures targeting this OO. Option 5 is ranked best thanks to its high budgets for AECH and EIP as well as its organic top-up. It is followed by option 4. Option 3 and the baseline have a similar score given EIP and AECH budget versus the budget cut.

3.2.4.3. SO3: Preserve nature and landscapes

This SO focuses on improving farm and forest biodiversity (OO3.1) as well as maintaining/improving culturally valued landscapes (OO3.2). Option 3a outperforms the rest, but the spread with option 3b is wide again, so it will depend on MS ambition. Option 5 also performs well.

Due to the millennia-long interaction between farming and the environment, specific habitats and species have developed that can only be maintained by the continuation of farming. Nearly half of the habitats linked to agricultural ecosystems are in an unfavourable conservation status (EEA, 2015). Main threats to agricultural biodiversity-rich environments are land abandonment, which under European conditions would mostly lead to shrub encroachment, and intensification, which leads to the simplification

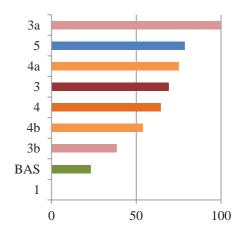
of plant and animal communities. For **improving farm and forest biodiversity** option 3a ranks best according to the experts, due to the ambitious eco-scheme which allows including targeted measures for biodiversity. However, there was discussion whether for biodiversity improvement you need a more regional approach, which would favour enhanced conditionality (option 4a). Option 5 also scores high, as it stimulates organic farming, permanent grassland and landscape features through top-ups, while also containing a high budget for AECH. 4b scores lower as it has only basic conditionality, although the redistribution towards permanent grassland and VCS for extensive livestock might contribute positively. 3b also scores lower with the smaller eco-scheme.

For the **maintenance/improvement of culturally valued landscapes**, Natura 2000 legislation is important. Option 3a scores best according to the experts as the eco-scheme combines high ambition with the possibility to target aid to relevant measures. 4a also performs well due to the additional support for permanent grassland and VCS for extensive livestock, which are associated with culturally valued landscapes, on top of its enhanced conditionality. Option 5 ranks lower than 3a and 4a, as it concentrates support on areas where cultural landscapes already exist thus helping maintenance. However, accounting for the uncertainty in options 3 and 4 implementation, option 5 scores as good as the average of these options. An additional risk, which was not accounted for by experts is the risk of further land consolidation in option 3a if not specific measures are implemented to keep/improve culturally valued landscapes.

Table 3.11. Option scores for the SO3 on nature and landscape preservation and its 2 OOs

SO₃ 003.1 003.2 **Options BAS** 3a 3b 4a 4b Weights 0.61 0.39

Graph 3.23. Option scores on SO3



3.3. Efficiency of the policy options: simplification

This section recapitulates the option scores derived from the group expert judgement on simplification. To get a full overview of the Simplification objective, it should be read in complement to the Annex on Simplification accompanying the IA report (see Annex 7). For the cross-cutting objective on simplification, a single specific objective is identified.

3.3.1. SO1: Streamline CAP design and delivery on relevant EU objectives, including simplification

As shown in Graph 3.24, the baseline and option 1 are seen as bringing little to no simplification. A significant gap occurs with all other options, driven by the shift towards performance and the common potential administrative burden reduction stemming from the streamlined CAP plans.

This SO considers the following 3 OOs:

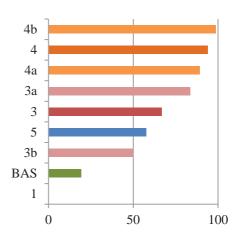
- OO1.1: Shift from compliance to performance
- OO1.2: Reduce the administrative burden
- OO1.3: Enhance the proportionality of administrative costs

OO1.1 looks at whether the CAP design and delivery under the options facilitates and incentivises **performance**. The group weighting attributed a high importance to this OO with 45%. Alternative options to the baseline and option 1 are considered to trigger results more effectively. Key argument put forward is the flexibility given to Member States under the new delivery model to focus the CAP interventions on identified national and regional needs. Options 4a and 4b score best with more certainty on performance linked to the conditionality, while results under 3a and 3b are dependent on the uptake of the eco-scheme by farmers. The lower scores for options 3b and 5 are explained by the limitations in the design to focus on needs, i.e. the use of entitlements under option 3b and prescriptive approach under option 5.

Table 3.12. Option scores for Simplification and its 3 OOs

OOS				
Options	MO/SO1	001.1	001.2	001.3
BAS	19	0	0	84
1	0	0	0	0
3	67	50	69	97
3a	84	75	85	100
3b	50	25	54	94
4	94	100	85	95
4a	89	100	69	96
4b	99	100	100	94
5	58	50	38	100
Weights	1	0.45	0.32	0.23

Graph 3.24. Option scores on SO1



The assessment of the potential **administrative burden** reduction under OO1.2 revealed that administrative burden is closely linked to the complexity of the CAP design and delivery, in terms of variety in tools and choices of complex tools, as well as to the ambition. A more complex strategy will require more time for set-up and implementation by administrations and set higher burden on beneficiaries for payment applications and controls. More ambitious strategies in terms of environmental requirements likewise increase administrative burden. Under this mind set, option 4b proposes a reasonable set of tools (basic payment and limited VCS) while remaining conservative on the conditionality. Option 4b is followed by option 3a (flat rate, no VCS, but with an ecoscheme) and option 4a (higher environmental requirements). The use of entitlements and multiple VCS are the reason behind the lower score for option 3b, while for option 5 it is the prescriptive approach and the variety of tools (VCS, redistributive payments). The baseline and option 1 score lowest as these options do not benefit from gains in administrative burden deriving from the streamlined CAP plans.

OO1.3 assesses the **efficiency** or "value for money" of the options. It combines the assessment of the administrative burden with the results from the analysis of the effectiveness of options. For option 5, the low score on OO1.2 on administrative burden

is counterbalanced by the high effectiveness associated. It scores equally with option 3a, with lower score for effectiveness associated with lower administrative burden. The baseline scores lower due to the higher administrative burden and the lower effectiveness, while option 1 scores the lowest as it combines the lowest effectiveness with proportionately higher administrative burden than the baseline (due to the budget cut).

3.4. Promoting knowledge and innovation in agriculture and rural areas: Modernisation

This section presents the option scores derived from the group expert judgement on modernisation. To get a full overview of the Modernisation objective, it should be read in complement to the Annex on Modernisation accompanying the IA report (see Annex 6). For the cross-cutting objective on modernisation, i.e. promote knowledge and innovation in agriculture and rural areas, a single specific objective is identified.

3.4.1. SO1: Co-creating innovation and sharing knowledge, including across generations

As shown in Graph 3.25, all options score significantly better than the baseline and especially the baseline with cuts. Experts consider that most impact on this objective is to be expected from the EIP-budget, which is significantly increased in the alternative options. Other instruments will only have secondary effects. Option 3b scores lower as it is the option where the EIP-budget increases less.

This SO considers the following 4 OOs:

- Enhancing Agricultural Knowledge and Innovation Systems (AKIS) and strengthening links with research
- Strengthening of farm advisory services within the AKIS
- Enhancing interactive innovation
- Supporting digital transition in agriculture

Experts consider the first OO on **enhancing AKIS** the most important in contributing to the SO with a weight of 36%. The budget allocated to knowledge and innovation is considered the main driving factor. Whether the option contributes to an enabling environment is also considered important. Uncertainties relate to small farms and young farmers. Small farms are associated with part-time farmers and those might be less interest to apply the latest innovations. Experts consider that young farmers are more prone to engage in innovative activities. Older farmers, in absence of a successor for the farm, are less likely to invest in the latest technology. Young farmers are also more interested in adding value activities such as organics. Their farms are also not necessarily smaller than those of older farmers. Options 3a and 5 attain the highest ranking as both have a high budget for knowledge and innovation and their strong focus on young farmers. Option 4 ranks a bit lower as there is less focus on young farmers. Option 3 has a lower budget for knowledge and innovation (but still exceeding the baseline) and young farmers are not specifically targeted, so it ranks lower.

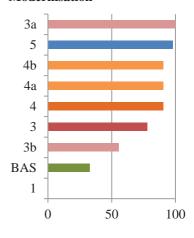
The 2nd OO focuses on **strengthening of farm advisory services within the AKIS**. The current legal framework obliges MS to have a Farm Advisory System (FAS) in place. However, the use and uptake of the knowledge and advice measures remains limited in the current programming period. The efficiency and effectiveness of advisory services can best be upgraded by improving their connections within the AKIS. Main elements to

consider for this OO are the EIP budget, the competitiveness measures, the focus on young farmers and new entrants, LEADER and basic services. Another point is that more environmental ambition requires more advice services. There was consensus in the group that options 3a, 4 and 5 are considered equal, as all farmers need advice equally and the budget for knowledge and innovation is the same. 3b was therefore also judged lower.

Table 3.13. Option scores for Modernization and its 4 OOs

Options	MO/SO1	001.1	001.2	001.3	001.4
BAS	33	33	38	38	17
1	0	0	0	0	0
3	78	78	81	81	67
3a	100	100	100	100	100
3b	56	56	63	63	33
4	91	89	100	100	64
4a	91	89	100	100	64
4b	91	89	100	100	64
5	98	100	100	100	85
Weights	1	0.36	0.23	0.26	0.15

Graph 3.25. Option scores for Modernisation



The 3rd OO focuses on the **enhancement of interactive innovation** projects. To enable impact from projects, the basic concept of the EIP-AGRI is to focus on end-users' problems/opportunities and to have partners with complementary types of knowledge joining forces in project activities from the beginning till the end. This is called the 'interactive innovation model' and is essential to tackle current complex and systemic challenges with good results. As this OO is very much linked to advisory services, although its focus rests upon joint projects, its ranking follows the same line as OO1.2.

The 4th OO of supporting digital transition in agriculture receives a lower weight compared to the other 3 as here other influences (e.g. developments by private providers of digital tools and services) beyond the CAP are also very important. Information technologies increase the availability of information for man and machine to make better decisions. In doing so, digital technologies have the potential to improve the performance of agriculture in economic, social and environmental terms. Main element to consider is the budget for EIP and competitiveness, although also the overall enabling environment affects the digitalisation process. Infrastructure has a major impact, especially access to broadband. The experts acknowledge that the digital transformation has also negative effects, such as the loss of jobs. However, jobs are created as well. Regarding options, 3a ranks best as it has a high budget on EIP and competitiveness as well as support for young farmers. Option 5 follows as it has a high budget on EIP and competitiveness and support for young farmers, as well as the highest budget for basic services in rural areas. However, the focus rests on small farmers who are perhaps less prone to investing in digitalisation. Given its high budget for EIP and competitiveness, but less focus on young farmers, option 4 scores a bit lower. 3b has a higher spending on basic services and infrastructure and competitiveness but lower EIP so its final ranking is judged lower, still outperforming the baseline.

3.5. Policy coherence

3.5.1. EU priorities

The CAP is already relevant to many EU priorities, and must continue to contribute to as many as possible. The key priorities to which it can probably make the greatest contribution are those on Jobs, growth and investment; Energy Union and climate action; a Stronger Global Actor; the Digital Single Market and Migration. Modernising and simplifying the CAP will maximise its contribution to the ten priorities, develop more synergies and make it more coherent with other EU policies.

3.5.2. Policy coherence for development

As the current one, the future CAP should continue to be **aligned with the commitments** of the EU on Policy Coherence for Development (PCD), as outlined in the Treaty of the European Union (Articles 3 and 21) and the Treaty of the Functioning of the European Union (Article 208). This means that the impacts of the CAP should not counteract the development policy objectives of the EU. The new CAP will take into consideration the Sustainable Development Goals (SDGs) and it will therefore consider the concerns that are relevant for Policy Coherence for Development, such as food security, poverty and equality. In this chapter we first describe the alignment of the current CAP with PCD and complement with observations on the tested policy options.

Trade

Food security is one of the key objectives of the CAP, both within the EU and globally. Globally, the EU promotes multilateralism, by advocating open, rules based trade. The EU has given long-standing **preferential market access** for products from developing and least developed countries (LDCs) and this access has been substantially deepened over time. Under the 'Everything But Arms' Initiative, LDCs are given duty- and quotafree access to the EU market. Under the Economic Partnership Agreements (EPAs), African, Caribbean and Pacific countries enjoy full duty- and quota-free access for their products to the EU market. The EPAs also leave partner countries sufficient policy space to enhance their agricultural production and to strive to eradicate poverty. To help with this, the EU applies asymmetry to market access, allowing almost all agricultural products, including full agri-food sub-sectors that are strategic for the partner states, to be excluded from liberalisation or protected by safeguards. As a result, the EU remains, by far, the world's **largest importer** of agricultural products **from Least Developed Countries** (LDCs), €3.5 billion worth agri-food imports from LDCs in 2017, compared with € 2.7 billion by US, Russia, Japan, China and Canada together.

Development cooperation

The EU is committed to helping developing countries integrate their agricultural sectors into the world's trading system and share in the benefits of the global economy. Food security and nutrition remain at the centre of EU's development programmes. From 2014 until 2020, the EU budget has allocated more than € 8.5 billion for food security, nutrition and sustainable agriculture in 62 partner countries, of which 36 countries in Sub-Saharan Africa. In addition, the EU promotes quality policy in developing countries, for example supporting the development of Geographical Indications in Africa in order to add value to African agri-food production, and recognising the organic production in more and more developing countries. EU-funded research and innovation programs also can benefit developing countries, notably via participation in Horizon 2020 etc.

But development support and trade need to be complemented by policies to promote responsible private sector investment in developing countries, especially in Africa. The EU has launched a policy dialogue with several layers with its African Union partners. The EU's experience can be used to further develop employment opportunities in agriculture and rural areas, in an open dialogue with the EU's partners.

CAP

The Common Agricultural Policy and agricultural trade policy continue to align closely with development policy. Over the past 25 years, the CAP has undergone successive reforms which have increased its **market orientation** and removed its trade distorting features, eliminated export subsidies, eliminated or reduced to safety net levels market support prices, and decoupled direct payments from production. The reforms consolidated the long-term trend towards direct income support for farmers, a form of public investment, as opposed to more trade-distorting forms of support, improving the sustainability of the policy.

Minimising market distortion

A major change to the CAP over the past twenty years has been the **movement away from coupled support**, which was tied directly to the production of particular products. The CAP reformed from supporting products to supporting producers, breaking the link between subsidies and production. Currently, over 90% of direct support does not distort trade – it is decoupled from production. EU support to farmers is made conditional on compliance with a number of environmental and social standards and practices, which are among the highest in the world, and which are usually not remunerated by the market. It responds to the policy objectives and also responds to the legitimate expectations of consumers in Europe and abroad on quality, safety, diversity and added value.

Furthermore, it is very difficult to associate the export price to the level of support received by the producer of a primary product. Prices of exported products – in the case of the EU, most of them being processed products, develop as a result of multiple factors which affect the competitiveness of the exporting industry. Effect of the support to the producer of the primary product is marginal, as it is largely decoupled from the volume and type of production and will not affect the production decision.

Stopping use of export subsidies

EU public funds are **no longer** used to **subsidise exports** outside the EU, which avoids distortions to the local markets.

For the last two decades the systematic use of export refunds (a form of subsidy designed to bridge the gap between higher EU prices and lower world prices) has gradually decreased. Today all rates are set at zero and, since July 2013, export refunds have ceased to exist as a means of systematic support. CAP was previously heavily criticized because of the negative effects on developing counties of its export subsidies. If in 1993, the CAP spent more than €10 billion on export subsidies; in 2012 the expenditure on export refunds was no more than €147 million. Since July 2013, no agricultural sector has benefited from these. In January 2014 the Commission went a step further, legally committing the EU not to grant export refunds for all products exported to African countries entering into a full Economic Partnership Agreement (EPA) with the EU. The EU was also a driving force behind the WTO Ministerial Decision in December 2015 to eliminate all export subsidies and discipline other export measures with similar effects.

Exceptional use of market measures

Market measures are still permitted, but only in the case of crisis, and in that case price support for farmers is set at levels that are generally well below normal market conditions, reducing EU surpluses and bringing EU prices more into line with global prices.

3.5.3. What do the options bring towards PCD and the EU's WTO engagements?

To analyse the effect of the options on coherence, it is also necessary to describe the potentially distorting impact of the most relevant instruments. Within the set of tested CAP instruments, the following ones are most associated with impact on third countries:

- Decoupled direct support
- Coupled support
- Risk management tools
- Payments for management commitments, in casu the incentive-based eco-scheme
- Sectorial programmes: market measures

Decoupled direct support is not considered trade or production distorting under WTO and hence any changes in those are not expected to affect third countries. The propositions made in option 4 to increase direct support for permanent grassland at the expense of cropland would still fall under the eligibility criteria of WTO Green Box to the extent that no production is required to receive the support.

The 2013 CAP reform has allowed some degree of **recoupling of direct payments**. Coupled payments have the intention to maintain production at current levels or bring it back to historical levels, so there is a positive impact on production associated. Estimates are roughly that EUR 2-4 billion of support could no longer be eligible to Green Box as a result (VCS is currently notified as Blue Box but would likely become Amber Box in the future). Recent changes were made in the Agricultural Omnibus to clarify the applicable rules. Within a Total Aggregate Measurement of Support (TAMS) ceiling of EUR 72 billion, and even accounting for the recent increase in coupled payments and sector-specific risk management tools, there is still enough margin for the EU under the WTO Agriculture Agreement. VCS with large flexibility and budget (maximum 15% of DP) is tested in option 3b. VCS for extensive livestock and protein crops for 10% of DP is tested in option 5, while option 4 contains only VCS for extensive livestock (3.5% of DP).

The changes introduced in the Agricultural Omnibus for **risk management tools** will give farmers a better protection in case of production risks. A sector-specific income stabilization tool covering drops in farmer's income exceeding at least 20% has been introduced. Furthermore, the threshold for insurances has been reduced from 30% to 20% of the average annual production, making these instruments more accessible to farmers. The support rate for crop, animal, and plant insurance, mutual funds and income stabilisation tools has been increased from 65% to 70%. However, those changes partly move the risk management tools from Green to Amber Box (i.e. sector-specific tools, or those with an income drop of less than 30%). In the options a risk management budget of

Bureau (2017) – EU CAP Reform, http.capreform.eu

5% of the DP envelope is tested in options 3b and 4 and of 10% in option 3a, which is a considerable increase compared to the current budget allocation.

For the **eco-scheme**, as part of the direct payments, the WTO rules can be seen as a constraint because the Green Box criteria limits payments to covering only the observed extra costs imposed by the required environmental effort. However, it remains extremely difficult to calculate the exact amounts of cost incurred – income foregone and hence make a distinction between 'incentive' and 'compensation'. Finally, WTO classification of ecological schemes depend whether such schemes would be notified as a separate scheme or part of the direct payments envelope (often referred to as "greening"). An ambitious eco-scheme (for 60% of DP) is tested in option 3a and a more conservative one (for 30%) in option 3b. It should be noted that the purpose of eco-schemes is not to enhance production but to enhance delivery on environmental objectives. The effect of these schemes is therefore most likely to provide a production constraint or to have a certain influence on the type of production chosen rather than an overall production stimulating effect.

Market measures, as referred to in the previous section, are only triggered in real crisis situations and the associated intervention prices are set at low level far from normal levels of world commodity prices, hence they do not create significant distortion. However, from the WTO perspective these measures qualify as Amber Box support, including market price support (MPS). MPS is notified to the WTO by multiplying the gap between the intervention price and external reference price by the eligible production. Nevertheless, no changes are tested throughout the options.

The effect of the different instruments can be summarized in following table:

Table 3.14 Production distortive effect of policy interventions

Policy intervention	Distortive effect?	Present in option? (importance between brackets)
Decoupled direct support	0	All
Coupled support		3b (large), 4 (small), 5 (medium)
Risk management tools	-	3a (large), 3b, 4 (medium)
Eco-scheme	0/-	3a (large), 3b (medium)
Market measures	0/-	All

Based on this simple analysis, one could conclude that option 3b has the most features with potential to distort production and influence trade with external partners, as it has most VCS, a considerable risk management budget (with sector based IST and lowered thresholds) and an eco-scheme. Depending how the eco-scheme would be perceived (distortive or not), 3a would be more or less distortive, as in this option the eco-scheme counts for 60% of DP and another 10% for risk management. Options 4 and 5 are similarly less distortive, with option 4 having more risk management but less VCS compared to 5.

3.6. Cross cutting: Improving sustainable development for farming, food and rural areas

3.6.1. Address societal expectations on food and health

As indicated during the public consultation and in the Communication on the Future of food and farming, the CAP is expected to respond better to citizen demands on food and health. Societal expectations on food and health stretch over various components of sustainable food systems such as:

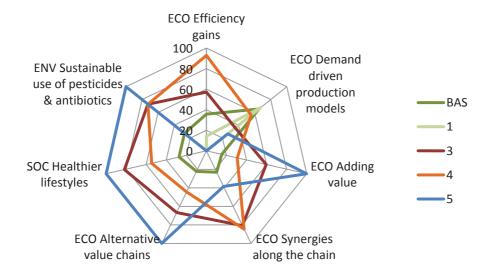
• food safety and quality

- affordability of food (also one of the cornerstones of art 39 of TFEU)
- health issues such as pesticide load and antimicrobial resistance
- food waste and agricultural losses
- responding and anticipating to changing demands

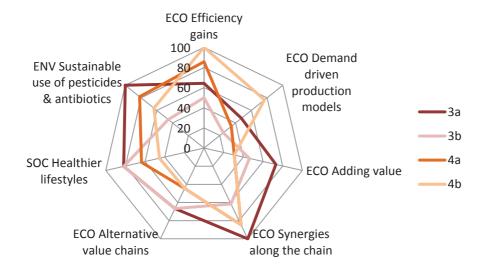
They are covered across the different operational objectives against which the different options are tested. Food safety, as enshrined in EU legislation, is a condition sine qua non for each option. The economic OO 2.3 on Adding value to agricultural products is particularly relevant for food quality (with its link to organic, GIs and certification schemes), but also for food waste reduction through the link with bio-economy and circular economy. Food waste can also be reduced through economic OO 3.2 on enhancing synergies within the value chain, by means of increased transparency and information exchange along the chain. Agricultural losses can further be reduced through OO 2.1 on efficiency gains and 2.2 on Demand driven production models. The affordability of food is specifically tackled under economic OO demand-driven production models, focusing among others on further reducing the gap between EU and world prices. Social OO 3.4 is directly measuring agriculture's contribution to healthier lifestyles, while environmental OO 2.4 on sustainable use of pesticides and antibiotics tackles related citizen concerns. Responding to changing consumer demands is directly related to economic OO 2.2 on demand driven production models and OO 3.3 on development of alternative value chains such as short supply chains, directly connecting farmers with consumers.

Graph 3.26 summarizes how the different options score on these operational objectives. We refer to the respective sections on OO to better understand why the options score differently. The 3 alternative options outperform the baseline and especially the baseline with cuts (with the exception of the OO on demand driven production models, as prices are expected to be lower in the baseline). Option 5 performs well on some issues, such as alternative value chains, healthier lifestyles and sustainable use of pesticides and antibiotics, but it underperforms on several other (economic) objectives. Option 4 also combines high scores on some objectives with lower scores on others. Option 3 reaches more balanced scores, but in general lower than 5 or 4.





Graph 3.27. Scores of options 3a, b and 4a, b for Citizen expectations on food and health



Considering the sub-options of 3 and 4 confirm the better score of the eco-scheme based option 3a on several objectives, as well as the better score of option 4b on some economic objectives, as it is less (environmentally) demanding compared to the others.

In a budget constraint environment, necessary trade-offs have to be made between the various available instruments. The main trade-off relates to the price versus additional quality and health attributes. The (sub-) options scoring better on price and economic efficiency underperform with respect to contributing to healthier lifestyles and sustainable use of pesticides and antibiotics. So in essence it boils down to the policy choice between lower priced food with basic health and environmental related quality attributes versus potentially more expensive food with higher (environmental and health) quality attributes.

3.6.2. Sustainable Development Goals

One of the cross-cutting objectives of the new CAP is to improve sustainable development for farming, food and rural areas. This objective is tightly intertwined to the United Nations Sustainable Development Goals (SDGs). This chapter outlines how the Impact Assessment takes the SDGs into account by mapping them against the operational objectives (OOs).

Sustainable Development Goals were adopted at the United Nations (UN) in 2015 as part of the 2030 Agenda for Sustainable Development. They consist of 17 goals, divided into 169 targets, which are meant to be reached by 2030. To measure progress in SDGs, the UN has proposed a list of 232 indicators. ⁴⁷ However, not all are necessarily appropriate for the EU. Thereby, Eurostat has defined a set of 100 EU-relevant indicators, which are followed annually.

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United Nations (2016). Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2016/2/Rev.1) Annex IV: Final list of proposed Sustainable Development Goal indicators (https://sustainabledevelopment.un.org/content/documents/11803Official-List-of-Proposed-SDG-Indicators.pdf).

So far, one follow-up report has been published by Eurostat⁴⁸. The report concludes that the EU has made considerable progress related to sustainable energy (SDGs 7 and 12), health and urbanization (SDGs 3 and 11). In environmental SDGs, improvements are visible e.g. in forest management and water quality (SDGs 6 and 15) and the EU is expected to reach its targets in climate change mitigation (SDG 13). However, very little progress is made in terms of biodiversity. Slightly less improvement is visible in education, partnership for SDGs and sustainable industrialization (4, 17 and 9). The progress is moderate in terms of employment and growth, poverty reduction and gender equality (8, 1 and 5). Despite the improvements in sustainable food production (SDG 2), the report concludes the overall progress in terms of food security has been limited. Negative trends were found in inequality (SDG 10), which has been increasing.⁴⁹

3.6.2.1. Why consider SDGs in the Impact Assessment?

The SDGs address not only developing countries but also developed countries, including the EU. To underpin its engagement to SDGs, the European Commission published a Communication "Next steps for a sustainable European future". 50 The Commission states it "will mainstream the Sustainable Development Goals into EU policies" and emphasizes that "agriculture plays a substantial role in the 2030 Agenda". This was reiterated in the Communication "The Future of food and farming". 51 To maximise the contribution of the future CAP beyond earlier identified Goals⁵², additional SDGs were considered, in particular: 3 (healthy lives), 11 (human settlements) and 10 (reduce inequalities). Given these commitments, the SDGs are inherently part of the CAP reform and nearly all SDGs were covered by the operational objectives in the Impact Assessment preceding the policy proposal.

3.6.2.2. How has the CAP contributed to SDGs so far?

The CAP has a pivotal role to ensure the EU will deliver on the SDGs. Agricultural policies, although being sectoral, touch upon nearly all SDGs indirectly or directly. Therefore, it is crucial to follow how the CAP performs in these terms. However, measuring the impacts of the CAP on SDGs is a challenging task. This is due to the wide scope of SDGs and the gaps in available indicators. Certain SDG targets would be highly relevant for the CAP and their interlinkages would be worth measuring. However, good quality data and feasible indicators are not always available, e.g. for the SDG target 12.3 on food waste or 2.5 on agricultural genetic resources. Also, the causalities between the CAP and the SDGs are sometimes difficult to establish, especially when considering rural development more widely. For instance, Member States have many national policies that influence growth and employment in rural areas, or inequality between territories (SDGs 8 and 10).

While Eurostat provides a comprehensive analysis of the EU's performance in SDGs, it does not examine the influence of policies on the result. This is done in a recent literature review commissioned by the European Environmental Bureau (EEB) and Birdlife⁵³.

European Commission (2017) COM 713 final, November 2017

⁴⁸ Eurostat (2017). Sustainable development in the European Union - Monitoring report on progress towards the SDGs in an EU context, 2017 edition. Publication Office of the European Commission: Luxemburg.

Data are insufficient for SDGs 6, 13, 14 and 16, although some trends were found for SDGs 6 and 13.

European Commission (2016) COM 739 final, November 2016 51

European Action for Sustainability, SWD(2016) 390 final accompanying COM(2016) 739 Final.

G. Pe'er, S. Lakner, R. Müller, G. Passoni, V. Bontzorlos, D. Clough, F. Moreira, C. Azam, J. Berger, P. Bezak, A. Bonn, B. Hansjürgens, L. Hartmann, J. Kleemann, A. Lomba, A. Sahrbacher, S. Schindler, C.

The study scrutinized the impact of the CAP on 12 relevant SDGs by reviewing an extensive body of literature, using a methodology similar to the Fitness Check approach of the European Commission. The study concluded that the CAP contributes to SDGs concerning poverty and food security (1, 2) in the EU, whereas the impacts outside the Union are varied. In environmental questions (SDGs 6 and 15), the CAP has led to local improvements but overall, the greening approach and other environmental measures have yielded limited results. Some gaps remain also in the measures addressing climate change mitigation (SDG 13) and the study suggests that true decoupling of emissions from production has to be improved. In terms of inequality (SDG 10), the CAP has contributed to more balanced territorial development but the distribution of payments is considered disproportionately skewed towards large farms. The SDGs concerning health and responsible consumption and production (SDGs 3 and 12) are found to be not fully addressed. For instance, food waste and losses are not considered in the current design of the CAP, although it could fall in the scope of agricultural policies. In employment and growth (SDG 8), the study focuses on green growth and considers the CAP has had contradictory impacts, as it supports a wide range of farming systems, which cannot always be classified as green growth. However, the number of publications varies widely across SDGs and especially those related to health, energy and inequality (SDGs 3, 7 and 10) were only few.

3.6.2.3. How were SDGs integrated in the Impact Assessment?

Sustainability was mainstreamed in the design of the Impact Assessment and thereby also SDGs were an integral part of the exercise. Firstly, the policy objectives of the Impact Assessment were structured around the three dimensions of sustainability – social, environmental and economic – which ensures that each is taken into account. The second step was to ensure links with the SDGs. This was done by creating a comprehensive set of operational objectives, which would cover the SDGs as widely as possible. In some cases, the objective itself does not directly relate to an SDG but the indicators used to assess the objective do.⁵⁴

Altogether, 13 SDGs were covered in the Impact Assessment, as outlined in Table 3.15. There were clear links with ten SDGs (1, 2, 3, 6, 8, 9, 10, 13, 15), meaning that the operational objectives can be directly associated with one or several SDG targets. Two SDGs were covered indirectly (4 and 5). In these cases, the operational objectives do not explicitly address these SDG themes but they were reflected in the Multi-Criteria Analysis. The remaining two SDGs (12 and 17) are overarching goals that can be linked to the exercise as a whole.

Schleyer, J. Schmidt, S. Schüler, C. Sirami, M. von Meyer-Höfer, and Y. Zinngrebe (2017). Is the CAP fit for purpose? An evidence-based fitness check assessment. Leipzig, German Centre for Integrative Biodiversity Research (iDiv), Halle-Jena-Leipzig.

The interlinkages were examined between SDG targets and either operational objectives or indicators of Multi-Criteria Assessment. SDGs were considered only on the level of targets and not SDG indicators, for two reasons: the UN list of SDG indicators does not necessarily reflect the indicators relevant for the EU or the CAP, and the Eurostat set of indicators is constructed based on the availability and quality of data but does not capture the SDG targets in their entirety. Moreover, both lists are still subject to modifications.

Table 3.15. SDG targets covered in the Operational Objectives. These refer to economic (ECO), social (SOC) or environmental (ENV) objectives or the cross-cutting objective on modernization (MOD) (see previous sections).

SDG	SDG targets addressed	Links with Impact Assessment
SDG 1 Poverty	SDG 1.2. By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.	SOC 6. Reduce inequalities between territories. Indicator: Level of rural poverty split by territory
		SOC 7. Reduce inequalities between groups. Indicator: Poverty index in rural areas.
SDG 2 Food security	SDG 2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including	ECO 4. Productivity and efficiency gains.
	through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment	Indirect links with: ECO 1. Cope with price volatility ECO 2. Improve risk
	NB. Focus on agricultural productivity and incomes overall, not necessarily those of small-scale producers	management ECO 6. Add value to agricultural products
	SDG 2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	All ENV objectives
	SDG 2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	ENV 2. Preserve agricultural genetic resources
	SDG 2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round	ECO 5. Demand-driven production models
SDG 3 Health	SDG 3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	SOC 9. Contribution to healthier lifestyles.

