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COMMISSION STAFF WORKING DOCUMENT

Principles and recommendations for integrating climate change adaptation considerations under the 2014-2020 rural development programmes[1]

Accompanying the document

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

An EU Strategy on adaptation to climate change

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[1] DISCLAIMER: This document must not being regarded as an official guide from the Commission. The document has been finalised before the adoption of legal acts concerning the CAP for the period 2014-2020. Therefore, some of the provisions referred to may change in the final regulations adopted by the Council and the European Parliament.

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Summary

Setting the context

As to the **rural development policy for the period 2014-2020**, the Commission has proposed central novel elements which give opportunities to optimally address climate action on adaptation and mitigation through the rural development programmes. The novel elements refer to:

- **clear policy objectives** that shall be pursued through the **six** Union **priorities** for rural development, among which two refer to climate action (Priorities 4 and 5),
- **cross-cutting objectives** like innovation, environment and **climate change mitigation and adaptation** to be pursued horizontally through all the measures of the rural development programmes (RDP)
- increased **flexibility** in designing the programmes which means that the measures can be programmed in relation to several priorities and focus areas
- an increased **performance orientation** of EAFRD based on macro-economic conditionality, ex-ante conditionality and on a performance review system,
- **result orientation** of the programmes - setting targets by focus areas that are linked to the EU's rural development priorities

What to do at the Programming Stage

For the period 2014-2020, programming encompasses development of **a Partnership Agreement** setting binding terms between the Member State and the Commission, and Rural development Programmes. Key points to bear in mind when developing these documents:

- **Partnership Agreements** entail obligations for Member States and are a good opportunity to 'lock-in' consideration of climate change adaptation throughout the process. Since they need to be developed in full consultation with all relevant government departments and stakeholders, climate experts should be involved in their development;
- Climate adaptation (and mitigation) features as a horizontal issue that must be taken into account in the development of RDP and Partnership Agreements (Article 8 of common rules regulation proposal). RDPs must explain how they address this and the other cross-cutting objectives of rural development through the six Union priorities of the policy (Article 5 of EAFRD proposal);
- Spending programmes should be driven by rural and sectoral strategies already in place[2], including national or regional **adaptation strategies**. The country page on Climate-ADAPT[3] platform provides up-to-date information on adaptation policies in each Member State;
- The development of **eligibility criteria for measures/** schemes can help cover compliance with adaptation strategies, consideration of impacts and how to address them. This can help to ensure that funding is not provided for activities that could exacerbate the negative impacts of climate change.

Key actions to incorporate adaptation in the RDP's strategic objectives

- Assemble and/or develop a robust **evidence base** on expected climate impacts and how these can affect agriculture and forestry. Where uncertainties remain, this is no good reason for inaction as the cost of inaction may be greater. This can be assessed on a case by case basis;
- Gather information from a range of sources, combining formal research with feedback from land managers and other actors and stakeholders who have practical experience;
- On the basis of the evidence base, articulate clearly what is needed to be achieved by 2020

[2] For example National Forest Strategies or Programmes usually already involves climate change adaptation related strategies based on the Helsinki 1993 H.4. resolution

[3] http://climate-adapt.eea.europa.eu/web/guest/countries

to increase the resilience of agriculture, forests and rural areas, and where it is appropriate to make use of public support through the European Agricultural Fund for Rural Development (EAFRD).

Key actions when developing priorities and measures for RDPs

- Ensure that the information collected at the previous stage is fed into a **needs' assessment** by priority in the SWOT, in particular for priorities 4 and 5;
- Identify the **measures** available under the EAFRD that can be used to deliver these priorities;
- Identify the **multiple benefits** that can be achieved through the measures identified to respond to climate adaptation needs, for example economic, social and environmental benefits;
- Identify activities that are **not deemed appropriate** for funding because they would act counter to climate adaptation needs;
- Identify **safeguards** that need to be put in place to ensure that all supported activities are resilient to climate change
- Design measures sufficiently **flexible** to allow adjustments reflecting evolving predictions about climatic changes over time;
- Ensure **coherence** with other elements of the CAP, such as cross compliance, greening and farm advisory service.

What to do at the Programme Implementation Stage

The overall goal is to create **the necessary conditions for applications so that the award of funding to project beneficiaries and subsequent implementation considers climate change impacts**. This can be done by Managing Authorities, with support from environmental partners/adaptation experts and involves:

- Providing **guidance** and resources for applicants (web-based, printed);
- Ensure that land managers have sufficient **knowledge** about how climate change impacts their projects. Formal **advice** and **training** for project applicants can address this needs together with effective support to farmers and foresters' networks;
- Providing guidance and training for those who provide technical support and advice to land managers and other rural actors – in particular ensuring that those delivering the Farm Advisory Service have sufficient expertise in climate adaptation.

What to do at the Monitoring and Evaluation Stage

Monitoring and evaluation need to be **periodically reviewed** so to **integrate new information about projected climate change** impacts and vulnerabilities throughout the lifetime of the RDPs. Due to its central role in the monitoring process, the **Monitoring Committee** must include sufficient adaptation expertise – through direct membership and also access to required external experts. **Data and information** are the main backbone of monitoring mechanisms.

- Successful monitoring requires **sound integration of adaptation** issues into the indicators within the Common Monitoring and Evaluation Framework (CMEF) as well as the milestones developed at the programming stage;

- A solid **indicator framework** that includes adaptation (even where adaptation is not the main focus of expenditure) and that includes national indicators that go beyond those prescribed at an EU level, will ensure an effective monitoring of climate resilience;
- **Good cooperation** between Managing Authorities and those involved in providing the data will help to ensure the right data can be collected. Where there are gaps in data

availability, efforts need to be made to fill these at the national level.[4]

Guidance for programme evaluators on how best to incorporate climate adaptation into ex ante and ex post evaluations of RDPs should be provided. Engagement of climate experts with the EU and national Evaluation Expert Network should facilitate this process.

[4] See for instance EEA report on climate change, impacts and vulnerability in Europe: http://www.eea.europa.eu/publications/climate-impacts-and-vulnerability-2012

1. INTRODUCTION

1.1. Context

The impacts of climate change are becoming increasingly evident for both the land based sectors as well as rural areas more generally. Even though EU agriculture is technologically developed, its capacity to deliver food and to contribute to ecosystem services for the European society is directly dependent on climatic conditions. European farmers and foresters will need to define their strategies for production, management and investment in face of the increasing uncertainty that climatic changes bring about.

