

Exploring the future of agriculture in Europe: how can policies support sustainable farming practices under different future pathways?

European agriculture is confronted with a range of uncertainties regarding its future development. Some of these are linked to changing climatic and environmental conditions, while others are the result of our behaviour. Within the SoilCare project we aim to explore different pathways for European agriculture, from now until 2050, as this will help to support the development of policies that are future-proof.

The approach we use to develop those pathways is called exploratory scenario development. In this approach we are not looking for the most likely future, nor are we deciding on a best or optimal future. We are interested in exploring the different uncertainties we might be confronted with, because by better understanding what might happen, we are in a better position to design effective policies. This means that we are aiming for a set of scenarios that help us scope a range of plausible future developments. The scenarios can therefore be rather extreme, but have to remain plausible. So basically, we try to think in structured ways about unexpected events, while avoiding scenarios that would be unrealistic.

The process we follow in developing our exploratory scenarios is one that includes both stakeholder participation and modelling to ensure scenarios are both relevant and contain useful levels of plausible detail. Based on a literature review, interviews and a workshop with European stakeholders we have developed a first set of narrative scenarios, detailed in this document to develop further with a wider range of stakeholders.



As shown in the figure above, these scenarios have been developed along two axes, related to different types of policy instruments: future challenges to mandatory instruments (e.g. regulations) and future challenges to voluntary instruments (e.g. subsidies). We have identified types of future worlds where there would be few or significant challenges to either type of instrument. We have done this because understanding what facilitates or inhibits the acceptance and implementation of these instruments may help us to design policies that are well adapted to specific socio-economic contexts or sufficiently robust

enough to be applicable under a range of different scenarios. Below, an overview table indicates the main differences between the four scenarios.

In many scenario studies, scenarios are developed by a limited number of people. To overcome this problem, we organised a webinar in April 2020 and are collecting further input online through the current activity, to give all who are interested in the topic the opportunity to provide their input, and by doing so, contribute to an improved set of scenarios.

We will then model each of the improved scenarios to assess the implications of these scenarios for policy and practice on the basis of a range of sustainability and profitability criteria.



Later in the year we will organise further participatory activities to provide feedback on the quantification of the scenarios resulting from the modelling. We will then also focus on the policy advice we can provide based on our learnings about the various ways in which European agriculture might develop.

We look forward to continue this journey with you. We hope you enjoy the scenarios and are looking forward to receiving your feedback through the Google form!

Scenario → Characteristics ↓	Local and sustainable (for those who can afford it)	Under pressure	Race to the bottom	Caring and sharing
Motivating factors	Increasing societal demand for healthy and sustainably produced food, but not everyone is able and willing to join this movement.	Pressure from society and farmers on government to take action on environment and livelihoods, as none feel capable to realise change themselves.	Societal demand for low food prices, coming with overexploitation leading to land degradation and lower production or higher costs for inputs.	Confrontation with disasters triggers society to rapid and drastic change, resulting in a holistic resilience approach with a vast appreciation for society and environment.
Economy	Increased market demand for healthy and sustainably produced food. The role of mainstream agriculture reduces.	Limited financial capacity in society. Small profit margins for farmers. Less diversity in the market due to regulations.	Focus on short-term financial gains. Exports of technology and cheap food facilitated by free trade agreements.	Fully functioning circular economies, making sustainable use of resources. Globalisation is mostly knowledge-based.
Farm practice	Boutique and mainstream farming co-exist.	Sustainable intensification on large farms.	High production, large-scale farming.	Wide range of sustainable farm practices.
Technology and knowledge transfer	Increased traceability. Improved communication technology to facilitate use of best practices. Grassroot initiatives and cooperatives drive improved sustainability.	R&D is focuses on monitoring and meeting regulations, but little ambition to go beyond. Likewise, advisory services focus on providing advice on meeting requirements.	High-tech focused on efficiency, side effects often uncertain. Funding for R&D through the agricultural sector including wealthy farmers. Privatised advisory services.	High-tech options for all farm sizes to complement traditional practices or develop new ones. Freely available advisory services bridge the gap between research and practice.
Socio-cultural	Individual capabilities, desires and decisions are shaping our future. Mix of different lifestyles and farming practices. Increased self-sufficiency at local and regional level.	Loss of traditions. Social implications for small-scale farms going out of business. Increase of young entrepreneurial, highly-educated farmers who can make the switch to new practices.	The one managing the land is not the owner. Loss of traditions and knowledge impact on resilience. Distant connection between farmers and consumers.	Focus on well-being, solidarity and a sense of belonging. A large part of the household budget is spent on food, especially regional produce.
Politics and institutions	Lack of trust in public institutions to take action. Fewer EU policies, decision power at national, regional and local level.	Strong government regulation with associated high costs. Strong EU protective of its citizens. Imports required at EU standards.	Agricultural producers become powerful actors in society and politics. EU lacks funding and trust to make a difference.	Governments and individuals working together to establish change. Strong EU with financial capabilities due to increased taxes.
Land use and environment	Urban to rural migration, with a competition for land in the countryside. Mixed landscapes.	Rural to urban migration. Mixed uses and land management practices within large farms.	Rural to urban migration. Decline of mosaic landscapes and abandonment of marginal lands.	Current rural depopulation trends stopped. Multi-functionality of landscapes.