SDG	SDG targets addressed	Links with Impact Assessment
	SDG 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	ENV 5. Sustainable use of pesticides and antibiotics. ENV 7. Reduce air pollution.
SDG 4 Education	SDG 4.4. By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	MOD 1. Enhancing Agricultural Knowledge and Innovation Systems and strengthening links with research
	SDG 4.7. By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development , including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	MOD 2. Strengthening of farm advisory services within the Agricultural Knowledge and Innovation Systems Not explicitly part of the objectives. However, the importance of skills was considered when assessing how research and advisory services help complying with environmental requirements.
SDG 5 Gender equality	SDG 5.1 End all forms of discrimination against all women and girls everywhere	Not explicitly part of the objectives. However, gender equality was reflected on when assessing SOC 7. (Reduce inequalities between groups) and SOC 4. (Foster inclusive growth in rural areas).
SDG 6 Water	SDG 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	ENV 1. Improve water quality and use
	SDG 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	ENV 1. Improve water quality and use ENV 4. Enhance the adaptation capacity of farms. Indicator: Efficient water use
SDG 7 Energy	SDG 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	ECO 4. Productivity and efficiency gains ECO 6. Add value to agricultural products
		ENV. Sustainable and efficient management of resources

SDG	SDG targets addressed	Links with Impact Assessment
SDG 8 Growth and employment	SDG 8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	SOC 3. Foster income and value added in rural areas SOC 4. Foster inclusive growth in rural areas
	SDG 8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors SDG 8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	ECO 4. Productivity and efficiency gains ECO 6. Add value to agricultural products ECO 9. Development of alternative value chains MOD 1. Enhancing Agricultural Knowledge and Innovation Systems and strengthening links with research MOD 3. Incentivising interactive innovation projects MOD 4. Supporting digital transition in agriculture
	SDG 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	SOC 2. Foster employment in rural areas
SDG 9 Infrastructure and industry	SDG 9.1 Develop quality, reliable, sustainable and resilient infrastructure , including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	SOC 5 – Improve access to infrastructure in rural areas.
SDG 10 Equality	SDG 10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status SDG 10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	ECO 3. Provide income support in a targeted way SOC 6. Reduce inequalities between territories SOC 7. Reduce inequalities between groups SOC 1. Foster generational renewal in agriculture and rural areas SOC 4. Foster inclusive growth in rural areas SOC 5. Improve access to infrastructure in rural areas
SDG 11 Urbanization	Not covered	Not covered

SDG	SDG targets addressed	Links with Impact Assessment
SDG 12 Sustainable consumption and production	SDG 12.2 By 2030, achieve the sustainable management and efficient use of natural resources	All ENV objectives
and production	SDG 12.3 Cutting in half per capita global food waste at the retail and consumer level, and reducing food losses along production and supply chains	ECO 4. Productivity and efficiency gains
	(including post-harvest losses) by 2030	ECO 5. Demand-driven production models
		ECO 6. Add value to agricultural products
SDG 13 Climate action	SDG 13.2 Integrate climate change measures into national policies , strategies and planning	ENV 3. Prevent and reduce GHG emissions
		ENV 4. Enhance the adaptation capacity of farms
		ENV 9. Increase carbon storage
SDG 14 Marine ecosystems	Not covered	Not covered
SDG 15 Terrestrial ecosystems	SDG 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	ENV 10. Maintain and improve culturally valued landscapes (including HNV Farming). Indicators: Landscape diversity index; Share (%) of HNV farming
	SDG 15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	ENV 6. Improve soil condition ENV 9. Increase carbon storage
	SDG 15.5 Take urgent and significant action to reduce the degradation of natural habitats , halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	ENV 8. Improve farm and forest biodiversity
SDG 16 Peace and governance	Not covered	Not covered
SDG 17 Partnership	SDG 17.14 Enhance policy coherence for sustainable development	Coherence ensured by having sustainability as cross-cutting objective

Annex 5.1 Policy options for the IA

Options were developed to test how EU objectives can be best met while reflecting broad ideas of the ongoing public debate. Some elements are common to all options: the budgetary framework and the delivery model, as well as market measures, competition provisions and the basic layer of conditionality.

1. ELEMENTS COMMON TO ALL OPTIONS

1.1. Budgetary framework

The budgetary assumptions reflect MS envelopes at the end of the current financial period, and treat the currently applied flexibility between pillars as revealing MS policy preferences. External convergence is tested by assessing the potential consequences of an EU flat rate payment.

For all options, the budgetary envelopes were determined by assuming that the consequences of Brexit translate into an 8.9% reduction in CAP budget. With a constant budget for market measures retained, the reduction in direct support would reach 10%, and is applied linearly to all interventions in the Post Brexit baseline option. In the other options, the distribution of the reduced envelope reflects changes in policy priorities.

The current architecture of 2 pillars (and 2 funds) is kept for all options, but CAP strategic plans are meant to cover interventions in both pillars. The option design implies a partial transfer of funds from direct payments to risk management tools. MS may decide to opt for other transfers between pillars. In this IA framework the eco-scheme (an incentive scheme to adopt agricultural practices beneficial to environment and climate) is mainly tested under pillar I, with the support to areas with natural constraints (ANC), currently mainly under pillar II, provided under pillar I in one of the options.

National co-financing of direct payments was assessed separately and is not specifically addressed in the different options, except in the case of ANC; should MS priorities lead to a reduction in EU funding in pillar II for ANC, it is assumed that national contributions would compensate farmers in areas with reduced support.

1.2. Delivery model and planning

All options reflect the greater subsidiarity given to MS to plan CAP interventions against EU objectives and to shift from compliance to performance. Since MS potential choices in their future CAP Strategic Plans are not yet known, options illustrate different ways to achieve these objectives, more particularly in terms of environmental performance as well as for support for targeting and re-distribution. In addition, options were designed to test the differences between voluntary and mandatory (conditionality) approaches to achieve higher environmental sustainability. Finally, sub-options were defined to reflect possible differences mainly in MS environmental ambition as well as for climate action. This enables assessing a potential range of impacts and informing proposals for the new delivery model.

1.3. Knowledge, innovation and technology

Higher environmental ambition of the CAP cannot be reached without strong support for knowledge, innovation and technology. Moreover, social innovation and the development of services and infrastructure in rural areas (including Information

Communication Technologies) are key elements in the promotion of rural vitality, growth and jobs.

Therefore all options reflect a higher emphasis on advice, knowledge transfer and cooperation and promote integrated approaches. The integration of advisors into innovation networks, coordination of the European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) and LEADER, integration of the farm advisory services (FAS and AKIS⁵⁵) within the EIP and CAP networks, all should allow the development of pilot schemes addressing EU objectives (e.g. carbon initiatives, sustainability assessments...).

1.4. Market-related measures

A set of changes was introduced in the competition provisions of the Common Market Organisation (CMO) Regulation in the OMNIBUS regulation. The position of producer organisations (POs) was strengthened, and farmers were provided with the right to ask for a written contract, unless their trading partner is a SME. These provisions entered into force on 1 January 2018, and no further changes are tested in the IA. What slightly distinguishes the different options is the degree of emphasis on interventions promoting competitiveness (including setting up POs).

Moreover, the existing sectorial programmes (for fruits and vegetables, wine and apiculture) are included in the CAP strategic plans to optimise the potential of these tools to contribute to increase EU competitiveness and improve farmers' position in the value chain. This integration can improve the targeting of the measures to EU priorities (resilience, environmental and climate action, smart farming, innovation...).

Finally, options include various assumptions for risk management, as specified thereafter.

Specific measures for agriculture have been implemented in Outermost Regions through the POSEI scheme (Programme of options specific to the remote and insular nature of the outermost regions)⁵⁶. In its report⁵⁷ presented in December 2016 after an external evaluation of the scheme, the Commission concluded that POSEI appears critical to maintaining the agricultural production in these regions and to ensure a sufficient supply in agricultural products. The Communication adopted on 24 October 2017 on the strategy for outermost regions⁵⁸ stated, as regards CAP measures: "The Commission will seek the continuation of the POSEI Regulation, without prejudice to the negotiations foreseen for the future multiannual financial framework, and seek to maintain specific provisions for the outermost regions in the European Agricultural Fund for Rural Development". Against this background, this impact assessment does not consider any specific change for OR.

1.5. Conditionality and green architecture of the CAP

To enhance environmental and climate ambition, all options include changes regarding cross-compliance and greening. Under cross-compliance, farmers face a possible reduction of their CAP support if they do not comply with requirements. The **new conditionality** includes some additional minimum requirements, applying to all options, and going **beyond the current cross-compliance rules**.

Based on Article 349 and on Articles 42 and 43 (Common Agricultural Policy)

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⁵⁵ Agricultural Knowledge and Innovation System

⁵⁷ COM(2016)797 final of 15 October 2016

COM(2017) 623 final "A stronger and renewed strategic partnership with the EU's outermost regions"

The additional elements derive mainly from current greening provisions, and aim to overcome some drawbacks identified in previous analyses:

- <u>Carbon sequestration</u>: maintenance of the permanent grassland share in agricultural area at MS/regional level as well as no-ploughing of permanent grasslands in Natura 2000 areas; ban on converting or ploughing wet and peatlands.
- <u>Biodiversity</u>: 3% of UAA dedicated to non-productive elements (landscape features, afforested areas and fallow land); for most MS, it is considered more effective than the current 5% of arable land under ecological focus area; 70% of the latter currently consists of catch crops and nitrogen-fixing crops, which are deemed less beneficial to biodiversity than landscape elements.
- <u>Soil</u>: simple 2 year crop rotation, more beneficial than the current crop diversification.
- Water quality: the current cross-compliance already includes most of the EU statutory rules applying to farming. An extension of the scope is envisaged under future conditionality, for instance the need to have a nutrient management plan is extended to all agricultural zones (i.e. not only in Nitrates vulnerable zones as currently)⁵⁹.
- <u>Without exemptions</u>: in the current greening scheme, various exemptions exist for certain types of farms (e.g. organic) and based on farm area size.

Beyond conditionality, MS would have the possibility to opt for voluntary schemes, based on an incentive approach via an eco-scheme or based on costs incurred and income foregone via agri-environment, climate action and health interventions (AECH).⁶⁰ The eco-scheme could be a condition for joining more ambitious AECH measures. Environmental top-ups are also tested in this IA (option 5). Starting from an analysis of MS/regional needs and challenges, MS are free to develop the best intervention logic.⁶¹ MS could accept that organic farming and potentially other certified schemes (such as agro-ecology, conservation agriculture...) automatically qualify for eco-scheme.

The eco-scheme and AECH schemes are voluntary, and can be granted only to adopt practices beyond regulatory requirements (including conditionality), thus offering flexibility to reward farmers addressing specific territorial and sectorial challenges. By contrast, conditionality is compulsory as a tool to enforce the law and any additional requirements set at EU or MS level. It represents the baseline for supporting more ambitious practices.

2. OPTIONS DESCRIPTION

Disclaimer:

- Options are illustrative and not prescriptive
- Options are not mutually exclusive
- Options are designed to test sets of instruments
- Options do not prejudge the final decision of the Commission (no preferred option)
- The preferred option could combine instruments derived from the different options

The situation will be further assessed based upon the forthcoming Commission report on the implementation status of the Water Framework Directive.

AECH include the agri-environment-climate measures as well as the support to organic, Natura 2000, water framework directive payments, animal welfare, forestry and non-productive investments.

Requirements can be farm specific with eco-scheme/AECH but for conditionality the requirements need to be applicable by all concerned farmers within a MS/region.

2.1. Option 1: Updated baseline

Option 1 corresponds to an update of the baseline (2030 market environment and 2013 CAP reform fully implemented) with the post-Brexit budgetary envelopes.

2.2. Option 3: Incentives for environment, climate action and health

This option aims at testing **climate action and environmental services** provision with **voluntary approaches based on incentives**, reflecting **specific territorial concerns** and reduced income support. Option 3 also examines if the objective of viable farm income can be reached with increased support for risk management tools (including income stabilisation tools) and lower direct payments. Two sub-options (ambitious and conservative) are tested in order to reflect different MS environmental ambitions and approaches to direct payments (it can be assumed that MS choices will likely fall in between the ambitious and conservative version of option 3).

2.2.1. Option 3a: Stronger priority on environment than on economic sustainability

Higher environmental ambition is reflected in an eco-scheme which is based on a wide range of farm practices deemed beneficial to environment, climate and health. ⁶²

A payment incentive corresponding to 60% of pillar I envelope would allow MS traditionally spending a high share of their rural development envelope on AECH to increase their pillar II focus on other interventions. In MS currently dedicating a large share of RD funds to AECH, their spending is set at 30% max of pillar II envelope to reflect the switch to incentive schemes in pillar I.

The basic layer of income support is reduced (25% of pillar I envelope) and granted as a MS flat rate capped at 100 000 EUR per farm (applying a salaries correction not to penalise employment). However, the support to areas with natural constraints (ANCs) is maintained to ensure a minimum of territorial balance. To target genuine farmers, a minimum requirement of 2 ha for receiving decoupled payments is tested.

The reduction in income support is a strong incentive to reduce risk exposure via alternative paths for adaptation to climate change and via the adoption of various strategies to cope with yield, price and **income variability** such as insurances, mutual funds, futures and income stabilisation tools. Therefore, in this option 10% of pillar I envelope is made available for **risk management tools**. Because the reduction of income support might increase entry barriers for young farmers, 5% of pillar I is used to develop a streamlined approach to **attract new farmers**.

As regards **knowledge**, **innovation and technology**, ring-fencing of **EIP** is tested and the minimum allocation to LEADER is increased. These also contribute to strengthen **competitiveness** together with more investment grants and to improve farmers' position in value chains by enhancing cooperation and more specifically the setting up of POs.

Winter soil cover on 100% of arable land; permanent cover crop between tree rows on 100% of permanent crop area; a 3 year crop rotation; 5% of arable land with fallow land, afforested areas and landscape elements; reduction targets of nutrient surplus; a strong push on the development of Integrated Pest Management; a reduction of antibiotic use; the development of cattle genomics targeting GHG efficiency. This description is illustrative and includes elements that can be modelled (such as winter soil cover) and others that can be assessed qualitatively (such as cattle genomics).

2.2.2. Option 3b: Lower environmental ambition, but greater focus on DP redistribution

In this sub-option, the **environmental performance and climate challenges** are reached via a lower eco-scheme (30% of pillar I envelope and less requirements⁶³), and the maintenance of a significant AECH framework.

Income support is a stronger priority in this sub-option. The **basic layer of income support** (around 30% of pillar I envelope) is granted as a decoupled payment. Entitlements are kept as no further convergence of the direct payment level per hectare between farmers is looked for in the 9 MS currently not applying a regional or national flat rate. A strong focus on **direct payments redistribution** is tested via:

- a redistributive payment to small-medium farms (80 EUR/ha between 2 and 30 ha),
- a capping per farm of the basic income support and the redistributive payment at 100 000 EUR (with salaries correction),
- a capping per hectare of the basic income support and the redistributive payment at 1 000 EUR/ha.
- a minimum requirement of 2 ha for receiving decoupled payments.

The increased support to **risk management tools** is set at 5% of pillar I envelope.

In addition, Member States are given the possibility to dedicate up to 15% of their pillar I envelop to **coupled support**, provided that it is **better targeted**. Three such targets are identified:

- Specific sectors whose importance, difficulties and territorial and environmental contribution have been identified at EU level, such as extensive livestock farming and beehives.
- Sectors such as protein crops contributing to an EU goal for environmental purposes and to reduce import dependency.
- Sectors identified by MS undergoing certain difficulties with the view to overcome these difficulties and improve competitiveness after a certain number of years, thus a phasing out of coupled support.

Due to the difficulties to anticipate MS choices, VCS was modelled as currently implemented.

To promote employment, growth and local development in rural areas, a stronger focus is placed on LEADER and on the basic services and infrastructure provision in rural areas. New farmers are mainly supported via installation grants. These priorities as well as those put on AECH imply a re-allocation of EU pillar II funds and a reduction in EU support to areas with natural constraints, compensated with national funds.

2.3. Option 4: Jointly address environmental and economic sustainability

In this option, **direct payments are better targeted** and the implementation of **conditionality is more ambitious** in order to improve the joint economic and **environmental performance of the CAP**, as well as to **address climate challenges**.

When setting-up the conditionality requirements, MS have the possibility to enhance conditionality by adding to the minimum requirements applied to the whole EU territory, higher requirements and/or additional simple but effective agri-environment and climate

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Winter soil cover on 50% of arable land and on the top of the 3% of UAA dedicated to non-productive elements, 3% of additional arable land lying fallow or with nitrogen fixing crops without pesticides.

practices related to five EU priorities (biodiversity, water, soil, air, climate), thus targeting their specific national/regional environmental and climate context. Farmers willing to implement more ambitious practices best suited to their farms will continue receiving rural development support (agri-environment-climate schemes, investments, training, advice etc.).

Similarly as for option 3, sub-options are developed to illustrate possible differences in MS ambition regarding environmental targets. Sub-option 4a is equally ambitious in terms of environmental objective as option 3a, but tests the possible outcome of a conditional system (versus voluntary approaches). By contrast, sub-option 4b is more flexible (no more ambitious conditionality) leaving scope to MS to deliver more on environment using solely rural development interventions.

To increase delivery results, including on **competitiveness**, this option puts a strong focus on **knowledge**, **innovation and technology**, mainly via enhanced EIP. Given this strong focus (and on AECH), certain MS using currently a large share of their RD envelope to grant income support in ANCs are assumed shifting priorities and using more national funds to support farm income in these areas. Similarly, investment grants remain available only to small farmers, while larger farmers receive investments support via **financial instruments**.

There is no distinction between sub-options regarding how the income objectives are addressed; option 4 aims at keeping **strong income support**, acknowledging that environmental benefits are not just reached via conditionality, but also by keeping farmers in business.

Option 4 tests an integrated direct payment support system more targeted at farming systems in need of support and contributing to the environmental and climatic objectives. While remaining decoupled, the basic payment is **adjusted according to land type** (arable land, permanent grass land, permanent crops) with **redistribution to permanent grassland** at the expense of arable land. ⁶⁵ **Voluntary coupled support** changes its focus to supporting only **extensive livestock production**, thereby linking it to environment and climate objectives, as well as productions with specific challenges related to loss of landscape and habitats.

To ensure a maximum redistribution of payments, farms receive a basic payment of maximum 100 000 EUR (with salaries correction), with the product of capping redistributed to smaller farmers. To target genuine farmers, a minimum requirement for receiving decoupled payments equivalent to 2% of the agricultural income is introduced (ranging therefore from 100 EUR to 1 000 EUR per farm according to MS). In addition, to address income variability, increased support to **risk management tools** is set at 5% of pillar I envelope.

2.4. Option 5: Focus on small farms and the environment

This option lays strong emphasis on **environmental care and employment** – and shifts the focus on small farmers as a key to success in keeping jobs in rural areas. It **redistributes pillar I direct support from larger to smaller farms**, testing a decoupled payment modulated by size (explained below) and a maximum of 60 000 EUR granted

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The requirements are similar to those in option 3a, except for IPM practises and changes in cattle genomics more difficult to impose in a conditionality system. However, the provisions of the directive on sustainable use of pesticides in terms of farmers' training, products' storage, sprayers' inspection and the ban on air spreading are enforced via this more ambitious

Starting from the support actually received by farmers when the 2013 reform is fully implemented, direct payments are aggregated by land type at MS level, leading to 3 levels of unitary per ha payments. The payment to permanent grassland is increased by 20% and this increase is financed by cutting on arable land payments.

by farm (with salaries correction). In addition, Member States are given the possibility to dedicate up to 10% of their pillar I envelop to **voluntary coupled support** provided that it is targeted to **EU goals**.

This option tests two schemes: support to **extensive livestock production**, considered at risk without support yet contributing to carbon sequestration, landscape and habitats, as well as **protein-rich crops** for their environmental benefits and to increase the supply of non-GM proteins.

It targets also farmers most in need in **areas with natural constraints** via a top up granted in pillar I and climate action and sustainable management of natural resources via **top ups to organic farming, permanent grassland and hedges**. Though always based on strategic planning, especially regarding RD funds, this option reflects a more prescriptive approach setting an allocation of 30% of the direct payment envelope to these tops ups. Beyond minimum conditionality and these top ups, MS are invited to dedicate a large share of pillar II envelope to support farmers adopting more ambitious farm practises (via agri-environment-climate measures based on incentives or costs incurred and income foregone). This switch in priorities is eased by the fact that in this option, support to ANC is granted in pillar I.

The thus greater availability of pillar II funds permits in this option a strong focus on **knowledge, cooperation, innovation (social and environmental) and jobs creation** through EIP and Leader projects. In addition, in order to improve generational renewal, in particular access of young farmers to the sector, under this option the introduction of a compulsory enhanced top-up payment for **young farmers** is assessed.

The **competitiveness** challenge is addressed by a move towards more targeted use of public support for investment. Grant support for investments would focus on smaller businesses – including in the farm and forestry sector – as well as on investments bringing wider benefit (e.g. in terms of basic services in rural areas). However, investment support through financial instruments would be made available for all beneficiaries, of whatever size.

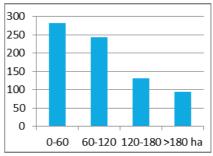
In order to address the issue of **imbalance in the value chain** and **addressing consumers' expectations**, this option would enhance support for setting up producer organisations and for cooperation for short supply chains and local markets under Rural Development, as well as the top ups to organic farming.

Box: The decoupled payment modulated by size assessed in option 5

The level of payment depends on the size of the farm relative to the average farm size in MS. All the hectares of a farm below half the national average size are granted 150% of the average national payment per ha. Between 50% and 100% of the size, the payment is 130% of the average; between 100% and 150% of the size, the payment is 30% below average and for all the hectares above the payment is the average divided by 2.

For example, in CZ the average farm size was around 120 ha in 2013. The average basic payment per ha is around 150 EUR/ha. But the first 60 hectares of all farmers are eligible to a higher payment of 280 EUR/ha*.

A farmer with 130 ha would be granted: 60*280+60*245+10*130 = 32 800 EUR Basic payment per ha in CZ by size



Source: DG AGRI

Share of CAP budget dedicated to environmental performance and climate action at EU level⁶⁶

Eco-scheme Top ups AECH** Contributing	Option 1 0 0 9%	Option 3a 44% 0 8%	Option3b 22% 0 9% Condition	Option 4a 0 0 9% onality	Option 4b 0 0 9%	Option 5 0 10%* 11%
interventions not accounted for				Support redistribut grassland and ta support to exter More ambitious conditionality	argeted coupled	Targeted coupled support to extensive livestock
Total share in CAP budget	9% + share of DP Jointness	52% + share of DP Jointness	31% + share of DP Jointness	9% + share of DP Jointness	9% + share of DP Jointness	21% + shareofDP Jointness

Estimate assuming a top up for organic area (200 EUR/ha of arable land, 100 EUR/ha of permanent grassland, 400 EUR/ha of permanent crop) and permanent grassland (50 EUR/ha) as well as a 5% increase in organic area. No estimate available yet on the potential budget implications of a top-up to hedges.

including agri-environmental measures and the support to organic, Natura 2000, animal welfare and forestry, as well as investments for. Forestry, water and energy use efficiency, renewable sources, GHG and ammonia reduction, carbon sequestration... The starting point is the current situation, in which most MS spend more than the minimum required of 30% of RD funds. To increase the overall ambition, where necessary, a minimum spending is introduced (mainly in MS spending currently a very high share of RD envelope to support ANCs).

Excluding market measures and POSEI. Currently the 30% minimum spending of RD funds (less than 8% of CAP budget) on environment and climate action includes ANC support. In this table, ANC support does not account for environment and climate performance.

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Income support and redistribution

	Option 1	Option 3a	Option3b	Option 4***	Option 5
Decoupled payments*	High	Very small MS flat rate	Medium	Strong flat rate by land type	Medium degressive with size
Voluntary coupled support	High	0	High targeted to EU goals and improving competitiveness	Small targeted to extensive livestock	Potentially high targeted to EU goals
Areas with natural constraints	Lower further to Brexit	Maintained in pillar II	Maintained in pillar II (higher national funds)	Maintained in pillar II (higher national funds)	Increased top up in pillar I
Payment redistribution	Top up to first ha in 8 MS. Degressivity in 14 MS from 150 000 EUR, % cut vary by MS from 5 to 50%**	0	To small-medium farms via a top up to first 30 ha	To farmers with lower income via an increase in support to permanent grassland	To small-medium farms via the modulation of support by size
Capping per farm (with salaries correction)	Limited, in 8 MS threshold from 150 000 to 500 000 EUR	100 000 EUR	100 000 EUR	100 000 EUR	60 000 EUR
Capping per ha			1 000 EUR		
Min. requirements	Threshold in EUR or ha varies from 0.5 to 4 ha and from 100 to 500 EUR	2 ha	2 ha	2% of ag. income (varies by MS, from 100 to 1 000 EUR)	Status quo

^{**} e.g. amounts above 150 000 EUR per farm (with salaries correction) are cut by 5% in BG and by 50% in IT.

*** options 4a and 4b are similar in terms of direct payments implementation.

Annex 5.2 Methods and tools

1. Introduction

In this Impact Assessment (IA) a combination of quantitative and qualitative methods is used. Different types of analysis require different methods/set of tools.

- 1. To quantitatively underpin the problems (and contribution of associated drivers) related to the <u>current situation</u>, information from indicators, evaluations, studies and prior modelling exercises is combined.
- 2. To analyse the economic, social and environmental <u>impact</u> as well as the administrative burden of the different <u>options</u>, 2 approaches are pursued:
 - 2.1. For those elements (instruments) of the options which can be integrated in (one or more of) the models, (some of) the impacts can be quantified.
 - 2.2. For those elements which cannot be modelled, a semi-quantitative approach based on internal expert judgement is followed. This entails scoring of the options by different experts (mostly within the Commission) following an intervention logic and informed by available analysis and literature.
- 3. The impacts of the baseline (current CAP) and the options obtained from step 2 are compared and aggregated by means of Multi-Criteria Analysis (MCA)

The first part gives a brief outline of the main models used, the expert judgement approach and the multi-criteria analysis. The second part describes in more detail which methods/models are used in which part of the IA. The caveats of the modelling assessment are described in relevant sections of the analysis.

2. BRIEF DESCRIPTION OF THE MAIN MODELS AND TOOLS USED IN THE IA

2.1. MAGNET

MAGNET (Modular Applied GeNeral Equilibrium Tool) is a global general equilibrium model, whereby the GTAP (Global Trade Analysis Project) model has been augmented with specialist modules tailored to the specific focus of the study. GTAP is a general equilibrium model covering all sectors of the economy (agriculture, manufacturing and services) as opposed to partial equilibrium models such as CAPRI (Common Agricultural Policy Regional Impact model), which focuses on subsets of an economy. MAGNET includes adaptions and extensions that cover:

- Differences in substitutability of land between sectors
- Imperfect mobility of labour between agricultural and non-agricultural sectors
- Endogenous land supply
- Biofuel sectors and the biofuel directive
- Income elasticities dependent on GDP per capita
- International capital mobility for dynamic analyses
- CAP policy

Beside these adaptions and extensions, MAGNET has also adaptions for investments, bilateral tariff rate quota and alternative consumption functions.

2.2. Aglink-Cosimo

Aglink-Cosimo is a recursive-dynamic, partial equilibrium, supply demand model of world agriculture developed by the OECD and FAO Secretariats. The model is used to simulate development of annual supply, demand and prices for the main agricultural commodities produced, consumed and traded worldwide. Aglink-Cosimo covers 44 individual countries and 12 regions, and 40 commodities clearing markets at world level. At EU level, the Aglink-Cosimo model is used to produce the "Prospects for Agricultural Markets and Income in the EU". This is a yearly exercise that provides a detailed overview of EU agricultural markets with a 10 year time horizon. It incorporates information from policy makers and market experts in the European Commission, stakeholders, researchers and modellers. The EU Outlook intends to provide a broad consensus about the evolution of European Agriculture in the medium-term. It serves as reference timeline for counterfactual policy analysis and market analysis done in numerous research sites in Europe, including calibrating the baseline of other models such as CAPRI, AGMEMOD, IFM-CAP.

There is uncertainty surrounding key drivers of these markets. The partial stochastic analysis addresses part of these uncertainties and its potential impact on the projections. This kind of probabilistic analysis quantifies the range of possible outcomes around the central baseline value, by reproducing a portion of the past uncertainty observed for key factors. It can also be used to perform scenario analysis.

2.3. CAPRI

CAPRI is a global agricultural sector model with focus on EU28, Norway, Turkey and Western Balkans, iteratively linking:

- Supply module (EU28+Norway+Western Balkans+Turkey): covering about 280 regions (NUTS 2 level)
- Market module: spatial, global multi-commodity model for agricultural products, 47 product, 77 countries in 40 trade blocks

Its objective is to evaluate ex-ante impacts of the Common Agricultural Policy and trade policies on production, income, markets, trade, and the environment, from global to regional scale. It allows for the spatial downscaling for EU-28 of crop shares, yields, stocking densities, fertilizer application rates to 150 000 Homogenous Soil Mapping Units (cluster of 1x1 km grid cells) for environmental impact assessment and link to biophysical model DNDC (Denitrification Decomposition, a computer simulation model of carbon and nitrogen biogeochemistry in agro-ecosystems). It follows an open source approach with an active network of developers and users, main client is the EU Commission. JRC contributes to its development, maintenance and use for policy analysis.

2.4. IFM-CAP

IFM-CAP, developed and maintained at JRC, is an EU-wide individual farm-level partial equilibrium model (IFM-CAP) aiming to assess the impacts of the CAP on farm economic and environmental performance. The rationale for such a farm-level model is based on the increasing demand for a micro-simulation tool able to model farm-specific policies and to capture farm heterogeneity across the EU in terms of policy representation and impacts. Based on positive mathematical programming, IFM-CAP seeks to improve the quality of policy assessment upon existing aggregate and aggregated farm-group models and to assess distributional effects over the EU farm population. To guarantee the

highest representativeness of the EU agricultural sector, the model is applied to the majority of EU-FADN (Farm Accountancy Data Network) individual farms (almost 80 000 farms).

2.5. AIDSK

AidsK is a DG AGRI in-house maintained model based on EU-FADN (containing over 86 000 individual farm accounts) with policy as when fully implemented (2019) and possibility to change direct payments, very useful to work on direct payments distribution as well as winners and losers (types of farming, MS...).

2.6. RUSLE 2015

The Revised Universal Soil Loss Equation (RUSLE) model (Renard et al., 1997) provides an estimate of possible erosion rates and estimates sediment delivery on the basis of accepted scientific knowledge, peer review published manuscripts, technical judgment and input datasets. In this assessment, the basic RUSLE model has been adapted through the improved quality of the input layers.

RUSLE2015 improves the quality of soil erosion estimates by introducing updated, high-resolution (100m) and peer-reviewed input layers of Rainfall Erosivity, Soil Erodibility, Slope Steepness and Slope Length, Land Cover and Management and the Support Practices applied to control erosion.

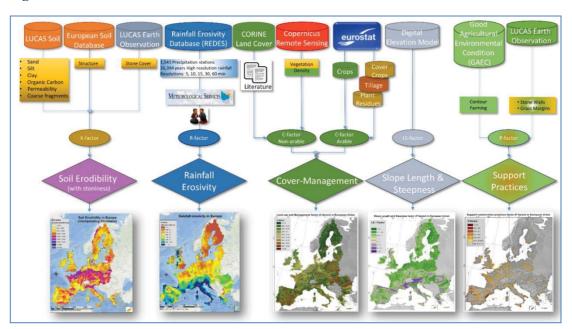


Figure 1. RUSLE 2015 Model workflow

Rainfall Erosivity was calculated from high-resolution temporal rainfall data (at intervals of 5, 10, 15, 30 and 60 minutes) collected from 1 541 well-distributed precipitation stations across Europe. Soil Erodibility is estimated for the 20 000 field sampling points including in the Land Use/Cover Area frame (LUCAS) survey. The Land Cover and management accounts for the influence of land use (mainly vegetation type/cover and crop type) and management practices (mainly in arable lands) with the potential to reduce the rate of soil erosion by water. The Slope Steepness and Slope Length parameters have been calculated using a high resolution Digital Elevation Model (DEM) at 25m. The support practices were estimated for the first time at European level taking into consideration the Good Agricultural and Environmental Conditions (GAEC). The model

is documented in the European Soil Data Centre (ESDAC), plus in 10 peer review Open Access publications.

2.7. Century model

CENTURY is a process-based model designed to simulate carbon (C) and nitrogen (N) dynamics in natural or cultivated systems, using a monthly time step. The soil organic matter sub-model includes three soil organic carbon pools, which decomposition rate is affected by soil temperature and moisture, soil texture and cultivation practices. The model also simulates the soil water balance, using a weekly time step, and a suite of simple plant growth models are included to simulate biomass carbon and nitrogen dynamics of crops, grasses and trees.

The model is currently running in the agricultural soil of the EU on a 1 km² grid resolution, implemented by state-of-art official datasets. The land use is based on the Corine Land Cover 1990, 2000 and 2006, supplemented with EUROSTAT and FAO statistics to build up crop rotations and implement consistent agronomic inputs (fertilization, irrigation etc.). Before 1990, we assumed the same land use but with different agro-techniques characterized by lower productivity crops, lower rates of mineral nitrogen and different rotation schemes.