As farmers and foresters manage the majority of land in the EU, the Common Agricultural Policy (CAP) can play an important role in increasing the resilience of rural areas to the effects of climate change and in enabling the agriculture and forestry sectors to develop in a way that ensures their long term sustainability in the face of a changing climate. Successfully integrating climate change adaptation considerations into the CAP will also bring benefits for the economy and society as a whole, by ensuring that essential biodiversity and ecosystem services dependent on land management continue to thrive and that the productive capacity and viability of the land based sectors is maintained. Adaptation planning can bring opportunities to build agricultural systems with greater resilience to environmental, climatic and economic risks.

A thorough integration of climate adaptation into all elements of the CAP is required so the resilience of agricultural and forestry activities to climatic changes is improved. Also, the EU rural development policy has a role in helping adapting farmland and forests ecosystems to climate change through for instance improving the resilience of ecosystems and the genetic diversity of crops and livestock breeds. The awareness, skills, know-how and motivation of authorities, experts and other stakeholders to consider the ways in which climate change will impact the ability of CAP to bring desired long-term sustainable development is a critical issue. This working document helps building such adaptive capacity. It has a particular focus on the programming cycle for Rural Development Programmes (RDPs).

The document relates specifically to the proposed EAFRD[5] regulation (COM(2011)627/3). To date, the CAP reform is not yet concluded and the draft regulations will undergo further changes before they are finalised and brought into force in 2014. This will reflect decisions to be made about Pillar 1 rules for direct payments[6] and in particular the cross compliance and greening requirements, as well as developments in EAFRD and related regulations. Many of the details of EAFRD measures will be determined by implementing regulations, not yet adopted, as well as Commission official guidelines. Although uncertainty remains about the detail of the measures, the priorities and principles outlined in this document will be applicable to the final Regulations.

1.2. Objectives

This document is intended to ensure that climate adaptation objectives are embedded in the design of their 2014 – 2020 Rural Development Programmes (RDPs). It is addressed to

[5] It should be noted that this document has been drafted on the basis of draft regulatory texts. Formal agreement on CAP legislation is not expected until 2013. Some of the provisions referred to may change in the final regulations adopted by the Council and the European Parliament.

[6] COM(2011)625/3

Managing Authorities and all stakeholders involved in rural development programme preparation and consultation, including climate experts and external stakeholders[7].

The European Agricultural Fund for Rural Development (EAFRD) provides an important source of funding for Member States through their RDPs. The document does not attempt to describe in detail the whole process of designing an RDP but rather provides advice, methods, and examples to ensure that climate adaptation needs and priorities are understood and fully integrated into national and regional RDPs for the next programming period. The 2014 – 2020 programming period will see significant changes to the current period and this document sets out adaptation priorities and key principles to guide this process.

It should be seen as a first attempt to bring to the attention of Member States and stakeholders a series of issues identified in the **EU Strategy on adaptation to climate change**[8] with direct relevance for the agriculture and forestry sectors.

Discussions with stakeholders on capacity needs and barriers for effective adaptation showed that the cross-sectoral nature of climate change adaptation and the need to integrate it across all elements of the CAP is a major challenge for authorities.

Agricultural authorities have an important role to play to ensure that land management activities and investments are carried out sustainably with regard to the impacts of climate change. At the same time, environment or climate change authorities often have the formal responsibility for climate adaptation issues within a Member State. It will be their task to indicate to authorities and stakeholders involved in the design, implementation and subsequent evaluation of RDPs how adaptation considerations can be effectively integrated into the design and development at the strategic level (Partnership Agreements and RDPs) as well as into specific measures.

2. INTEGRATING CLIMATE ADAPTATION INTO THE CAP

2.1. The current CAP reform proposals

Pillar 1 continues to be focussed on the provision of income support to farmers through decoupled payments. For the 2014-2020, it is proposed that 30 per cent of the Pillar 1 national ceilings will be allocated to farmers for carrying out compulsory 'green' measures. The most important of these is the proposal to allocate 30 per cent of Pillar 1 national ceilings to a 'greening payment'. To receive this greening payment, farmers will be required to follow requirements for crop diversification on arable land, maintenance of permanent grassland, and the maintenance of seven per cent of the eligible area of arable and permanent crops as, Ecological Focus Areas (EFA). An important aspect in this context is that the scope of the Farm Advisory System (FAS) is proposed to be expanded to cover climate-related issues. The FAS can potentially help building adaptive capacity of farmers by bringing to them the necessary knowledge. Member States, under certain conditions, can transfer a proportion of the Pillar 1 national ceiling to Pillar 2, which can be used for targeted and regional-specific expenditure for climate adaptation.

Pillar 2 – the so-called rural development policy – offers the main opportunities to ensure that national, regional or local adaptation needs are fully integrated into the programmes of expenditure for 2014-2020. The EAFRD measures will be implemented at farm level in the context of the significant and interrelated proposed changes to Pillar 1.

[7] DG AGRI will be providing guidance for rural development programming with several working documents covering different issues.

[8] COM(2013)216

The addition of the term "climate" to the current agri-environment measure is a significant change, signalling a commitment to support for agricultural and forestry management practices contributing towards climate change adaptation and mitigation, which may become even more significant if the EU adopts rules for accounting for emissions from land use, land use change and forestry[9].

The receipt of Pillar 1 payments as well as agricultural land management measures under Pillar 2 is conditional on compliance with 'Statutory Management Requirements' (elements of EU legislation that apply at the farm level) and standards of Good Agricultural and Environmental Condition (GAEC). These cross-compliance requirements must be met by farmers at their own cost. The GAEC standards are defined by Member States within the context of an overarching framework[10]. As such there is some room to influence their specific design to increase the climate resilience of agricultural land.

Two new GAEC related to climate change have been proposed for the forthcoming period. These relate to the maintenance of soil organic matter and the cultivation of organic soils. Measures going further than the compulsory GAEC can be looked at in detail during the programming phase.

2.2. Entry points for climate adaptation

Climate adaptation is not a new priority for the CAP, although to date it has mainly be addressed by reference to specific environmental priorities, such as dealing with water scarcity. In the proposed regulations for the CAP 2014-2020, adaptation has gained greater prominence, with 'the sustainable use of natural resources and climate action' one of the three core objectives of the CAP. '***Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors***…' has been set out as one of the six Union priorities for rural development policy. Actions to address climate adaptation impacts will count as part of the proposed 20 % target for overall budget spending on climate change.

