Shaping the future of farming

OP2B position paper on the vision for the future of agriculture in the EU

17 December 2024

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WBCSD World Business Council for Sustainable Development

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Executive summary

This position paper from One Planet Business for Biodiversity (OP2B) offers advice to policy makers on the vision for the future of agriculture in Europe. It calls for more and better coordination between industry and policy to make regenerative agriculture the norm in Europe.

Regenerative agriculture balances continued agricultural production with measurable net-positive impacts on soil health, biodiversity, climate, water resources and farming livelihoods at both the farm and landscape levels. Regenerative agriculture holds the potential to offer solutions for climate change, water management and biodiversity loss.

In order to limit climate change to 1.5 degrees, regenerative agriculture must expand from covering around 15% of global cropland today to 40% by 2030[i]. Implementing/Adopting regenerative farming on 40% of the world's cropland would save around 600 million tons of emissions[i] . For Europe, this goal would require 40 million hectares of farmland to adopt regenerative practices by 2030. A clear pathway, supported by collective investments from both public and private sectors, can make this ambitious goal achievable while ensuring economic benefits for farmers and resilience for food systems.

Nature plays a crucial role in agricultural production through the delivery of key ecosystem services including soil productivity, water supply and quality, crop pollination, control of pests and diseases, contributing to nutrient and carbon cycles, and mitigating droughts and floods[ii]. Many regenerative agricultural practices show synergies between carbon capture and storage and enhancing biodiversity, while not having clear large negative effects on food production, especially in the long term[iii]. With only 5 harvests left until 2030, there is an urgent need to accelerate the transition to regenerative agriculture by moving beyond pilot projects to large-scale landscape transformations to stay within planetary boundaries.

Collaboration is key to achieve transformation of our agricultural systems into regenerative ones . With nine policy asks, the OP2B-coalition calls upon financial actors, businesses and policymakers to unite in supporting farmers to transition to regenerative agricultural practices:

Nine policy asks to accelerate transition:

1. A holistic, performance-based vision on agricultural policy
2. Support the development of new business models for ecosystem services
3. Improve access to peer-to- peer learning to exchange best practices between farmers
4. Foster public-private partnerships to scale up and accelerate the transition to regenerative agriculture and promote collaboration within value chains
5. Establish risk-sharing mechanisms and insurance programmes
6. Repurpose CAP subsidies to accelerate transition
7. Align policy frameworks with internationally recognized standards
8. Provide clear and consistent metrics through established guidelines
9. Support farmers to transition through improved on-farm data rights and compensation

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Paradigm shift to regenerative agriculture

Our current agri-food systems are designed to provide affordable, available and safe food and other products for a growing population. Modern agri-food systems, deeply rooted in mid 20th century values, are characterized by high production volumes, concentrated crops and mechanized farming.

However, the system's efficiency no longer fits the values and challenges of the 21st century. Climate change has reduced food security and affected water security, hindering efforts to meet the UN's Sustainable Development Goals and threatening our ability to continue to produce the food we need.

Although overall agricultural productivity has increased globally over the past 50 years, climate change has slowed this growth. [iv]Conventional agriculture is both a major contributor to climate change and vulnerable its effects, including predicted disruptions to supply chains and 10% lower yields. [v]Agriculture accounts globally for 11% of greenhouse gas emissions[vi], 70% of freshwater withdrawals [vii], and poses threats to 86% of species that are already at-risk of extinction.[viii]

We depend on nature and must take responsibility as its stewards, both individually and collectively. The transition from conventional practices to sustainable farming models that restore and give back to nature has never been more urgent. It's not just about preserving our resources but also about securing the future viability of our entire ecosystem.

What is regenerative agriculture?