Meteorological data were taken from the E-OBS gridded dataset (http://www.ecad.eu/download/ensembles/download.php), and the climatic projections from the WCR-CORDEX portal (https://esgf-node.ipsl.upmc.fr/search/cordex-ipsl/). Soil data used by the model were derived from the European Soil Database-ESDB, available at the European Soil Data Centre (https://esdac.jrc.ec.europa.eu/).

Spatial resolution Datasets Models Outcomes 1 km² ESDB Resampled to 1 km2 CLC 90-00-06 National Century **EUROSTAT** NUTS2 NUTS3 ~1 – 5 km Daily weather data E-OBS ~50 km CORDEX (AR5)

Figure 2. Flow chart of Century model framework⁶⁷

2.8. Standard Cost Model

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For the estimation of administrative costs, the "Standard Cost Model" was used as described in the Better Regulation Toolbox (Tool #60)⁶⁸. Administrative costs are costs incurred by enterprises, the voluntary sector, public authorities and citizens in meeting legal obligations to provide information on their activities, either to public authorities or

Further details on the model framework architecture, validation and scenario analysis can be found in Lugato et al. (2014, 2016).

https://ec.europa.eu/info/sites/info/files/file_import/better-regulation-toolbox-60_en_0.pdf

private parties. The main aim of the model is to assess the net cost of information obligations imposed by EU legislation.

The EU Standard Cost Model assesses the administrative costs on the basis of the average cost of the required administrative activity multiplied by the total number of activities performed per year. The average cost per activity is estimated by multiplying a tariff and the time required per action. The quantity is calculated as the frequency of required actions multiplied by the number of entities concerned. More information can be found in Annex 7 on Simplification.

2.9. Workshops with experts

To complement evidence, four workshops were organised on the environmental-climate, social and economic challenges, and one workshop on risk management (see Annex 2). The workshops focused on particular topics where evidence on current state or potential impact was insufficiently conclusive. International experts on these topics were invited to present their views and participate in the discussions. The rationale of the workshops was the following:

- definition of the problems;
- identification of desirable measures to address the problems;
- consequences for the policy options and the impact assessment.

2.10. Intervention logic based on expert judgement

For indicators/instruments for which quantitative data from the models are lacking, each option is scored based on expert judgement. The scoring procedure is embedded in the Multi Criteria Analysis methodology (see below). The latter allows to score the baseline as well, useful in absence of an evaluation.

Basic approach, adapted in function of the available information:

- Informed by the intervention logic, available studies, evaluations, scientific literature, in house and external analysis, experts in DG AGRI score the options
- Aggregation is done when several subitems describe an objective
- Weights are attached to the subitems expressing the relative importance of this subitem in reference to the objective

Informed by available data and literature, both the weights and subitem scores are generated by experts within DG AGRI in a group scoring exercise. The motivation and documentation of the scores are a key element of the approach.

2.11. Multi-criteria-analysis

2.11.1. Main objectives

- Objective 1: to come to an overall quantitative score for the options against the new policy objectives
- Objective 2: to provide a procedure which allows scoring options against criteria for which there is no modelling outcome

2.11.2. Different uses of Multi-criteria Analysis (MCA)

- Identify trade-offs between economic, environmental and social challenges
- Assessment of coherence, effectiveness, efficiency of different options
- Position of different stakeholders

2.11.3. Main rationale

Options are scored against a list of criteria/indicators, which are linked to each of the new CAP main and specific objectives. This allows identifying which option outperforms the other (with how much). An overall score and a score on each criterion is obtained. Weighting allows putting more emphasis on those criteria more important to reach the objective. A sensitivity analysis on weights is possible to see the influence on options' overall score and position.

The MCA is complementary to a more detailed analysis of individual indicators. The accompanying argumentation why options perform better/worse than others remains pivotal. No direct scoring of instruments within options against criteria will be done, but the intervention logics, linking instruments within options to objectives, will be informative to assess the impact of options on criteria.

2.11.4. *Software*

The MCA is performed with the help of the MacBeth69 software. As it needs only qualitative judgements about the difference of attractiveness between two elements at a time, in order to generate numerical scores for the options in each criterion and to weight the criteria, it is perfectly suited to assess the options' impact against criteria for which a quantitative modelling outcome is lacking. The software also allows checking for inconsistencies and facilitates a sensitivity analysis on weights.

3. DESCRIPTION OF TOOLS USED IN THE DIFFERENT PHASES

3.1. Evaluation of baseline

The EU baseline is composed of a combination of sources, more detailed below:

- DG AGRI EU agricultural outlook 2016 and 2017
- AidsK
- Scenar 2030 baseline
- Input from the CAP context and impact indicators, Eurostat indicators, several evaluations and (external) studies.

The <u>EU agricultural outlook</u> provides 10-year projections of agricultural markets and income, with focus on the EU. Its main uses are to better understand markets and their dynamics, to identify key issues for market and policy developments and to have a benchmark for assessing the medium-term impact of future market and policy issues.

It offers a description of what may happen under a specific set of assumptions, which at the time of making the projections were judged plausible. It covers the main commodities (grains, meats, dairy, biofuels, sugar – being extended to olive oil, wine and some fruit & vegetables). The underlying model is Aglink-Cosimo (OECD-FAO). The Outlook provides results in terms of supply balance sheets (production, consumption, imports, exports, stocks) and prices. The starting point is the OECD-FAO Outlook, in which the DG AGRI Short-Term Outlook is incorporated, as well as the new macro-economic and policy assumptions. It is a joint production between DG AGRI and the JRC. The Outlook is extensively discussed with AGRI market experts and hierarchy, as well as with international experts during the Outlook workshop. The final result is presented during

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⁶⁹ Measuring Attractiveness through a Category Based Evaluation Technique

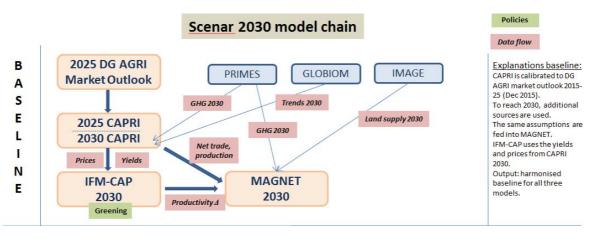
the EU Agricultural Outlook Conference, in presence of Commissioners and international organisations.

Within this IA, the EU agricultural outlook 2017-2030 provides the price environment and main market trends. Its main underlying assumptions are:

- CAP 2013 (but limited modelling, AGLINK is aggregated at EU-15 and EU-N13 level)
- Only ratified FTAs (including Canada)
- For the IA, CAP assumptions include OMNIBUS (common proposal on simplification of CAP), i.e. Income Stabilisation Tool (IST) changes, but this has no real implications on market developments, only when assessing different ways to provide IST.
- COP21, air quality, energy package are not incorporated. The Paris Agreement (as a result of the 21st Conference of Parties of the UN Framework Conference on Climate Change) and subsequent Commission proposals on Climate/Energy are not embedded in the baseline. Indeed, they form part of the contextual elements that have changed since the last reform. Changes related to Climate Change, Energy or Environment are addressed in options.

Scenar 2030 is a JRC D4 (Unit Economics of Agriculture) study outlining projections for EU agriculture in 2030. It considers 3 scenarios: Status quo, Strong reduction of EU Agricultural policy (liberalisation scenario of the IA) and Sustainable Competitiveness (enhanced greening). In the Scenar 2030 exercise the analytical power of three models (MAGNET, CAPRI and IFM-CAP) is combined through soft links.

Figure 3. Scenar 2030 model chain



For the baseline, the status quo, Magnet, CAPRI and IFM-CAP are projected towards 2030 and calibrated to the 'EU agricultural outlook 2016-2026':

- For Magnet (CGE model, MS, base year 2011) it means simulating 2030, checking trade position, price and production developments to make sure that they align with the agricultural outlook;
- For CAPRI (PE model, MS, Nuts2) it means EU production/trade/consumption levels close to 'EU agricultural outlook 2016-2026', the CAP policy as in 2019.
- For IFM-CAP (farm model, base = FADN 2012), the CAP policy as in 2019 (most detailed model on CAP), calibrated to CAPRI (production, prices)

AidsK (see previous description) is based on FADN 2012 data with CAP fully implemented (2019). It considers the same farm structure as in 2012.

Input from **CAP indicators, evaluations and other studies** is extensively taken on board, most notably during the MCA-analysis. Main references used for the evidence base can be found in Annex 1 to the IA report.

3.2. Assessing the impact of options

Table 1. Options modelling and other analysis

Which model	What for
Scenar 2030	The market liberalisation scenario*
AidsK analysis	DP distribution in option 3/4/5
•	Income stabilization tool
	Income variability
CAPRI	Land prices
	Production and productivity changes
	Trade
	Price gap analysis
	GHG emissions
	Ammonia emissions
	Nitrogen balance
IFM-CAP	Land allocation and activities
	Agricultural income
	Share of farmers with low profitability (in difficulty)
Magnet	Scenar 2030
AGLINK-COSIMO	Baseline
stochastic	Effect of countercyclical payments
RUSLE 2015	Soil erosion by water
Century	Soil organic carbon
RD budget allocation	Effect on various indicators from different models

^{*} this scenario is described in the Scenar 2030 study⁴

Within the scenarios only CAP policy measures or market access instruments are altered. All other policies are kept stable throughout the projection period. This includes biofuels policies which are assumed not to alter in 2021. Macro-economic assumptions are identical to the assumptions in the DG AGRI outlook 2015-2025 or DG AGRI outlook 2016-2026, depending on the model.

GHG policies are external to the scenarios. The modelling framework is brought in line with the EC reference scenario for EU energy, Transport and GHG emission trends to 2025. Agriculture is responsible for about half of all non-CO2 GHG emissions and is expected to increase its share in total non-CO2 until 2030. The Common Agricultural Policy influences, inter alia, livestock numbers/intensities. The Nitrogen Directive and the Water Framework Directive impact on the use of fertilizer.

For the indicators and instruments for which quantitative data from the models is missing, expert judgement is used, following the procedure outlined under 1.2.10. A list of Operational Objectives for which the qualitative analysis was used is provided in Annex 5.3.

3.3. Addressing uncertainties

Macro-economic uncertainty (or price volatility) is incorporated into the modelling exercise for the CAP instruments for which this is a key issue, such as risk management

tools. For example, to analyse the potential use of the Income Stabilisation Tool, farm income is shocked in AidsK with two different sets of output assumptions.

3.4. Comparing the baseline and the options

In addition to the modelling analysis, to cover the items which are not sufficiently captured by the models, and to summarize the impact of the options vis-à-vis the baseline, Multicriteria Analysis is used.

In total, more than 50 DG AGRI experts, as well as scientists from JRC for the environmental objectives, participated in the MCA-exercise. The DG AGRI experts contributed to the IA from the beginning onwards and were selected based on their expertise regarding CAP interventions and challenges. They represent units from all across the DG (unit A1, A2, B1, B2, C, C1, C2, C3, C4, D1, D2, D3, D4, E4, F1, G, G1, G2, G3, G4, H1, I4, R1, R3). Throughout the IA process these experts further built up their expertise on the future CAP as they were part of challenge teams from the start of the IA:

- In these teams, which met on a regular basis from beginning of 2017 onwards, challenges were identified, background documents on challenges drafted, intervention logics and explanatory fiches on options prepared.
- The experts participated in the different workshops organized with academics and other DGs, bringing the lessons learnt into the challenge teams.
- Several of them, especially the group coordinators, also participated in different ISG-meetings and bilateral exchanges with relevant other DGs, also allowing that information was transmitted to inform the expert judgement.
- One of the main tasks of the challenge team experts was the screening of relevant scientific literature from academics and public institutions to scientifically underpin the expert opinions.

The experts were also involved in the actual scoring exercise. Emphasis rested upon the qualitative underpinning of ranking and scoring. The experts also performed the weighting exercise and provided explanations for the attributed weights. In total 5 group exercises were organized, each focusing on a different policy objective:

- For effectiveness:
 - 1. Group focusing on Economic Policy Objective
 - 2. Group focusing on Environmental Policy Objective
 - 3. Group focusing on Social Policy Objective
- For efficiency
 - 4. Group focusing on Simplification objective
- For Future Proofing
 - 5. Group focusing on Modernization objective

The JRC experts were also involved since spring 2017 in many of the group discussions regarding the Environmental Policy Objective. They also participated in the preparation of fiches and the scoring exercise.

The overall followed procedure is:

3.4.1. Step 1: identification of options

5 options, including 2 sub-options, the current CAP baseline for EU27 and a baseline with linear cuts (after Brexit), are compared. Effects of the No CAP scenario are described in Scenar 2030⁷⁰. Alternative options are described in detail in Annex 5.1. Each option contains the same/different elements/instruments. The design and combination of these instruments determines an option's ability to reach the set objectives.

Figure 4. Synthetic overview of the options



3.4.2. Step 2: construction of value tree

Starting from the identified main CAP objectives (MO), the specific objectives (SO) and the Operational Objectives (OO) associated to each SO (see Annex), a value tree is constructed. These OOs are also considered as criteria entering the MCA. The value tree links criteria (or OOs) to specific objectives and specific objectives to a main objective.

3.4.3. Step 3: identification of criterion properties

Criteria are equal to the Operational Objectives. Depending on the criterion, we can distinguish between 3 situations:

1. The criterion has quantitative performance levels

This is the case when a model-driven score can be obtained for the options. Minimum and maximum levels for the criterion are based on the model outcome for the different options or on legal requirements/EU targets. By means of a transformation function

92-79-73859-3, doi:10.2760/887521, JRC108449.

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R. M'barek, J. Barreiro-Hurle, P. Boulanger, A. Caivano, P. Ciaian, H. Dudu, M. Espinosa, T. Fellmann, E. Ferrari, S. Gomez y Paloma, C. Gorrin Gonzalez, M. Himics, K. Louhichi, A. Perni, G. Philippidis, G. Salputra, P. Witzke, G. Genovese; Scenar 2030 - Pathways for the European agriculture and food sector beyond 2020, EUR 28797 EN, Publications Office of the European Union, Luxembourg, 2017, ISBN 978-

(linear, exponential, logarithmic, stepwise,...), the option scores are translated to scores between zero (for the minimum) and hundred (for the maximum).

2. The criterion has qualitative performance levels which allow ranking

Examples are: the situation has much improved, status quo, worsened etc. These qualitative levels are translated to scores between 0 and 100 based on a (linear) transformation function.

3. No qualitative performance levels can be assigned to the criterion

When a criterion is too complex to assign ordinal levels to it, options are directly compared against each other. This approach was used most frequently. This is done as such:

- Within the group of experts, evidence is presented on how options perform against the criterion. This evidence is based on internal and external analysis, scientific papers, H2020 insights, evaluations, DG AGRI and EP studies, grey literature and informed by the intervention logic (explaining the link between instruments in options and specific objectives).
- Based on group expert judgement, options are ranked from best to worst.
- Based on group expert judgement, a preference matrix is completed. This matrix expresses how strongly (varying from extreme to no preference) the best performing option is preferred over the second best and so on.
- Based on these qualitative scorings, a software based consistency check is performed and quantitative scores are calculated for the options by means of linear programming.
- During this process, notes are taken documenting why the options are scored as such.

3.4.4. Step 4: determination of options' scores

When a model-based quantitative score for the options is available, the scores immediately emerge after entering these in the transformation function accompanying the criterion. When a criterion has qualitative levels, each option is assigned to a specific level based on group expert judgement, again informed by the intervention logic, the available information sources and a group discussion. The process and choices are well documented in fiches. For options directly scored against a criterion, we refer to step 3.3.

3.4.5. Step 5: determination of weights for criteria and objectives

The weighing aims to give a different importance to different criteria depending on their contribution to the specific and main objectives. A stepwise approach is applied: first the criteria within a specific objective are weighed, and after that the specific objectives within the main policy objectives.

Each individual expert provided weights together with a justification. The final weights applied were obtained by averaging over the weights assigned by the individual experts. This step is informed by relevant studies and literature, and the reasoning to come to a certain scoring is documented.

3.4.6. Step 6: analysis of results

In a final step, both overall scores of the options as well as the scores on particular criteria can be analysed.

An overall robustness check shows how robust the obtained result is, i.e. whether an option strictly dominates another (scores better on all criteria) or additively (scores better on some but not on others).

To analyse the importance of the applied weights, sensitivity analysis is performed. This analysis reveals with how much the weight of a criterion should change for 2 options to switch position.

100.00 MO: Foster a smart and resilient agricultural system 33.08 SO1: Supporting a viable farm income op 4b 100.00 31.17 OO1.1: Coping with price volatil 30.68 10.15 OO1.2: Improve risk management 4B 38.15 OO1.3: Better targeted income support 4A op 4a 85.71 43.46 SO2: Increase competitiveness зА 17.23 OO2.1: Productivity and efficiency gains зв 28.14 12.23 OO2.2: Demand driven production models 32.21 000 OO2.3: Adding value to agricultural products 1A 23.46 SO3: Improve farmers' position in the value chain op 3a 64.29 18 44.59 10.46 OO3.1: Strengthening cooperation am 26.56 6.23 OO3.2: Enhanced cooperation within value chain (vertically) 8.77 OO3.3: Development of alternative value chains op 3b 50.00 002.1: Productivity and efficiency gains BAS 35.71 Current op 4a ор За op 3b BAS BAS-15 op 5 scale v. strong op 4b weak strong v. strong op 4a strong v. strong 85.71 op 3a 64.29 weak moderate v. strong v. strong BAS-15 14.29 op 3b strong v. strong 50.00 BAS strong 35.71 BAS-15 14.29 op 5 op 5 0.00 Consistent judgements

Figure 5. Example of scoring exercise for Economic Operational Objective 2.1

Annex 5.3: Objectives used in the MCA

	Impact Assessment						
Policy objectives	Specific objectives	Operational objectives					
ECO							
	Support viable farm income	Cope with price volatility					
	and resilience throughout the	Improve risk management					
	territory						
		Provide income support in a targeted					
	T	way					
Enstan	Increase competitiveness and market orientation	Productivity and Efficiency gains					
Foster a smart and	market orientation	Demand-driven production models					
resilient		Add value to agricultural products					
agricultural sector		rad value to agricultural products					
ensuring food		Strengthen cooperation amongst					
security	Improve farmers position in	farmers					
·	value chains	Enhance synergies within value chain					
		Development of alternative value					
		chains					
ENV-CLIM							
	Contribute to climate change	Prevent/reduce GHG emissions					
Bolster	mitigation & adaptation	Increase carbon storage					
environmental care							
and climate action		Enhance farms adaptation capacity					
and contribute to the							
environmental and	Foster sustainable	Improve soil condition					
climate objectives of	and efficient management of	Reduce air pollution					
the EU	resources	Improve water quality/use					
		Sustainable use of pesticides and antibiotics					
		Preserve agricultural genetic resources					
		Treserve agriculturar genetic resources					
	Preserve nature and	Improve farm and forest biodiversity					
	landscapes	Maintain and improve culturally valued					
	_	landscapes (including HNV Farming)					
SOCIO							
Strengthen		Foster in rural areas					
the socio-economic	Attract new farmers and	- generational renewal					
fabric	facilitate business						
of rural areas	development, as well as						
	generational renewal	ampleyment					
	Promote employment,	- employment					
	growth and	- inclusive growth					
	local development in rural	- value added (e.g. bio-economy)					
	areas	Improve - access to infrastructure					
		- access to minastructure					

Impact Assessment					
Policy objectives	Specific objectives	Operational objectives			
		- access to services - contribution to healthier lifestyles			
Chass Currenta	Address territorial imbalances, rural poverty and social inclusion	Reduce inequalities between - territories - rural/urban divide - groups (rural poverty, social inclusion)			
Improve sustainable development for farming, food	Maximise contributions to EU priorities and SDGs This includes Address societal expectations on food and health (security,	Strengthen links to EU objectives Streamline Common Indicators (including SDG indicators)			
and rural areas	safety, quality, sustainability)	e.g. demand-driven, pesticides, antibiotics, healthier lifestyles			
SIMPL-INNO Promote Knowledge & Innovation in agriculture and rural areas	Co-create innovation and share knowledge, including across generations	Enhance Agricultural Knowledge and Innovation Systems and strengthen links with research Strengthen farm advisory services within the AKIS systems Enhance interactive innovation Support digital transition in agriculture			
Simplify the CAP	Streamline CAP design and delivery on relevant EU objectives	Shift from compliance to performance Reduce administrative burden Enhance proportionality of administrative costs			

Annex 5.4 – Non-productive elements in the EU

Eurostat 2013 1 000 ha EU 154 200 BE 1 300 CZ 3 500 DK 2 600 DE 16 700 EE 1 000 IE 5 000 EL 4 900 ES 23 300 FR 27 700 HR 1 600	Area	Share in			and landscape	
1 000 ha EU 154 200 BE 1 300 BG 4 700 CZ 3 500 DK 2 600 DE 16 700 EE 1 000 IE 5 000 EL 4 900 ES 23 300 FR 27 700		UAA	Estimation excluding dubious		landscape elements	
EU 154 200 BE 1 300 BG 4 700 CZ 3 500 DK 2 600 DE 16 700 EE 1 000 IE 5 000 EL 4 900 ES 23 300 FR 27 700	Eurostat		case	es* (JRC)	Share in	
BE 1 300 BG 4 700 CZ 3 500 DK 2 600 DE 16 700 EE 1 000 IE 5 000 EL 4 900 ES 23 300 FR 27 700	2013	2013	Area Share in UAA		UAA	
BG 4 700 CZ 3 500 DK 2 600 DE 16 700 EE 1 000 IE 5 000 EL 4 900 ES 23 300 FR 27 700	5 840	4%	860	1%	4%	
CZ 3 500 DK 2 600 DE 16 700 EE 1 000 IE 5 000 EL 4 900 ES 23 300 FR 27 700	10	1%	10	1%	1%	
DK 2 600 DE 16 700 EE 1 000 IE 5 000 EL 4 900 ES 23 300 FR 27 700	50	1%	10	0%	1%	
DE 16 700 EE 1 000 IE 5 000 EL 4 900 ES 23 300 FR 27 700	10	0%	0	0%	0%	
EE 1 000 IE 5 000 EL 4 900 ES 23 300 FR 27 700	30	1%	10	0%	1%	
IE 5 000 EL 4 900 ES 23 300 FR 27 700	200	1%	90	1%	2%	
EL 4 900 ES 23 300 FR 27 700	40	4%	10	1%	5%	
ES 23 300 FR 27 700	10	0%	40	1%	1%	
FR 27 700	140	3%	10	0%	3%	
	2 420	10%	40	0%	11%	
HP 1 600	490	2%	100	0%	2%	
1110 1 000	10	0%	10	0%	1%	
IT 12 100	370	3%	180	1%	4%	
CY 100	10	9%	0	0%	10%	
LV 1 900	60	3%	10	1%	4%	
LT 2 900	90	3%	10	0%	4%	
LU 100	0	0%	0	0%	0%	
HU 4 700	130	3%	20	0%	3%	
MT 0	0	5%	0	0%	6%	
NL 1 800	10	0%	60	3%	4%	
AT 2 700	40	1%	10	0%	2%	
PL 14 400	450	3%	80	1%	4%	
PT 3 600	330	9%	10	0%	9%	
RO 13 100	670	5%	40	0%	5%	
SI 500	0	0%	0	1%	1%	
SK 1 900	20	1.0/	0	0%	1%	
FI 2 300	20	1%	U	0 / 0	1 /0	
SE 3 000		11%	120	5%	17%	

Note: Linear elements considered here: Grass margins, shrub margins, single trees bushes, lines of trees, hedges and ditches. Dubious cases refer to the difficulty to assess if one linear element belongs to agricultural area or not. In case of doubt, the JRC removed this element from the estimation. Numbers are to be taken with caution; additional work would be required to improve the quality of this estimate.

Source: DG AGRI based on Eurostat and JRC based on LUCAS survey

Annex 5.5: Capping

	Baseline	Option 3a	Option 3b	Option 4	Option 5
Farmers capped	3 140	0	130	4 380	1 380
Product of capping (Million EUR)	120	0	10	0	50
Share of MS in capped amount					
HU	61%				5%
PL	17%				0%
BG	12%		84%		58%
CZ	4%				1%
SK	3%				1%
IT	3%				1%
RO			11%		30%
DE			4%		1%
Income of capped farms	31 800		50 500	32 800	44 600
Income of non capped farms	28 600		26 700	25 800	26 500
Average employment in capped farms					
EU	47		20	10	11
HU	51			12	9
PL	64				
BG	40		25	20	16
CZ	54				
SK	50				
IT	15				
RO			15	11	12
DE			2	4	

Source: JRC, IFM-CAP model

Annex 5.6: Share of direct payments received by biggest beneficiaries and biggest farms

Share of direct payments granted to 20% biggest beneficiaries

Share of direct payments granted to 20% largest farms in terms of UAA

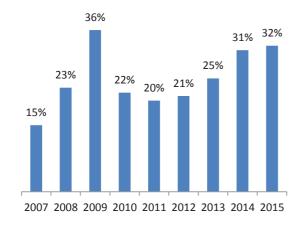
	Share	Change relative to baseline			Share	Change relations baseling			e to		
	Baseline	3a	3b	4	5		Baseline	3a	3b	4	5
EU	73	2	-2	1	-6	EU	70	1	-2	2	-5
BEL	45	4	-1	4	-6	BEL	44	4	-3	3	-6
DK	57	0	-4	0	-14	DK	56	2	-4	2	-12
DE	58	2	-3	2	-11	DE	58	0	-3	1	-11
EL	54	12	3	2	-3	EL	45	15	7	11	6
ES	59	1	-6	1	-8	ES	51	7	-5	8	-1
FR	44	8	4	5	-4	FR	41	1	-1	4	-2
IE	44	-9	-7	-5	-9	IE	40	-7	-6	-2	-7
IT	72	2	-2	-2	-15	IT	68	1	-1	1	-12
NL	48	1	-4	0	-9	NL	48	1	-4	-1	-10
AT	49	-2	-5	1	-5	AT	48	-8	-7	0	-7
PT	62	-5	-6	5	3	PT	57	-2	-6	7	4
SE	52	5	-2	0	-12	SE	49	-4	-6	0	-9
FI	46	-1	-1	-1	-10	FI	44	0	-2	0	-9
CZ	81	1	-2	0	-14	CZ	80	-2	-3	-1	-13
HU	76	2	-4	1	-13	HU	76	3	-5	2	-13
PL	55	1	-3	1	-13	PL	54	0	-4	1	-12
SI	50	-1	-1	-2	-12	SI	49	-5	-1	-2	-12
SK	71	1	0	-1	-12	SK	70	-1	-1	-2	-12
EE	76	-1	-10	-2	-17	EE	75	0	-9	-1	-16
LT	57	6	-6	5	-8	LT	57	5	-8	5	-7
LV	64	2	-9	1	-14	LV	64	1	-10	1	-14
CY	72	3	4	1	-13	CY	71	3	2	2	-12
MT	60	-5	7	-10	-24	MT	49	4	7	0	-12
BG	90	3	-3	1	-4	BG	89	2	-3	1	-3
RO	77	1	-2	-2	-13	RO	76	0	-3	-2	-13

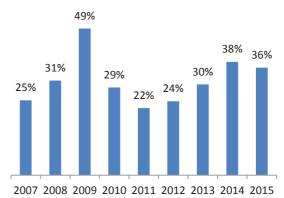
Source: JRC, IFM-CAP, based on professional farms (FADN data)

Annex 5.7 – Income variability

Share of farms with a gross farm income drop beyond 30% compared to the 3 previous years

Share of farms with a sector income drop beyond 20% compared to the 3 previous years





Source: DG AGRI, FADN

Annex 6: Promoting Modernisation

Modernisation is a cross-cutting objective, for both EU agriculture and food systems, as well as for rural areas. They face many challenges that require new solutions. Innovation is necessary to foster a smart and resilient agriculture sector ensuring food security, to bolster environmental care and climate action, and to strengthen the socio-economic fabric of rural areas. Innovations - along with the corresponding innovation systems - are needed (e.g. on the use of nature based solutions, breeding, vertical farming, zootechnics, biological, technological, digital, developing new chains for bio-economy, organisational and product related) to serve a multi-functional EU agriculture delivering food and non-food products, public goods as well as contributing to vibrant rural areas. Although substantial knowledge exists it stays fragmented and insufficiently applied. Agriculture research may deliver new insights which stay within the scientific world only and also the agricultural sector itself has a considerable and under-used innovation capacity. Overall, take up of new knowledge and technology is absent or slow, bridging the gap between research and farming practice is key.

For the purpose of impact assessment, the following objectives were formulated:

<u>Cross-cutting objective</u>: Promote knowledge and innovation in agriculture and rural areas

<u>Specific objective</u>: Co-creating innovation and sharing knowledge, including across generations

Operational objectives:

- 1. Enhancing Agricultural Knowledge and Innovation Systems and strengthening links with research
- 2. Strengthening of farm advisory services within the Agricultural Knowledge and Innovation Systems
- 3. Enhancing interactive innovation
- 4. Supporting digital transition in agriculture

1. ENHANCING AGRICULTURAL KNOWLEDGE AND INNOVATION SYSTEMS (AKIS) AND STRENGTHENING LINKS WITH RESEARCH

This is a cross-cutting objective equally relevant for all clusters (economic, environmental and social) and all policy options. Reflections now focus on improving the Agricultural Knowledge and Innovation Systems (AKIS), the systems of people and organisations in countries/regions that generate, share, and use agriculture-related knowledge and information. The main difference is the budgetary allocation that will have an impact on the long-term knowledge infrastructure and the number of projects/interactions that can be supported and as such on the resulting level of innovation and sharing of knowledge. Therefore targeting CAP funding to that kind of measures would be important. The type of knowledge/advice to be supported will be chosen by the MS/region, depending on their needs and the final CAP option and consequently it may have a stronger economic, environmental or social focus. Flexibility is important and is much appreciated by MS (conclusion EIP Evaluation Study⁷¹).

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Coffey *et al.* (2016) Evaluation study on the implementation of the new European Innovation Partnerships (EIP) for Agricultural Productivity and Sustainability, Study to the European Commission.

Knowledge and innovation is horizontal and cross-cutting and can equally be used for pursuing economic, environmental or social strands.

Rural development has several measures that fund training, the exchange of information, the use of advice and training of advisors, demonstration, farm exchange and piloting and testing new ideas as well as results from research in EIP operational groups (OGs).

The 2017 EIP evaluation study⁷², the Policy brief on Advisory services⁷³ from the SCAR⁷⁴ Strategic Working Group on AKIS and the recently concluded FP7-funded PRO AKIS project, the SCAR Foresight and the SCAR-AKIS reports⁷⁵ provide some background: **the weaker and more fragmented the AKIS is in a country, the less actors are interconnected and the more difficult innovative projects such as EIP OGs emerge.** It was observed that innovation under the EIP-AGRI is most successful in regions / Member States where a dedicated innovation environment is created and the AKIS is strong and integrated⁷⁶.

The available information suggests

- Different Member States (MS) have different, mostly very fragmented AKISs responding to different historical developments and circumstances. Some links between particular AKIS models and the performance of those models are emerging⁶.
- The exchange of information between different parts of AKISs in MS and regions (advisory services, farmer organisations, research, educational systems, etc) needs to be improved. Networking and cooperation, in particular between research, advisors and farmers is crucial to allow for co-creation of new knowledge, and the rural networks should support this to a larger extent and in a more structured way supporting connections between all relevant geographical levels and actors.
- A system merely focusing on provision of advice is no longer sufficient. There is a need for continued public support to maintain and further stimulate the exchange of information within the agriculture sector, and in particular to enable an EU wide interconnected AKIS¹, as started up under the EIP.
- The EIP approach of interactive innovation and co-creation via hands-on operational groups (RD), complemented by linking research and practice in networks and by funding Horizon 2020 interactive projects, is well appreciated by the sector. The EIP measure in rural development has been taken up successfully and is evaluated positively.
- The EIP-AGRI's bottom-up and farmer-led approach is assessed "truly distinctive and highly appreciated by farmers and stakeholders", which demonstrates the need for its distinctive approach to innovation. "The flexibility of the EIP-AGRI

Coffey *et al.* (2016) Evaluation study on the implementation of the new European Innovation Partnerships (EIP) for Agricultural Productivity and Sustainability, Study to the European Commission.

Standing Committee for Agricultural Research (SCAR) (2017) Policy brief on the Future of Advisory Services, Strategic Working Group on Agricultural Knowledge and Innovation Systems and EIP-AGRI (2017) Skills development: education & training, advice, peer to peer exchange and networking Agri Innovation Summit (AIS) "Innovation – shaping the future", 12 October.