More generally, the proposal for the Common Provisions Regulation (CPR)[11] stipulates, in article 8 on Sustainable Development, that climate change mitigation and adaptation shall be promoted in the preparation and implementation of Partnership Agreements and programmes for five European funds. This Regulation defines eleven thematic objectives including: (4) supporting the **shift towards a low-carbon economy** in all sectors and (5) **promoting climate change adaptation, risk prevention and management**. Hence, the overall framework for the five funds includes climate change mitigation and adaptation. Member States shall provide information on the support for climate change objectives using the methodology adopted by the Commission.

More targeted objectives can also help achieve more climate resilience in rural areas. Within rural development, there are six priorities which relate to the thematic objectives. Particularly relevant for adaptation are priority 4 - Restoring, preserving and enhancing ecosystems – and priority 5 - Promoting resource efficiency and transition to a low carbon economy. The

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9 Proposal for a Decision of the European Parliament and of the Council on accounting rules and action plans on greenhouse gas emissions and removals resulting from activities related to land use, land use change and forestry (COM(2012)0093.

10 The framework for cross compliance is set out in Article 93 and Annex II of the Proposals for the regulation for the financing, management and monitoring of the common agricultural policy (COM (2011) 628/3)

11 This covers five funds: the European Regional Development Fund (ERDF); the Cohesion Fund; the European Social Fund (ESF); the European Agricultural Rural Development Fund (EAFRD); and the European Maritime and Fisheries Fund (EMFF)

proposals for the rural development policy provide a greater emphasis on climate adaptation by also stating that 'all priorities shall contribute to the cross-cutting objectives of (…) climate change… adaptation'[12]. Although not legally binding, it is suggested that Member States spend at least 25% of their EAFRD contribution (i.e. not including national co-financing) for 'climate change mitigation and adaptation and land management, through the agri-environment-climate, organic farming and payments to areas facing natural or other specific constraints'[13].

Many measures will be relevant to tackle adaptation and most of them are closely related to improving resource efficiency and the natural environment in which agriculture takes place. The way these measures are designed in RDPs will determine its potential. **Member States will be expected to set out RDPs showing how they will use the measures available to pursue adaptation within their specific national or regional contexts**.

This document **highlights the opportunities in the proposed regulations for integrating adaptation priorities into RDPs** and schemes/measures in each Member State and/or region. It should help ensure that broad EU objectives are translated into practice at national, regional, and local level.

[12] Article 5 of COM(2011) 627 final

[13] recital 28 of COM(2011) 627 final2

Planned farm-level adaptations

Farm-level adaptive measures range from technological solutions to adjustments in farm management or structures. The speed and scale of the changes, particularly in certain parts of the EU, will require on-going short-term autonomous farm adaptation to be completed by adaptive actions in the form of technological and structural changes. This will require planned strategies based on analysis of local and regional conditions. Constant evolution of crop patterns, farm management practices and land use are observed across the EU, partly in response to climatic variation. Such farm-level adaptations aim at increasing productivity and dealing with existing climatic conditions, and draw on farmers' current knowledge and experience. Over the next years, adaptation may need to go beyond mere adjustments of current practice. Possible short to medium term adaptive solutions include:

- Adjusting the timing of farm operations, such as planting or sowing dates and treatments;
- Technical solutions, such as protecting orchards from frost damage or improving ventilation and cooling systems in animal shelters;
- Choosing crops and varieties better adapted to the expected length of the growing season and water availability, and more resistant to new conditions of temperature and humidity;
- Improving the effectiveness of pest and disease control through for instance better monitoring, diversified crop rotations, or integrated pest management methods;
- Using water more efficiently by reducing water losses, improving irrigation practices, and recycling or storing water;
- Improving soil management by increasing water retention to conserve soil moisture, and landscape management, such as maintaining landscape features providing shelter to livestock;
- Introducing more heat-tolerant livestock breeds and adapting diet patterns of animals under heat stress conditions.
- Foresee use of risk management instruments (such as insurances) to cope with economic effects of extreme events.

Individually or in combination these solutions have substantial potential to counterbalance adverse climatic changes and to take advantage of positive ones. Many of these adaptation options can be implemented by farmers today or in the near future, provided that they have sufficient knowledge and guidelines. However, climate risks are only one aspect influencing farmers' decisions, which involve many other socio-economic and market considerations. Coping with the increasing climatic variability could be more difficult than adjusting to gradual changes in mean climatic variables. This may require greater attention to ensuring stability and resilience of agricultural production and farm incomes in vulnerable regions. Diversifying farm activities and income sources, with fundamental changes in farm structures and in some cases, additional investments, may become necessary.

3. PRINCIPLES TO GUIDE DEVELOPMENT AND IMPLEMENTATION OF 2014-2020 RURAL DEVELOPMENT PROGRAMMES TO MEET ADAPTATION OBJECTIVES

Deciding what to support and how to fund it – based on a strategic evaluation of challenges, priority needs, desired outcomes and funding rules and requirements - is the first major step in the process of implementing rural development policy to the national or regional situation. For the upcoming 2014-2020 period, programming will consist of **RDPs**, linked closely with the **ex-ante evaluation**, and **Partnership Agreements** (PA) (covering not just rural development policy, but also other European Funds).

These documents lay the ground for funding over the next seven years and it is therefore critical that they consider climate impacts, direct funding opportunities for adaptation and adaptation-related investments to improve the resilience of agriculture and forestry sectors and overall rural areas.

Following sections go through all steps of RDPs process and highlight a series of principles to guide the use of EAFRD funding and the development of RDPs to deliver on adaptation.

3.1. Cross cutting principles and approaches

Mainstreaming a cross-cutting objective like climate change adaptation within rural development requires concerted efforts on many fronts. These cross-cutting issues and approaches lay out in this section are relevant across all stages of the RDPs cycle.

3.1.1. Partnership

The partnership principle is already embedded in rural development policy, with a requirement on Member States and regions to involve relevant social, economic and other appropriate institution (including environmental organisations) in all aspects of the preparation, implementation, monitoring and evaluation of RDPs. The proposed Common Provisions Regulation for 2014-2020 requires that 'partners' shall be involved at each stage of the programme cycle and shall be members of the monitoring committee.