Regenerative agriculture balances continued agricultural production with measurable net-positive impacts on soil health, biodiversity, climate, water resources and farming livelihoods at the farm and landscape levels. A regenerative agriculture approach should aim to simultaneously promote above- and below-ground carbon sequestration, reduce greenhouse gas emissions, increase crop biodiversity, improve ecological integrity, reduce pesticide and over-fertilization risk, improve soil health, reduce water pollution by improving nutrient use efficiency, improve environmental flows and significantly increase farmers' financial and social benefits and wellbeing[ix]. Nature plays a crucial role in agricultural production through the delivery of key ecosystem services including soil productivity, regulating water supply and quality, crop pollination, control of pests and diseases, contributing to nutrient and carbon cycles, and mitigating droughts and floods. Environmental degradation and the effects of climate change are compromising these services, significantly impacting agricultural production and undermining the resilience of agricultural systems. This not only threatens long-term food security but also has immediate consequences. Evidence shows that environmental degradation and declining resilience are already manifesting in soil erosion, loss of ecosystem services, and harvest losses due to extreme weather

events. Continuing agricultural production under a business-as-usual scenario is no longer a viable option.

Regenerative agriculture practices include the role of farm animals both in carbon management and biodiversity. The effect of farm animals on carbon balance is context-dependent and largely depends on the type of animal husbandry considered[iii]. When moved frequently across pastures to prevent overgrazing, livestock like cattle, sheep, and goats promote grass growth and enrich the soil with essential nutrients through manure and urine distribution. Moreover, animal manure serves as a valuable resource, enhancing soil structure and nutrient availability. Integrating animals with crop production further enhances sustainability by improving soil fertility, reducing erosion, and promoting carbon sequestration[x].

In order to limit climate change to 1.5 degrees regenerative agriculture must expand from covering around 15% of global cropland today to 40% by 2030[xi]. Implementing/Adopting regenerative farming on 40% of the world's cropland would save around 600 million tons of emissions. For Europe, this goal would require 40 million hectares of farmland to adopt regenerative practices by 2030. A clear pathway, supported by collective investments from both public and private sectors, can make this ambitious goal achievable.

By aligning policy frameworks, financial incentives, and technical support, stakeholders can create the conditions needed for farmers to transition to regenerative practices at scale. Public-private collaboration will play a critical role in mobilizing resources, reducing risks, and ensuring that farmers receive fair compensation for delivering ecosystem services. This approach not only supports the expansion of regenerative agriculture but also strengthens rural economies, enhances food system resilience, and contributes to achieving Europe's climate and biodiversity targets.

It pays to put farmers first

Farmers are on the frontlines of climate change and nature loss and are acutely vulnerable to economic shocks. Commissioner Hansen stated that farmers are also our first line of defence in the fight against climate change and biodiversity loss[xii]. At present, farmers are under pressure from climate change and extreme weather events, from geopolitical instability, and from increasing regulatory complexity and administrative burden.

Regenerative agriculture is absolutely critical to transforming the agricultural system. We must put farmers at the centre of everything we do, adapting to the diverse realities of the geographies where we operate, while embracing technology and fostering innovative public-private mechanisms to accelerate the change. Climate mitigation and adaptation strategies must respond to farmer needs and ensure they are supported as extreme weather events change the way that food and other agricultural products are produced. A true partnership approach based on equity and mutual trust can ensure fair value distribution, enabling farmers to fulfil their role as providers and land stewards by equipping them with the tools they need for a successful transition. Addressing their transition needs requires sensitivity to specific local contexts. Business and policy makers must work with farmers from the offset to co-design local collaborative solutions.

In order to remain profitable, farmers need to constantly manage their profits and losses and be disciplined in their practices. Therefore, it's no surprise that farmers' top concerns about regenerative agriculture involve potential loss of income. Our analysis shows that incorporating regenerative practices can potentially decrease profitability during the earlier stages of transition. However, once past the 3-to-5-year mark, farmers' profits could be significantly higher than what they might expect from continuing with a conventional system, due in part to profit diversification and input use efficiencies[xiii].