SCAR: Standing Committee for Agricultural Research, an expert group where MS coordinate their research and innovation issues

See the reports of the SCAR AKIS SWG in their 2nd and 3rd mandate for the rationale for interactive innovation: Standing Committee on Agricultural Research (SCAR) (2016) <u>Agricultural knowledge and innovation systems</u>: <u>Towards the future</u>. <u>A foresight paper</u>, Strategic Working Group AKIS, Study to the European Commission.

See <u>www.proakis.eu</u> and annex 1: overview of MSs' AKISs

- allows it to tackle this and to be shaped to widely different circumstances"⁷⁷. Therefore MS and Europe needs an "AKIS 2.0" (see EIP brochure⁷⁸)
- The measures related to the advisory services under Rural Development face difficulties among others as a result of the rigidity of the measure (list of elements to be covered, need to apply public procurement rules etc) and the enhanced profiling of commercial businesses as "advisory services" providing advice "for free".

EU value added

Currently, a few Member States have a well-functioning AKIS, whereas in most parts of Europe it is less provided for. One could argue that the AKIS is a national responsibility, where the EU does not have a role to play. However, the successful implementation of the CAP, in particular when it comes to innovation, requires well-functioning and EU wide interconnected AKISs. Therefore, the EU has an interest in ensuring that such an AKIS exists to address EU level objectives supports the realisation of CAP objectives.

Secondly, the EU has a role in complementing the national and regional AKIS systems and to ensure that information is exchanged between different Member States about new technologies, new ideas for marketing, land management, management and preservation of public goods etc. This is a part of the EIP that is particularly appreciated, also by farmers.

Finally, the CAP can make synergies with EU research policy and results. This can help co-creating new knowledge responding to farmers' needs in a more cost-efficient way through the multi-actor approach, and support making new knowledge available in all parts of the EU in a better organised way.

Policy implications

Any new policy on AKIS should create EU added value by:

- incentivising interactive innovation projects (CAP policy dedicated knowledge and innovation actions creating new knowledge EIP OGs)
- organising and structuring knowledge exchange at national / regional level, as well as at EU level (CAP policy networking, advisory services and information actions).
- pooling resources to address EU level objectives (EIP networking activities, Research policy, in particular multi-actor research projects and Thematic Networks)
- maintaining / reinforcing the links between the CAP and the new Research and Innovation Framework Programme 9 (FP9) and possibly other policy areas (ESIF, LIFE, national and regional research). In particular, continuing to reinforce the links between the CAP and FP9 will be key to boost synergies between the 2 policies and build a comprehensive research and innovation system in agriculture in the wide sense of the word
- being flexible enough to address national differences

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Coffey *et al.* (2016) Evaluation study on the implementation of the new European Innovation Partnerships (EIP) for Agricultural Productivity and Sustainability, Study to the European Commission.

EIP-AGRI (2018) <u>Brochure Agricultural Knowledge and Innovation Systems</u>, Study to the European Commission.

In view of the EU value added, EU support should be focussed on the areas where EU intervention can make the difference. The fostering of knowledge exchange and innovation should be linked to EU level objectives and a related performance framework with clear reporting obligations.

Innovation can be a <u>central objective</u> to be achieved in a programmed approach by Member States / regions. **Member States and regions would programme knowledge hubs, interactive advisory services and other elements of AKIS with a view to achieve innovation**.

The support would focus on ensuring the exchange of information and ideas in projects but also at national / regional level and at EU level. The EIP experience has demonstrated that the Commission can steer Member States' attention towards innovation via the interactive approaches (the EIP network, high co-financing rates for knowledge and innovation projects for EIP OGs) and sufficient flexibility to adapt to the existing AKISs.

- The CAP Plans should have an obligatory section where each Member State explains how it is going to stimulate knowledge exchange and innovation. Specifically, the CAP Plan will have to provide information on how advisory services, research and rural networks will work together and on how innovation support services will be provided. The scope of the knowledge exchange and innovation should cover agricultural issues at large and the wider rural community (including environment climate change, energy, agri-food or bio-based value chains and the creation of possibilities for rural businesses).
- Under the CAP Plan each Member State or region **funds a number of actions** related to information actions, demonstration, farmers' exchange, training, advice, pilot projects, EIP-AGRI operational groups, etc. aimed at knowledge exchange and innovation, using the types of intervention to be developed in the regulation.
- Beyond the CAP, delivery on knowledge and innovation will be conditional on the capacity of the FP to fund the necessary knowledge generation and communication at EU level. This will be achieved only if the synergies that have been established between the CAP and Horizon 2020 to establish a comprehensive agricultural research and innovation ecosystem will be maintained and/or reinforced in FP9. Ambitious R&I activities need to be developed under FP 9 to promote food and nutrition security and the sustainable management of natural resources, building on the Strategic approach to EU agricultural R&I⁷⁹, the EU Bioeconomy Strategy⁸⁰, and Food 2030⁸¹.

2. STRENGTHENING OF FARM ADVISORY SERVICES WITHIN THE AGRICULTURAL KNOWLEDGE AND INNOVATION SYSTEMS

The Communication mentions the exchange of knowledge and focus on innovation is a **cross cutting objective** for the new CAP. The CAP should continue to support the <u>interactive innovation</u> model, as applied in EIP Operational Groups and in H2020 multi-actor projects and thematic networks. In essence, this model stands for tackling real

Horizon 2020.

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European Commission (2016) <u>Final paper on a strategic approach to EU agricultural research and innovation</u>, Horizon 2020

European Commission (2012) <u>Innovating for Sustainable Growth: A Bioeconomy for Europe</u>
Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM 60 final

⁸¹ European Commission (2016) <u>European Research and Innovation for Food and Nutrition Security</u> Staff Working Document 319 final

practice needs/opportunities through collaboration between actors to make best use of specific complementary types of knowledge (scientific, practical, organisational, etc) in view of co-creation and diffusion of solutions/opportunities ready to implement in practice. Farm advisory services should be strengthened within the AKIS. The farm advice given should be impartial, advisors should have no conflict of interest with commercial activities.

The current legal framework obliges Member States to have a **Farm Advisory System** (FAS) in place. However, the use and uptake of the knowledge and advice measures remains limited in the current programming period. The **EIP-AGRI** initiative has led to considerable attention for innovation and the exchange of knowledge. Horizon 2020 projects and CAP interactive innovation projects have helped bringing in new knowledge and compiling knowledge ready to use and also by connecting Horizon 2020 to EIP funded projects. The EIP-AGRI aims to ensure better uptake of results of H2020 projects through the multi-actor approach which produces practice-oriented recommendations in a language easy to understand for farmers/foresters and advisors. These recommendations are then communicated through the EIP website and EIP networking activities.

In the current CAP period, it is observed that innovation under the EIP-AGRI is most successful in Member States where a dedicated innovation environment is created and the AKIS is strong and integrated⁸².

The efficiency and effectiveness of advisory services can best be upgraded by improving their connections within the Agricultural Knowledge and Innovation Systems and sharing knowledge and innovative applications more intensively. To perform such an upgrade of advisory services, a transition period is needed. Such a transition plan will form a part of the CAP Strategic Plans to be approved.

Context

- Traditionally advisory services were used to "transfer" knowledge to farmers in order to make them perform better. Knowledge no longer only flows in one direction from research to farmers. Nowadays challenges have become much more complex and knowledge is less concentrated, therefore this "linear" knowledge transfer model is failing.
- The linear model meanwhile has been complemented by the so-called "interactive innovation model" as applied in the EIP-AGRI. This model puts the emphasis on targeted knowledge "exchange" because there is a need for co-creation of new and tailor-made solutions which are combining different kinds of knowledge. To enable this, collaboration between specific combinations of actors who can bring in the various types of knowledge (scientific, technological, practical, organisational etc.) to solve the problem needs to be incentivised. Advisors obviously play a key role in the interactive innovation model.
- Consequently, there are more players that have to be involved in the sharing and creation of knowledge. Therefore, the focus is now on improving information flows within the Agricultural Knowledge and Innovation Systems (AKIS), the systems of people and organisations in MSs/regions that

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Evaluation Study of the EIP-AGRI: https://ec.europa.eu/agriculture/sites/agriculture/files/external-studies/2016/eip-2016/eval_en.pdf

generate, share, and utilize agriculture-related knowledge and information (e.g. administration, researchers, advisors, farmers, agri-business, etc.).

- An advisor is as strong as his/her interconnections within the AKIS are. He/she needs to be fed with the newest knowledge and be supported to develop knowledge in interactive innovation projects such as in the EIP (H2020 multi-actor projects or RD Operational Groups). The advisor furthermore plays a key role to funnel farmers' needs and opportunities into the knowledge and innovation system for further development. This helps knowledge systems to improve their impact. Therefore it is useful to support strengthening of farm advisory services within the AKIS. To adapt to the diversity of AKIS systems in countries, flexibility will be needed, to the example of the EIP implementation.
- The FP7 PRO-AKIS study showed that it is of utmost importance to support solid transition plans for the strengthening of farm advisory services within the AKIS, in order for countries to improve and learn from best practices from other MS, or to make what remains of advisory services if any gradually more competent and inclusive. Researchers will also need to be incentivised and rewarded to share research results within the AKIS. (See further context in the SWG SCAR-AKIS Policy Brief on the future of advisory services ⁸³).
- The funding and organization of future advisory bodies should be made resilient through a mix of public and private funding. The Policy Brief on the future of advisory services (SWG SCAR-AKIS, Brussels, 2016) mentions a front-office / back-office approach. The back-office, that should be public funding, will insure the managing and keeping the knowledge public, make it easily available, actively build networking activities, enable thematic orientation and feed in of collective intelligence from multiple sources⁸⁴. The front-office, mainly private funded, will deliver on-farm advice, will take in questions and guide them, if necessary, to the specialists in the back-office.

3. ENHANCING INTERACTIVE INNOVATION

In line with the Communication on the Future of Food and Farming, the CAP will be able to both continue backing farmers' income and contribute to a more sustainable development of EU agriculture.

So far, in the period 2014-2017 very positive experience has been gathered by the EIP "Agricultural Productivity and Sustainability" with regard to speeding up innovation and fostering competitive and sustainable farming and forestry that 'achieves more and better from less'.

To enable impact from projects, the basic concept of the EIP-AGRI is

- (1) to focus on end-users' problems/opportunities and
- (2) to have partners with complementary types of knowledge scientific, practical and other joining forces in project activities from the beginning till the end.

Standing Committee for Agricultural Research (SCAR) (2017) <u>Policy brief on the Future of Advisory Services</u>, Strategic Working Group on Agricultural Knowledge and Innovation Systems.

Already 22 H2020 thematic networks are "compiling knowledge ready for practice" (see Annex 4)

This is called the "interactive innovation model" and is essential to tackle current complex and systemic challenges with good results. These interactive projects are able to develop innovative solutions which are more ready to be applied in practice and cover real needs. Moreover, end-users like farmers, foresters or businesses will be more motivated to use the project results, because they were involved in generating them and feel "co-ownership". The ultimate aim of the EIP-AGRI is to ensure a steady supply of food, feed and biomaterials with dedicated attention to include the relevant actors in the chain (farmers, advisors, researchers, education, businesses, NGOs, authorities etc). Advance payments and a specific framework for reporting, evaluation and control practices, distinct from other CAP payments, to the example of projects under EU Research Policy, will be needed to incentivise also smaller actors to lead and join EIP projects.

The EIP-AGRI applies the interactive innovation principle under **EU research funding** (the so-called 'multi-actor approach': 1 bio Euro multi-actor projects in 2014-2020 under H2020) and under CAP funding in Rural Development Programmes (the so-called 'EIP Operational Groups': 3200 planned in 2014-2020 and a number of cooperation projects focusing on innovation).

Besides the interactive projects, the EIP-AGRI also supports the **EIP network** which connects people and projects, both at EU level and at national/regional level. The EIP-AGRI network is run by the European Commission (DG AGRI) with the help of the Service Point (SP). The SP team facilitates the networking activities, enhancing communication, knowledge sharing and exchange through conferences, focus groups, workshops, seminars and publications. The primary target is to stimulate the interaction between all actors. This creates great spill-over effects through knowledge sharing and cross-fertilisation of ideas between CAP and H2020 funding.

In practice, a **unique EU repository of data from the projects** enables the actors from both H2020 and CAP innovation projects to connect and be informed on which innovative project is taking place where. For instance, this repository enables the 6-7 February 2018 EIP workshop on innovative supply chains, where more than 40 EIP OGs convened and exchanged information between each other. They were at the same event connected with 9 H2020 multi-actor projects (and other projects) concerning innovation in food supply chains. Not only information was exchanged but also first steps for further innovative cooperation and projects were taken and ideas for further research collected.

A thriving innovation ecosystem is important to incentivise innovation projects: raising awareness and animating the participation in innovative actions are key for the successful implementation of the EIP. A lot of existing networks and platforms can contribute to connecting stakeholders and to preparing and discussing potential innovative ideas. Part of the action plan of National Rural Networks (NRN) focuses on thematic and analytical exchanges between rural development stakeholders: the NRN or national EIP network funded with Technical assistance is expected to foster innovation. Under Art 35 of Regulation (EU) No 1305/2013 also new networks can be funded, e.g. regional or national EIP networks, or thematic networks. For incentivising actions of operational groups, it makes sense to exploit all available means within the existing AKIS and involve existing networks/clusters wherever possible and useful, in particular linking up researchers and advisors as inclusive as possible to the rural networks in order to get knowledge flowing across Europe.

Innovation support services, besides providing innovation brokering services, can help promoting innovation and innovation funding formats, organise brainstorming events and animation of thematic or cross-sectoral groups, coordinate and facilitate projects as an

intermediate between partners bridging between science and practice, and support broad dissemination of innovative project results.

Working with intermediates in the EIP operational group project, so—called "facilitators", is important in view of getting and keeping the discussion on the farmers' problems and bridging between the language of science and entrepreneurial practice which may have different objectives and time horizons.

Roles of Innovation Support Services

- act as an "innovation broker" putting farmers/foresters in touch with the people they need to work with and vice versa (e.g. researchers, advisors, businesses in the food and non-food supply chains, NGOs, administration, consultants etc.). This should enable them to share information, find the solution to an issue identified or to realise a specific new approach or idea they have (innovation opportunity)
- can act as " **innovation facilitator**", an intermediate function bridging the gap between research and practice, or other actors, and helping innovation projects run more smoothly and achieve results.
- should actively **promote the benefits of collaboration to foster interactive innovation** and facilitate the **dissemination of information** about innovation projects/approaches in agriculture and forestry
- form part of a wider package of support for innovation. The service provider will be expected to **work closely with others** (existing networks, organisations) to ensure a joined up and synergetic approach is take.
- are expected to work with the national/regional rural networks and other relevant organisations to help groups carrying out innovation projects in agriculture and forestry to take part in Horizon 2020 and other EU funded projects and bring the innovative knowledge from the EU level or from other countries/regions to the own country.

Becoming an innovation support service is a new "interactive" role which advisory services could take up within the AKIS⁸⁵. To this end they need to develop interactive skills and may need specific training. In this way they will acquire innovative knowledge linking CAP (innovation projects in particular and the rural networks working for innovation) with H2020 innovation (multi-actor) projects and working closely with existing infrastructure/networks.

Intergenerational renewal

Intergenerational renewal will be incentivised if the young farmer sees a attractive future based on a decent farm income. This often encompasses profound changes on the old farm. New farming methods, new products and technology, new outlets and supply chains etc. can be tested out in innovation projects where the young (and old) farmers join up with experts bringing inspiration, a neutral view and specific expertise, be it on business development, calculation methods, market or product knowledge or anything which can move them towards the necessary change to future-proof the farm for the young farmer. Innovation projects may focus on specific production methods, on more

H2020 project RUR-16-2019: "Fuelling the potential of advisors for innovation" will help the transition. E.g. The Chambers of Agriculture in Schleswig-Holstein (DE) are the regional EIP innovation support service and have already successfully brought together actors around a series of EIP OGs.

nutritious and valuable products, better connection between consumer and producer in short supply chains creating win-wins, internet sales, niche markets or certified products, promising non-food products and related bio economy value chains and so on, all promising avenues for young farmers to develop a better income on the farm.

4. SUPPORTING DIGITAL TRANSITION IN AGRICULTURE

To make sure the potential of digital technologies is fully realised, there are 3 key areas of intervention:

1) The need to support the uptake of digital technologies by farmers and rural communities.

- Both on- and off-farm employment will **require increasing levels of digital skills**. According to the 2017 Europe's Digital Progress Report⁸⁶, 44% of the EU population and 37% of the workforce had 'insufficient' digital skills in 2016. Important is to consider the skills level of advisory services, in order to make advisory services able to help orient farmers in the digital landscape.
- There is a risk for having a digital divide. Small or less educated farmers may be unable to keep up with new technologies. This could lead to a large digital divide between big and small farmers. Therefore, having independent advisory services in place with sufficient digital knowledge and access to the data is very important to help to minimise the divide.
- Independent advisors often lack digital skills. As agricultural data management and precision agriculture requires technical competence, a system of support and training for advisers across the EU would be very much desirable. The future role of farm advisory services should include facilitating innovation projects on digital technologies and supporting farmers in orienting themselves in the digital landscape.
- There is a lack of infrastructure, many rural areas lag behind in broadband availability, while 76 % of the EU population has **access to fast broadband** (>30Mbps), only 40 % of homes in rural areas have such access.

2) The development of digital solutions based on existing and new technologies.

- There is a core group of digital applications which on big farms found already wide adoption (e.g. digital application, GPS positioning, milk robots, etc.), but many **other applications are still to be developed**.
- There is a need to develop adapted solutions for all including small farms. There is still a high **need for incentivising innovation, to tailor digital technologies to farmers' needs**.

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https://ec.europa.eu/digital-single-market/en/news/europes-digital-progress-report-2017

- 3) The need to deal with the impact of digital technologies in the society and ensure that existing policies can **mitigate potential negative effects coming with digitisation**.
 - Technology is neutral; its different applications are not. Empowerment of farmers and the provision of better and increased support for impartial advisers are needed to overcome the perceived complexity of precision agriculture solutions. With **strategic targeting of policies**, **the positive effects of digitisation can be achieved, while the negatives can be mitigated**. In other words, different emphases in the CAP might direct the development and impacts of digitisation (e.g. simplification of administrative processes and certification, increasing environmental ambition, attention for advice and small farms, etc.)⁸⁷.
- In addition, in the context of ISSG on modernisation and simplification of the CAP, DG AGRI and DG CNECT launched jointly the pilot project **RUR-14-2018**: **Digital solutions and e-tools to modernise the CAP**

The project should achieve a further integration and digitization of the EU CAP's governance infrastructure, by:

- evaluating the **reduction of the socio-economic costs and barriers** for a wide range of stakeholders involved in the implementation of the CAP;
- improving the potential of IACS to be used for monitoring, analyses and control, by incentivising administrations to **share part of their national LPIS information**:
- achieving a higher level of system **interoperability** and (meta-)data **standardisation**, allowing innovative ways to use and combine agrienvironment-climate data;
- achieve user acceptance validation addressing **privacy**, **security**, **vulnerability**, **liability**, **identification of user needs**.

In the long term this pilot could contribute to a more inclusive, efficient and sustainable EU CAP. For instance, a digital farm dossier organising the data gathering and sharing through the whole supply chain can lead to a major simplification of the CAP administration, monitoring and management systems. At the same time, it could also lead to significantly reducing farmers' administrative burden towards cooperatives and private retailers asking for certification, together with the building of efficient learning networks useful for cross-policies implementations.

an effective way (e.g. about the nutrient balance of their soil). All farmers should benefit from that, not only those that can afford to pay for the services of private advisers. $\underline{ \text{http://www.europarl.europa.eu/RegData/etudes/STUD/2017/603207/EPRS} \ \underline{ \text{STU}(2017)603207} \ \underline{ \text{EN.pdf}}$

See the European Parliament Study on the digital transition (Annex 2) "Precision agriculture in

Europe: Legal, social and ethical considerations": "The roles of the farm advisers supported under Rural Development and the European Innovation Partnership (EIP) on Agricultural Production and Sustainability already established within the CAP could be fostered as these instruments allow Member States to develop and share appropriate knowledge and expertise.... A new farm information management system may need to be developed, that could facilitate instructions to operators, the certification of crop production process and cross compliance of standards. Farm advisers will be needed to analyse the data of a farm and help farmers, both large and small ones, to know more and understand the added value of managing their data in

A set of projects will be funded under the 2018-2020 H2020 Work programme to support the digital transition in agriculture (Total 102 mln €, see Annex 3)⁸⁸

- RUR-02-2018: Socio-economic impacts of digitisation of agriculture and rural areas
- RUR-13-2018: Enabling the farm advisor community to prepare farmers for the digital age
- RUR-14-2018: Digital solutions and e-tools to modernise the CAP
- DT-RUR-12-2018: ICT Innovation for agriculture Digital Innovation Hubs for Agriculture
- DT-ICT-08-2019: Agricultural digital cross-cutting integration platforms
- DT-ICT-09-2020: Digital service platforms for rural economies

Annex 6.1: Characterising MSs' AKISs

PROAKIS study: Characterising MS' AKIS



An overview (as of 2014)



Annex 6.2: Report of the European Parliament

A recent **report of the European Parliament**⁸⁹ addresses a number of issues related with the digital transition in agriculture which can be tackled through well designed research, advice and innovation actions:

"While it is clear that the farmer owns the data generated on his fields, with increasing amounts of data being created about farming and by farmers, the identification of the different forms of field level data on yield and input performance being generated by the technology has become an overriding issue that remains relatively unexplored". "Pointing out that data can be a valuable commodity in its own right, **the study warns**

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See EIP-AGRI (2017) Shaping the digital (r)evolution in agriculture Study to the European Commission.

Kritikos, M (2017) <u>Precision agriculture in Europe: Legal, social and ethical considerations</u>, Study to the European Parliament.

that its misuse could have far-reaching consequences: "Data combined with other farm data can be crunched, tweezed or bludgeoned into showing trends, predict market futures or the adoption of new crop technology. Thus, its potential misuse could lead to anti-competitive practices including price discrimination and speculations in commodity markets that may affect food security especially in Europe."

"Precision agriculture also raises questions in relation to the terms of interaction between humans and machines - particularly regarding the lack of independent advisory/consultancy services. Given the technical complexity of precision agriculture, its use and operation require the provision of advisory/consultancy services specialised in data management. Such specific services would probably not be independent, and may generate competition and fragmentation with regard to current farm advisory services providing comprehensive and impartial advice for farmers. Farm advisory services and the European Innovation Partnership enable support for the uptake of new technologies, new management approaches specific to local conditions and tailor-made solutions. If Member States programme the advisory measure, farmers can be funded for the use of expert advice and the necessary knowledge and information required for implementing farm operations. Farm advisers play a central role in recommending, delivering and giving support to farmers on new data management technologies, including precision agriculture. The increasing use of precision agriculture creates an additional challenge for established farm advisory services. Farmers should be enabled to receive personalised, targeted advice based on the information/data they own and provide to their adviser. To this aim, common data standards are needed and farm advisory services will need dedicated tools and training on agricultural data management." "Also, open-source environmental, geographic and satellite imagery data should become accessible to advisory schemes allowing the latter to develop balanced information dissemination without bias or special interests. The farm advisory services in Member States can in principle play a special role in supporting precision agriculture, providing support and advice to farmers regarding technology and precision agriculture methods as an independent body not linked with commercial companies."

Given that precision agriculture is currently almost entirely based on the private sector offering devices, products and services to the bigger farmers who can afford it, public service advice is generally very limited. In the majority of Member States, access to independent advisory services linked to public bodies, co-operatives and farmer associations, where the farmers can get additional information in order to make decisions, is limited and rather unstructured. The role of independent advisers, who can combine agricultural and environmental understanding, is critical as they can be consulted by farmers as impartial sources of knowledge and experience, rather than private company consultants whose role may for instance include product sales as a condition for their support."

"A new 'big data digital divide' as a form of economic and social inequality may emerge as farmers most often lack the tools or the context to analyse their own data and are mostly unaware of the extent to which their data get stored, traded and analysed for future use. In particular, one of the main restrictions for data sharing among institutions, farmers, advisers and researchers is due to non-standard software and data formatting solutions."

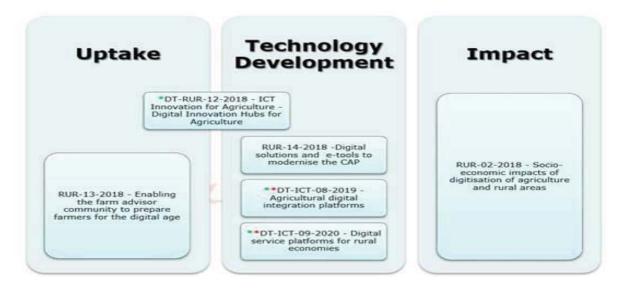
"A **new farm information management system** may need to be developed, that could facilitate instructions to operators, the certification of crop production process and cross compliance of standards. Farm advisers will be needed to analyse the data of a farm and help farmers, both large and small ones, to know more and understand the added value of managing their data in an effective way (e.g. about the nutrient balance of their soil). **All**

farmers should benefit from that, not only those that can afford to pay for the services of private advisers. Simply making data available is not enough to address these differences, and more needs to be done, potentially through providing low-cost advisory services on data use. Combining public data with the farmers' own data, possibly supported for the analysis by independent advisers, can help small and medium farms to make better use of data and improve their insight in the farming and market processes with a view to supporting competiveness and improving sustainability. The combination of public data and farmers' data can support a level playing field for an agricultural data 'ecosystem' for all farms. The development of data exchange for the precision agriculture information systems based on EU common standards may address the problem of digital division."

Therefore the report, which is advisory in nature, calls for the establishment of what it calls "an EU-wide independent, farmer-centric data repository" to ensure safe and proper access to data generated by precision farming. The geospatial data already collected in the framework of the CAP payments, and existing EU standards linked to this system, may provide a good base for developing this data repository," the report's author suggests. "Moreover, such an EU-wide repository has a huge potential for administrative simplification, both for farmers and for Member State administrations. It could also enable a set of synergies with applications related to, for example, traceability of food, certification schemes (organic production, geographical indications), research and innovation projects, etc. The not too distant future will provide even more opportunities for capturing and sharing data at an EU scale."

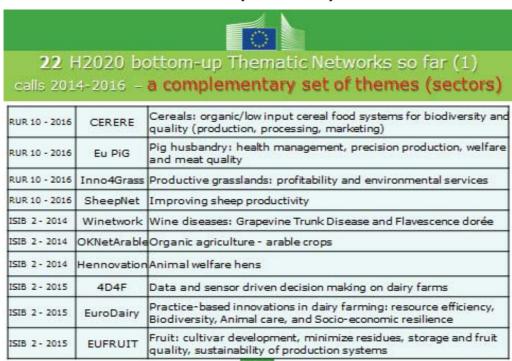
However, a concern debated in the new report is that of access of precision farming tools for smaller-scale producers. "Small farmers may be unable to keep up with new technologies because of lack of knowledge or investment capital. This could lead to a large digital divide between big and small farmers," it warns. The report suggests that one way of addressing this problem could be to incentivise Producers' Organisations (POs) to organise access to precision farming for its members, with the support of Common Market Organisation (CMO) funds. This, it suggests, may prove more accessible for small farmers than existing grants for technological innovation under Pillar Two of the CAP.

Annex 6.3: H2020 projects supporting the digital transition in agriculture (2018-2019-2020)



Annex 6.4: H2020 "Thematic network" projects compiling knowledge ready for practice (2014-2017)

Themes rather sector-oriented (2014-2016):



Themes rather cross-sector oriented (2014-2016):



SKIN	Stimulating innovation and good practices in short supply chains
AFINET	Agroforestry: sylvoarable and sylvopastural systems' design, management and profitability
Agri-Spin	Innovation brokering methods
AGRIFORVALO R	Valorization of biomass side-streams from agriculture and forest
Smart-AKIS	Smart Farming Technology: Management Information Systems, Precision Agriculture and Agriculture automation and robotics
HNV-Link	Support HNV farmlands through knowledge and innovation
FERTINNOWA	Optimize water and nutrient use efficiency: dbase on innovative technologies and practices for fertigation of horticultural crops
	AFINET Agri-Spin AGRIFORVALO R Smart-AKIS HNV-Link

Showcasing Thematic Networks on 9 March 2018



2017 Thematic networks:



2017 H2020 bottom-up Thematic Networks another complementary set of themes (cross-cutting themes)

ENABLING	Upscaling biomass production and pre- processing for bio-based value chains
INCREdible	Non Wood Forest Products: Cork, Resins and Edibles in the Mediterranean basin
NEWBIE	New Entrant netWork: Business models for Innovation, entrepreneurship and resilience
OK-Net EcoFeed	Organic Knowledge Network on Monogastric Animal Feed (pigs, broilers, hens)
PANACEA	Non-food Crops' penetration path

Short film explaining how interactive MA & thematic networks work: https://youtu.be/mVsW4--ex0M

Annex 7: Simplifying the CAP

Glossary⁹⁰

Term or acronym	Meaning or definition
AECM	Agro Environment and Climate Measures
AKIS	Agricultural Knowledge and Innovation Systems
ANC	Areas facing Natural Constraints
BAS	Baseline
CAP	Common Agricultural Policy
DP	Direct Payments
EAFRD	European Agricultural Fund for Rural Development
EAGF	European Agricultural Guarantee Fund
ESI	European Structural and Investment
GAEC	Good Agricultural and Environmental Conditions
GI	Geographical Indication
ICT	Information and Communications Technology
IPR	Intellectual Property Right
ISCO	International Standard Classification of Occupations
LPIS	Land-parcel identification system
MCA	Multi Criteria Analysis
MFF	Multiannual Financial Framework
PDO	Protected Designation of Origin
RD	Rural Development
REFIT	Regulatory Fitness and Performance
SMR	Statutory Management Requirements
SWOT	Strengths, Weaknesses, Opportunities, and Threats
VCS	Voluntary Coupled Support

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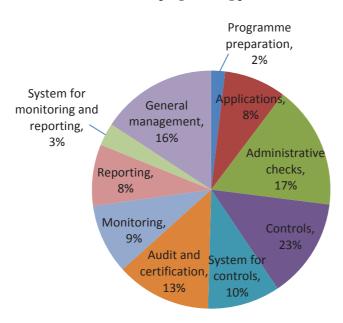
A full-fledged glossary including definitions on the CAP on: European Commission (2015) <u>Glossary of the Common Agricultural Policy</u>, (DG AGRI), website.

1. ADMINISTRATIVE BURDEN UNDER THE CAP

Simplifying the CAP has been a long standing objective. It is generally felt that the implementation of the CAP is cumbersome both for beneficiaries and for national administrations. In particular, the **complexity** of the CAP and its structure along 2 pillars with multiple tools and measures makes it difficult to have an overall coherent and comprehensive understanding of the CAP. This complexity is largely related to the historical development of the CAP and its tools. With new needs arising, the CAP has evolved, adding up new layers to the existing ones. This has resulted in a complex system of basic mandatory tools complemented by a high number of voluntary ones, with a high level of details set at EU level and a range of exceptions and derogations introduced on request of Member States. Though several reforms strived already to address administrative burden, today's CAP implementation still remains complex, costly and burdensome.

The annual **administrative costs** for national administrations are estimated at 4.8% of the total public expenditure under the CAP budget⁹¹. This includes costs for management and control of the CAP expenditure, i.e. the delivery costs, and hence excludes any one-off set-up and adjustment costs. The 2017 report on ESI Funds⁹² confirms this conclusion with 4.7% share of administrative costs under the rural development programme. Programming ESI Funds at regional level is assessed to entail proportionally higher costs with regard to the budget⁹³.

Graph 1 Estimated share of selected cost categories for national administrations under the 2014-2020 RD programming period⁹⁴



With regard to beneficiaries, costs related to rural development measures were estimated in 2011 at 4.7% of total public expenditure (including national co-financing), or 6.6% of

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²⁰¹⁶ Annual Activity Report, Directorate General for Agriculture and Rural Development, https://ec.europa.eu/info/sites/info/files/file_import/aar-agri-2016_en_2.pdf

Use of new provisions on simplification during the early implementation phase of ESIF, 2017, http://ec.europa.eu/regional policy/sources/docgener/studies/pdf/new prov simplification esif en.pdf

New assessment of ESIF administrative costs and burden, not yet published

Based on preliminary results from: *New assessment of ESIF administrative costs and burden*, not yet published. Programme preparation includes i.a. financial management, programme management, information and communication.

the EAFRD expenditure⁹⁵. This is comparable with the 2006 estimations of administrative burden for farmers linked to the CAP direct payments (3% to 9.3%, depending on Member States)⁹⁶. The 2011 study on administrative burden finds that applications represent almost 80% of the administrative burden for beneficiaries, compared to 19% for payment claims and 2% for cooperation with authorities in the frame of on-the spot controls. While information obligations are generally not significantly different in function of the amount of area or animal-related payments, the administrative burden on beneficiaries is proportionally higher for small amounts⁹⁷. While the burden varies significantly between the measures assessed, information obligations under project-related measures are the most burdensome for the individual beneficiary.