For cross-sectoral issues like climate change adaptation, it is essential that environmental/climate authorities and experts are closely involved in the design as well as the subsequent implementation and monitoring and evaluation of RDPs and measures. **The advice presented in this document relies heavily on this right, and encourages adaptation experts to take advantage of it to the greatest extent possible.**

3.1.2. Networks

Since 2007, there is a requirement for each Member State to set up a **National Rural Network** (NRN), bringing together all stakeholders involved in rural development. It aims to facilitate the exchange of expertise and know-how and to identify transferable practices. These networks are now operating in all Member States and a European Network for Rural Development provides a 'Contact Point'[14] or a hub for all the NRNs to come together to share knowledge, facilitate information exchange and cooperation across Europe. These networks remain a priority in the proposals for 2014-2020 and **climate experts are encouraged to engage with their NRNs.** This can, *inter alia,* encourage the sharing of information and expertise on how to address climate adaptation needs in RDPs, for example considering the types of options and approaches used that have proved most effective.

[14] http://enrd.ec.europa.eu/

The new **European Innovation Partnership (EIP) for Agricultural Productivity and Sustainability** will be implemented through actions that are mainly supported by the rural development and the research and innovation policies. For rural development, this will entail funding the setting-up and management of an EIP network at the EU level and innovative actions, including the establishment and operation of 'Operational Groups' (Art. 36, Co-operation) The latter will be set up by 'interested actors' connected to the agricultural and food sector (e.g. farmers, advisors, researchers, businesses) to develop innovative projects to enhance productivity and sustainable resource management. The objectives of the agricultural EIP specifically include **promoting a climate friendly and resilient agriculture** and **improving processes to preserve the environment, adapt to climate change and mitigate it**.

This novel initiative offers significant opportunities to integrate climate adaptation into the projects that the operational groups will carry out. **Climate experts, therefore, are encouraged to engage with the EIP processes** that are taking place at the national/regional level to embed climate adaptation thinking into the design of the projects to be carried out by the Operational Groups, particularly to help develop new technologies and strategies for adaptation in relation to agriculture.

The **European Evaluation Network** for Rural Development (otherwise known as the Evaluation Expert Network) is another network with which it will be important to engage. The aim of this network, which has been in place since 2007, is to support the evaluation of RDPs and to facilitate the networking of those involved in evaluation activities. The current network provides guidance materials for evaluators on how to carry out evaluations of RDPs as well as supporting the development of indicators (see Monitoring and Evaluation section below). By engaging with this network, both directly and via Member States' representatives on the Evaluation Expert Committee, **adaptation experts can help to direct the focus of its activities and encourage the prioritisation of work on methods for capturing the impacts of RDPs in relation to climate adaptation.**

3.1.3. Research and information on climate change vulnerabilities, risks and responses

Climate change adaptation is a research field which is constantly evolving. The period between now and 2020 will bring new understanding of specific and more localized climate threats, their impacts and associated damages. There will also be new technical options for adapting to these climate change impacts. Authorities and experts should be able to constantly integrate new information into RDPs, but also at a more operational level. Projects and measures should be conceived in a **flexible manner** which allows for adjustments as and when new information becomes available. It is worth investigating the degree to which the technical assistance measure could be used to fund evidence gathering and integration activities.

Where to look for information on climate change impacts and adaptation over Europe?

The European Climate Adaptation Platform website (http://climate-adapt.eea.europa.eu/), an initiative of the European Commission, provides a platform for stakeholders across the EU to share information on expected climate change in Europe; current and future vulnerability of regions and sectors; national and transnational adaptation strategies; adaptation case studies and potential adaptation options; and tools that support adaptation planning.

3.2. Partnership agreements

3.2.1. Description

The Partnership Agreement will summarise Member States' plans for using all the CSF Funds[15] in a way that is consistent with Europe 2020 Strategy's objectives. **Partnership Agreements will entail obligations** from Member States. It is therefore a significant opportunity to ensure that consideration of climate change impacts across all programmes is clearly stated up front in this document.

Partnership Agreements are to be submitted to the Commission with the RDPs, once the regulations are adopted[16]. Furthermore, Partnership Agreements have to be prepared in cooperation with partners, including environmental stakeholders.

3.2.2. Key opportunities for integrating adaptation

The task of integrating adaptation into the Partnership Agreement must be seen in relation with the preparation of the RDPs and other programmes. The Partnership Agreement effectively pulls together the content of these programmes in an integrated way, looking for synergies and opportunities for achieving key priorities in a combined way wherever possible. Adaptation actions can be complemented through different funds. There are, in addition, a number of unique opportunities to stress the importance of climate change threats to the programmes, as well as the need for spending on adaptation.

Financial allocations

The 20% target for climate change mitigation and adaptation for the EU budget 2014-2020 shall be reflected in the Partnership Agreement, which must include the total indicative amount of support foreseen for climate change objectives. This is important, as direct financial allocations for adaptation will be reinforced.

RDPs (and the CAP as a whole) will need to set out the indicative amount of support aimed at achieving climate change objectives. This is another opportunity to stress the advantages of integrating adaptation concerns across all the programmes. A common methodology for tracking climate-related expenditure is currently being developed. It will be automatically applied to the RDPs (using the indicator plan) to calculate the amount of rural development expenditure contributing to climate action (mitigation and adaptation)[17].

Ex-ante conditionalities

These are legal, policy, institutional and administrative factors which must be in place in each Member State or region in order to avoid the risk that the Commission suspends payments. It is in the Partnership Agreement that Member States must provide the first assessment of the extent to which the conditionalities are fulfilled. For conditionalities that are not fulfilled at the date of the submission, the relevant RDPs must detail actions and a timetable to meet the requirements within two years of the adoption of the Partnership Agreement (or by 31 December 2016 whichever is earlier).

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15 The Common Strategic Framework (CSF) Funds = include the European Agriculture Fund for Rural Development (EAFRD) and the future European Maritime and Fisheries Fund (EMFF) in addition to the three Cohesion Policy Funds (ERDF, ESF, CF) referenced in the Introduction to this guidance.

16 The Partnership Agreement should be in place by 1 January 2014 but this may be delayed if the regulation adoption process extends into the latter part of 2013.