Various research both in Europe[xiv] and the US[viii] shows that there is a positive business case for regenerative agriculture. Profitability drivers include increasing revenue from diversified crop rotations as opposed to monocultures, lower fuel needs because of minimum soil disturbance, additional revenue streams from carbon markets and other ecosystem services, and reduction in costs due to lower reliance on chemical inputs for crop protection and fertilizers. In the first couple of years, farmers are likely to see a decline in profits due to lower crop yields and the added cost of seeds and new machinery. However, once farmers reach a relatively steady state of regenerative practices, a positive long-term business case emerges. Farmers can reach profitability increases of 70% to 120% and a return on investment of 15% to 25% over 10 years, according to an analysis by BCG[viii].

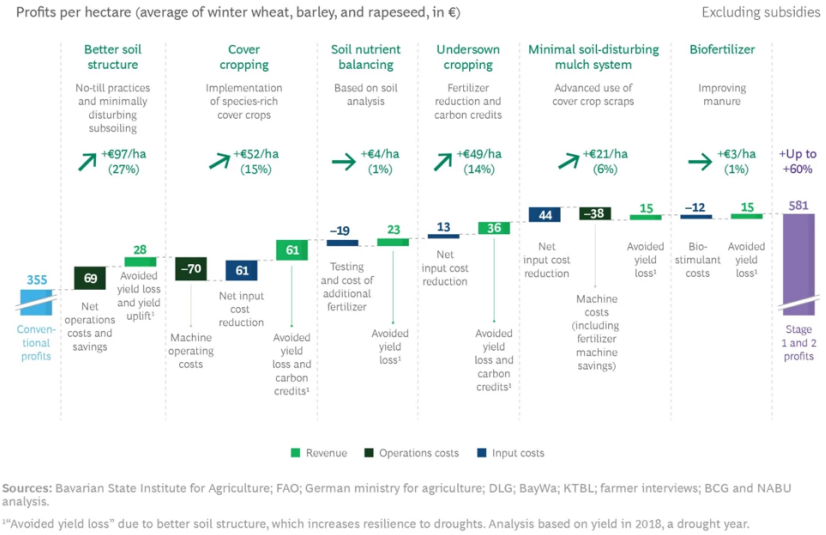

Figure 1 Cost/Benefit analysis carried out on a typical crop farm in Germany that grows cereals and oilseeds. Source: The Case for Regenerative Agriculture in Germany— and Beyond (BCG, Nabu)

Business is committed to scaling up the transition to regenerative agriculture

Regenerative agriculture is gaining momentum. While farmers are driving the change, businesses play a key role in supporting the scale-up of regenerative agriculture. The prospect of resilient value chains combined with a positive business model for farmers offers a promising business case for agriculture, food & beverage, fibre and cosmetics industries to support transitions.

Since its inception at the U.N. Climate Action Summit in 2019, OP2B's 26 member companies have invested $3.6 billion in initiatives on regenerative agriculture, engaging 300,000 farmers. By 2030, their goal is to implement regenerative agricultural practices on 12.5 million hectares of land globally, equivalent to 15% of all agricultural lands in the EU[xv].

While efforts by individual companies are valuable, coordinated, landscape-level initiatives are crucial to achieving large-scale change in Europe. This shift requires moving from isolated pilots to collaborative, broad-scale landscape initiatives, and from fragmented incentives to comprehensive financing packages that support entire farming communities. The transition to regenerative agriculture will require continued partnership and investment across the value chain to deliver impact at scale and speed to future proof our global agricultural systems. It is crucial that companies in the supply chain, such a s food and beverage companies, cosmetics companies and fashion industry focus on collaborative action with farmers to help regenerative agricultural practices become the norm, rather than the exception.

Europe has a unique opportunity to contribute to a net-zero, climate-resilient, nature-positive and equitable agricultural system. We call upon financial actors, businesses and policymakers to unite in supporting farmers to transition to regenerative production systems.

Support and accelerate the transition

A holistic, performance-based vision on agricultural policy. Europe needs a more conducive policy environment to enable the transition to regenerative agricultural approaches that deliver environmental, social, and economic benefits. To support the transition to regenerative production systems, there is an urgent need to harmonize agricultural policy with sustainability goals related to soil health, biodiversity conservation, and climate resilience.