Findings from the report on implementation of the 2013 CAP reform⁹⁸ indicate overall variable administrative burden from the various direct payment schemes and rural development measures. The evaluation on viable food production⁹⁹ reports that the proliferation of measures is also driving higher administrative burden, possibly disproportionate when few beneficiaries are targeted by the measure. For direct payments, high burden is particularly reported for on-the spot controls, except crosscompliance where controls are often combined with sectorial checks. Beneficiaries also experience high burden with relation to the eligibility requirements, i.e. declaration of land cover and use of parcels. Greening 100 and VCS are recurrently set forward as more burdensome tools, although for VCS this largely depends on Member States' choices. Some additional findings identify high administrative burden perceived for the implementation of the "active farmer", the verification of payment entitlements for young farmers. For rural development measures, high burden for national administrations occur with regard to the transposition of eligibility criteria and EU requirements, and the administrative checks of applications and investment projects. Thematic sub-programmes are also reported to add up significantly to the administrative burden 101. Similarly to direct payments, eligibility criteria create high burden for beneficiaries, as well as administrative checks.

Each reform is also bringing its set of **adjustment and investment costs**. Investment costs typically occur only once, such as implementation costs, the set-up or update of IT systems and definition of new procedures. Adjustment costs refer to the temporary loss of efficiency due to the reorganisation within the administrations and are characterised by high costs in the early years after the reform, then decreasing over time. This includes costs linked to training and familiarising with the information obligations. If excessive, one-off and adjustment costs may counterbalance the administrative burden reduction achieved by the policy changes. Findings of the 2006 study on administrative burden on

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Study on administrative burden reduction associated with the implementation of certain Rural Development measures, 2011, https://ec.europa.eu/agriculture/external-studies/rd-simplification_en

Study to assess the administrative burden on farms arising from the CAP, 2006, https://ec.europa.eu/agriculture/sites/agriculture/files/external-studies/2007/burden/fulltext.pdf

Use of new provisions on simplification during the early implementation phase of ESIF, 2017, http://ec.europa.eu/regional policy/sources/docgener/studies/pdf/new prov simplification esif en.pdf

Mapping and analysis of the implementation of the CAP, 2016, https://ec.europa.eu/agriculture/external-studies/mapping-analysis-implementation-cap en

Evaluation study of the impact of the CAP measures towards the general objective "viable food production", 2017, ongoing

See also: Evaluation study of the payment for agricultural practices beneficial for the climate and environment, 2017, https://ec.europa.eu/agriculture/evaluation/market-and-income-reports/greening-of-direct-payments en

Synthesis of ex ante evaluations of rural development programmes 2014-2020, 2015, https://ec.europa.eu/agriculture/evaluation/rural-development-reports/ex-ante-rdp-synthesis-2014-2020 en

farms¹⁰² revealed that one-off costs in France for implementing the 2003 reform on decoupling payments were slightly higher than the recurring costs of that year. The 2012 LEI report on the simplification of the CAP¹⁰³ sets in perspective the potential burden reduction of the 2013 CAP reform proposals considering also investment and adjustment costs. Under the 2014-2020 rural development programme, one-off costs are estimated to represent between 15% and 20% of total administrative costs under the programming period¹⁰⁴.

The 2016 report on CAP implementation 105 also assesses that typically about 50% of administrative burden from Pillar I derives from the implementation at national level, while this represents 85% for administrative burden related to Pillar II. Actually during implementation process Member States can generate significant additional administrative burden during transposition of EU requirements into national legislation or through so called **gold-plating**. Complex, incomplete or ambiguous national legislation can lead to inefficiencies and confusion. This translates in significant time loss to interpret rules and understand requirements, and can lead to higher error rates. Gold-plating typically results in another layer of systemic complexity as such detailed or disproportionate requirements and excessive documentation requests translates in increased administrative burden for beneficiaries and national administrations also with regard to applications and controls. The study of the European Parliament on gold-plating in EAFRD¹⁰⁶ reports an excess in administrative or procurement rules related to the eligibility criteria and to crosscompliance. The burden on beneficiaries from gold-plating is estimated at 35% of the total burden¹⁰⁷. The High Level Expert Group monitoring simplification for ESI Funds concluded, based on evidence from the 2017 report on ESI Funds, that the main reason for gold-plating is the fear from national authorities that their action would be challenged later or that the auditors might disagree with the solution chosen by then ¹⁰⁸.

Finally, complexity in both EU and national legislation typically translates in higher **hassle costs**, which is the cost associated to time lost by waiting, e.g. for approval of programmes or for payments. The synthesis mid-term evaluation of the 2007-2013 rural development programmes ¹⁰⁹ reports that the administrative challenges have caused significant delays in the start of programmes in a number of countries. This is also confirmed in a special report of the European Court of Auditors ¹¹⁰, which estimated at over 11 months the average time for approval of the rural development programmes, largely related to the complexity of the programmes and the resulting delays for approval by the Commission.

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Study to assess the administrative burden on farms arising from the CAP, 2006, https://ec.europa.eu/agriculture/sites/agriculture/files/external-studies/2007/burden/fulltext.pdf

Simplification of the CAP, Assessment of the European Commission's reform proposals, 2012, https://www.wur.nl/en/Publication-details.htm?publicationId=publication-way-343232373932

Based on preliminary results: New assessment of ESIF administrative costs and burden, not yet published

Mapping and analysis of the implementation of the CAP, 2016, https://ec.europa.eu/agriculture/external-studies/mapping-analysis-implementation-cap-en

[&]quot;Gold-plating" in EAFRD, To what extent do national rules unnecessarily add to complexity and, as a result, increase the risk of errors, 2014, http://www.europarl.europa.eu/RegData/etudes/etudes/join/2014/490684/IPOL-

JOIN ET(2014)490684 EN.pdf

Use of new provisions on simplification during the early implementation phase of ESIF, 2017, http://ec.europa.eu/regional policy/sources/docgener/studies/pdf/new prov simplification esif en.pdf

Final conclusions and recommendations of the High Level Expert Group monitoring simplification for beneficiaries of ESI Funds, 2017,

http://ec.europa.eu/regional policy/sources/newsroom/pdf/simplification proposals.pdf

Synthesis of Mid-Term Evaluations of Rural Development Programmes 2007-2013, 2012, https://ec.europa.eu/agriculture/evaluation/rural-development-reports/synthesis-mte-2007-2013 en

Rural Development Programming: less complexity and more focus on results needed (Special report N° 16, 2017), https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=43179

Altogether, a wide range of inefficient procedures for management of specific CAP measures have been highlighted over the last years by the European Court of Auditors in their special reports¹¹¹. These reports provide **recommendations for a more efficient management of the CAP tools**: better targeting of funds to needs, improving selection of rural development projects with regard to their cost-effectiveness, enhancing synergies between tools, limiting risk of errors due to the complexity of the rural development framework, improving the monitoring and evaluation system (including quality and adequacy of data). The lack of appropriate tailoring and targeting of CAP tools under DP and RD was further assessed in the 2016 report on CAP implementation¹¹²: the analysis looked at whether a suitable enabling environment was implemented. It concluded that Member States choices did not systematically set the necessary preconditions for the CAP to be effective especially with regard to sustainable growth.

The recent Court of Auditors' report addressing design and process of the 2014-2020 programming framework under Rural Development¹¹³, observed that the new results-oriented approach enshrined in the strategic framework had a limited impact due to shortcomings in the implementation. For example, the programmes' contributions to the Europe 2020 Strategy were difficult to assess. The setting-up of performance indicators unveiled limitations. The report recommends improving the consistency between individual programmes, simplifying programme requirements, more meaningful measuring and annual reporting on the implementation, and legal clarity for the next programming period in good time. This report also considers that the principles of strategic programming and result-orientation are valuable and deserve further refinement also in view of a simpler implementation in practice.

Following the submissions for simplification received, the REFIT Platform¹¹⁴ expressed the need to reduce the regulatory burden of the CAP and improve its value for money, while ensuring the achievement of the objectives and increase its integration with other policy areas. The REFIT Platform opinions concern especially the efficiency and effectiveness of the policy. The platform pointed at overlaps between both CAP pillars due to new and increased greening of Pillar I, resulting in a risk of additional compensation and administrative burden. The platform proposed to revise the cross-compliance rules in order to create greater transparency and proportionality, particularly for the penalty system, and to assess the link between cross-compliance rules and agroenvironmental commitments. The platform mentioned the inconsistency of certain ESI Funds and EAFRD rules and proposed the harmonisation and standardisation of ESI Funds. An opinion on control and audit of the CAP suggested establishing more targeted, risk-based and proportionate control regimes.

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The EU priority of promoting knowledge-based rural economy has been affected by poor management of knowledge (Special report n°12, 2015), The cost-effectiveness of EU Rural Development support for non-productive investments in Agriculture (Special report n°20, 2015), EU support for rural infrastructure: potential to achieve significantly greater value for money (Special report N° 25, 2015), Is the Commission's system for performance measurement in relation to farmers' incomes well designed and based on sound data? (Special report N°1, 2016), Making cross-compliance more effective and achieving simplification remains challenging, (Special report N° 26, 2016), The certification bodies' new role on CAP expenditure: a positive step towards a single audit model but with significant weaknesses to be addressed (Special report N°7, 2017), EU support to young farmers should be better targeted to foster effective generational renewal (Special report N° 10, 2017), Greening: a more complex income support scheme, not yet environmentally effective (Special report n°21, 2017).

Mapping and analysis of the implementation of the CAP, 2016, https://ec.europa.eu/agriculture/external-studies/mapping-analysis-implementation-cap en

Rural Development Programming: less complexity and more focus on results needed (Special report N° 16, 2017), https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=43179

See Annex 2 on Stakeholder consultation.

Responses to the 2017 open public consultation on modernising and simplifying the CAP¹¹⁵ confirmed the general perception of excess of bureaucracy: the greening scheme, aid applications and controls are identified as the most burdensome and complex elements. The call for a reduction of administrative burden is a generalised demand in the papers submitted by farmers and national administrations. There is a clear agreement among stakeholders on the positive effects of reducing the overlaps between Rural Development and other CAP measures (69%), the better use of databases and technologies (remote sensing, smart phones) to reduce farms inspections (62%) as well as the use of a more extensive use of e-government tools (63%).

Some issues have also been raised with regard to the Common Market Organisation. Producers and Member States have asked for the system of geographical indications (GIs) to be more efficient. Under current procedures detailed analysis made by Member States is to a large extent duplicated by the Commission. The administrative burden is causing delays in registration of GIs which reduces the system's credibility and raises questions about the management efficiency. Lengthy procedures and delays in the registration process have been the source of regular complaints by the sector and the Member States¹¹⁶.

2. CAP SIMPLIFICATION AND MODERNISATION: CHANGES CONSIDERED FOR POST-2020

For the next MFF, simplifying the CAP has been set as a main cross-cutting objective. The corresponding specific objective is to **streamline the CAP design and delivery on EU objectives of relevance for the CAP including simplification**. The three operational objectives under simplification to which each of the options under the impact assessment can contribute are:

- Shift from compliance to performance
- Reduce the administrative burden
- Enhance the proportionality of administrative costs

2.1. The new delivery model

To address the CAP objectives, the CAP post-2020 modernisation and simplification will introduce a new delivery model based on **increased subsidiarity** in the implementation and **greater focus on performance**. Under this new system, the Commission aims for enhanced coherence among the different instruments of the CAP. This is translated in the streamlining of direct payments and rural development as well as the sectorial strategies under the common market organisation in a unique and integrated strategic planning approach. At the same time, more flexibility is given to Member States in the design of the specific measures to better target national and regional needs, while justifying for a strategic approach and contribution to performance along EU objectives.

The definition of possible common rules applicable to all ESI Funds under a common rule book is currently being discussed between relevant services of the Commission in order to maximise coherence while keeping the specificities and needs of each policy. This document is prepared under the assumption that the outcome of these discussions

See Annex 2 on Stakeholder consultation.

The average time spent from the submission of the application to the Commission until the registration of a geographical indication has been 24-36 months for a wine, and 12-24 months for an agricultural product and foodstuff.

will eventually allow for sufficient subsidiarity and focus on results, and the new CAP delivery model will fit well with the overall policy design of shared management funds.

From the perspective of simplification, the new delivery model has the potential to address some of the key issues identified above, such as the simplification of the rural development programming, fewer burdens from implementation of EU requirements through better adaptation to local situations and better coordination of the actions of the two pillars. It can also bring benefits in terms of policy coherence with the objectives of EU environmental legislation and the environmental planning tools.

The new delivery model will hence bring tangible changes to the current working methods of national and EU administrations: national competent authorities will have an increased responsibility for setting up a strategic approach for CAP delivery, under approval of the Commission. This will *per se* lead to certain administrative burden when establishing their CAP plan and justifying the choices made. However, national plans more specifically addressing national and regional needs can also positively impact the acceptability of the CAP and in consequence positively impact the perception of administrative costs. The role of the Commission will shift from setting up detailed rules and controlling compliance towards assessing national CAP design, delivery and monitoring on the basis of their performance.

The flexibility given to Member States leaves uncertainty as to the choices which will be made by Member States to implement CAP measures on their territory. It is therefore difficult to assess these impacts on administrative burden of the new delivery model at Member States level. While the streamlining of the CAP and the shift towards performance provide for **significant potential for administrative burden reduction**, the tools which Member States will take up in their national strategies as well as the national requirements and criteria will be key. There is indeed a risk that Member States continue focusing on compliance by setting complex, additional or even unnecessary national requirements. Nevertheless, fewer EU requirements will limit the fear of noncompliance with them by Member States, reducing therefore the incentives for gold-plating and for establishing numerous national rules. Likewise, the uptake of new technologies by Member States, such as digitisation and use of satellites, will have an important impact on administrative burden. The generalisation of the geo-spatial aid application and of single pre-filled application forms, mandatory from 2018 onwards, is already expected to simplify procedures.

With regard to beneficiaries, benefits in terms of administrative burden will derive from the national CAP Plan and the way national administrations translate it at beneficiary's level. A simpler, more coherent and strategic approach, if taken up by Member States, should result in reduced burden for applications and controls. Moreover, targeting the CAP to national and regional needs will enhance the acceptability of the CAP by beneficiaries, with a subsequent impact on perceived administrative burden.

2.2. Changes under the Common Market Organisation

2.2.1. Wine provisions

Two main changes are considered under the wine provisions:

• **Planting authorisations**: currently, new authorisations which may be granted under the system of planting authorisations (2016-2030) are limited by 1% of the area planted in the preceding year. Member States will have the flexibility to choose a fixed reference year instead (i.e. 2015, the last year of the old

system). The main purpose is to maintain the production potential in those Member States where the vineyard area is actually declining, due to abandoned vineyards not being replanted.

• **Oenological practices and vine varieties**: the categories of *low alcohol* and *alcohol-free* wine will be included in the wine definition and the use of hybrids for the production of Protected Designations of Origin (PDOs) and the possibility to integrate non Vitis vinifera varieties (e.g. Vitis Labrusca) in their national list of wine grape varieties will be allowed. The main purpose is to a) respond to consumers' growing demand and match international competition on low alcohol wines and b) achieve a positive impact on environment ensuring better adaptability of vineyards to climate change due to the characteristics of these grape varieties.

2.2.2. Geographical indications

The Communication on the Future of Food and Farming¹¹⁷ called for geographical indications (GIs) to be made more attractive to farmers and consumers, and render the system easier to manage. Both Member States and the producers consider that the rules on managing GIs, spread over four basic Acts¹¹⁸ are far from being easy to manage and delays are too long. They are looking for a **simpler GI system**, in line with international standards for GIs, and faster registration of geographical indications and efficient approval of amendments to product specifications. This will allow producers greater flexibility and response time in competing on the EU and global markets. Protection of EU GIs in bilateral trade agreements is a major EU objective that is not fully exploited if the registration system is too burdensome and opaque.

GIs can be made considerably easier to manage by separating intellectual property rules from other requirements laid down in the product specification like compliance with marketing standards and labelling rules. This would enable more efficient registration of a GI as an intellectual property right (IPR), aligning with international practice for GIs, while allowing the non-IPR issues to be addressed more effectively, whether through separate legislation (as for derogations from winemaking rules) or addressing possible market infringements through the appropriate channels with the Member State concerned. In addition, limiting the scrutiny of applications at EU level to checking them against manifest errors as well as habilitating Member States to decide on amendments that do not have impacts at EU level, would streamline approvals, shorten timelines, and prevent the current wasted resources arising from the fact that Member States are already examining the applications to ensure that the rules are respected therefore a second layer of scrutiny at the EU level should become leaner to respect the twin principles of subsidiarity and proportionality. This division of competence would allow the

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COM(2017) 713 final, 29.11.2017.

⁽¹⁾ Regulation (EU) 1151/2012 of the European Parliament and of the Council of 21 November 2012 on quality schemes for agricultural products and foodstuffs (OJ L 343, 14.12.2012, p. 1).

⁽²⁾ Regulation (EU) No 1308/2013 of the European Parliament and of the Council of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007 (OJ L 347, 20.12.2013, p. 671).

⁽³⁾ Regulation (EC) No 110/2008 of the European Parliament and of the Council of 15 January 2008 on the definition, description, presentation, labelling and the protection of geographical indications of spirit drinks and repealing Council Regulation (EEC) No 1576/89 (OJ L 39, 13.2.2008, p. 16).

⁽⁴⁾ Regulation (EU) No 251/2014 of the European Parliament and of the Council of 20.3.2014 on the definition, description, presentation, labelling and the protection of geographical indications of aromatized wine products, and repealing Council Regulation (EEC) No 1601/91. (OJ L 84, 20.3.2014, p. 14).

Commission to focus resources on the EU value added, which stems from ensuring that EU-level impacts of protecting a GI are examined while the Member States are best placed to examine national impacts.

Clarification of the definition of 'Protected Designation of Origin' for wines will enable producer groups to use new varietals needed in response to climate change, and allow proper justifications of applications in line with viticulture and oenological realities, thus reducing the need for revising of an application, and faster registration of a Protected Designation of Origin.

Simplification of some specific procedures, for example the opposition procedure, is envisaged to reduce bureaucracy and misunderstandings, and make the process more effective. These essentially administrative 'tweaks' to the procedures and rules that will further shorten the overall time needed from the submission of the application to a GI registration.

The simplification proposed for wine GIs will exacerbate divergences from the rules for agricultural products and foodstuffs, laid down in a second basic Act. If the above mentioned simplification effort applied also to agricultural products and foodstuffs, leaner procedures allowing for faster registration would bring benefits to producers of GIs in this sector, too.

Finally as regards simplification, a third basic Act applies to aromatised wines. Currently there are only five geographical indications for aromatised wines registered (out of 3350 geographical indications in total). Having specific implementing and delegated legislation is considered a substantial waste of resources. Applying the GI rules for agricultural products and foodstuffs¹¹⁹ also to aromatised wines would be a major simplification and reduction of administrative burden without impacting stakeholders' existing rights. A fourth basic Act applies to spirit drinks. With a view to align it to the Lisbon Treaty and achieve simplification at the same time, the Commission adopted a proposal in December 2016¹²⁰.

In the view of the recent trends in the sales of goods, the sector is asking for more efficient controls of geographical indications by customs, in transit and their protection as intellectual property on the internet. One critical innovation needed is to make available GI metadata and internet links to official right-holders so that Customs authorities can take action. This is in train and does not need legislative adjustment. However, extending GI protection to goods in transit would align with anti-counterfeiting strategies for other forms of IPR as well as requiring Member States to better collaborate and exchange information in support of existing IP enforcement initiatives on-line that often by-pass GIs. These elements would reduce counterfeiting and make GIs more attractive to farmers and consumers.

All in all, a simplified system could be more understandable to consumers, become easier to promote and lead to higher sales and thus increased farm incomes as the concept of geographical indications becomes better known. A simplified EU system could reduce the costs for the public purse of managing the system and the enforcement thereof.

COM(2016) 750 final, 1.12.2016.

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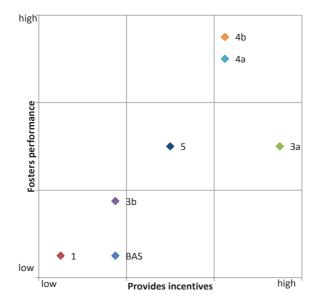
Regulation (EU) 1151/2012: These rules already are already applicable to some alcoholic drinks like cider and beer, and the grapevine product of vinegar. Integration with Wine GIs was also considered but excluded as Aromatised Wines are not covered by the CMO and the wine GI definitions and criteria are significantly divergent from that for Aromatised Wines while there is already full alignment of definitions with the Agricultural Product and Foodstuff Regulation.

3. A CAP ORIENTED TOWARDS PERFORMANCE

The new CAP delivery model is designed to allow Member States to orient their national strategy towards performance in function of identified national needs. However the choice in the design and delivery of national plans should not solely focus on the effectiveness of interventions, but should consider whether these are oriented towards performance. This means that account should be taken of the capacity of the various tools to allow for results to materialise in relation to their specific objectives, with regard to whether they foster results and/or provide incentives to beneficiaries to perform.

The performance-orientation of the impact assessment options was assessed in function of their design. Under all options the CAP post-2020 modernisation and simplification brings a shift from compliance to performance, with CAP plans taking national needs into consideration for the design of the national strategy, reduced control of compliance by the Commission, and monitoring and reporting on output, result and impact indicators (with a possible update of the national plan).

Options 4a and 4b ensure high result-orientation linked to the certainty of results under conditionality while the eco-scheme and the incentives it provides to deliver on results benefit result-orientation under option 3a. Option 5 scores averagely as the prescriptive approach, through top-ups defined at EU-level, inhibits the focus of the design on national needs, which in turn may prevent the creation of results where needed most. Entitlements under option 3b similarly prevent the tools to focus on needs.



Graph 2 Performance-orientation of options

4. SCOPE FOR REDUCING ADMINISTRATIVE BURDEN

4.1. Simplification under the new delivery model

4.1.1. CAP strategic plans

The implementation information to be submitted by Member States under the current CAP is heavy and differs significantly in terms of content, format and procedures. It requires Member States to send a number of the notifications of implementation of various schemes including GAECs, to prepare a rural development programme and to prepare sectorial strategies for fruit and vegetables, wine and apiculture. Further sectorial

programmes also exist in a limited number of Member States for hops and olive oil. While management of direct payments is dealt with at national level (except for Belgium, where Flanders and Wallonia administer these separately), rural development programmes are set up in 7 Member States by regional bodies (Belgium, Germany, Spain, Finland, France, Italy, Portugal¹²¹). In some of these Member States, a national plan is drafted in addition to the regional ones, e.g. Italy.

Altogether, this information represents thousands of pages to be submitted by national administrations. Rural development programmes are the most burdensome, with programming documents averaging almost 800 pages. The sum of notifications' forms under direct payment represents over 500 pages, of which about 10% to be submitted on an annual basis. For sectorial programmes, national strategies average between 40 and 70 pages. Although the preparation of the rural development programmes represents a significant burden for competent authorities in the first year it represents however a small fraction of costs for national administrations, at around 2% of total costs over the 7-years programming period¹²².

Under the options assessed in the impact assessment, all of these obligations are replaced by a **new comprehensive CAP strategic plan**. The CAP strategic plan should fit well with the overall policy design of shared management funds. It will be implemented by the appropriate governance structures and will encompass an ex-ante assessment, a national/ regional strategy, description of interventions, financial planning and a performance framework for monitoring and evaluation. While similar to current requirements under the rural development programmes, the scope for planning will be much broader, also including Pillar I payments and sectorial programmes. The CAP strategic plan is however designed to be less burdensome than the current rural development programme as the level of detail will be much less and it ensures a structured and strategic planning within a **single procedure**.

The CAP planning will need to be done at national level (while respecting each internal Constitutional framework, e.g. Belgium). However it can be expected that Member States regionalising funds under the EAFRD continue preparing their plan, at least partly, at regional level while coordinating and accompanying these under a national framework. For these competent authorities, the planning approach may result in increased costs for coordination mainly linked to the wider scope of the planning.

The costs for carrying out the analysis of national needs (SWOT analysis) are not expected to vary significantly in function of the design of the plan. However, the complexity of the design will matter: the more interventions planned, the more eligibility criteria and/or requirements set and the more complex the tools chosen, the more time will be needed to set up the national CAP plan and to explain the choices made in Member State's CAP plans.

The system of approval is expected to be simpler than the current approval of rural development programmes, though streamlined for the whole CAP and with a different focus: while current RD programmes are assessed with regard to eligibility rules, the justifications for the design will be key for approval of the CAP plans.

Up to 4% if including some related one-off general management tasks.

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The UK also manages RD programmes at regional level, but is excluded from the assessment.

4.1.2. Management of applications and payment claims

Applications represent the bulk of costs for beneficiaries and involve significant costs for handling of applications by the paying agencies and managing authorities. This entails in consequence a large potential for administrative cost reduction.

Under the current CAP, beneficiaries largely benefit from a single application form for area and animal-related payments and are more and more able of using geo-spatial aid applications for defining areas. The 2017 study on ESI Funds¹²³ also reports gains under the 2013 reform from simpler rules for revenue-generating projects (up to 2.6% for beneficiaries) and for extending simplified cost options to grants and repayable assistance (up to 1.6% for national administrations, up to 7.5% for beneficiaries). Further, the 2012 eGovernance study¹²⁴ estimated an expected administrative burden reduction of 11% by implementing eGovernance systems to applications and payment claims under rural development.

While little changes are expected in the procedures for applications and payment claims, gains can however be reached for both beneficiaries and national administrations. While the compliance by beneficiaries with eligibility criteria is no longer subject to the assurance mechanism and conformity audits, there is **scope for administrations to require less evidence from applicants** with their applications submission and payment claims. The 2017 study on ESI Funds ¹²⁵ assesses that on average an application form for payments under the ESI Funds is over 30 pages, with almost 200 answer fields to be completed, 5 signatures to be provided by the applicant and 6 supporting documents to be attached. Similarly, the requests for payment claims are on average 6 pages with almost 100 answer fields, 3 signatures required and 7 supporting documents. For national administrations, 3 approval steps are needed from submission of payment claims before the payment is made.

The disappearance of payment entitlements under options 3a, 4 and 5 are also expected to translate in an additional reduction of administrative burden.

4.1.3. Audits by the Commission and controls

The current audit system by the Commission will significantly change under the new delivery model. The task of EU auditors will **shift to annual performance clearance**, reliability of data to the Commission in the framework of the annual performance reports, and governance structures, including basic EU requirements. Therefore, the significant reduction in EU requirements is estimated to have a substantial impact on the scope and time needed to cooperate with EC audits.

Expectations are similar with regard to administrative and on-the-spot controls performed by national administrations: the shift towards control of performance, the expected reductions of requirements at the level of beneficiary and the flexibility in setting up management and control systems in the Member States, have the potential to **limit the administrative checks on compliance and lower the time spent on farms for on-the-spot controls**. Controls under conditionality replace current cross-compliance principles,

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Use of new provisions on simplification during the early implementation phase of ESIF, 2017, http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/new_prov_simplification_esif_en.pdf

eGovernance study at EU / Member State level, 2012, https://ec.europa.eu/agriculture/external-studies/e-governance_nl

New assessment of ESIF administrative costs and burden, not yet published

though complemented with greening practices. Controls at farm level by the Commission should no longer take place.

4.1.4. Monitoring and reporting to the Commission

The current reporting system consists in the preparation of the annual accounts of the paying agency (for financial clearance), the management declaration, the reporting on control data and control statistics, the annual implementation reports of rural development programmes and the evaluations of these programmes.

The new delivery model requires annual performance reporting on the CAP strategic plan, at Member State level, with regard to performance indicators and expenditure. The annual performance clearance, performed by the Commission, will assess the progress on the achievements towards the objectives of the CAP plan. A multi-annual assessment of performance, based on the annual performance reports, will report on result indicators and distance to targets.

Regarding monitoring, under the three options assessed, the shift from compliance to performance is resulting in a changed set of indicators to be monitored and reported upon. However, for requirements stemming from sectorial legislation enshrined in conditionality, there is no change in the indicators. The **common new set of indicators**, while significantly reduced in terms of output indicators, nevertheless encompasses new indicators. The latter are assessed to be more time-consuming to collect and monitor. However, where the data is readily available, it is not expected to increase time spent for monitoring.

Some additional costs can be expected from the increased need to coordinate monitoring at regional level and collect/combine regional data (where applicable).

4.2. Strategic design and delivery for administrative burden reduction

Considering the flexibility given to Member States, the national choices made in the design and delivery of the CAP will have a major impact on the resulting administrative burden. Variety of tools, more complex procedures, and detailed requirements will all come at higher administrative costs for national administrations and beneficiaries. These costs will hence need to be counterbalanced with their expected benefits.

Modernisation can here play an important role for further simplification without compromising on performance. The increased use of new technologies can significantly contribute to fewer burdens through the use of remote sensing imagery, sentinels/satellites images, smart e-solutions, geo-spatial aid applications, ortho-imagery, and drones. A separate annex covers the cross-cutting objective of modernising the CAP.

Beside recurring administrative costs, changes to the current CAP tools can involve substantial adjustment costs for national administrations and beneficiaries (training, information, support for applications, increased error rates) as well as one-off investment costs for adapting current systems (IT systems, updated procedures and forms, new technologies).

The table below presents some considerations to take into account in terms of administrative burden.