17 The tracking of climate expenditure will be based on the assignment of a Rio marker category to each budgetary item. The three Rio marker categories are: 0% - not climate related, 40% - significantly climate related, and 100% - targeted to climate. Different markers can be applied for a same RD measure, depending on the priority(ies) / focus area(s) it is programmed for.

For adaptation, the most important conditionality is related to the thematic objective on adaptation and risk management (5). Thematic objective 5 has been identified in the draft regulations as relevant to two EU's priorities for rural development:

(1) RD priority 4: restoring, preserving and enhancing ecosystems dependent on agriculture and forestry; and

(2) RD priority 5: promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in the agriculture and food sectors and the forestry sector.

Annex 3.1 provides the details of the conditionalities linked to these RD priorities which are relevant for climate adaptation. In relation to the risk assessment requirement, where integrated adaptation strategies do not yet exist at the national level, sectoral or regional strategies or policies that consider adaptation needs (for example those for agriculture, forestry, biodiversity, water, soils…) should be taken into account. This will strongly support the effectiveness of spending through RDPs.

Assessment of administrative capacity

The Partnership Agreement must address the administrative capacity of authorities and beneficiaries to ensure efficient implementation of the funds. This is an opportunity to realistically evaluate national capacity to integrate climate change adaptation in rural development measures and investments and consider whether additional capacity building activities are needed and how they will be addressed.

3.3. Development of RDPs

3.3.1. Description

The RDPs are the overarching **planning tool** for expenditure under rural development policy. They must set out a strategy for meeting a series of nationally or regionally appropriate targets in relation to the Union priorities for rural development. They identify which measures are to be used to meet these objectives, based on a SWOT analysis (strengths, weaknesses, opportunities and threats) of the situation in the geographical area covered by the programme (region or national level). They also include a **proposed allocation of the rural development budget** by measure, a **set of indicators** for measuring progress towards meeting the targets, and the arrangements for programme implementation.

RDPs are subject to an **ex-ante evaluation** to assess the overall rationale, consistency and coherence of the programme and this also includes a Strategic Environmental Assessment. RDPS must also demonstrate that Member States comply (or set out a plan for how they intend to comply within two years) with a series of 'ex ante conditionalities', as described above.

RDPs are submitted to the Commission for review and approval, based on consistency with the Europe 2020 objectives and the regulations underpinning rural development policy (the EAFRD). A Member State may submit either a single RDP for its entire territory or a set of regional programmes.

3.3.2. Key opportunities for integrating adaptation

Situation analysis

A SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of the situation in the rural area covered by the programme for rural development has to be carried out in order to identify and justify the strategic objectives to be addressed within the RDP and the outcomes to be achieved.

The proposed EU regulations require that needs for climate change adaptation form part of the situation analysis, so this is an important opportunity to embed adaptation considerations into this process. At a strategic level information on climate threats, potential impacts and vulnerabilities relevant to the Member State, region as well as the sectors covered by RDPs will be essential to understand the different ways in which climate adaptation needs to be incorporated into RDPs.

Essentially, the **integration of climate adaptation** into RDPs consists of two key elements:

- **Consideration of how climate change will impact the different types of supported project/scheme** prioritised in the RDP, particularly where this concerns infrastructure that is only renewed on a long-term basis, and what can be done to make them more resilient.
- **Considerations of opportunities for direct funding of climate change adaptation activities.** Identifying and prioritising dedicated adaptation actions that fit together with existing national and regional adaptation strategies or other existing specific assessment[18]. This will enable the agricultural and forestry sectors to develop in a way that ensures their long term sustainability in the face of climatic changes and increase the resilience of biodiversity and associated ecosystem services.

It is important, therefore, to make sure that a **sufficiently robust evidence** base is in place. Then, it becomes possible to identify the key adaptation priorities for a given region/Member State. In most cases, substantial research effort and assessments will be necessary to gather the required information and have it available in time. However, it should be recognized that the evidence base will never be perfect and that **substantial uncertainty** exists regarding expected climatic impacts. This may lead to conservative estimates of the impacts of climate change being made, but it should not prevent action being prioritised.

Information on climate impacts for the sectors covered by the RDPs, as well as options to address them, can be derived from a range of sources.[19] Academic research findings can be supplemented by information and feedback from land managers and other actors or stakeholders who have experience with the practicalities of working with a changing climate. They can highlight the areas where assistance is needed to build the resilience of their businesses to climate change and have innovative ideas about how this could be achieved. Taking into account that planned adaptations are at a relative early stage of implementation and the existing uncertainties, it is advisable that the planned interventions are based not just on perceived needs but also on evidence that the supported practice/scheme/investment has proved to be successful in achieving the desired outcome.

Priorities and measures

[18] As of January 2013, 15 Member States have adopted a national adaptation Strategy. In addition, 20 Member States have considered the interactions between climate change impacts and agriculture. This information must be used to identify the adaptation funding priorities under the Rural Development Programmes. (Source: EEA report on adaptation (2013, forthcoming). Additional information on climate change adaptation and agriculture at Member State level can be found in http://climate-adapt.eea.europa.eu/countries

[19] In particular, a brief summary of the available evidence on the climate threats and likely impacts of climate change for the agriculture and forestry sectors and on biodiversity has been compiled as part of the "Methodologies for climate proofing investments and measures under the Common Agricultural Policy and the Cohesion and Regional policy" project. It also provides a list of adaptation options, which can be used to identify concrete measures to be funded via RDPs. The results of the study are available at http://ec.europa.eu/clima/policies/adaptation

As part of the Establishing which measures, or combinations of measures are used to deliver the priorities and outcomes identified through the situation analysis is one of the most important parts of the programming process as this specifies what gets funded in practice. Experience from current programmes has shown that even if an issue is identified as important in the SWOT analysis, it still may not be well reflected in the funding priorities. Hence, making sure that climate adaptation considerations are part of the decision making process for determining the choice and focus of measures is essential. Member States may decide to deliver some of the needs relating to climate adaptation via other means, such as through national measures. If so, it is important to highlight this in the RDP to demonstrate that the priorities are being met.

First, the **types of actions** (or technical options) that need funding to improve the resilience of rural areas, agriculture, forestry and biodiversity should be identified. This should be based on results of the situation analysis. Ideally a cost benefit analysis should be carried out[20]. Once these actions have been determined, the measures available within the EU rural development regulations that can be used to deliver these actions need to be identified.