A performance-based approach provides flexibility for farmers to implement strategies tailored to their unique circumstances, while still working toward common goals and a long-term vision. The current approach to agricultural policy is ineffective in addressing the diverse needs and challenges faced by farmers across different regions, landscapes and climates. Recognizing this diversity, a focus on farmers' results and outcomes toward these goals allows for adaptation to the specific context of each farmer and ensures subsidiarity.

To drive the transition to regenerative production systems, agricultural and environmental policies in Europe must shift towards a holistic, science-based, performance-driven, and context-specific vision for the future of agriculture—one that can be implemented at the EU, national, and sub-national levels. As the EU explores new policy frameworks such as the vision for the future of food and agriculture, Common Agricultural Policy (CAP) and the sustainability benchmarking for agriculture, performance based policy can help bridge the gap between ecological and economic sustainability, and provide a clear approach to land stewardship to ensure all actors in the value chain thrive.

Support the development of new business models for ecosystem services. Ecosystem Services Markets (ESM) offer a critical opportunity to accelerate the shift to regenerative agriculture. By valuing and monetizing services like carbon sequestration, biodiversity restoration, and improved water management, ESM provides farmers with financial incentives to adopt and sustain regenerative practices. These markets can create stable, sustainable revenue streams for farmers while contributing to EU climate, biodiversity, and water goals.

Financial support for practice change is essential to deliver regenerative agriculture outcomes. These services must be integrally valued in the agro-economic pricing system and markets. While supply chain actors can renumerate farmers for regenerative production methods with price incentives, value creation for ecosystem services are typically in the public domain. Policies supporting these models, such as payment-for-ecosystem-services (PES) platforms, should ensure farmers are financially compensated for the environmental value they create and not merely for compensation of the cost.

We ask policy makers to support creative new business models for the ecosystem services market and include increased investments in a mature European market for ecosystem services in the plans for a vision of agriculture in the future.

Improve access to peer to peer learning. Education, innovation and technology provide farmers with the tools they need for the transition. Tailored education, continuous learning, and coaching throughout the process can empower farmers to confidently adopt and implement sustainable practices.

This approach not only equips farmers with the necessary skills and know-how but also ensures that regenerative practices are implemented effectively on the ground and strengthens the fabric of agricultural communities, paving the way for a more sustainable and resilient future.

European innovation programmes such as Horizon Europe, but also LIFE+, EIT-Food and CAP supported networks need to focus on peer-to-peer learning for farmers.

Financing and de-risking the transition for farmers

Foster public-private partnerships to scale up and accelerate the transition to regenerative agriculture and promote collaboration within value chains. It is critical for businesses, financial institutions and governments to prioritize farmers' financial and technological needs by working together to align both new and existing financial incentives so that farmers are rewarded for the tangible benefits they bring to nature. Public-private partnerships can focus on specific regenerative agriculture projects, directly supporting farmers and reducing their risks by offering public investments that match/support private ones. This approach would significantly contribute to the scale-up of regenerative practices.

An analysis from the European Investment Bank[xvi] estimates that in 2020, the financing gap for agriculture in the EU was between €19.8 and €46.6 billion and the gap for the agri-food industry was more than €12.8 billion. In order to finance and accelerate the transition in Europe we need a more comprehensive and holistic financial support mechanism that can scale to reach a large number of farmers. The current mix of subsidies, loans, price premiums and insurances creates a significant barrier to the widespread adoption of sustainable practices by forcing farmers to act as their own financial coordinators in a complex system.

An integrated public-private financial package will simplify the financial landscape for farmers, enabling scaled uptake of sustainability and regenerative agriculture goals. Figure 2 illustrates an example of common financial needs in a transition period that must be addressed together. The figure highlights common financing needs, which include CAPEX investments for farmers in land or equipment, typically provided by banks and investors; operational costs, which may be covered by long-term contracts or price premiums from off-takers; knowledge, innovation, and education, usually supported through European or national grant schemes; and new business models for ecosystem services that need to be developed. Public-private collaboration should focus on coordinating incentives, leveraging investments from both public and private sectors, and unlocking access to funding for farmers.