	Tool	Link with administrative burden
Planning	CAP plans	The broader scope of plans is offset by the lower level of details required compared to current rural development programmes and current notification requirements for direct payments. Complexity of the strategy and multiplication of requirements will translate in additional burden.
	Coordination at national level	Double layer of national and regional strategies for rural development is revealed to be cumbersome as changes at one level needs to be reflected at other.
Direct payments (EAGF)	Decoupled support — targeted in function of farm size and territories and years from setting-up (according to needs), in line with EU objectives	Easier to combine different schemes under the new delivery model. Following elements may increase the complexity: • mandatory capping per farm: simplified methods for taking account of salaried labour and family labour cost can reduce administrative burden, • no substantial difference in terms of administrative burden if redistribution through a differentiated basic layer or top-ups to a basic layer, • small farmers: simplified application procedures for small farmers reduce the burden for beneficiaries, • payment for young/new farmers: reported to be less burdensome for beneficiaries • definition genuine farmer will impact the number of beneficiaries and corresponding administrative burden: higher minimum requirements in terms of hectares or share in income will translate in less beneficiaries and corresponding burden reduction – requirements in term of hectares are much simpler to implement but the risk of excluding too many farmers is higher, • request for transition/convergence period and use of historic references (entitlements) will constitute additional burden. Administrative burden will also vary significantly in function of the level of detail with regard to national requirements and
	Optional voluntary coupled support	eligibility conditions. VCS scheme is reported to be burdensome for beneficiaries and administrations (design of the schemes, approval of applications and justification to the Commission) ¹²⁷ , although this depends to a large extent to Member States' choices. Hence, some limitation (in terms of sectors and time) might be considered to decrease administrative burden.
	Conditionality	Cross-compliance principles complemented with greening practices allow for better integration with other instruments. The list of SMRs and GAECs is an exhaustive list serving as baseline for all area and animal-related CAP payments. For SMRs, national requirements are set on the basis of an EU list as implemented by Member States. For GAECs, requirements apply as defined at national level taking account of local and climatic conditions. Further requirements may be set if linked to EU objectives to serve as baseline if Member States want to be more ambitious. Additional requirements can be source of complexity and administrative burden depending on Member State's application.
	Optional voluntary eco- schemes	Eco-schemes are expected to be more flexible and better tailored than the current greening. They cover practices additional to conditionality, but different from AECM. They can be used as stand-alone or entry-level scheme towards Pillar

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Mapping and analysis of the implementation of the CAP, 2016, https://ec.europa.eu/agriculture/external-studies/mapping-analysis-implementation-cap en

Mapping and analysis of the implementation of the CAP, 2016, https://ec.europa.eu/agriculture/external-studies/mapping-analysis-implementation-cap en

	Tool	Link with administrative burden	
Rural development measures (EAFRD)	Area-based environmental payments (Agro- environmental measures (AECM) and forestry)	II interventions, and work as an incentive payment linked to decoupled direct payment, or as a compensation payment calculated on extra costs or loss of income. Budget linked to eco-schemes is difficult to plan because the scheme is voluntary. There is thus a risk of underspending – it could therefore also be planned under EAFRD. It also requires a clear demarcation with conditionality and AECM to avoid overlaps, including in terms of administrative burden. Reduced number of measures and sub-measures as well as simplified requirement should facilitate planning and management of the tool. Some administrative burden is linked to AECM as it requires information on income foregone and cost incurred for premium calculation. The multi-annual nature of the measure facilitates budget planning and potential shift of budget towards/from other measures in function of the uptake by beneficiaries.	
	Areas under natural constraints	Current delimitation of ANC is kept.	
	Project-based measures (investments, financial instruments, business development support, risk management, cooperation, advice)	Reduced number of measures and sub-measures as well as simplified requirements should facilitate planning and management of the tool. Delivery model allows better targeting of national and regional needs. Project-based measures require calls for projects which involve higher administrative burden for national administrations and beneficiaries. Some additional elements to consider in terms of administrative burden: • financial instruments will be included in the CAP plan, • installation grants require a business plan to be drawn up, • ambition with regard to Agricultural Knowledge and Innovation Systems (AKIS) implies higher administrative burden, but it could be integrated with Farm Advisory Services. • Possible use of simplified cost options can reduce administrative burden on both national administrations and	
Applications	Eligibility criteria and evidence requested for applications	beneficiaries. The shift towards performance can be translated into a lower number of eligibility criteria or requirements and/or into less evidence requested at time of application, translating into fewer burdens for beneficiaries for submitting applications and for national administrations to perform administrative checks. The increased use of single, smart (e.g. linked to other data sources, including from other administrative entities) and prefilled (e.g. based on previous year information) forms will also reduce the burden for beneficiaries. This may involve some limited additional burden for national administrations to set up systems and perform preliminary checks of pre-filled forms. The wider use of geo-spatial aid applications, possibly combined to sentinels images, can further decrease burden for beneficiaries. Likewise, digitisation e.g. through the development of apps can positively impact time for applications.	
	Payment claims	Member States may choose to further use simplified cost options and so limit the evidence requested.	
Controls	Administrative checks	In addition to the above possible gains under applications and payment claims, the use of remote sensing and of satellite or sentinels images can facilitate the administrative checks.	
	On-the-spot controls	While compliance by beneficiaries with eligibility rules is no longer subject to conformity audits by the EC and amounts recovered can be kept and reused, the setting by national	

	Tool	Link with administrative burden	
		administrations of own acceptable level of risk can potentially translate in a reduced number of controls. Increased use of technology, e.g. satellites/sentinels images uploaded in LPIS, for control of performance (instead of compliance) can also reduce the number and extent of on-the-spot controls.	
Monitoring and reporting	Indicators and targets	The reduced number of mandatory EU indicators for monitoring and reporting is expected to reduce the monitoring and reporting costs. The number of indicators are still dependent on the complexity of the design (variety of tools implemented). The thorough identification at planning stage of data needs permits to foresee data collection through smart application forms and can limit additional effort from beneficiaries. The automation and increased use of data from existing sources should also positively contribute to reduced costs for monitoring. The use of sentinel images for monitoring can also reduce monitoring costs.	
	Coordination at national level	Aggregation of data at national level can remain an important issue, requiring thorough coordination of the task if performed at regional level. The linkage of reporting to performance clearance and the financial incentive on performance can represent an additional pressure for sound aggregation of data.	
	Annual performance reports	Streamlined single reporting obligations on the whole CAP plan will reduce the administrative burden compared to the multiple reporting channels. Automatic generation of data can facilitate the reporting but requires possible updates of the systems.	

4.3. Assessing administrative burden reduction

4.3.1. Methodological approach

According to the Better Regulation rules, the Commission defines administrative costs as the costs incurred by enterprises, the voluntary sector, public authorities and citizens in meeting legal obligations to provide information, either to public authorities or to private parties. The Commission has developed a methodology to assess and quantify administrative costs: the EU Standard Cost Model¹²⁸. This model is the standard model to be used when assessing administrative costs in the context of new legislation.

The EU Standard Cost Model assesses the administrative costs on the basis of the average cost of the required administrative activity multiplied by the total number of activities performed per year. The average cost per activity is estimated by multiplying a tariff and the time required per action. The quantity is calculated as the frequency of required actions multiplied by the number of entities concerned. The total administrative costs are estimates on the number of full time employment working at national level on the CAP. Considering that the administrative burden and enforcement costs are difficult to differentiate for a comprehensive policy as the CAP, the present assessment does not further detail administrative costs into administrative burden and the business-as-usual. For beneficiaries also, 100% of administrative costs for information obligations under the CAP are considered administrative burden, while the costs for the day-to-day farm management and accountancy is not accounted for in the estimated costs. The 2010

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Better Regulation toolbox, tool 60, https://ec.europa.eu/info/sites/info/files/file_import/better-regulation-toolbox-60 en 0.pdf

project on measurement of administrative burden for businesses¹²⁹ estimates the share of business-as-usual in the administrative costs to be less than 5%.

The options are those considered in the impact assessment. The administrative costs of the baseline (BAS), or option 1, are not differentiated in function of the budget reduction, considering that the linear budget reduction will not impact administrative tasks. Only the impact on administrative costs of changes under the options 3, 4 and 5 are estimated and are presented in terms of estimated percentage reduction in costs for the target group.

The number of entities for national administrations is function of the level at which each action is performed (national or regional) and of the entity performing the task (competent authority, managing authority, coordinating body, paying agency or certification body). At present, and excluding the UK, there are 28 national bodies (with Flanders and Wallonia separated), 114 regional bodies, 6 coordinating bodies, 76 paying agencies and 56 certification bodies. With regard to beneficiaries, there are at present about 7 million farmers receiving payments under at least one of the direct payment schemes (with about 15 million payments), while there are over 4 million claims under rural development measures, of which 300 000 project-based.

Tariffs used are EU hourly wage averages¹³⁰. For national administrations, the tariff for clerks is used for tasks such as administrative and on-the-spot checks (ISCO 4, € 18/hour), while the tariff for legislators is used for planning and reporting (ISCO 1, € 41.61/hour). For beneficiaries, assuming that the person submitting and managing applications and claims for payments, and cooperating for controls, is the person managing the farm, the category of managers is chosen (ISCO 2, € 41.61).

Considering the uncertainties surrounding the decisions of Member States under the CAP strategic plan, a **simplified Standard Cost Model approach** is taken, by associating reasonable reductions in information obligations under each option in comparison to a baseline built on existing studies¹³¹. The aim of the assessment is to illustrate potential administrative burden reduction for direct payments and rural development brought by the CAP post-2020 modernisation and simplification. It is assumed that Member States take up in the design and delivery of the CAP a part of the actions needed to reach these reductions, such as favouring simpler schemes, reducing control of compliance, etc.

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EU Project on Baseline Measurement and Reduction of Administrative Costs, 2010, http://ec.europa.eu/smart-

 $[\]frac{regulation/refit/admin\ burden/docs/enterprise/documents/files/abs\ development\ reduction\ recommendation}{s\ en.pdf}$

Average wages include the 2014 mean hourly earnings by main economic activity and occupation (according to the International Standard Classification of Occupations (ISCO)) + adjustment to 2014 Prices + Non wage Labour Costs + 25% Overhead. The EU average factors in the relative number of hours worked in each MS.

This includes one-off and recurring costs.

The following assumptions are taken for national administrations:

Assumptions for national administrations		
Planning	Simpler and less detailed planning, disappearance of notifications and integration of sectorial programmes. Differences between options determined as follows: lowest variety and complexity in options 3a and 4b, somewhat higher complexity in option 4a, highest complexity in options 3b and 5.	
Applications and payment claims	Reduced evidence to be verified under administrative checks and payment claims. Under options 3 and 4, the minimum requirements (minimum hectares under 3a and 3b, minimum share in income under 4a and 4b) reduces the number of eligible beneficiaries. Under option 5, the inclusion of ANC payments under direct payments shifts part of the burden from rural development towards direct payments.	
Audits and controls	Less requirements and shift towards control of performance reduces the scope of the controls. The number of controls in reduced in options 3 and 4 proportionally to the reduction in beneficiaries. Significant reduction in time for audits due to the reduced EU requirements. The time for performance clearance is function of the CAP plan (and report) – differences between options are assimilated to reductions under planning.	
Monitoring and reporting	Significant reduction in the number of indicators: differences between options are assimilated to reductions under planning. Increased costs for ensuring quality of data (incentivised by the performance clearance) and increased coordination for aggregating data. Streamlined reporting with variations in function of complexity of option.	

The following assumptions are taken for beneficiaries:

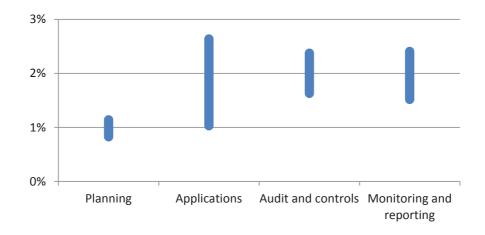
Assumptions for beneficiaries		
Applications	Fewer requirements (eligibility criteria) translate in reduced evidence to be submitted and reduced quantity of information to be filled in the application form. Variations	
	between options are function of complexity of options.	
Controls	Less requirements and shift towards control of performance reduces the scope of the controls. Higher reduction under option 4b (low complexity of option + low environmental requirements).	

4.3.2. Estimated administrative burden reduction

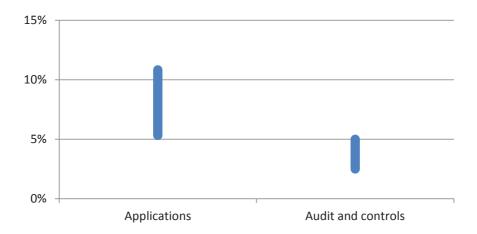
Given the uncertainty linked to the administrative burden achieved, figures are presented as ranges. The results estimate the annual burden reduction. It should be noted however that a number of actions only occur in the first years of the plan (investments, planning, setting-up and adapting of systems) and that the burden may reduce over time as they become more familiar or because it takes some time to shift to new practices.

Graph 3 and 4 show the overall estimated potential reduction in administrative burden for the categories of information obligations of respectively national administrations and beneficiaries.

Graph 3 Potential for administrative burden reduction for national administrations per cost category



Graph 4 Potential for administrative burden reduction for beneficiaries per cost category



4.3.3. Estimated administrative burden reduction under the impact assessment options

The potential for administrative burden reduction is the highest under option 4b. It combines a low number of payment schemes (basic payment and VCS limited to extensive livestock) and conditionality limited to basic environmental requirements. For national administrations, some additional time gains are also realised by the reduction in beneficiaries with the minimum requirement to be granted the payment at 2% of the average income.

The low complexity in design of option 3a, with a simple flat rate, though supplemented with an eco-scheme with additional environmental requirements, results in a fairly high reduction in administrative costs. Additional reduction in administrative burden for national administrations is reached through the important decrease in eligible beneficiaries with the minimum requirement of 2 hectares.

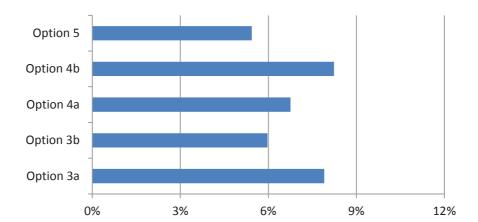
Option 4a, while similar in design to option 4b, includes a stricter set of environmental requirements, resulting in a more limited potential reduction in administrative costs.

The conservative approach of option 3b implies a high complexity in design, and thus less potential reduction of administrative burden, with the use of entitlements, basic and redistributive payments which are capped per farm and per hectare, and high VCS. Some

additional gains result nevertheless from the reduction in beneficiaries, similarly to option 3a.

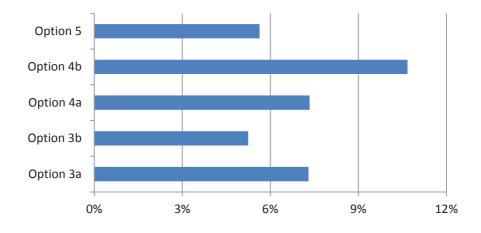
Option 5 brings the lowest potential reduction in administrative burden, due to the complex (VCS, redistributive payments, top-ups) and prescriptive approach taken by Member States. This option also entails the highest number of eligible beneficiaries, compared to options 3 and 4 where minimum eligibility requirements are set.

Graph 5 shows the overall estimated potential reduction in administrative burden for national administrations.



Graph 5 Potential for administrative burden reduction for national administrations per option

In Graph 6, the estimated potential administrative burden reduction for a single beneficiary is given.



Graph 6 Potential for administrative burden reduction for a single beneficiary per option

The potential reduction translates in the following estimated annual level of administrative burden (including one-off costs).

	Estimated administrative burden under the baseline	Estimated administrative burden under the new delivery model
National administrations	EUR 2.98 billion	EUR 2.74-2.82 billion
Beneficiaries	EUR 3.84 billion	EUR 3.43-3.67 billion

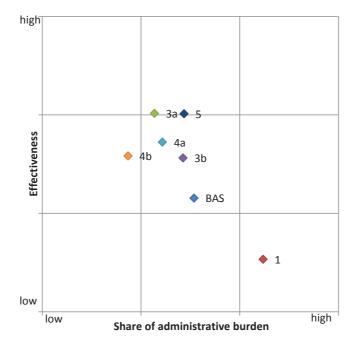
5. TOWARDS EFFICIENT CAP DESIGN AND DELIVERY

Any legislation brings its share of administrative burden. This is necessary for accountability reasons: the achievements of a public intervention should be assessed and reported. Administrative burden is even more unavoidable under financial programmes as transactions involving public support will need to be justified. What is important is hence to balance the need for accountability and simplification to reach a proportionate administrative burden (value for money).

This further implies that **trade-offs** need to be made when designing national strategies. Better tailoring and targeting of payments and higher environmental requirements may generate more administrative burden, but these may be balanced out by greater effectiveness. Likewise, reducing administrative burden through the increased use of ICT requires potentially significant investments.

To assess the proportionality of costs, the share of administrative burden in the total CAP budget is calculated, considering the current budget under the baseline (BAS) and a reduced budget under the other options. This share is confronted with the MCA score for effectiveness of the options, covering the three challenges (economic, environmental, social).

The results are shown in graph 7 below. Options 3a and 5 are the most efficient options, driven by a high effectiveness, while the baseline with budget cut ranks worst (no change in burden, lowest score for effectiveness).



Graph 7 Administrative efficiency of options

Annex 8 - Behavioural evidence from focus groups with European farmers on approaches to encourage more environmental-friendly practices

Joint Research Centre (JRC)
Unit I.2 Foresight, Behavioural Insights and Design for Policy
with a contribution from Unit D.4 Economics of Agriculture

Context and objectives

Behavioural sciences are increasingly informing policy-making¹³², including agricultural policies¹³³. Their unique contribution to policy lies in the first-hand evidence they provide regarding how people think and behave.

For the reform of the Common Agricultural Policy to be a success, it is necessary to **understand farmers' decision-making and viewpoints** beyond the assumptions made by neoclassical economics, because farmers' motivations are not only driven by profit maximisation ¹³⁴. The background documents on the economic ¹³⁵ and environmental ¹³⁶ challenges facing agriculture and rural areas – which accompany the Communication on the Future of Food and Farming – include reviews of the behavioural sciences literature.

In this context, a qualitative study was conducted to better understand farmers' experience with the three CAP instruments designed to motivate them to adopt more environmentally-friendly practices: cross compliance, green direct payments (i.e., "greening") and voluntary agri-environmental and climate measures. A particular focus was farmers' views and understanding of the logic behind these mandatory, conditional and voluntary schemes. Given the qualitative nature of data collection, the objective was to present **narratives**, discourses and perceptions expressed by farmers who participated in the exercise ¹³⁷.

Methodology

Six focus groups were carried out in January 2018 in Seville (Spain), Tours (France), and Lublin (Poland). These locations were selected due to the diversity of farming activities, crops and cultural contexts. Each focus group was attended by 6 to 8 farmers who were recruited over the phone. During recruitment, a screening questionnaire was administrated to ensure that participants were all subject to at least one obligation of greening and to allow some variety in participants' types of crops, membership in a cooperative, farm size, and age. As with any focus group, the objective was not to

Oullier, O. (2013). Behavioural insights are vital to policy-making. *Nature*, 501(7468), 463–463.

Wreford, A., Ignaciuk, A., & Gruère, G. (2017). Overcoming barriers to the adoption of climate-friendly practices in agriculture. *OECD Food, Agriculture and Fisheries Papers*, 101.

Maybery, D., Crase, L., & Gullifer, C. (2005). Categorising farming values as economic, conservation and lifestyle. *Journal of Economic Psychology*, 26(1), 59–72.

https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-

modernising/eco_background_final_en.pdf

https://ec.europa.eu/agriculture/sites/agriculture/files/consultations/cap-

modernising/env background final en.pdf

van Bavel, R., & Dessart, F. J. (2018). The case for qualitative research in behavioural studies for EU policy-making. *JRC Science for Policy*. Brussels

constitute a sample representative of the whole population of farmers in the EU, but rather to get a **diverse mix** of participants¹³⁸.

In each location, two focus groups were conducted, each one being rather homogeneous with regard to the adoption of environmentally-friendly practices¹³⁹ in order to encourage participation:

- one focus group with farmers relatively highly committed toward the environment (i.e. 'green' farmers)
- one focus group with farmers with a low to average environmental commitment (i.e. 'conventional' farmers)

A semi-structured discussion guide was designed to cover progressively various topics in a funnelling approach: identification of environmentally-(un)friendly practices, motivations and barriers to the adoption of more environmentally-friendly practices, current environment-related incentive schemes, recommendation for future incentive schemes. The present document only presents the results from the sections on incentives. Examples of 'verbatims' are provided throughout the document in footnotes.

Results

General discussion on incentives

When asked to spontaneously mention both positive and negative incentives that can motivate farmers to adopt more environmentally-friendly practices, participants first and foremost referred to **legal and economic tools**. The discourse of 'conventional' farmers revolved mainly around obligations, economic sanctions, economic incentives, and **mandatory schemes**¹⁴⁰. In contrast, 'green' farmers (especially in Seville and in Tours) tended to more spontaneously discussed **voluntary schemes**, not only from the CAP¹⁴¹. The higher market price for crops grown in a more environmentally-friendly way was also an economic incentive for some¹⁴², but only provided consumers are sufficiently conscious about these issues¹⁴³.

Stewart, D. W., & Shamdasani, P. N. (2014). Focus groups: Theory and practice (Vol. 20). Sage publications.

Environmental commitment was assessed combining the objective adoption of certain practices (i.e. organic farming, adoption of voluntary agri-environmental and climate measures) and subjective positioning (i.e. degree of environmental commitment compared to fellow farmers and future intentions).

^{-&}quot;Our wallet... Sanctions... If you don' to comply with the requirements, you don't get the money" (Esconventional)

^{- &}quot;If we don't do something on time, there are consequences. There's a deadline and for every day of delay they pay you less. This is a punishment. If you exceed the deadline, you bear the consequences" (PL-conventional)

^{- &}quot;We don't have the choice with all these laws coming out all the time. We are urged by force (FR-conventional)

^{-&}quot;At the level of the CAP, I took part in a voluntary measure for reducing inputs" (FR-green)

^{- &}quot;The subventions for modernising machinery... A machine that spouts... that's not the same as a new one. (ES-green)

^{- &}quot;I think they also gave some subsidies for investing in machinery, like anti-drifting ducts, things like that". (FR-green)

^{- &}quot;Our cooperative has a woman responsible for certification, who brings us rigorous instruction guides so that we get more money for these products that we sell with that certification. It incentivises us to keep producing in the field." (ES-green)

^{- &}quot;Imagine this – in the store, the consumer can choose between a fat, juicy, non-organic turkey, or a smaller, skinnier and more expensive organic one... Obviously we'll all buy the fat and good-looking one." (PL-conventional)

Besides economic tools, participants also mentioned trainings¹⁴⁴ (e.g. to understand the appropriate time for spraying pesticides, to become more conscious of the environmental impacts of certain farming practices) and advice from consultants (with some doubts as to their impartiality) as other incentives to motivate them to adopt more environmentally-friendly practices. Collective incentives never spontaneously emerged.

Prior to specifically tackling CAP related tools, participants freely discussed the overall logic of mandatory, conditional and voluntary schemes. **Mandatory schemes** leveraging sanctions to enforce certain regulations on environmentally-friendly practices were deemed **relevant** to prevent farmers from causing severe damages to the environment However, generally speaking, participants considered the philosophy of **voluntary schemes**, based on reward, as a more **appropriate** tool given its encouraging and constructive approach, compatible with farmers' value of **freedom** Participants often used the 'stick and carrot' analogy to refer to the different types of schemes and the concept of **'conditional' schemes** did not often come out spontaneously.

Key insights

- 'Green' farmers seem to think more spontaneously of voluntary schemes when reflecting on incentives, compared to 'conventional' farmers whose discourse revolves more around mandatory schemes.
- Voluntary schemes are more encouraging and compatible with freedom values.
- Mandatory schemes and sanctions are relevant and important drivers for conventional farmers.

Cross compliance

The principle of minimum requirements imposed by the Good Agricultural and Environmental Conditions was generally well perceived by participants. The metaphor that was often mentioned was that of **Highway Code**¹⁴⁷: just as it is forbidden to drive too fast on roads, it's forbidden, for instance, to spray pesticides very close to rivers. And just as people are not rewarded for driving at the right speed, farmers do not get specific money to meet these requirements¹⁴⁸. Participants justified the existence of cross

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^{- &}quot;They should organize training events or meetings in the villages. But I'd like more training seminars."

(PL-green)

^{- &}quot;Making you more conscious through trainings... To sensitize you. You think you're doing something good but you're doing it wrong. We don't hold the ultimate truth..." (ES-conventional)

⁻ It's normal that violating the law leads to fines." (PL-green)

^{- &}quot;It's not the same to make a light mistake toward the environment, which isn't very serious... What's serious needs to be punished. What's light can't be punished... You can just end up not receiving a subsidy" (ESgreen)

^{- &}quot;Because some farmers say "No, because no!". Some will never change their minds and you need to fine them" (PL-green)

^{- &}quot;Yes, it's the stick and carrot method. But the stick shouldn't be too big." (PL-green)

^{- &}quot;Rewards are better, they're more encouraging" "We need something more constructive where we evolve, we need to move forward" (FR-conventional)

^{- &}quot;Nobody likes to be imposed things on them and penalized." (PL-green)

^{- &}quot;It's a fine, just like for any person that gets controlled driving too fast" (ES-conventional)

^{- &}quot;You don't get a bonus because you drive at 90 km/h all year long" (FR-green)

compliance by the need to ensure that every farmer complies with the regulation ¹⁴⁹ and that serious infringements are penalised ¹⁵⁰.

The uneven implementation of cross compliance regulations across the EU was a recurrent topic of discussion among French farmers, this problem being due, according to them, to each country protecting their farmers' interests and to the unequal controls between different countries¹⁵¹. In Poland, participants spontaneously expressed the fear of denunciation by neighbouring farmers as a driving force for compliance¹⁵².

Key insights

- Cross compliance is generally well accepted by participating farmers.
- Perceived uneven implementation and controls across the EU causes concern for lack of level-playing field

Greening

Participants were all **well aware** of the greening requirements including the recent changes to some specifications – probably because they were recruited based on the fact that they had to comply with at least one obligation of greening. In contrast, within each group there was no clear consensus regarding the **voluntary, conditional or mandatory** nature of the practices included in greening ¹⁵³: although participants did understand the possibility to voluntarily opt-out, some described the scheme as mandatory because they needed this payment. Participants indeed comply with the greening requirements, mainly because they fear losing part of their basic payments ¹⁵⁴. Likewise, the **complement/bonus or a due/right** nature of greening was a disputed concept and the concept of 'conditionality' was virtually not used in participants' own words to describe greening.

- "It's a way to make sure that people just don't do want they fancy" (ES-green)

- "The lightest sanction is death penalty" (ES-conventional)

^{- &}quot;It's a good thing... If everyone did whatever they liked, if there were no rules, ... things wouldn't work" (FR-conventional)

^{- &}quot;For instance, the one that makes some really foolish things, like 'I spray, I don't care about the river nearby'. OK, that's directly harming, he needs to be directly punished" (FR-green)

^{- &}quot;It's still a 'common' agricultural policy so, it's quite funny... Either we close borders [...] or we put the same rule for everyone" (FR-green)

^{- &}quot;People accept eating sprayed Spanish products... [...] But at the same time they keep controlling us" (FR-green)

^{- &}quot;Each country tries to protect its farmers as much as possible... Not ours..." (FR-conventional)

^{- &}quot;I think these regulations do work. For example, I'm not going to be burning out my fallows anymore. That's because I'm afraid the neighbour will report me. Then I will lose my direct payments." (PL-green)

^{-&}quot;You can choose to do it or not" - "They make it sound like it's voluntary, but they oblige you, in a way" (ESconventional)

^{-&}quot;Greening is for all farmers who comply with the requirements... These requirements... they're voluntary" (ES-green)

^{-&}quot;No, greening isn't voluntary. Within your CAP payments, you're obliged to have a certain surface" (FR-green)

^{- &}quot;If I do not satisfy the greening criterion, they pay me less... I don't want to, but I have to. So I am forced anyway" (PL-green)

^{- &}quot;In both cases, it's a sword of Damocles" (FR-green)

^{- &}quot;Also, there is this whip over me - if I don't do these things, I'll get less money" (PL-green)

^{- &}quot;It's the carrot" - "It's a due" (FR-conventional)

^{- &}quot;Greening is complementing that basic payment" "If you comply with that thing which is more ecological, then we'll reward you... Politically, that's how it's conceived." (ES-green)

^{- &}quot;Greening, that's a premium" (FR-green)

^{- &}quot;In order to receive compensation... I mean this payment is no payment, it's actually a compensation" (PL-green)

Greening tends to be viewed **positively** as it provides some tangible **benefits**, mainly for wildlife (ecological focus areas)¹⁵⁶, for soils (crop diversification and catch crops mean less need of chemicals)¹⁵⁷ and ultimately for business¹⁵⁸, without too much constraints¹⁵⁹. The three main points of concern spontaneously discussed were the **lack of coherence** of some requirements with the stated environmental goals¹⁶⁰, **scepticism** regarding the true goal of greening¹⁶¹ and the lack of **additivity**¹⁶². There is a perception, also, that greening demands could increase in the future¹⁶³.

Key insights

- Greening is part of participating farmers' understanding of the Common Agricultural Policy.
- The voluntary, conditional or mandatory nature of greening is debated.
- Participating farmers view greening overall as positive even though they express some concerns.

Agri-environmental and climate measures

Overall, participants viewed agri-environmental and climate measures as a voluntary scheme¹⁶⁴ and they were aware of their existence, except most Polish participants in the 'conventional' group¹⁶⁵. The **motivations** to participate in these voluntary schemes are

- "I like to keep this oasis, with woodpeckers, squirrels, weasels, foxes... if you keep a piece of land not farmed you see all these animals. Hedgehogs! It's incredible to see a hedgehog in a natural habitat." (PL-green)
 - "When you keep these grasslands, there are birds' nests there, in places they enjoy. Like lapwings" (PL-conventional)
- "The catch crops just improve the soil. It's done for crop rotation, to avoid just growing one cereal in a place" "If you have mustard or some legumes growing once in a while, the fungus doesn't develop that quickly." (PL-conventional)
 - "Greening is beneficial for everyone... For the soils, for us, for France's health" (FR-green)
- "Eventually, we did see that greening was beneficial. So any entrepreneur, if it's beneficial for his business, he does it" (FR-green)
- "Greening doesn't require a big effort. It's an intellectual constraint" (FR-conventional)
 - "Now you can't spray anything on those protected areas. But if you're going to sow broad beans to harvest it later, without phytosanitary products, that's unfeasible... You don't grow it. What do I do?" (ES-green)
 - "They consider empty sowing as another crop, that's an absurd thing... That's [...] the contradictions that we see" (ES-convent.)
- "I think they did it in order to sell the idea, it sounds better to say 'green payment, we're changing agriculture, focusing it in such a way that we're more ecological. [...] The only thing they changed is the name" (ES-conventional)
 - "Now the CAP payments are diluted with everything, with the environment, in fact with everything. Everything is decreased and they use it to say 'well there, there's a part that used for the environment" (FR-conventional)
- "Myself, if tomorrow there's no more payment, I keep on doing it" (FR-green)
 - "We do that normally... even if you have 15 Ha arable land, then you don't just keep wheat, but also other cereals" (PL-convent.)
- "The basic payment, they're going to decrease it little by little, and the green payment they'll raise it for good farming practices." (ES-green)
 - "Every year, they add a layer. For the ecological focus area, before we could put some alfalfa but now we can't anymore" "I think we'll have to do more fallows to get into the rails of greening" (FR-conventional)
- "It's a personal choice" (FR, convent.) "There's a carrot at the end" (FR-green) "That one is optional" (ES-convent.)
- "I never heard of many of these." "Neither have I." "These are not that commonplace". "I never really got into that... but I read there are going to be new modernization programs soon, from the Agency, for organic farms. I never heard of that before, I don't think they had such support mechanisms" "Farmers don't know enough about pro-environment programs? I know from my own example and when I talk to farmers, they don't talk about it." (PL-conventional)

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mainly **economic**¹⁶⁶: there is indeed a feeling that these schemes provide a much-needed financial extra necessary for the economic survival of some farmers. The administrative **constraints** as well as the **controls** are seen as stringent¹⁶⁷ and therefore putt off many participants¹⁶⁸.

In focus groups in France and Poland, participants expressed some scepticism regarding agri-environmental and climate measures: French participants saw them as **too selective** in their criteria¹⁶⁹ and sometimes not additive¹⁷⁰, and mentioned that these voluntary schemes are mainly signed by smaller farmers due to their high need for additional income¹⁷¹. Among the main points of concern, Polish participants repeatedly mentioned **information asymmetry** (i.e. there is a perception that some farmers have access to privileged, early information on some calls for voluntary schemes)¹⁷², difficulty in applying¹⁷³ and **biased granting** of the schemes¹⁷⁴. Virtually all groups digressed on the issue of changing rules during the completion of the voluntary scheme¹⁷⁵.

Key insights

- The existence and nature of agri-environmental and climate measures is well understood, with the notable exception of Polish participants in the conventional group.
- Environmental motives generally play little role in sign-up.

- "The agro-environmental measures... it's like with the solar panels... It's first and foremost more for money than for the environment. It's more about profit than about the environment" "You need to judge the pros and the cons... see what it can return economically" (FR-conventional)

- "What we're doing is basically, we're begging" (ES-conventional)

- "It's not like a car where we choose the options... It's not the case. The contract, it's as it is. You take it, you don't take it, that's it" (FR-conventional)

- "They give you from one hand, and you get so many constraints that they take it back from the other hand" (FR-green)

-"As far as I'm concerned, there are certain subsidies that I don't apply to because I'd rather not have them. It becomes a personal approach to do these things. But eventually you find yourself shivering on your chair, thinking to yourself "oh my God, she [the controller] is putting so much things in red everyone. You're two days long close to a heart attack" (FR-green)

- "When they put the AES in place, it was a huge thing, and at the end, nothing. I remember that in training we were 70 farmers [who were interested] and eventually we were just 10 to do it." (FR-conventional)

- "They [the local administration] took a lot of people but they realised that it didn't make up a lot for each farm, so they put more criteria, once, twice, three times to make sure that just a small proportion of people could get it" (FR-green)

- "Those who participate in AES are those who can do it without bothering too much" (FR-conventional)

- "The one that has I 000 hectares, why would he bother doing these things when he is has enough to live with?" (FR-green)

- "What about the tomato plantations from last year? This was a certain program about growing organic tomatoes, it was a fact known only to the "Marszalkowska farmers". The deadline for submitting applications to that program was June the 15th. And the media informed about it on June 14th! It was information that was not circulated right." - "If you go to the website of the Ministry or the Restructuration Agency, before you find the right appendix, you could be looking for hours for it. Or weeks!" (PL-green)

- "I remember these subsidies for forestry – it was a direct payment for walnut trees. I remember that all the unused lands were suddenly turned into walnut plantations. Who owned them? Some [...] political party. They knew in advance. They were buying that land 2 years or 3 years in advance or they were leasing it from the state." (PL-green)

-"Nobody submits these applications on their own. It's too much paperwork" (PL-conventional)

- "The application... Also it won't go through. It definitely will not go through." "Yes and also, there are phone calls, it's all about connections..." "Yes, I know these people who got into a project, took out loans, but then a committee appeared and told them that they can't be enrolled in the program because there is some criterion they did not meet." (PL-conventional)

- "I get into a 5-year commitment, but nobody promises that the rules of the game won't change. The rules of the game impose many requirements on me, but if I think of my rights – this year I get less. I can't plan my production right. I can't say that next year, or for the 5 years I'll get the same payment." "Yes, the changes of these rules, or the vagueness of these rules, it pushes people away from being more pro-environment." (PL-green)

- "It's 5 years, you don't have the right to change, to move away. If they change, they warn you telling you 'you can go on following the new rules, or you can stop the contract, but as far as we're concerned, we can't do it the other way around". (FR-conventional)

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 Participants in Poland view agri-environmental and climate measures as difficult to obtain because of information asymmetry and biased granting.