One of the principles underpinning the rationale behind many rural development measures is that they should aim to deliver **multiple objectives**, and that they should be **clearly designed to achieve the priority/focus area they are programmed for**. This principle needs to be kept in mind for those actions/technical options identified as important for improving resilience to climate change: the other co-benefits should be highlighted. However, conflicts of objectives may occur. Where this is foreseen, these should be highlighted and processes put in place for deciding what trade-offs are acceptable. Whatever process is decided upon, it should be transparent and clearly explained in the RDP, using notably the indicator plan.

A selection of examples of the types of options and the measures which might be used to fund them are set out in Annex 3.2.[21]

Moreover, adaptation considerations could be considered in more specific instances by developing additional sup-programmes, for instance on adaptation and water scarcity, or by developing adaptation schemes under the European Association of Mutual Guarantee Societies.

Safeguards should be put in place for specific measures, where appropriate and feasible, to ensure that expenditure takes account of likely climate impacts. **Adaptation "proofing"** of all measures would ensure that there are no undesirable perverse effects. Some may already have been established in the EU implementing regulations and simply need to be translated into national rules, whereas others may need to be adopted to address the local situation. Potential examples include:

- Defined minimum water efficiency savings for any investments in irrigation (the current proposals include such a safeguard);
- Ensuring that activities will increase the resilience of ecosystems, habitats and their associated species populations to climate change and/or facilitate the movement of species (and habitats) to new areas with suitable climatic conditions
- Rules for afforestation to ensure that the species composition of new planting are suited to the likely future climate that they will face over their lifetime;

[20] The final report of the "Methodologies for climate proofing investments and measures under the Common Agricultural Policy and the Cohesion and Regional policy" project includes some suggestions.

[21] Examples of measures undertaken under the current RDPs as well as potential adaptation options are also mentioned in the final report referred to above.

- Demonstration that investments in infrastructure are resilient to future climate change and do not lead to increased GHG emissions;
- Eligibility for payments for risk management, insurance schemes and mutual funds linked to a business plan demonstrating that climate adaptation considerations have been taken into account in the future planning of business operations.

It is also important to identify activities that should not be prioritised when their effectiveness would be negatively affected by the impacts of climate change. This might include, for example, investments or projects that would lead to increasing the overall volume of water used in drought-prone areas or to increase the risk to flooding.

Finally, care should be taken to ensure that the measures and activities chosen as a priority within the RDP work in a **coherent way with other elements of the CAP**, particularly cross-compliance, the new 'green direct payments', and the Farm Advisory Service (FAS) under Pillar 1. The two pillars of the CAP have different purposes but it is important that potential synergies between them are used. In relation to climate adaptation, there are a number of relevant cross-compliance standards, such as the new GAEC standards to maintain soil organic matter and to protect wetland and carbon rich soils. They have the opportunity to provide an important baseline for more demanding and targeted actions within the RDP.

Climate experts need to be involved in the design of all these elements to ensure consistency and complementarity.

Eligibility Criteria

The setting of eligibility criteria[22] for applicants to schemes/measures is a critical point within programming and an important stage for climate change mainstreaming. They should stipulate the conditions under which funding can be awarded to applicants and one such condition should be the climate resilience of the planned activities. They will be linked with the safeguards established during the programming phase (see above).

The types of activities funded by RDPs are extremely varied. Different types of measures will require different eligibility criteria, for example depending on whether expenditure is focused on incentivising land management actions, on investments in physical infrastructure or on the development of packages of advice and training.

Possible eligibility criteria related to climate change adaptation could be (if considered appropriate in a given programme):

- The applicant must demonstrate understanding of the way in which climate change may impact upon the planned activities and demonstrate that a plan for dealing with this is in place;
- The application should be in line with the national/regional climate change adaptation strategy or climate change risk analysis (where a strategy is not available).

Programme Assessment (ex-ante evaluation and SEA)

The Common Provisions Regulation (Article 48) calls for an *ex ante* evaluation of programmes, which should incorporate a Strategic Environmental Assessment (SEA) where appropriate. These can be extremely important tools for mainstreaming adaptation.

Overall, the **ex-ante evaluation** examines consistency of the programme strategy with funding priorities and the regional situation. For the next programming period, the aim is to

[22] DG AGRI will develop a working document on principles for setting selection criteria as part of the guidance for programming.

enable the ex-ante evaluation to be more fully integrated into the programme design process by involving the evaluators from an early stage of programme development[23]. It is therefore a chance for appraisal of the treatment of climate impacts in funding priorities, particularly if opportunities were missed during the early programming stages.

SEA, with its focus on environmental issues, represents another important opportunity to reflect upon how responsive the programme is to climate change impacts that threaten its objectives, or the adaptation needs of the region or Member State. SEA is of particular value for measures that do not directly address environmental objectives – for example those focusing on enhancing the competitiveness of the agricultural sector – because it can open the door for the input of environmental authorities, experts and stakeholders. As a specifically designed evaluation process, it will assess the programme's coherence with wider environmental objectives, including adaptation. At the same time, experience from many Member States from the 2007 – 2013 period have shown that SEAs were carried out late in the programming process, and had relatively little effect on assessing or improving the overall impact of programmes on the environment. Careful attention is needed to following good practice in carrying out SEAs for RDPs.

So far, SEA has been designed to assess impacts on the environment, rather than vice-versa – e.g. to assess impacts of a changing climate on a programme. Yet, climate change impacts are intricately bound to environmental issues, in particular biodiversity and eco-systems. Moreover, DG Environment's guidance on integrating climate change and biodiversity into SEA[24] will provide good advice on how climate change adaptation can be integrated into SEA.

Indicators, milestones and performance framework

In the proposed regulation, the monitoring of RDPs will be used for a 'performance framework' designated in the common provisions regulations (Article 19 and Annex I of the proposed Common Provisions Regulation). A suite of indicators specific to the CAP as a whole, and rural development policy in particular, are to be established through the Common Monitoring and Evaluation Framework (CMEF). Moreover, Member States can add indicators relevant to their national/regional situation.

Where there is direct spending on climate change adaptation, it will be important to have indicators that effectively illustrate adaptation successes, using notably the output and target indicators for the most climate relevant focus areas. It is an even greater challenge to develop indicators that assess indirect objectives, such as climate proofing of sectoral investments. However, where important adaptation concerns have been successfully inserted into funding priorities, they should be backed up with relevant indicators. These will be essential for project preparation, implementation and the programme monitoring and evaluation stages.

