

Technological solutions to sustainable agriculture in the EU

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The Committee on Agriculture and Rural Development adopted the own-initiative report by Anthea McINTYRE (ECR, UK) on technological solutions for sustainable agriculture in the European Union.

Members noted that the agriculture sector has always relied on new farm business models and practices that include new techniques and production methods to increase outputs and adapt to new and changing circumstances. They are convinced that **innovation has the potential to contribute to achieving sustainable agriculture in the EU**.

The main recommendation contained in the report are as follows:

Precision Farming (PF): Members stated that the principles underpinning PF can generate significant benefits for the environment, increase farmers' incomes, rationalise the use of agricultural machinery and significantly increase resource efficiency, including use of water for irrigation.

The Commission is encouraged to promote policies to stimulate the development and uptake of precision farming technologies for **all farm types**, irrespective of their size and production, whether crop and/or animal farming.

Big data and informatics: emphasizing that the collation and analysis of large integrated data sets has the potential to drive innovation in agriculture, Members called on the Commission and the Member States to **remove the barriers** to integrating complex and fragmented ICT systems, stimulating investment and covering training costs, and to make the necessary facilities more accessible to agriculture.

Soil, water and nutrient management: recognising soil degradation to be a major constraint in agricultural production, the report called for greater ambitions and efforts to **improve soil and water management practices**, particularly in light of climate change. Regretting that the efficiency of nutrient use in the EU is very low, Members stressed that action is needed to improve the efficiency of nitrogen (N), phosphorous (P) and potassium (K) use, in order to reduce their impact on the environment and improve food and energy production.

Genetic diversity: Members are of the opinion that monoculture and a lack of crop rotation is a major factor in the loss genetic diversity over the past century. They stated that all plant varieties and animal species, including landraces, their wild and semi-wild relatives, and old and pioneer varieties to be essential for maintaining genetic diversity.

The report insisted on the need for:

- **greater dialogue between genetic banks**, private and public plant research, breeders, end users and all other actors involved in the conservation and use of genetic resources;
- **maintaining and using genetic resources** for long-term food security and to broaden the genetic base of modern plant and animal breeding programmes;
- maintaining and developing the performance of **local breeds**;
- supporting **suitable crop rotations** that remain profitable for farmers.

The Commission is called upon to put forward **proposals for the European strategy for the safeguarding of genetic diversity in agriculture** provided for in the [EU Biodiversity Strategy for 2020](#).

Precision breeding: Members expressed their support for **continuous progress** in innovative plant and animal breeding through the application of safe and proven techniques aimed at increasing not only the range of pest- and disease-resistant traits in crops, but also the range of food raw materials with nutritional and health-beneficial characteristics on the market.

The report emphasised that it is crucial not to hamper the application of, and experiments involving, high-precision breeding techniques – without sound scientific reason, and that legislation should be fit-for-purpose in order to keep pace with developments without being burdensome.

Plant protection products (PPPs): Members stressed the urgent need to review the implementation of the regulatory framework for PPPs and to develop a coherent, efficient, predictable, risk-based and scientifically robust assessment and approvals system. They considered it important to **reduce farmers dependence on pesticides** and develop PPPs which are cost-effective, safe to use and environment friendly.

DG Health and Food Safety (SANTE) is called upon to establish clear **criteria for defining low-risk active substances** for the development and use of low-risk pesticides. The Commission should come forward with an **action plan** and set up an expert group in order to work towards a more sustainable pest management system.

Skill development and knowledge transfer: the report recognises that the development of agri-related technologies requires a multitude of specialist skill sets and knowledge that are transdisciplinary in approach. Member States are called upon to work in partnership with industry, research institutions and other relevant stakeholders in the design of their next rural development programmes, with a view to identifying opportunities to support skill development and knowledge transfer in these areas.

Research and funding priorities: the report called on the Commission and the Member States to develop a **long-term investment plan**, assigning priority to a sectoral approach, with continuity of funding, for basic and applied research. The plan should include cost-effective solutions and be applicable to small-scale producers, rural areas and outermost and mountainous regions.

The Commission and the Member States should in particular:

- develop projects which focus on the **development of more resource-efficient agricultural practices and crop varieties**, including locally specialised varieties, aimed at the conservation and improvement of soil fertility and nutrient exchange;
- prioritise investment in the **circular economy** and climate-smart farming practices, with adequate funding incentives for research and uptake by farmers;
- develop **innovative projects for producing non-food products** (bio-economy, renewable energy, etc.) and services with a view to developing a more resource-efficient agriculture industry (better use of water, energy, food for crops and animals, etc.), and one which is more autonomous.

Lastly, Members considered it essential that **emerging technologies continue to be developed in the EU**, are not stifled by unnecessary and burdensome regulation, and are allowed to demonstrate and deliver their value and benefits, given that reasonable EU regulation, oriented towards consumer safety and health and environmental protection, based on independent, peer-reviewed science, enables EU farm produce to be competitive and attractive on the internal and world markets.