Recommendations for future incentive schemes

Throughout the focus groups, farmers' narratives abundantly revolved around how incentive schemes *should* be designed. The following box summarises the main recommendations.

Key insights

- Incentive schemes should still come from the EU¹⁷⁶.
- A better knowledge of farming in general and rural, local conditions in particular is needed to design coherent and meaningful incentives 1777.
- Better educating consumers about the value of environmentally-friendly products¹⁷⁸ would allow farmers to sell their products at a better price.
- Targeting incentive schemes to 'real' farmers¹⁷⁹ and, more specifically, to small farmers¹⁸⁰.
- More level-playing field between farmers as to voluntary schemes, between EU Member States and between the EU and the rest of the world as to environmental constraints and controls¹⁸¹.

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^{- &}quot;National? No, it should come from Europe!" (ES-green)

^{- &}quot;In the EU! Everything is simpler in the EU. Maybe, but it's all made much more complicated in Poland. It's all due to our Polish bureaucracy. From what I hear, it's easier in the West. They encourage people to use programs, whereas in Poland, all these rules try to stop you. If you misstep, you get a fine" (PL-conventional)

^{- &}quot;Those who create that, they should be more down-to-earth, on the ground" (FR-conventional)

^{- &}quot;I hate it when on one day, some decision-maker chooses that a given substance cannot be used anymore and they give you no replacement. That is over the top." (PL-green)

^{- &}quot;Those who decide these measures, they don't know the environment, they don't know the countryside" (ESconvent.)

^{- &}quot;They should instead educate people in schools. If we educate everybody, then, perhaps, I could say that the whole environment we're talking about will learn more about how we can protect it." (PL-green)

^{- &}quot;That the fruit of our labours bring something in... then if our products are better valued, that means we work our soil better, so we can work even better, that's the whole correlation." (FR-conventional)

^{- &}quot;The majority of farmers, we would prefer not to receive any single euro of subsidies, if the product was valued for what it's worth" (ES-green)

^{- &}quot;Some landowners, some doctors, some chemist... they bought farms to be able to hunt, to have some grassland, fallows... And they get the CAP payments, that should have never been the case" (FR-green)

^{- &}quot;Payments should be given to people who really is and lives from the countryside, and not now as it's done... The 3 million euros for the Duchess of Alba or the power producers who have some fields and don't produce anything" (ES-green)

^{- &}quot;A farmer that uses sprays at the wrong time and he earns 1 000 PLN per Hectare, That fine can kill a medium farmer and won't hurt a big one. [...] The big farmer pollutes thousands of Hectares anyway!" (PL-green)

^{- &}quot;That farmers that has 100 hectares, please don't tell me he does it correctly!"(FR-green)

^{- &}quot;Most of the time, small human scale farms are family farms, so there is transmission" (FR-conventional)

^{- &}quot;Right now a small farmer can't keep livestock. In the past, they kept them in small quantities. If you have more livestock, there's more manure and less artificial fertilizers." (PL-conventional)

^{- &}quot;Imports on foreign products should be controlled just as ours" (FR-conventional)

^{- &}quot;If we import hormones-fed meat, then... well French people also feed them with hormones" - "Without closing borders... If we want to forbid glyphosate in France, if you want to be logical then we forbid foreign products that used it" (FR-green)

Annex 9 – Bibliography

AD *et al.* (2009) Evaluation of the Implementation of the Farm Advisory System, Study to the European Commission.

Agricultural Markets Task Force (2016) <u>Improving market outcomes</u>, <u>enhancing the position of farmers in the supply chain</u>, Final report for the European Commission.

Agrosynergie (2015) <u>Evaluation of Article 68 measures</u>, Study to the European Commission.

Agrosynergie GEIE (forthcoming) <u>Impact of the CAP measures towards the general objective "viable food production"</u>, Study to the European Commission.

Alliance Environment (2007) <u>Evaluation of the application of cross compliance as</u> foreseen under regulation 1782/2003, Study to the European Commission.

Alliance Environment *et al.* (2017) <u>Evaluation study of the payment for agricultural practices beneficial for the climate and the environment</u>, Study to the European Commission. Report of the evaluator.

Alterra Wageningen UR *et al.* (2011) <u>Impacts of renewable energy on European farmers.</u> <u>Creating benefits for farmers and society</u>, Study to the European Commission.

Arete (2013) – <u>Study on assessing the added value of PDO/PGI products</u>, Study to the European Commission.

Arroyo De Sande, C *el al.* (2018) Provision of social care and support services in remote rural areas: Challenges and opportunities, European association of service providers for persons with disabilities.

Augère-Granier, M.-L. (2016) <u>Short Food Supply Chains and Local Food Systems of the</u> EU, European Parliamentary Research Service.

Augère-Granier, M-L. (2017) <u>Rural poverty in the European Union</u>, European Parliamentary Research Service.

Baldock, D. *et al.* (2018) <u>Measuring the CAP's environmental and climate performance</u>, Institute of European Environmental Policy.

Bardaji, I. *et al.* (2016) <u>State of play of risk management: Tools implemented by member States during the period 2014- 2020: national and European frameworks</u>, Study to the European Parliament Committee on Agriculture and Rural Development.

Beedell *et al.* (1999) <u>Explaining Farmers' Conservation Behaviour: Why Do Farmers</u> Behave the Way They Do? Journal of Environmental Management, Volume 57, Issue 3.

Bertolini, P. *et al.* (2008) <u>Poverty and social exclusion in rural areas</u>, Study to the European Commission.

Bijman J. *et al.* (2012) <u>Support for Farmers Cooperatives</u>, Study to the European Commission.

Blomquist J. *et al.* (2014) <u>Do the CAP Subsidies Increase Employment in Sweden?</u> <u>Estimating the Open Economy Relative Multiplier Using an Exogenous Change in the CAP, EAAE 2014 Congress 'Agri-Food and Rural Innovations for Healthier Societies', Ljubljana, Slovenia.</u>

Bock B. *et al.* (2015) Changing social characteristics, patterns of inequality and exclusion. In Territorial cohesion in rural Europe. Editions K.Kopus A., De Lima F.

Bonnet, F. (2016) <u>Aménager les territoires ruraux et périurbains</u>, Ministre du Logement, de l'Egalité des territoires et de la Ruralité, France.

Borrelli P. et al. (2017) A new assessment of soil loss due to wind erosion in European agricultural soils using a quantitative spatially distributed modelling approach, Land Degradation & Development, Volume 28, Issue 1.

Boulanger, P. *et al.* (2016) <u>Cumulative economic impact of future trade agreements on EU agriculture</u>, European Commission, Joint Research Centre (JRC).

Boulineau, E. et al. (2014) La pauvreté en Europe. Une approche géographique, Editions PUR, Géographie sociale.

Breustedt G. et al. (2013) <u>Calibrating agri-environmental schemes using a two-stage</u> <u>discrete choice experiments - Discrete-Choice-Experiments</u> German Journal of Agricultural Economics, Volume 62, Issue 4.

Brown D. *et al.* (2010) Rethinking the OECD's New Rural Demography, Centre for Rural Economy, University of Newcastle Upon Tyne.

Brunori, G. et al. (2000) Synergie and Coherence through Collective Action: some insights from wine routes in Tuscany, Sociologia Ruralis, Volume 40, Issue 4.

Bureau, J.C. (2017) <u>Does the WTO discipline really constrain the design of CAP payments?</u>, website.

Business Wire (2015) Research and Markets: France Crop Protection Pesticides Market - Growth, Trends and Forecasts (2015-2020).

Cannarella C. *et al* (2007) <u>Barriers to Innovation in Rural Enterprises: the Strategy of "Doing Nothing"</u>, New Medit n°4.

Capgemini *et al.* (2010) <u>EU Project on Baseline Measurement and Reduction of Administrative Costs,</u> Study to the European Commission.

Capgemini *et al.* (2011) <u>Study on administrative burden reduction associated with the implementation of certain Rural Development measures,</u> Study to the European Commission.

CEMA, European Agricultural Machinery Association, website.

Ciaian, P. *et al.* (2016). <u>The Impact of the 2013 CAP Reform on the Decoupled Payments' Capitalization into Land Values in the EU</u>, European Commission, Joint Research Centre (JRC).

Coffey *et al.* (2016) Evaluation study on the implementation of the new European Innovation Partnerships (EIP) for Agricultural Productivity and Sustainability, Study to the European Commission.

Cogeca (2015) "Development of agricultural cooperatives in the EU, 2014" PUB (14) 9112:2, Brussels.

Copenhagen Economics (2016) <u>Impacts of EU trade agreements on the agricultural sector</u>, Study to the European Commission.

Cordier, J. (2014) <u>Comparative analysis of risk management tools supported by the 2014 farm bill and the CAP 2014-2020</u>, Study to the European Parliament

Council of the European Union (2018) <u>Communication on "The Future of Food and Farming"</u> – Presidency conclusions, 7324/18

Courteny P. et al. (2011) <u>European Development Opportunities for Rural Areas, (EDORA)</u>, Study to the European Commission

Crescenzi R. *et al.* (2014) <u>The EU Cohesion policy in context: regional growth and the influence of agricultural and rural development policies</u>, Department of Geography and Environment, London School of Economics and Political Science, LEQS Paper N° 85.

Crescenzi R. *et al.* (2016) The EU Cohesion policy in context: Does a bottom-up approach work in all regions? Department of Geography and Environment, Environment and Planning A, Volume 48, Issue 11.

Dauvin, M et al. (2014) <u>Estimating broadband diffusion in the EU using NUTS1 regional</u> data, Economic Research Southern Africa (ERSA).

Davidova S. *et al.* (2013) <u>Semi-subsistence farming: value and directions of development</u>, Study to the European Parliament.

Dax, T et al. (2016) The future of Rural Development, Workshop on "'Reflections on the agricultural challenges post-2020 in the EU: preparing the next CAP".

Defrancesco, E. *et al.* (2008) <u>Factors affecting farmers' participation in agrienvironmental measures: a northern Italian perspective</u>, Agricultural Economics, Volume 59. Issue 1.

Deloitte (2012) <u>eGovernance study at EU / Member State level</u>, Study to the European Commission.

Dudu, H. *et al.* (2017) <u>Impact of CAP Pillar II Payments on Agricultural Productivity</u>, European Commission, Joint Research Centre (JRC).

Ecorys (2010) <u>Study on employment, growth and innovation in rural areas</u>, Study to the European Commission.

Ecorys (2014) "Gold-plating" in EAFRD, To what extent do national rules unnecessarily add to complexity and, as a result, increase the risk of errors, Study to the European Parliament.

Ecorys (2015) <u>Pilot project: Exchange programmes for young farmers</u>, Study to the European Commission.

Ecorys (2017) <u>Modernising and simplifying the CAP</u>. Summary of the results of the public consultation, Study to the European Commission.

Ecorys (Forthcoming) Synthesis of Rural Development Programmes (RDP) ex-post evaluations of period 2007-2013.

Ecorys *et al.* (2010) <u>Study on employment, growth and innovation in rural areas (SEGIRA),</u> Study to the European Commission.

Ecorys *et al.* (2016) <u>Mapping and analysis of the implementation of the CAP</u>, Study to the European Commission.

Ecorys et al. (Forthcoming) Study on risk management in EU Agriculture. Study to the European Commission.

EIP AGRI Focus Group (2015) Precision Farming, Study to the European Commission.

EIP-AGRI (2017) <u>Horizon 2020. Multi-actor projects,</u> Study to the European Commission.

EIP-AGRI (2017) List of multi-actor projects, Agriculture and Innovation, website.

EIP-AGRI (2017) <u>Shaping the digital (r)evolution in agriculture</u> Study to the European Commission.

EIP-AGRI (2017) <u>Skills development: education & training, advice, peer to peer exchange and networking</u> Agri Innovation Summit (AIS) "Innovation – shaping the future", 12 October.

EIP-AGRI (2018) <u>Brochure Agricultural Knowledge and Innovation Systems</u>, Study to the European Commission.

EIP-AGRI, Focus Group (2015) <u>Innovative Short Food Supply Chain management</u>, Report to the European Commission.

EIP-AGRI, Workshop (2017) <u>Cities and Food: connecting consumers and producers</u>, Report to the European Commission.

Eurofound (2014), <u>Quality of life in urban and rural Europe</u>, Publications Office of the European Union, Luxembourg.

EUROISLANDS (2011) – <u>The development of the Islands</u> - European Islands and Cohesion Policy, <u>Annex IV- Analysis if the relevant literature</u>, ESPON programme.

European Commission (2008) <u>Green Paper on Territorial Cohesion. Turning territorial diversity into strength</u>, Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee, COM 616 final.

European Commission (2012) <u>Innovating for Sustainable Growth: A Bioeconomy for Europe</u> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM 60 final

European Commission (2012) <u>The Implementation of the Water Framework Directive (2000/60/EC) River Basin Management Plans</u>, Report from the Commission to the European Parliament and the Council, COM 670 final.

European Commission (2013) <u>Impact Assessment</u>, Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and he Committee of the Regions a Clean Air Programme for Europe, Proposal for a Directive of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants, Proposal for a Directive of the European Parliament and of the Council on the reduction of national emissions of certain atmospheric pollutants and amending Directive 2003/35/EC, Proposal for a Council Decision on the acceptance of the Amendment to the 1999 Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution to Abate Acidification, Eutrophication and Ground-level Ozone, Staff Working Document 531 final.

European Commission (2014) Commission Implementing Regulation (EU) No 834/2014 of 22 July 2014 laying down rules for the <u>application of the common monitoring and</u> evaluation framework of the common agricultural policy.

European Commission (2014, 2016) EU Market observatories, website.

European Commission (2015) <u>Better Regulation for Better Results — An EU Agenda</u>, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM 215 final.

European Commission (2015) Better Regulation Toolbox.

European Commission (2015) <u>Digital Agenda Scoreboard: Most targets reached, time</u> has come to lift digital borders, website.

European Commission (2015) <u>Ecological flows in the implementation of the Water Framework Directive</u>, CIS guidance document n°31, Technical Report 086

European Commission (2015) Glossary of the Common Agricultural Policy, website.

European Commission (2015) <u>The mid-term review of the EU biodiversity strategy to 2020</u>, Report from the Commission to the European Parliament and the Council, 478 final.

European Commission (2016) <u>Annual Activity Report</u> and <u>annexes</u>, Directorate General for Agriculture and Rural Development.

European Commission (2016) <u>CAP context indicators</u>, Directorate General for Agriculture and Rural Development.

European Commission (2016) <u>Cork 2.0: European Conference on Rural Development</u>, website.

European Commission (2016) <u>Development of the dairy market situation and the operation of the "Milk Package" provisions</u>, Report from the Commission to the European Parliament and the Council, COM 724 final.

European Commission (2016) <u>European Research and Innovation for Food and Nutrition</u> <u>Security</u> Staff Working Document 319 final

European Commission (2016) <u>Final paper on a strategic approach to EU agricultural</u> research and innovation, Horizon 2020.

European Commission (2016) <u>Fitness check of the EU nature legislation (birds and habitats directives)</u>, Staff working document 472.

European Commission (2016) <u>Monitoring EU Agri-Food Trade: Development until</u> December 2016, Directorate General for Agriculture and Rural Development, website.

European Commission (2016) <u>Next steps for a sustainable European future: European Action for sustainability</u> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 739 final.

European Commission (2016) <u>Productivity in EU agriculture – slowly but steadily growing</u>, Directorate General for Agriculture and Rural Development, EU Agricultural Market Brief n°10.

European Commission (2016) <u>Prospect for the EU agricultural markets and income</u> <u>2016-2026</u>, Directorate General for Agriculture and Rural Development, EU Agricultural Outlook Report.

European Commission (2016) <u>REFIT Platform Opinion on the submission by the European Environmental Bureau on Effectiveness and Efficiency of the Common Agricultural Policy, Refit Platform Opinion.</u>

European Commission (2016) <u>REFIT Platform Opinion on the submission by the Freistaat Saachsen on the overlaps between Pillar I and II of the Common Agricultural Policy, Refit Platform Opinion, Stakeholder Suggestions.</u>

European Commission (2016) <u>REFIT Platform Recommendations and other work:</u> Agriculture and Rural Development, website.

European Commission (2016) Review of the Greening after one year, Staff Working Document, 218 final.

European Commission (2016) <u>The implementation of the scheme of specific measures</u> for agriculture in favour of the outermost regions of the Union (POSEI) Report from the Commission to the European Parliament and the Council, COM 797 final.

European Commission (2017) "Reflection Paper on the future of EU Finances" COM 358.

European Commission (2017) <u>A stronger and renewed strategic partnership with the EU's outermost regions</u> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM 623 final.

European Commission (2017) <u>Agriculture and Sustainable Water Management in the EU</u>, Staff working document 153.

European Commission (2017) <u>Background documents on challenges facing EU agriculture and rural areas: economic, social, environmental and climate,</u> Directorate General for agriculture and rural development.

European Commission (2017) <u>Consultation on modernising and simplifying the common agricultural policy (CAP)</u>, Directorate General for Agriculture and Rural Development, website.

European Commission (2017) <u>EU Agricultural outlook for the agricultural markets and income 2017-2030</u>, Directorate General of Agriculture and Rural Development, Joint Research Centre (JRC).

European Commission (2017) <u>Eurobarometers on the Common Agricultural Policy</u>, website.

European Commission (2017) <u>Europe's Digital Progress Report</u>, Staff Working Document 160 final.

European Commission (2017) <u>Evaluation and studies plan 2017-2021</u>, Directorate General for Agriculture and Rural Development.

European Commission (2017) <u>Evaluation of the impact of the CAP measures towards the general objective of "viable food production"</u>, <u>Indicative roadmap.</u>

European Commission (2017) <u>Fuelling the potential of advisors for innovation</u>, Directorate General of Research and Innovation, H2020 project Call RUR-16-2019.

European Commission (2017) <u>High Level Group monitoring simplification for beneficiaries of ESI Funds</u>, Regional Policy.

European Commission (2017) <u>Horizon 2020 interim evaluation on societal challenges</u> <u>Societal challenge 2: Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy, Directorate General for Research and Innovation.</u>

European Commission (2017) <u>Implementation of the ecological focus area obligation</u> <u>under the green direct payment scheme</u>, Report from the Commission to the European Parliament and the Council, 0152 final of 29 March.

European Commission (2017) <u>Inequality and poverty – what action is being taken by Member States?</u>, Directorate General for Employment, Social Affairs and Inclusion, website.

European Commission (2017) <u>Managing risk in the dairy sector: how futures markets could help</u>, Directorate General for Agriculture and Rural Development, EU Agricultural Market Brief n°11.

European Commission (2017) <u>Modernising and Simplifying the CAP, Economic challenges facing EU agriculture,</u> Directorate General for Agriculture and Rural Development.

European Commission (2017) <u>REFIT Platform Opinion on the submission by the Swedish Industry and Commerce for Better Regulation (NNR) on 'Greening', Refit Platform Opinion.</u>

European Commission (2017) <u>Reflection Paper on the future of EU Finances</u>, COM 358 final.

European Commission (2017) Report from the Commission to the European Parliament and the Council on the implementation of the ecological focus area obligation under the direct payment scheme, Staff Working Document 121 final.

European Commission (2017) <u>Risk management schemes in EU agriculture: Dealing with risk and volatility</u>, Directorate General for Agricultural and Rural Development., EU Agricultural Market Brief n°12.

European Commission (2017) The Digital Economy and Society Index, website.

European Commission (2017) <u>The Future Of Food And Farming</u>, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, COM 713 final.

European Commission (2017) <u>Workshops for Impact Assessment</u>, Directorate General for Agriculture and Rural Development, website.

European Commission (2017) <u>Young farmers in the EU</u>, Directorate General of Agricultural and Rural Development., EU Agricultural and Farm Economics Briefs n°15.

European Commission (2017), <u>Agriculture and Sustainable Water Management in the</u> EU, Staff Working Document 153 final.

European Commission (2018) <u>A Modern Budget for a Union that Protects, Empowers and Defends, the Multiannual Financial Framework for 2021-2027</u>, COM (2018) 321 final.

European Commission (2018) A new, modern Multiannual Financial Framework for a European Union that delivers efficiently on its priorities post-2020, Communication from the Commission to the European Parliament, the European Council and the Council, COM 98 final, 14 February.

European Commission (2018) <u>Cooperatives</u>, Directorate General for Internal Market, Industry, Entrepreneurship and SMEs, website.

European Commission (2018) Review of the EU Air policy, website.

European Commission, <u>Future of the CAP</u> Directorate General for Agriculture and Rural Development, website.

European Commission, Investment Plan for Europe: The Juncker Plan, website.

European Commission, <u>Water Scarcity & Droughts in the European Union</u>, Previously completed studies 2007-2010, Directorate General for Environment, website

European Council (1992) Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.

European Court of Auditors (2013) <u>Have the Member States and the Commission achieved value for money with the measures for diversifying the rural economy?</u>, Special Report N°6.

European Court of Auditors (2014) <u>Integration of EU water policy objectives with the CAP</u>: a partial success, Special Report N°04.

European Court of Auditors (2015) <u>EU support for rural infrastructure</u>: potential to achieve significantly greater value for money, Special Report N°25.

European Court of Auditors (2015) <u>The cost-effectiveness of EU Rural Development support for non-productive investments in agriculture</u>, Special report N°20

European Court of Auditors (2015) <u>The EU priority of promoting a knowledge-based rural economy has been affected by poor management of knowledge-transfer and advisory measures</u>, Special Report N°12.

European Court of Auditors (2016) <u>Is the Commission's system for performance measurement in relation to farmers' income well designed and based on sound data?</u>, Special report N°1.

European Court of Auditors (2016) <u>Making cross compliance more effective and</u> achieving simplification remains challenging, Special report N^o 26.

European Court of Auditors (2017) <u>Greening – a more complex income support scheme</u>, not yet environmentally effective, Special Report N^o 21.

European Court of Auditors (2017) <u>More efforts needed to implement the Natura 2000</u> network to its full potential, Special Report N°1.

European Court of Auditors (2017) <u>Rural Development Programming: less complexity</u> and more focus on results needed, Special report N°16.

European Court of Auditors (2017) The certification bodies' new role on CAP expenditure: a positive step towards a single audit model but with significant weaknesses to be addressed Special report N°7.

European Court of Auditors (2017). <u>EU support to young farmers should be better</u> targeted to foster effective generational renewal, Special Report n°10.

European Environment Agency (2015) <u>Agriculture and climate change</u>, Signals - Towards clean and smart mobility, Copenhagen.

European Environment Agency (2015) <u>State of nature in the EU</u>, Technical report n°2, Copenhagen.

European Environment Agency (2016) <u>Annual European Union greenhouse gas inventory 1990–2014 and inventory report 2016</u>, Submission to the UNFCCC Secretariat. Technical report n°15, Copenhagen.

European Environment Agency (2017) <u>Climate change, impacts and vulnerability in Europe 2016</u>, Report n°1, Copenhagen.

European Environment Agency (2017) <u>Use of freshwater resources</u> Indicator Assessment, Data and maps, website.

European Feed Manufacturers Federation (2016) Feed & Food Statistical Yearbook, website.

European Institute for Gender Equality (EIGE) (2016) Gender in agriculture and rural development, Luxembourg.

European Network for Rural Development (2010) <u>Public goods and public intervention</u> in Agriculture, TWG2: Links between agriculture and the wider rural economy, website.

European Network for Rural Development (ENRD) (2009) <u>TWG2 Linkages between agriculture and the wider rural economy</u>, website.

European Network for Rural Development (ENRD) (2010) 'Remote Care Services' in the Outermost Regions of Portugal, RDP Project Database, website.

European Network for Rural Development (ENRD) (2017) <u>Workshop on Social Hubs in</u> Rural Europe, website.

European Parliament and Council Directive 2000/60/EC of 23 October 2000 <u>establishing</u> a framework for Community action in the field of water policy.

European Parliament and Council Directive 2001/42/EC of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment.

European Parliament and Council Directive 2009/128/EC of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides.

European Parliament and Council Directive 2009/147/EC of 30 November 2009 on the conservation of wild birds.

European Parliament and Council Directive 2011/92/EU of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment.

European Parliament and Council Regulation (EU) No 1305/2013 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.

European Parliament and Council Regulation (EU) No 1306/2013 of 17 December 2013 on the financing, management and monitoring of the common agricultural policy and repealing Council Regulations (EEC) No 352/78, (EC) No 165/94, (EC) No 2799/98, (EC) No 814/2000, (EC) No 1290/2005 and (EC) No 485/2008.

European Parliament and Council Regulation (EU) No 1307/2013 of the of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy and repealing Council Regulation (EC) No 637/2008 and Council Regulation (EC) No 73/2009.

European Parliament and Council Regulation (EU) No 1308/2013 of 17 December 2013 establishing a common organisation of the markets in agricultural products and repealing Council Regulations (EEC) No 922/72, (EEC) No 234/79, (EC) No 1037/2001 and (EC) No 1234/2007.

European Parliament, A Welcoming Europe?, website.

Eurostat (2009) Consumers in Europe, Eurostat, Statistical book, Luxembourg.

Eurostat (2016) <u>Data on digital divide</u>, <u>Eurostat</u>, <u>Statistics on rural areas in the EU</u>, website.

Eurostat (2017) <u>Sustainable development in the European Union – Monitoring report on progress towards the SDGs in an EU context</u>, <u>Publication Office of the European Commission</u>.

Eurostat Agri-environmental indicators, website.

Eurostat Food price monitoring tool, website.

Eurostat Population by educational attainment by degree of urbanisation, website.

Eurostat series Employment by NUTS 3 regions, website.

Eurostat series Gross value added, website.

Eurostat series **Population density** website.

EY et al (2014) The economic impact of modern retail on choice and innovation in the EU food sector, Study to the European Commission

Farrell, G, *et al.* (2000) <u>Lutter contre l'exclusion sociale en milieu rural</u>, Innovation en milieu rural, Observatoire européen LEADER, Cahier de l'innovation n°8.

Federal Institute for Research on Building, Urban Affairs and Spatial Development (BBSR) *et al.* (2014) <u>ESPON ATLAS Mapping European territorial structures and dynamics</u>, ESPON programme.

Ferrari E. et al. (2017) <u>Scene-setter on jobs and growth in EU agri-food sector</u>, Workshop organised by Directorate General of Agricultural and Rural Development.

Fertilizers Europe (2015) Industry facts and figures, website.

Food Drink Europe *et al.* (2014) <u>Joining forces for an EU Industrial Policy for the food and drink sector. A European Social Partnership Initiative.</u>

Forzieri *et al.* (2016) <u>Multi-hazard assessment in Europe under climate change</u>, Climatic Change, Volume 137, Issue 1–2.

Gall, R. *et al.* (2006) <u>Agricultural producer cooperatives as strategic alliances</u>, International Food and Agribusiness Management Review, Volume 9, Issue 4.

Gosling & Williams (2010) <u>Connectedness to nature, place attachment and conservation behaviour: Testing connectedness theory among farmers,</u> Journal of Environmental Psychology, Volume 30, Issue 3.

Greenville Jared (2017) <u>Links between global agriculture and food value chains and jobs and growth</u>, Workshop organised by Directorate General of Agricultural and Rural Development.

Hélaine S, et al. (2016) A stochastic approach of the assessment of EU intervention mechanisms for dairy products, Scientific Congress SFER, VetAgroSup, Clermont, France, 9/10 juin.

Hunt, J. (2014) Making the CAP Fit: Responding to the Exploitation of Migrant Agricultural Workers in the EU, The International Journal of Comparative Labour Law and Industrial Relations 30, n° 2

Institute for Environmental European Policy (IEEP) (2011) <u>Addressing biodiversity and habitat preservation through measures applied under the Common Agricultural Policy, Study to the European Commission.</u>

Institute for Environmental European Policy (IEEP) *et al.* (2017) <u>Service contract to support follow-up actions to the mid-term review of the EU biodiversity strategy to 2020 in relation to target 3A – Agriculture, Study to the European Commission.</u>

Intergovernmental Panel on Climate Change (2014) <u>Summary for Policymakers.</u> In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report, Cambridge University Press, Cambridge, UK and New York, USA.

IRS *et al.* (2015), "Ex post evaluation of 2007-2013, Culture and Tourism Final Report", Work Package 9, Final report to Directorate General for Regional and Urban Policy.

Kallas *et al.* (2010) <u>Farmers' objectives as determinants of organic farming adoption: The case of Catalonian vineyard production</u>, Agricultural Economics, Volume 41, Issue 5.

Kantor (2015) <u>Synthesis of ex ante evaluations of rural development programmes 2014 - 2020</u>, Study to the European Commission.

Katsarova, I. (2013) <u>The (low) absorption of EU Structural Funds</u> Library of the European Parliament, Library Briefing.

Kovats, R.S. *et al.* (2014) <u>Europe</u>. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press, Cambridge, UK and NY, USA.

Kritikos, M (2017) <u>Precision agriculture in Europe: Legal, social and ethical</u> considerations, Study to the European Parliament.

LEI (2011) <u>Evaluation of CAP measures applied to the dairy sector</u>, Study to the European Commission.

LEI- WUR *et al.* (2016) Farm Level Indicators for New Topics in policy evaluation project (FLINT), project financed under the FP7, website.

Lewis D. *et al.* (2010) Refinement of the OECD regional typology: Economic Performance of Remote Rural Regions

Linnemann, L. (2016) <u>Establishment of a sustainable and environmentally friendly wheat-value chain (OG ENU-Wheat)</u>, EIP-AGRI workshop 'Operational Groups: First experiences'.

LMC (2012) <u>Evaluation of measures applied under the CAP to the cereals sector</u>, Study to the European Commission

Lugato et al. (2014, 2016) Model framework architecture, validation and scenario analysis.

Mahé L-P. *et al.* (2016) The future of market measures and risk management schemes, Part 2, Study to the European Parliament.

Martinez Juan, A. (2017) <u>EU rural development policy and the integration of migrants</u>, briefing (Feb.) European Parliamentary Research Service.

Matthews A. (2017) Why further reform of the CAP is necessary? in CAP: thinking out of the box Further modernisation of the CAP – why, what and how?' RISE Foundation

Matthews, A. (2016) <u>The future of direct payments</u>, CAP reform post 2020 - Challenges in agriculture, Part 1, Study to the European Parliament.

Maybery, D. *et al.* (2005) Categorising farming values as economic, conservation and lifestyle, Journal of Economic Psychology, Volume 26, Isssue 1.

M'barek R. *et al.* (2017) <u>Scenar 2030 - Pathways for the European agriculture and food sector beyond 2020, European Commission, Joint Research Centre (JRC).</u>

Metis GmbH *et al.* (2010) "<u>Ex-post evaluation of LEADER +</u>" Study to the European Commission.

Minarelli, F. *et al.* (2015) <u>Innovation in European food SMEs: determinants and links between types</u>, Bio-based and Applied Economics Volume 4, Issue 1.

Minviel, J. et al. (2014). Meta-regression analysis of the impact of agricultural subsidies on farm technical efficiency, EAAE 2014 Congress 'Agri-Food and Rural Innovations for Healthier Societies', Volume 26.

Mylona, K. et al (2016) <u>Delivering on EU food safety and Nutrition in 2050 – future challenges and policy preparedness, European Commission</u>, Joint Research Centre (JRC).

Mzoughi (2011) <u>Farmers adoption of integrated crop protection and organic farming: Do moral and social concerns matter?</u>, Ecological Economics, Volume 70, issue 8.

Nicholls, R.J *et al.* (2007) <u>Coastal systems and low-lying areas</u>. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry *et al.* Cambridge University Press, UK.

Nordregio (2006) <u>Study on Employment in rural areas (SERA)</u> Final Report to the Direction-General for Agriculture and Rural Development, Brussels.

Nowicki, P. *et al.* (2006) <u>Scenar 2020. Scenario study on agriculture and the rural world</u>, Study to the European Commission

Nurzyńska, I. (2016) <u>The Role of the Common Agricultural Policy in Stimulating Rural Jobs in Poland</u>, 160th EAAE Seminar 'Rural Jobs and the CAP', Warsaw, Poland.

OCDE (2012), <u>Linking Renewable Energy to Rural Development</u>, OECD Publishing, Paris.

OECD (2010) Strategies to Improve Rural Service Delivery, OECD Publishing, Paris.

OECD (2012) <u>Promoting growth in all regions. Lessons from across the OECD, OECD Publishing, Paris.</u>

OECD (2013) <u>Rural-Urban Partnerships: An Integrated Approach to Economic Development</u>, OECD Publishing, Paris.