Work is already underway involving Managing Authorities to look at how to develop such indicators. In addition, some Member States are developing national indicators to measure progress with adapting to climate change in the agriculture and forestry sectors, although these are generic indicators rather than related to the impacts of CAP expenditure[25]. Climate

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23 Guidelines for ex ante evaluations within the context of the 2014-2020 programming period are being developed by the European Evaluation Network for Rural Development - http://enrd.ec.europa.eu/evaluation/en/

24 *Practical guidance for integrating climate change and biodiversity into SEA procedures*, DG ENV, forthcoming 2012

25 See for example indicators developed in Germany (www.umweltdaten.de/publikationen/fpdf-l/4230.pdf) or in the UK (http://archive.defra.gov.uk/environment/climate/documents/100219-measuring-adapt.pdf)

experts should engage with the Member State representatives involved in these discussions at EU, national and regional level and encourage the setting up of an expert group at the national / regional level to discuss these issues if these are not already in place[26].

3.4. Implementation

3.4.1. Description

There are a number of ways in which Managing Authorities and implementing bodies can support the implementation process and the delivery on adaptation. These include providing support, guidance and assistance to scheme applicants and beneficiaries, either directly or through intermediaries, such as extension services and private advisors.

3.4.2. Key opportunities for integrating adaptation

Assistance and guidance to project applicants

Embedding climate change adaptation into the RDPs as well as into eligibility criteria for specific schemes/measures provides incentives for potential beneficiaries to react to this when applying for funding. However, knowledge and information barriers could prevent beneficiaries from seizing such opportunities. Hence, raising awareness and knowledge of the potential applicants is needed to achieve effective uptake and implementation of adaptive measures. This can be resource intensive and costly but can improve outcomes on the long-term as adaptation actions will be increasingly needed.

First, the relevant extension services and experts that provide advice to scheme applicants must have the necessary knowledge and skills on climate adaptation. The ways in which land managers and other rural actors source advice is extremely varied and differs between Member States. In most cases, a mixture of public funded advice as well as private advisory services will be available. It is impossible, therefore, to ensure that all extension services or private advisers are suitably familiar with climate adaptation issues. All Member States are required to set up a Farm Advisory Service (FAS), which for 2014-2020 must be extended to cover climate adaptation (rather than just cross-compliance as in the past).

In addition, advice and training in relation to climate adaptation can also be provided directly to scheme beneficiaries, by ensuring that written guidance for scheme applicants incorporates information on climate adaptation or by providing funding for the design and delivery of bespoke training, seminars and workshops for scheme participants.

Managing Authorities can support the implementation process through assistance and guidance to project applicants via:

- **Resources:** Provide extension services, private advisers and potential scheme applicants with relevant technical resources. These can aim at general awareness-raising or specific technical information on particular types of land management (i.e. how to ensure optimal outcomes for protecting soil, conserving water etc) or infrastructure (i.e. practical information on design). National studies, adaptation strategies and other resources on impacts, adaptation options and their implementation will also be valuable. These can be provided through a dedicated space on the website of the Managing Authority and could even be provided as links on application forms;
- **Training:** Training sessions, bringing together groups of similar beneficiaries or arranged around a certain theme or sector, can have an important effect on awareness

[26] Information on progress with discussions at the EU level can be found on the EU Evaluation Network for Rural Development's website: http://enrd.ec.europa.eu/evaluation/en/.

raising and also building technical capacity. Training sessions could also be offered to personnel running extension services and private advisers;

- **Good practices:** Provide examples of good practices in integrating climate change adaptation. This can be especially useful in sectors or areas where national good practices are missing. The ENRD Contact Point project database and the European Climate Adaptation Platform are useful starting points for finding such examples.

Examples of existing advice and guidance

Seminars, study circles and group consulting (Sweden): Capacity building seminars, study circles and group consultations on adaptation to climate change are planned in Sweden to help rural areas increase awareness about future climate trends, plus required responses. In some parts of Sweden there is already a tradition of participating in study circles.
Such information projects are good examples of how different R DP measures can link to other climate change projects at national, regional and local level. Results from many projects can be used to add value to the RDP information projects. For example, support for farm advisory services and capacity building training can help farmers identify climate action opportunities linked to modernisation and competitiveness investments that may be eligible for funding from other RDP measures. The advisory services can also build farmers' technical skills which will benefit the quality of climate action projects and enhance value for money from improved outcomes.

Factsheets on farming and climate change (UK): In England, the 'farming futures' website has been developed through the collaboration of a number of farmer organisations and DEFRA (the government's agriculture and environment department) which provides easily accessible information on the opportunities and challenges related to climate change to farmers, land managers and their advisors and influencers to drive on-farm climate change adaptation and mitigation. Although not linked specifically to rural development funding, the series of 25 fact sheets that have been produced to date provide information on available funding opportunities that land managers may be able to take advantage of.

3.5. Monitoring and evaluation

3.5.1. Description

Monitoring and reporting on programme implementation and their outcomes are a challenging but nonetheless critical programme stage. In some countries, the lack of strategic policy frameworks at the national and/or regional level, coupled with insufficient knowledge base on climate impacts can make integration into the monitoring system a challenging task.

In addition, knowledge is developing at a rapid pace, and will continue to do so through 2020 and beyond. As a result, important information may become available within the lifetime of current RDPs, particularly in areas where research currently lags behind. This means that monitoring efforts in relation to climate adaptation need to be under periodic review so that new evidence can be incorporated into the monitoring and evaluation process during the lifetime of the programme.

Adaptation experts should be aware of these challenges and be ready to assist Managing Authorities and the programme monitoring committee in tackling these challenges.

3.5.2. Key opportunities for integrating adaptation

Overall, monitoring, reporting and evaluation follows the overarching **performance framework, with its indicators, milestones and targets** as set out in the Partnership

Agreement as well as in the **Common Monitoring and Evaluation Framework (CMEF)** established by the Commission. The indicators developed at the programming stage will be used by the Monitoring Committee during the annual review meetings and will also feed into the annual implementation reports as well as into progress reports on the implementation of the Partnership Agreement. Even where it is not feasible to develop robust indicators, the requirement to assess the degree to which RDPs have addressed climate adaptation needs should be written into the specifications for *ex* ante and ex post **evaluations.**

The **Monitoring Committee** is an obligatory body which has the potential to guide the effective and efficient implementation of programmes. The participation of a climate change expert would increase chances of providing climate change relevant input to the committee, the Managing Authority, and finally to the beneficiaries.