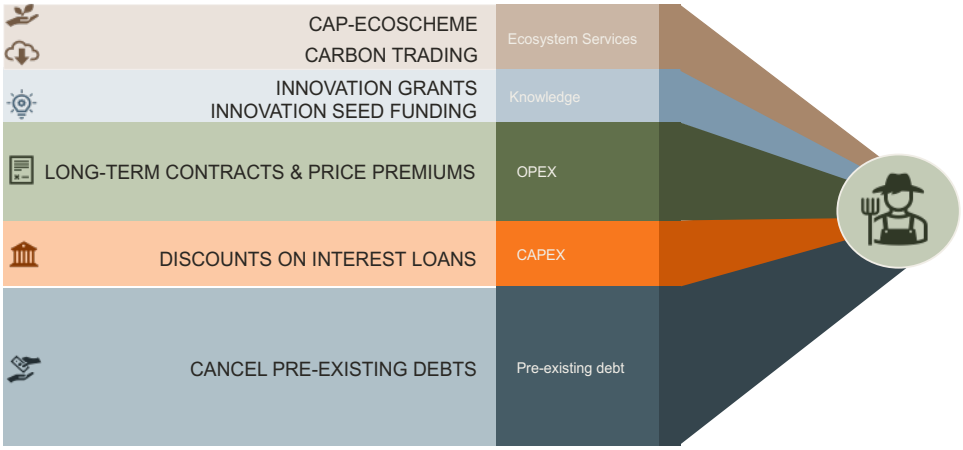

Figure 2 A typical financial stack for regenerative agriculture, where an integral financial package for farmers would need to cover costs in CAPEX investments, operational expenses through long-term contracts or price premiums, grants for knowledge and innovation, emerging ecosystem services business models and cancelling pre-existing debts."

Establish risk-sharing mechanisms and insurance programmes. Today, farmers are often required to bear the risk of yield losses as a result of rising climate and economic shocks and the ongoing impacts of climate change. Both governments as well as financial actors play a critical role in de-risking and financing the transition for farmers by providing financial incentives, technical assistance, and access to credit and insurance. In Europe, it is estimated that some €28-35 billion are required for the first year of adopting more sustainable soil management practices[xvii].

As well as direct payments to farmers, governments can create financial support mechanisms, such as insurances and public bank guarantees (‘guarantees of first loss’) that help take the risk away from farmers .

Repurpose CAP subsidies to accelerate transition. Subsidy programmes can help farmers manage both costs and risks. Existing subsidies based on practices force farmers to choose between the most effective practice for their system’s regeneration and financially rewarded practices. The income support policy needs to be changed to meet current and future challenges, promote employment and to support the ongoing transition of agri-food systems towards more sustainable, competitive, profitable, and diverse futures[xviiii]. We recommend altering the CAP and other subsidy programs to an outcomes- based funding model, backed by aligned outcomes for farm sustainability and regenerative production (see the section below on Accountability and metrics). An outcomes-based subsidy structure grants farmers the autonomy to implement practices that mutually benefit their income and nature.

Because CAP funding is distributed through EU member states, increased value chain and farmer collaboration with policy at the national level is needed to align CAP funding flows with national contexts and local-level transition needs. We urge the creation of structured dialogue and processes with member states to align CAP implementation with outcomes-based approaches and data-driven assessments that address national priorities for nature conservation and rural livelihoods.

We call on policymakers to extend the current framework for living labs under the CAP to establish dedicated experimentation spaces at the regional (landscape) level. These spaces should facilitate collaboration between industry, financial actors, landscape initiatives, and farmer collectives, fostering innovative and scalable solutions.

