





## POLICIES AND PRACTICES FOR PROMOTING SUSTAINABLE AGRICULTURE



Intensive or conventional agriculture can create various negative impacts on the environment - for example, nutrient pollution, soil degradation, biodiversity reduction due to land use change. Sustainable agriculture, however, can be defined as a system of farming that aims to provide for present human populations while conserving the planet's ability to sustain future generations<sup>1</sup>. For example, applying the concept of polyculture instead of monoculture can reduce the need for pesticides and fertilizers, and improve soil quality just by planting a variety of crops together. Another practice to mention is crop rotation, which works by sowing different crops after each other to preserve the quality of soil. In crop rotation, nitrogen-fixing cover crops with legumes are often used to retain soil nitrogen and reduce erosion.

To balance the needs of the world's growing population and reduce the impact of the sector of Agriculture and Land Use, Land-Use Change, and namely, a 15% increase in greenhouse gas (GHG) Forestry (LULUCF) sector on the environment, practices which support healthy soils, climate change mitigation, biodiversity and pollution reduction should be promoted and included in the modern farming practices. Effective policies play a pivotal role in achieving this goal. In this article, we dive into specific national policies across the EU that have successfully attracted farmers toward sustainable land management practices, describe the key EU regulation that defines the environmental targets to be met, and discuss how the project LIFE OrgBalt can inspire farmers to implement climate change mitigation practices on their land.

The EU's LULUCF Regulation sets binding targets for carbon sequestration and emissions reduction, removals from the sector until 2030<sup>2</sup>. The Water Framework Directive ensures water quality and prevents pollution. It promotes integrated water management, protecting aquatic ecosystems and supporting sustainable agriculture. Addressing nitrate pollution from agricultural sources, the Nitrates Directive regulates nutrient management, including fertilization practices and soil protection. Often on the basis of EU regulations, national initiatives are developed to ensure that the goals set by the EU and national states are met and the agricultural activities are not degrading the environment.

<sup>1</sup> https://www.britannica.com/technology/sustainable-agriculture

<sup>&</sup>lt;sup>2</sup> https://climate.ec.europa.eu/eu-action/land-use-sector\_en







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## National policies promoting sustainable agriculture

Denmark has taken a brave step by introducing a GHG tax on livestock emissions. Starting in 2030, Danish livestock farmers will be taxed 40 eur per ton of carbon dioxide equivalent emitted by their cows, sheep, and pigs. By 2035, the tax will increase to 100 eur per ton of CO2 equivalent<sup>3</sup>. This policy aims to reduce methane emissions from livestock digestion, encouraging farmers to adopt climate-friendly practices. The tax proceeds will be redirected to the sector and reinvested in green initiatives, climate technology, and production transformation, with a focus on supporting agricultural sectors with the greatest challenges transitioning to a sustainable way of operating<sup>4</sup>. The GHG tax is the first of its kind in the world, contributing to Denmark's goal of reducing emissions by 70% from 1990 levels by 2030. Moreover, the same agreement entails the development of the "Green Landscape Fund", which will support activities like planting of new forests and restoration of peatlands. A specific GHG tax of 5,36 eur per tonne of CO2 equivalent will also be introduced for farmers who do not wish to contribute their carbon-rich peatlands to restoration<sup>5</sup>.

Germany's eco-schemes incentivize farmers to embrace sustainable practices. These schemes, introduced within Germany's Common Agricultural Policy (CAP) Strategic plan, offer financial rewards for adopting environmentally friendly approaches like crop diversification, management of crop areas without the use of chemical-synthetic plant protection products, planting of legumes, introducing agroforestry, and fostering biodiversity<sup>6</sup>.

The uptake of these practices by German farmers, however, is happening slower than expected, with the main challenges pointed out by the industry being the need for more subsidy, and more flexible and practical rules for implementation<sup>7</sup>.

France shows its commitment to organic farming through substantial subsidies provided to farmers who transition to organic practices. The French organic action plan (Ambition Bio Plan 2013-2017) aimed to double the country's organic land share within five years. Between 2010 and 2020, 12 million EUR were allocated to R&D projects in organic farming. The subsequent Ambition Bio Plan (2018-2022) targeted a 15% organic land share with a 1.1 billion EUR budget, supported by the "Avenir Bio" fund<sup>8</sup>. These subsidies encourage sustainable techniques such as reduced pesticide use, crop rotation, and soil conservation. However, the organic farming sector in France experienced a crisis due to the consumer's reduced ability to spend on organic produce in 2023, which lead to the first year in which the proportion of organic farming land dropped in France<sup>9</sup>. This illustrates that policy intervention is still needed to encourage sustainable farming, as the agricultural sector is highly dependent on stable consumer demand.

## LIFE OrgBalt's role in encouraging sustainable agriculture practices

The focus of the LIFE OrgBalt project is to demonstrate how climate mitigation practices can be implemented on agriculture and forestry lands with nutrient-rich organic soils. Some of the practices explored in the

<sup>3</sup> <u>https://organictargets.eu/focus-countries-old/france/</u>

<sup>&</sup>lt;sup>9</sup> https://www.lemonde.fr/en/economy/article/2024/06/18/france-s-organic-farmed-land-shrunk-for-the-first-time-in-2023 6675100 19.html











<sup>&</sup>lt;sup>3</sup> <u>https://www.britannica.com/technology/sustainable-agriculture</u>

<sup>&</sup>lt;sup>4</sup> <u>https://climate.ec.europa.eu/eu-action/land-use-sector\_en</u>

<sup>&</sup>lt;sup>5</sup> <u>https://www.britishagriculturebureau.co.uk/updates-and-information/denmark-agrees-carbon-tax-on-agriculture/</u>

<sup>&</sup>lt;sup>6</sup> https://www.ecologic.eu/sites/default/files/publication/2023/50120-Environment-and-climate-assessment-of-Germanys-CAP-Strategic-Plan.pdf

<sup>&</sup>lt;sup>7</sup> <u>https://www.euractiv.com/section/agriculture-food/news/eu-eco-schemes-not-a-hit-among-farmers-german-ministry-data-shows/</u> <sup>8</sup> https://www.euractiv.com/section/agriculture-food/news/eu-eco-schemes-not-a-hit-among-farmers-german-ministry-data-shows/







project can also be an inspiration for policy makers when designing incentives for a transition to more sustainable ways of farming. For example, transformation of arable land to grassland/pasture can bring both climate and biodiversity benefits. Planting tree strips along drainage systems in arable lands and grasslands has the potential to increase carbon removals, limit nutrient leaching, improve moisture regime and contribute to biodiversity. Moreover, within LIFE OrgBalt, a simulation tool has been developed, which can be used as a support tool in the decision making process on the practices with the most environmental and socio-economic benefits to ensure that the policies implemented do not block the farmer's economic interests.

LIFE ORGBALT TEAM



To receive our newsletter, send us an email to <u>info@baltijaskrasti.lv</u> or submit a request on our project <u>website</u>.

**FIND OUT MORE** 



Project "Demonstration of climate change mitigation potential of nutrient rich organic soils in Baltic States and Finland" (LIFE OrgBalt, LIFE18 CCM/LV/001158) is implemented with financial supportfrom the LIFE Programme of the EuropeanUnion and State Regional Development Agency of the Republic of Latvia. www.orgbalt.eu

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