Data and information are essential for effective monitoring and evaluation. A solid indicator framework that includes adaptation (even where adaptation is not the main focus of expenditure) will determine the data requirements for monitoring climate resilience as programmes are implemented. This framework should include national indicators that go beyond those prescribed at an EU level to ensure that as much information as possible is collected to help inform assessments of progress against programme priorities. Good cooperation between Managing Authorities and information sources will help to ensure the right data can be collected and fill gaps in data availability. It will be important to consider all types of data requirements, both quantitative and qualitative. Qualitative information may be just as useful to show progress in moving towards more climate resilience, particularly where there are difficulties in measuring outcomes quantitatively.

Guidance is likely to be needed for programme evaluators on how best to address climate adaptation in formal evaluations and this is currently under development. Engagement of climate experts with the EU Evaluation Expert Network and its national equivalents, where these have been set up, should help facilitate this process.

4. ANNEX

4.1. Ex-ante conditionalities related to adaptation priorities

Ex-ante conditionalities related to climate adaptation priorities		
Thematic Objective 5 (CSF): Promoting climate change adaptation and risk prevention (Climate change target) (referred to in Article 9(5)		
RD priority 4: restoring, preserving and enhancing ecosystems dependent on agriculture and forestry	4.4. *Risk prevention (and risk management)*: The existence of national or regional risk assessments for disaster management taking into account climate change adaptation[27].	A national or regional risk assessment shall be in place that includes: • A description of the process, methodology, methods and non-sensitive data used for national risk assessment; • A description of single-risk and multi-risk scenarios; • Taking into account, where appropriate, national climate change adaptation strategies.
RD priority 5: promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in the agriculture and food sectors and the forestry sector	5.2 *Energy efficiency*: transposition into national law of Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006 on energy end-use efficiency and energy services	A Member State has submitted to the Commission an Energy Efficiency Action Plan which translate energy saving objectives into concrete and coherent measures in accordance with article 14 of Directive 2006/32/EC
	5.3 *Water pricing:* the existence of a water pricing policy which ensures an adequate contribution of the different water uses to the recovery of the costs of water services, in accordance with Article 9 of Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a	• A Member State has taken account of the principle of recovery of the costs of water services, including environmental and resource costs in accordance with Article 9(1) of Directive 2000/60/EC; • A Member State has carried out an economic analysis in accordance with Article 5 and Annex III to Directive 2000/60/EC regarding volume, price and cost of water services, and estimates of relevant investments;

[27] Conclusions of the Justice and Home Affairs Council; Conclusion on further developing risk assessments for disaster management in the European Union. 11-12 April 2011.

Ex-ante conditionalities related to climate adaptation priorities		
	framework for Community action in the field of water policy[28].	• A Member State has ensured contribution of the different water uses by sector in accordance with Article 9(3) of Directive 2000/60/EC

Source: Proposal for EAFRD – COM(2011)627 final/2 – annex IV

4.2. Examples of EAFRD measures and their potential for adaptation

Priority	Rural Development Measures	Thematic focus	Type of adaptation[29]
Farm infrastructure			
2, 3, 4	Article 18 – Investments in physical assets Article 19 – Restoring agricultural production potential damaged by natural disasters/ preventing actions Article 25 – Prevention and restoration of damage to forests from fires and natural disasters Article 35 – Forest-environmental and climate services and forest conservation	Avoidance of damage from extreme events	▪ Coastal and interior flood protection involving agricultural land (water overflow areas, flood-tolerant crops) ▪ Restoring agricultural production potential damaged by EWE ▪ Adaptation of agricultural infrastructure (e.g. Buildings) ▪ Preventative actions for forests
2, 3	Article 18 – Investments in physical assets Article 23 – Afforestation and creation of woodland Article 24 – Establishment of agroforestry systems	Avoidance of heat stress	Improvement of animal rearing conditions (shading and sprinklers)
3, 4, 5	Article 18 – Investments in physical assets	Improved water management	▪ Modernisation of irrigation equipment to improve water use efficiency ▪ Water storage
Land management			
4, 5	Article 29 – Agri-environment-climate Article 18 – Investments in	Improving water and soils management, and building resilience of	▪ Buffer strips (permanent vegetation) ▪ Tillage methods,

[28] OJ L 327, 22.12.2000, p. 1.

[29] These options are simply indicative. For instance, in some cases, the choice of measure for a given "option" will depend on the detailed characteristics of a given project / operation

	physical assets Article 31 – Natura and WFD payments	biodiversity	▪ Introduction of new crops more adapted to changing climate ▪ Drought prevention (retaining and improving soil moisture)
4, 5	Article 29 – Agri-environment climate Article 18 – Investments in physical assets (in the case of necessary investments); Article 31 – Natura 2000 and Water framework directive payments Article 24 – Establishment of agroforestry systems	Improving habitat / biodiversity resilience	Conservation areas and habitat restoration
4, 5	Article 22 – Investments in forest area development and improvement of the viability of forests Article 23 – Afforestation and creation of woodland; Article 24 – Establishment of agroforestry systems	Soil and forest management	Conversion to more climate-resilient forest types, afforestation, agro-forestry systems
4, 5	Article 29 – Agri-environment-climate Article 31 – Natura 2000 and Water framework directive payments	Improving habitat / biodiversity resilience Soil Management	Management of permanent grassland
Conservation genetic resources			
4	Article 29 – Agri-environment-climate		Plant and livestock breeding programmes
Farm management			
3	Article 37 – Risk management; Article 38 – Crop, animal and plant insurance Article 39 – Mutual funds	Risk management	Insurance schemes to cope with economic effects of extreme events

	for animal and plant diseases and environmental incidents		
3, 4, 5	Article 36 - Co-operation	Joint action	Joint action undertaken with a view to adapting to climate change
Farm awareness raising			
1 – 6	Article 15 – Knowledge transfer and information actions Article 16 – Advisory services, farm management and farm relief services	Advice / Capacity Building for land managers	Information actions Advice on farm management (climatic aspects can be included in more broader advice related to agri-environmental and economic issues)