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EXECUTIVE SUMMARY OF THE EVALUATION

of the impact of the Common Agricultural Policy on climate change and greenhouse gas emissions

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Context

Farmers are vulnerable to climate change and they need to adapt. At the same time, agriculture has an impact on climate, accounting for 12% of total EU greenhouse gas (GHG) emissions[1], despite the progress in reducing emissions. EU GHG emissions from agriculture have fallen by more than 20% since 1990, yet they have stagnated since 2010, while agricultural production has continued to grow. Although this highlights gains in climate footprint per unit of output, there is a need to reduce total emissions further to achieve the EU's ambitious climate targets for 2030.

Achieving the EU's climate targets

Based on the climate tracking methodology, the CAP's contribution to the EU's climate targets is estimated at 26% for 2014-2020, above the 20% commitments, even if few CAP measures were primarily designed to address such targets. However, the reduction of emissions from managed agricultural soils is better addressed in the CAP than livestock emissions. In addition, the relevance of some (primarily) voluntary CAP measures to the EU's climate needs depends on whether Member States and farmers implement or apply them. Nevertheless, there are several measures that can have an impact on adaptation and mitigation.

Simulating different scenarios

The evaluation includes a simulation estimating a reduction in agricultural emissions of 4.6% compared to a baseline without the CAP (in a scenario of medium emission reductions and based on the 2016 uptake of rural development measures (Pillar II). Pillar I contributes most to this reduction (3.5%), via greening and, more specifically, by protecting environmentally sensitive permanent grasslands and ecological focus areas. On the one hand, this simulation overestimates the effect these measures have on mitigation, as many sensitive grasslands would be protected anyhow under the Natura 2000 Directive. On the other hand, the simulation could not quantify the impact of all measures (such as greening permanent grassland ratio, whose effect on carbon storage depends heavily on whether such grasslands are ploughed).

Effectiveness

Pillar II measures whose impact was quantifiable (i.e. investments in physical assets, investments in developing forest areas, agro-environment-climate measures, organic farming and Natura 2000 payments) have helped reduce GHG emissions by 1.1%. Support for areas facing natural constraints helps with preventing land abandonment and loss of grassland, but the positive impact on climate mitigation (e.g. by protecting carbon stocks in soils) is not guaranteed, as it depends on farmers' practices on the land.

Mitigation

Mitigation can mainly be achieved by extensive livestock grazing systems and protecting existing carbon stocks, thanks to the maintenance of permanent grasslands. The main contribution from arable systems comes through support for nitrogen-fixing crops, improved land management, which reduces carbon emissions and even protects soil carbon stocks, and

[1] GHG emissions from agriculture include emissions from enteric fermentation (CH_4); manure management (CH_4 and N_2O); rice cultivation (CH_4); managed agricultural soils (N_2O); cropland (including land converted to cropland) (CO_2) and grassland (CO_2).

reductions in N_2O emissions from soils and manures. The CAP has achieved fewer such reductions on intensive grassland or arable farms.

Adaptation

Several CAP measures have the potential to also contribute to climate adaptation; these include support for the diversity of crops and farming systems, investment support for adaptation to new climate conditions, limiting soil erosion and improving resilience to floods. Land management measures addressing mitigation usually also contribute to climate adaptation. However, overall, Member States have not tailored the CAP sufficiently for adaptation purposes (e.g. cross-compliance), so its potential is not fully used. Furthermore, more can be done to spread knowledge and advise farmers on techniques and practices to improve climate performance.

Efficiency

Better targeting of CAP support would lead to an increase in efficiency. The evaluation also highlighted the role of screening for 'maladaptation' that could avoid public expenditure on infrastructure or sectors that may increase vulnerability in the medium to long term, such as irrigation infrastructure in areas with depleted water resources, or by promoting excessive specialisation of whole geographical areas.

Coherence

The way CAP measures may be used together is usually coherent in terms of climate action. However, some elements of the CAP policy design (e.g. eligibility criteria for permanent grassland, exemption of beneficiaries of the small farmers scheme from greening, voluntary coupled support) are not fully coherent with climate objectives. The CAP's climate-focused measures are, though, coherent with other EU policies related to climate change.