OECD (2017) <u>Evaluation of Agricultural Policy Reforms in the European Union: The Common Agricultural Policy 2014-20</u>, OECD Publishing, Paris.

OECD (2017), <u>Agricultural Policy Monitoring and Evaluation 2017</u>, OECD Publishing, Paris.

ÖIR *et al.* (2012) <u>Synthesis of Mid-Term Evaluations of Rural Development Programmes 2007-2013</u>, Final Report for the European Commission.

ÖIR *et al.* (2016) The role of the EU's Common Agricultural Policy in creating rural jobs, Study to the European Parliament.

Olper, A. et al. (2012) <u>Does the Common Agricultural Policy Reduce Farm Labour Migration? Panel data analysis across EU regions</u>, Comparative Analysis of Factor Markets for Agriculture across the Member States No. 28.

Orgiazzi et al. (2016) A knowledge-based approach to estimating the magnitude and spatial patterns of potential threats to soil biodiversity, Science of the Total Environment, Volumes 545-546.

Oullier, O. (2013). Behavioural insights are vital to policy-making, Nature, 501(7468).

Paggliaci, F. (2017) <u>Regional paths towards Europe 2020 targets: a spatial approach</u>, European Planning Studies, Volume 25, Issue 4.

Panagos P. *et al.* (2015) The new assessment of soil loss by water erosion in Europe, Environmental Science & Policy 54, Volume 58.

Panagos P. et al. (2018) Cost of agricultural productivity loss due to soil erosion in the European Union: From direct cost evaluation approaches to the use of macroeconomic models, Land Degradation and Development., Volume 1, Issue 14.

Panagos, P. *et al.* (2015) <u>Estimating the soil erosion cover-management factor at European scale</u>, Land Use policy Volume 48C.

Panagos, P. *et al.* (2016) <u>Soil Conservation in Europe: Wish or Reality?</u> Land Degradation and Development, Volume 27, Issue 6.

Pannell, D.J. *et al.* (2006) <u>Understanding and promoting adoption of conservation practices by rural landholders</u>, Australian Journal of Experimental Agriculture, Volume 46, Issue 11

Pe'er, G. et al. (2017) <u>Is the CAP fit for purpose? An evidence-based fitness check assessment</u>, Leipzig, German Centre for Integrative Biodiversity Research (iDiv), Halle-Jena-Leipzig.

Pérez Domínguez, I. *et al.* (2016) <u>An economic assessment of GHG mitigation policy options for EU agriculture (EcAMPA 2)</u>, Science for Policy Report, European Commission, Joint Research Centre (JRC).

Petrick, M. and Zier, P. (2011) "Regional employment impacts of Common Agricultural Policy measures in Eastern Germany: a difference-in-differences approach", Agricultural Economics, volume 42, issue 2.

Piorr A. *et al.* (2011) <u>Peri-urbanisation in Europe: Towards a European Policy to sustain Urban-Rural Futures</u>, PLUREL, University of Copenhagen / Academic Books Life Sciences

Poláková, J. et al. (2011) Addressing biodiversity and habitat preservation through Measures applied under the Common Agricultural Policy, Study to the European Commission.

Putnam, R. (1993) La tradizione civica nelle regioni italiane, Milan, Mondadori.

Ramboll (2006) <u>Study to assess the administrative burden on farms arising from the CAP</u> Study to the European Commission.

Renwick, A. et al., (2012) Policy reform and agricultural land abandonment in the EU

Ronzon, T. *et al.* (2015) <u>The Bioeconomy in the European Union in numbers. Facts and figures on biomass, turnover and employment.</u> European Commission, Joint Research Centre, Institute for Prospective Technological Studies, Spain.

Ronzon, T. *et al.* (2017) A systematic approach to understanding and quantifying the EU's bioeconomy. Bio-based and Applied Economics, volume 6, n°1.

Rossi R. (2017) <u>Women and their roles in rural areas</u>, European Parliamentary Research Service.

Roza, P. *et al.* (2012) <u>Simplification of the CAP, Assessment of the European Commission's reform proposals</u>, LEI Wageningen.

Sanders, J et al. (2016) <u>Distribution of the added value in the organic food chain</u>, Study to the European Commission

Schmitzberger *et al.* (2005) <u>How farming styles influence biodiversity maintenance in Austrian agricultural landscapes</u> Agriculture, Ecosystems & Environment, Volume 108, Issue 3.

Schrijver *et al.* (2016) <u>Precision agriculture and the future of farming in Europe</u>, Scientific Foresight Study, European Parliamentary Research Service.

Schulz *et al.* (2013) <u>Assessing farmers' willingness to accept "greening" insights from a discrete choice experiment in Germany</u>, Agricultural Economics, Volume 65, Issue 1.

Shucksmith, M. *et al.* (2009); Novo-Corti *et al.*(2014) according to Clifton, J. *et al.* (2015) <u>Public infrastructure services in a territorial perspective: Analysis in the EU context.</u>

Slavova, D. (2017) <u>Ex-Post evaluations on Rural Development Programmes 2007-2013</u>, Information report for the European Economic and Social Committee.

Söderberg, T. (ed.) (2016), <u>Greening of the CAP in practice – costs versus environmental</u> benefits, Report 2016:18Eng, Jönköping, Swedish Board of Agriculture.

Standing Committee for Agricultural Research (SCAR) (2017) <u>Policy brief on the Future of Advisory Services</u>, Strategic Working Group on Agricultural Knowledge and Innovation Systems.

Standing Committee on Agricultural Research (SCAR) (2016) <u>Agricultural knowledge</u> <u>and innovation systems: Towards the future. A foresight paper</u>, Strategic Working Group AKIS, Study to the European Commission.

Stewart, D. W. et al. (2014) Focus groups: Theory and practice, Sage publications.

Stolte, J. *et al.* (2016) <u>Soil threats in Europe – Status, methods, drivers and effects on ecosystem services,</u> JRC Technical reports, European Commission, Joint Research Centre (JRC).

Sucksmith, M. (2010) <u>How to promote the role of youth in rural areas of Europe</u>, Study to the European Parliament.

Sutton, M. *et al.* (2011) <u>The European Nitrogen Assessment: Sources, Effects and Policy Perspectives</u>, Cambridge University Press.

Sweco, et al. (2017) <u>Use of new provisions on simplification during the early implementation phase of ESIF</u>, Study to the European Commission.

Swinnen, J. *et al.* (2008). <u>Study on the functioning of land markets in the EU Member States under the influence of measures applied under the Common Agricultural Policy</u>. Final report. Centre for European Policy Studies (CEPS).

Swinnen, J. *et al.* (2013) <u>Possible effects on EU land markets of new CAP direct payments</u>, Study to the European Parliament.

Terluin, I. et al. (2017) <u>Flexibility given to Member States - state of play and perspectives</u>, Study to the European Parliament

Terres, JM. *et al.* (2013) <u>Assessing the risk of farmland abandonment in the EU</u>, Scientific and Policy Reports, European Commission, Joint Research Centre (JRC)

The James Hutton Institut *et al.* (2015) <u>Prospect for farmers' support: Advisory Services (PROAKIS)</u>, website.

The N2K Group (2016) <u>Integration of Natura 2000 and biodiversity into EU funding</u> (EAFRD, ERDF, CF, EMFF, ESF). Analysis of a selection of operational programmes <u>approved for 2014-2020</u>, Study to the European Commission.

Tomka, B. (2013) A Social History of Twentieth-Century Europe, Routledge, Taylor and Francis Group, London and New York.

Trouvé A. *et al.* (2016) <u>Etude sur les mesures contre les déséquilibres de marché : quelles perspectives pour l'après quotas dans le secteur laitier européen?</u> Study to the Ministry of Agriculture and Food.

United Nations (2016) Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2016/2/Rev.1) Annex IV: Final list of proposed Sustainable Development Goal indicators, University Press, Cambridge, United Kingdom and New York, USA.

United States Department of Agriculture (USDA) <u>Farm Bill Home</u>, Farm Service Agency, website.

Van Bavel, R. et al. (2018) Applying behavioural sciences to EU policy-making, JRC Science for Policy.

Walsh, K. *et al.* (2013) Employment and social inclusion in rural areas: a fresh start, POBAL, Government supporting communities.

Wiest, K. (2016) <u>Women and migration in Rural Europe</u>. <u>Labour Markets</u>, <u>Representations and Policies</u>, New Geographies of Europe.

Wiggering, H. *et al.* (2005) <u>Indicators for multifunctional land use - Linking socioeconomic requirements with landscape potentials, Ecological Indicators 6.</u>

Wijnands, Jo H.M. et al (2017) <u>Analyses of the Functioning of Milk Package provisions as regards Producer Organisations and collective negotiations</u>, European Commission, Joint Research Centre (JRC).

World Bank on the European Union (2017) <u>Thinking CAP Supporting Agricultural Jobs and Incomes in the EU</u>, EU Regular Economic Report 4.

Wreford, A. *et al.*, (2017) Overcoming barriers to the adoption of climate-friendly practices in agriculture. OECD Food, Agriculture and Fisheries Papers, n°101.

Zawalińska K. (2017) <u>Territorial cohesion through lenses of the CAP and rural areas</u>, workshop organised by Directorate General of Agriculture and Rural Development.

$Annex\ 10-Glossary^{182}$

Term or acronym	Meaning or definition
Administrative burden	Costs incurred by enterprises, the voluntary sector, public authorities and citizens in meeting legal obligations to provide information on their activities, either to public authorities or to private parties, and resulting from collecting and processing information which would not be done in the absence of a legal obligation.
Advisory services	These are services intended to assist farmers (as well as forest holders and small and medium enterprises in rural areas) to improve the economic and environmental performance of their holdings. These services provide tailor-made advice, taking into consideration the specificities of the farm, to contribute to the sustainability and climate friendliness of the holding. The scope of the advice covers any economic, environmental and social aspect that a beneficiary may need to develop his or her activity.
AECM	Agri-Environment and Climate Measure: These are practices, undertaken voluntarily by farmers, over a set period. Support may be provided through Rural Development programmes. The practices bring environmental benefits and /or help to mitigate and adapt to climate change. The payments compensate farmers for the extra costs that they incur and the income that they forego when they undertake these practices. The practices must go beyond a number of obligations which apply to farmers in any case – including (but not limited to) cross-compliance and relevant national legislation. A given practice which is funded through the greening provisions of pillar I may not also be funded through an agri-environment-climate measure.

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A full-fledged glossary including definitions on the CAP on: European Commission (2015) Glossary of the Common Agricultural Policy, (DG AGRI), website.

Term or acronym	Meaning or definition
AKIS	"Agricultural Knowledge and Innovation System" means the combined organisational context and interaction of stakeholders who use and produce knowledge and innovation for agriculture and rural areas, including farmers, advisors, trainers, researchers, and other agricultural experts. The scope of the knowledge exchange and innovation within AKIS reaches out to EU, national, regional, and local levels and covers issues related to agriculture and wider rural concerns, including environment, climate change, energy supply, agri-food or biobased value chains, and rural businesses opportunities.
ANC	Areas with Natural or other Specific Constraints: These are areas where farming is handicapped by a natural or other specific constraint. The areas have to be delimited by member states on the basis of eight biophysical criteria (e.g. slope), with some flexibility for member states to use other criteria for up to 10% of their agricultural area. Before the 2013 reform of the Common Agricultural Policy, such areas were known as 'Less Favoured Areas' (LFAs) and were defined under much vaguer criteria – a fact criticised by the European Court of Auditors. In these areas, farmers face higher costs of production and are eligible for compensatory payments calculated on the basis of the additional costs incurred and income foregone. There are three different categories of such area: 1. mountain areas, which are handicapped by altitude, difficult climatic conditions and a short growing season; 2. areas, other than mountain areas, facing significant natural constraints; 3. other areas which face specific constraints and where the land needs to be managed in order to conserve or improve the environment, to maintain the countryside, to preserve the potential for tourism or to protect the coastline.

Term or acronym	Meaning or definition
BPS	Basic Payment Scheme:
	Under the 2007-2013 rules of the Common Agricultural Policy, farmers received direct payments under either the Single Payment Scheme or the Single Area Payment Scheme. The 2013 reform of the Common Agricultural Policy replaced the Single Payment Scheme with the Basic Payment Scheme which came into effect as from 2015. The Basic Payment Scheme is operated on the basis of payment entitlements allocated to farmers in the first year of application of the scheme and activated each year by farmers. Eligibility for the Basic Payment Scheme or, as the case may be, the Single Area Payment Scheme is a precondition for farmers to receive other direct payments such as the green direct payment, the redistributive payment, the payment for areas with natural or other specific constraint and the payment for young farmers.

Term or acronym	Meaning or definition
CAP	Common Agricultural Policy (CAP):
	This is the set of legislation and practices adopted by the European Union to provide a common, unified policy on agriculture. The initial measures were introduced in 1962. Since then, the policy has been adapted and developed and has undergone a number of reforms.
	The overall objective is to ensure that agriculture can be maintained over the long term at the heart of a living countryside.
	The European Union is obliged by law to have an agricultural policy. Article 38 (4) of the Treaty on the Functioning of the European Union states that 'the operation and development of the internal market for agricultural products must be accompanied by the establishment of a Common Agricultural Policy.'
	The aims are as follows (article 39):
	1. an increase in agricultural productivity by means of technical progress and the rational development of agricultural production,
	2. a fair standard of living for the agricultural community,
	3. the stabilisation of markets for farm products,
	4. food security (i.e. ensuring that there is always a supply of food),
	5. food affordability (i.e. that the price of food is at a level that people can afford).
CAP Plan	(there is no ready made definition)
Capping	The 2013 reform of the Common Agricultural Policy granted member states the option to 'cap,' i.e. to limit, the amount of the Basic Payment that any farmer receives. The funds 'saved' under this mechanism stay in the member state concerned and are transferred to the Rural Development envelope. Capping is voluntary for member states and is a specific application of degressivity (see modulation, transfers between pillars).

Term or acronym	Meaning or definition
Carbon preservation and sequestration	Process involved in carbon capture and the long-term storage of atmospheric carbon dioxide or other forms of carbon to mitigate or defer global warming.
CDG	Civil Dialogue Groups:
	These are groups of representatives of organisations at European level from civil society. The organisations include professional associations and other non-governmental organisations which are involved in farming, the rural economy, food production, food processing, agricultural trade, the environment, consumer protection and other related matters. They meet with the services of the Commission several times a year. There are 13 such groups. They play an advisory and consultative role - they are not involved in the drafting or approval of legislation.
CLLD	Community-Led Local Development :
	A coherent set of operations to meet local objectives and needs, which contributes to meeting the European Union strategy for smart, sustainable and inclusive growth, and which is designed and implemented by a <u>local action group (LAG)</u> .
CMEF	Common Monitoring and Evaluation Framework:
	The horizontal regulation (Regulation (EU) No 1306/2013, Article 110) establishes a common monitoring and evaluation framework with a view to measuring the performance of the CAP. It covers all instruments related to the monitoring and evaluation of CAP measures and in particular direct payments, market measures and rural development measures.
CMES	Common Monitoring and Evaluation System:
	For rural development, the monitoring and evaluation system is set out by: the common provisions regulation (Regulation (EU) No 1303/2013), which defines the common monitoring and evaluation elements for the European Structural and Investment Funds (ESIF); and the rural development regulation (Regulation (EU) No 1305/2013), which addresses the specificities for the rural development programmes.

Term or acronym	Meaning or definition
СМО	Common Market Organisation
	A common market organisation is a set of measures that enables the European Union to monitor and manage, either directly or indirectly (via producer organisations supported by operational programmes), the markets of agricultural products. The rules are laid down in the regulation on the single common market organisation.
	The purpose of market management is to stabilise markets (in terms of quantity offered and purchased and the price at which transactions take place) and thus to ensure, on the one hand, that farmers do not suffer from excessively low prices and, on the other, that consumers have a secure supply of food at reasonable prices.
	Until 2007, the European Union operated 21 common market organisations which together covered around 90% of the output of farms. With a view to make things simpler, the European Union has amalgamated these 21 common market organisations into a single set, known as the single common market organisation.
Cover crops	crops planted as an intermediate crop primarily to manage soil erosion, soil quality, water quality, weeds, pests and biodiversity.
CO ₂ emissions	Carbon dioxide emissions, the most long-lived greenhouse gas in the Earth's atmosphere.
Crop diversification	Growing a variety of crops on the arable land of a farm in one single season, refers to one of the greening measures in the current CAP.
Crop rotation	An agricultural technique in which, season after season, each field is sown with successive crops in a regular rotation, each crop being repeated at intervals of several years.

Term or acronym	Meaning or definition
Cross-compliance	In order to receive direct payments and some other forms of support, farmers are required to respect certain rules. This requirement is known as cross-compliance. These rules concern food safety, animal health, plant health, the climate, the environment, the protection of water resources, animal welfare and the condition in which farmland is maintained.
	There are two components of these rules: statutory management requirements and good agricultural and environmental conditions. If a farmer is found not to respect these rules, his or her direct payments may be reduced.
Decoupling	Introduced by the 2003 reform of the Common Agricultural Policy, decoupling is the removal of the link between the receipt of a direct payment and the production of a specific product. Prior to this reform, farmers received a direct payment only if they produced the specific product to which the direct payment was associated. It meant that the profitability of producing a product (cereals, beefmeat) did not depend only on the price at which the farmer could sell the product in the market, but also on the amount of the direct payment that was associated with that particular product.
	The 2003 reform decoupled many direct payments from production and this process was continued in the 2009 <u>health check</u> . The overall effect of decoupling has been to move the agricultural sector more towards the free market and to give farmers greater freedom to produce according to market demand.
	The health check permitted member states to continue to couple a small number of direct payments to production (for instance the suckler cow premium and the sheep and goat premium). The possibility of keeping a link between production and direct payments was maintained in the 2013 reform. The reason is to support the continued production of particular products so as to avoid land falling out of farming in vulnerable regions

Term or acronym	Meaning or definition
Degressivity	The 2013 reform of the Common Agricultural Policy stipulated that the direct support (basic payment scheme and single area payment scheme) that any farmer is entitled to receive is to be reduced by at least 5% of the amount of the payment above EUR 150 000. In order to take employment into account, the farmer can deduct the costs of salaries in the previous year (including taxes & social security contributions) before this reduction is applied. Member states using more than 5% of their annual national ceiling to grant a redistributive payment are not required to apply this reduction. The funds thus 'saved' stay in the member state concerned and are transferred to the Rural Development envelope (see capping, modulation, transfers between pillars).
Direct payments	Direct payments were established by the 1992 reform of the Common Agricultural Policy. Prior to this reform, the Common Agricultural Policy supported prices: i.e. the prices at which farmers sold their products in the market (such support is therefore not paid directly to farmers). The 1992 reform reduced the level of price support. To prevent a corresponding fall in the incomes of farmers, direct payments were introduced. Nowadays, direct payments are granted to farmers in order to support their incomes and to remunerate them for their production of public goods.
EAFRD	European Agricultural Fund for Rural Development: This fund was created in September 2005 and came into operation at the beginning of 2007. It replaced the Guidance Section of the European Agricultural Guidance and Guarantee Fund and that part of the guarantee section from which some of the Rural Development measures had been funded. It is the single source of funding from the European Union for Rural Development.
EAGF	European Agricultural Guarantee Fund: This fund was created in September 2005 and came into operation at the beginning of 2007. It replaced the guarantee section of the European Agricultural Guidance and Guarantee Fund. It provides funding for direct payment to farmers, for the management of the agricultural markets and for a number of other purposes such as veterinary and plant health measures, food programmes and information activities.

Term or acronym	Meaning or definition
Ecological focus area	Since 2015, every farmer in the European Union who claims a direct payment and has more than 15 hectares of arable land is obliged to have 5% of his arable land covered by ecological focus areas. These are areas which bring benefits for the environment, improve biodiversity and maintain attractive landscapes (such as landscape features, buffer strips, afforested areas, fallow land, areas with nitrogen-fixing crops etc.). Some exceptions to this general rule apply, for example to farmers who have more than 75% of their area under grassland.
	The obligation to have 5% of land covered by ecological focus areas may be increased to 7 % subject to a European Commission report in 2017 and a legislative proposal from the Commission. This obligation is one of three 'greening' measures of the Common Agricultural Policy 2014-2020 - the others being the maintenance of permanent grassland and crop diversification.
EIP-AGRI	European Innovation Partnership for Agricultural Productivity and Sustainability:
	The purpose of the European innovation partnership is to promote a) the productivity and efficiency of the agricultural sector and b) the sustainability of agriculture (securing soil functionality at a satisfactory level by 2020).
	In order to promote agricultural productivity and sustainability, the European innovation partnership provides a working interface between agriculture, bio-economy and science at regional, national and European Union level. It also serves as a catalyst to enhance the effectiveness of innovation-related actions supported by Rural Development programmes as well as by research and innovation activities supported by the European Union.
	Implementation is channelled through operational groups as key acting entities, involving actors such as farmers, scientists, advisers, non-governmental organisations and enterprises. The operational groups constitute themselves around topics of interest and carry out projects aimed at testing and applying innovative practices, processes, products, services, and technologies. At cross-border or European Union level, operational groups act in particular through cluster initiatives and pilot and demonstration projects.

Term or acronym	Meaning or definition
Emission leakage	Increase of emissions outside the countries taking domestic mitigation or other policy actions
ESIF	European Structural and Investment Funds:
	These include the following funds of the European Union: the European Agricultural Fund for Rural Development, the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund.
Ex-ante conditionality	These are certain prior conditions which should be met in the context of Rural Development programmes. They match essential elements to be in place in order to guarantee the correct implementation of Rural Development programmes and their measures. For example, the definition of baseline conditions for the implementation of agri-environmental-climate measures is an ex-ante conditionality for such a measure.
External Convergence	Introduced by the 2013 reform of the Common Agricultural Policy, the term external convergence refers to making the policy fairer between member states. The policy becomes fairer because the national envelopes for direct payments are progressively adjusted either upwards or downwards to bring them close to the average level for the European Union. The national envelopes of those member states where the average payment (in EUR per hectare) is below 90% of the average are gradually increased (by one third of the difference between their current rate and 90% of the average). The national envelopes for member states receiving above average amounts are correspondingly adjusted downwards. There is a guarantee that every member state reaches a minimum average level of direct payment at national or regional level by 2019.

Term or acronym	Meaning or definition
FADN	Farm Accountancy Data Network:
	The farm accountancy data network provides data on the financial and economic aspects of various types of farming in the member states of the European Union. Each year a sample of farms is selected which is representative of commercial farms. These farms provide data on their costs of production, their revenues from sales and other aspects of their farming operations. The data enable the European Union to monitor the income situation of farmers and to examine the effects of the Common Agricultural Policy.
Farmer	In the context of the Common Agricultural Policy, a farmer is an individual (or group of individuals e.g. partnerships, companies, and other legal structures through which a business is conducted) whose holding is situated with the territory of the European Union and who exercises an agricultural activity.
Farm sustainability tool for nutrient management (Nutrient Management Plan)	Tool at farm level that can be used to increase the efficiency of the use of all nutrient sources a crop uses while at the same time reducing production costs and environmental risk.
FAS	Farm Advisory System: system for advising beneficiaries on land management and farm management. That farm advisory system can be operated by designated public bodies and/or selected private bodies.
Financial discipline mechanism	This is a mechanism for ensuring that the expenditure under the provisions of the Common Agricultural Policy does not exceed the limits specified in the European Union budget.
Financial instruments	Measures of financial support provided on a complementary basis from the budget of the European Union in order to address one or more policy objectives. Such instruments may take the form of loans, guarantees, equity or quasi-equity investments, or other risk-sharing instruments, and may, where appropriate, be combined with grants.

Meaning or definition
Good Agricultural and Environmental Condition: Farmers are obliged to maintain their land in 'good agricultural and environmental condition.' This concept includes the following: the protection of soil against erosion, the maintenance of soil organic matter and soil structure, and the safe-guarding of landscape features. It is the member states - not the European Union - which decide the exact specification of these parameters.
The 2013 reform of the Common Agricultural Policy introduced several instruments to promote environmental sustainability and combat climate change. These instruments comprise a green direct payment, enhanced cross-compliance obligations, an obligation to allocate 30% of the Rural Development budget to projects and measures that are beneficial for the environment and climate change (including voluntary agri-environment-climate measures), training measures and support from the farm advisory services
This covers accredited Paying Agencies and where applicable, Coordinating Bodies, Certification Bodies, Competent Authorities.
This regulation sets out the general rules on the financial management and budgetary aspects of the two pillars of the Common Agricultural Policy (the European Agricultural Guarantee Fund and the European Agricultural Fund for Rural Development). It concerns financial corrections and controls as well as procedures for the prevention, detection and correction of irregularities and the application of penalties. The regulation provides also for common rules on farm advisory services, cross-compliance and the integrated administration and control system. It sets the basis for the publication of information of the beneficiaries of the Common Agricultural Policy and establishes a common monitoring and evaluation framework with a view to measuring the

Term or acronym	Meaning or definition
IACS	Integrated Administration and Control System: This is an obligatory system used by member states for the management and control of payments made to farmers under the Common Agricultural Policy, using advanced techniques to check parcels by aerial or satellite photography, and to cross-check farmers' claims with computer databases. Specifically, the integrated administration and control system ensures that payment irregularities are revealed and that queries are followed up. In this way, payments to farmers are made correctly and any amounts which have been unduly paid are
Internal convergence	The 2013 reform of the Common Agricultural Policy introduced the requirement that the value of per hectare payment entitlements for the Basic Payment Scheme, within a member state, must move towards a more uniform level. To achieve this, member states could choose from different options: to apply a national or regional flat rate from 2015; to achieve a regional or national flat rate by 2019, or to ensure that those farms receiving less than 90% of the regional or national average rate see a gradual increase — with the additional guarantee that normally each payment entitlement reaches a minimum value of 60% of the national or regional average by 2019. The amounts for farmers above the regional or national average are adjusted, with an option for member states to limit the loss to 30%.
JRC	Joint Research Centre (European Commission)

Term or acronym	Meaning or definition
LEADER	Links between actions for the development of the rural economy:
	This term is a French acronym meaning <i>Liaison Entre Actions</i> de Développement de l'Economie Rurale (in English: 'Links between actions for the development of the rural economy').
	It is a community-led local development method for mobilising and developing rural communities through local public-private partnerships (<u>local action groups</u>). It helps rural people, groups and enterprises to consider the potential of their area and to encourage the implementation of integrated and innovative local development strategies.
	In its first two generations as a Community initiative (Leader I: 1991-93 followed by Leader II: 1994-99) it was focused on disadvantaged rural areas. In 2000-2006 (Leader+), the method was expanded to cover all types of rural area. The approach was then mainstreamed in 2007- 2013, as an integral part of the European Union's Rural Development programmes, covering some 2 200 rural territories across 27 member states. In 2007, Leader was extended to the fisheries sector.
	During the period 2014 - 2020, Leader continues under Rural Development. It is also available under the cohesion policy as a common instrument called <u>community-led local development</u> .
LPIS	Land Parcel Information System:
	This computer database contains all agricultural areas that are eligible for a direct payment under the Common Agricultural Policy. It is used to cross-check the parcels for which payments have been claimed by the farmer. The land parcel identification system ensures that the farmer is paid for the correct area and that overpayment is avoided.

Term or acronym	Meaning or definition
LULUCF	Land Use, Land Use Change and Forestry:
	The term is defined by the United Nations climate change secretariat as 'a greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities'.
	Similar to other economic sectors, land use, land use change and forestry has impacts on the global carbon cycle. The activities included in land use, land use change and forestry can add or remove greenhouse gases from the atmosphere, affecting climate change in either a negative or positive way
Nitrogen surplus	The difference between all nitrogen inputs and outputs on agricultural land
Operational group	These are groups of farmers, researchers, advisors and businesses in the agri-food sector. They receive Rural Development funding to run projects within the framework of a European innovation partnership
Permanent crops	In the context of the Common Agricultural Policy, the term permanent crops means non-rotational crops other than permanent grassland and permanent pastures which occupy the land for five years or more and which yield repeated harvests, including nurseries and short rotation coppice.
Permanent grassland	Permanent grassland can be defined as land not included in the crop rotation of the holding for five years or more, used to grow grasses or other herbaceous forage naturally (self-seeded) or through cultivation (sown). It may include other species such as shrubs and/or trees which can be grazed or produce animal feed.
Pillars	Pillars (in the context of the Common Agricultural Policy): The Common Agricultural Policy comprises two 'pillars.' The first pillar is support to farmers' incomes. This support is provided in the form of direct payments and market measures and is entirely financed from the European Agricultural Guarantee Fund. The second pillar is the support provided for the development of rural areas. This support takes the form of Rural Development programmes and is co-financed from the European Agricultural Fund for Rural Development.

Term or acronym	Meaning or definition
PO	Producer organisation: A legally-constituted group of farmers and growers. Producer organisations assist in the distribution and marketing of products. They also promote a higher quality of products and encourage their members to adopt good environmental practices. Producer organisations have been legally encouraged since 2001 in the fruit and vegetable sector, and since 2011 in the milk sector (see milk package).
	Since the 2013 reform of the Common Agricultural Policy, producer organisations are now encouraged in all sectors. Producer organisations can group themselves into associations of producer organisations and into <u>inter-branch organisations</u> .
POSEI	Programmes d'Options Spécifiques à l'Eloignement et à l'Insularité (for Outermost Regions): This is a scheme that supports the incomes of farmers in the outermost regions of the European Union and the supply of essential products to those regions. It is the French acronym for Programmes d'Options Spécifiques à l'Eloignement et à l'Insularité. The scheme seeks to compensate farmers for their extra costs of production and marketing due to the small size of these territories, their difficult topography and climate, and the long distance to European markets.
RDP	Rural Development Programme: The Rural Development programmes define multi-annual strategies in selected programming areas, based on a thorough analysis of their socio-economic and environmental needs. The strategies implemented under each Rural Development programme aim at meeting the European Union priorities for Rural Development through a number of selected measures. The programmes also lay down the conditions that potential beneficiaries have to meet if they are to benefit from Rural Development funds.

Term or acronym	Meaning or definition
Redistributive payment	In order to redistribute support to smaller farmers, member states may allocate up to 30% of their national budget to a redistributive payment for the first hectares. The number of hectares for which this payment could be allocated will be limited to 30 hectares or the average farm size in member states if the latter is more than 30 hectares. The amount per hectare cannot exceed 65% of the average payment per hectare.
Risk management toolkit	The toolkit covers:
	1) Financial contributions to premiums for crop, animal and plant insurance against economic losses incurred by farmers and caused by adverse climatic events, animal or plant diseases, pest infestation, or an environmental incident,
	2) Financial contributions to mutual funds, to compensate farmers for economic losses caused by adverse climatic events, animal or plant diseases, pest infestations or environment incidents,
	3) An income stabilisation tool to compensate farmers for a severe drop in income.
Rural Development measures	The Rural Development measures are defined in the Rural Development regulation and represent the main instruments to implement the Rural Development programmes. For the programming period 2014 – 2020, the number of measures has been reduced compared to the previous programming period. Furthermore, there is now more flexibility in how the measures are used. This increases their effectiveness in meeting specific priorities.
	A range of different types of support is offered by the menu of Rural Development measures to address the many needs of the rural areas of the European Union. Member states have to programme these measures to ensure that they help to achieve one or more European Union priorities for Rural Development and to meet the needs of rural areas.
	Member states have a certain discretion regarding the final design of these measures. The support granted under each measure is shared between the European Union and the member state concerned. This arrangement is known as cofinancing.

Term or acronym	Meaning or definition
SAPS	Single area payment scheme (SAPS):
	Due to limited administrative capacities and the absence of historical data, new member states (i.e. those that joined the European Union in 2004 and 2007) were granted the possibility of applying the single area payment scheme instead of applying the standard direct payment schemes. The single area payment scheme provides a flat-rate decoupled area payment paid for eligible agricultural land and replaces almost all payments granted in other than new member states.
	Under Regulation (EC) No 73/2009, the single area payment scheme was foreseen to expire. However, the 2013 reform of the Common Agricultural Policy permitted member states applying the single area payment scheme in 2014 to apply it until 2020. At present, the single area payment scheme is applied by all new member states except Slovenia, Malta and Croatia.
SMR	Statutory Management Requirements
	The statutory management requirements form part of cross-compliance and are laid down in a number of European Union directives and regulations. They concern public health, animal and plant health, identification and registration of animals, environment and animal welfare. These requirements apply independently of cross compliance (which only establishes the link between the full payment and the respect of such requirements).
VCS	Voluntary Coupled Support:
	Payment to certain hectares of crop or heads of animal according to the rules laid down under Title IV chapter 1 of Regulation EU 1307/2013.