To ensure a sufficiently funded transition, both public and private capital needs to be mobilized. A Temporary Just Transition Fund should be established outside the CAP to complement support for the sector’s swift sustainability transition[xviii]. Whereas CAP funding is primarily focussed on

supporting farmer income, a new public transition fund for farmers is also needed to support farmers in paying for new infrastructure, shifted operational expenditures, and gaining access to technical support and training during the transition to regenerative agricultural practices. Transition funds should cover a 3-7 year transition period, as farmers are most likely to have higher financial risks in this first adoption period.

Accountability and metrics

Align policy frameworks with internationally recognized standards. Harmonized measurement for regenerative agriculture is the key to scale, as it builds trust through credible standards, enables finance flows, simplifies farmers' adoption, makes the supply chain more resilient, and allows for public private collaborations. Widespread alignment of outcomes and indicators will encourage accounting, reporting and disclosure bodies to develop specific guidance for regenerative agriculture.

The World Business Council for Sustainable Development (WBCSD)has prioritized strengthening corporate performance accountability systems for climate, nature and equity. In support of this effort, WBCSD and OP2B launched a regenerative agriculture initiative in 2023.This collaborative effort involves 52 members and 33 business-focused partners, engaging more than 1,100 businesses, with the goal to consolidate farm-, landscape- and global-level outcomes and indicators with corporate reporting.

The combined efforts of the initiative have resulted in a short list of cross-sectoral regenerative agriculture outcomes, aligned with key sustainability frameworks, planetary boundaries and UN SDGs. These outcomes should be considered depending on the context (see figure 3). Outcomes and metrics have been proposed based on analysis of existing frameworks and refined through scientific review and a series of deep dives.

In developing the vision for the future of agriculture and in consequent policies such as the post 2027 CAP, we ask that policymakers ensure the policy framework is aligned with internationally recognized standards.

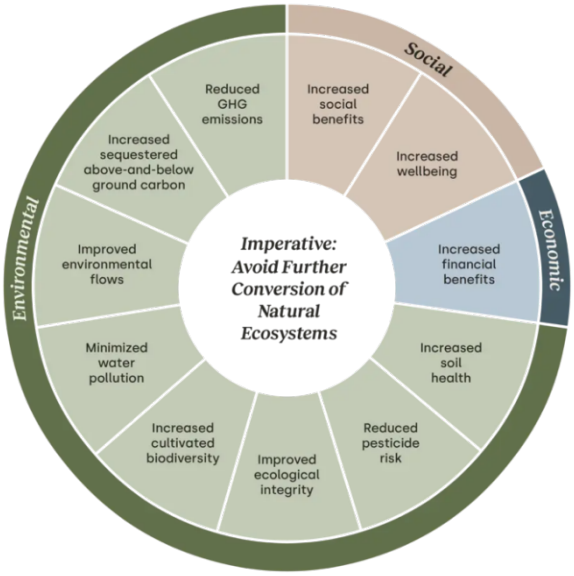

Figure 3: Collective vision on regenerative agriculture. A set of 11 social, economic and environmental outcomes with Key Performance Indicators, aligned with key sustainability frameworks, planetary boundaries and UN SDGs.

Provide clear and consistent metrics through established guidelines to ensure transparency, accountability, and comparability in reporting. This fosters greater trust among stakeholders and also enables informed decision-making based on reliable data and evidence. Future EU policy such as the on-farm sustainability benchmarking, Soil Monitoring Law, Sustainable Farm Data Network and Sustainable Food Systems Framework should support a harmonized framework for metrics across Europe and serve as a foundation for reward systems that incentivize sustainable and regenerative practices.

Support farmers to transition through improved on-farm data rights and compensation. Farmers should be compensated for collecting and sharing data, as they are not currently driving the data collection process and have limited understanding of data ownership. Additional support is necessary to ensure fair compensation for farmers' data licensing. Multistakeholder collaborations are developing and testing models that could transform data into an alternative source of income for

farmers. By providing financial incentives, technical support, education, and streamlined data collection methods that ensure data privacy, farmers can more easily access incentive schemes to deliver ecosystem services.Both public and private actors need to collaborate in support for improved on-farm data.

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