



JOINT RESEARCH CENTRE

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**Public Hearing on the Conservation of agricultural biodiversity
organised by the AGRI Committee**

Event on 11 January 2021, 16h45 - 18h15

**How can scientific evidence support
EU commitments and measures?**

SPEAKING POINTS

Digitalisation, Knowledge Management, and Modelling are three avenues along which the Joint Research Centre's science is supporting EU commitments and measures in the agricultural domain addressing cross-policy issues. I will tell you how.

Firstly, Europe's space programme (Copernicus and Galileo) gives us unprecedented monitoring capabilities. We literally see the land changing. We can compare the situation 'today' with last week, last year, even last decade. With these data, we document current conditions, highlight trends and provide baselines against which progress is measured.

Through our work with DG AGRI and the Member States paying agencies, this technology is already an indispensable part of the compliance and assurance for the CAP, helping to assure that in 2021 over €40 billion euro¹ (€1274.07 per second) is spent accountably, fairly and effectively.

Satellite images, phone cameras, farm machinery sensors, environmental information collected by farmers and the public, plus massive computer power from Copernicus DIAS, allows us to map and monitor agricultural practices (such as mowing or crop rotations, burning or ploughing), landscapes, even individual plants (with smartphones).

Optimising the use of this powerful data is one reason the European Commission is going to launch a new Knowledge Centre on Earth Observation. Managed by the Joint Research Centre (JRC), in full cooperation with DG DEFIS, this will be announced by our Commissioner Mariya Gabriel tomorrow.

Space technologies already play a huge part in our Agriculture and Environment information gathering, and the new Knowledge Centre will take this work to much greater levels in the future, especially concerning CAP environment and climate performance.

Secondly, science is helping make research more accessible to stakeholders and citizens. Automated literature reviews and meta-data analysis offers the means to synthesise existing scientific knowledge and improve our understanding of causal links between farming practices and biodiversity.

¹ €40 179 072 000 for 2021 European agricultural guarantee fund (EAGF) the Basic Payment Scheme; most of the biodiversity work is part of the European agricultural fund for rural development (EAFRD), 2021 figure for EAFRD is €15 002 928 000

The European Commission's Knowledge Centre for Biodiversity managed by JRC with DG Environment was established at the end of 2020. This Knowledge Centre provides a one-stop shop for information about biodiversity and the impact of related policies. It monitors the progress of the EU Biodiversity Strategy for 2030, and is an interface for scientists to network, share research results and channel them to support EU policies.

Thirdly, socio-economic modelling tools, such as CAPRI (Common Agricultural Policy Regionalised Impact model) incorporate environmental and climate aspects into policy analysis, helping examine impacts and evaluate performance, thus showing by simulation the sensitive areas where the policy should pay attention. Although such models need to pay even greater attention to reinforcing links between farming practices, biodiversity, and landscape indicators we are already seeing 'first-results'. The JRC is publishing a report on environmental and climate ambitions for agriculture in the next weeks.

In synthesis:

You manage best what you can measure; you make better decisions with more knowledge; and you plan more effectively with accurate forecasts. Our digitalisation research with the Earth Observation and Biodiversity Knowledge Centres and improved models together support EU commitments and measures.