

Scaling up Regenerative Agriculture – OP2B's contribution

Regenerative Agriculture

"Avoiding, reducing and reversing land degradation is essential for meeting the Sustainable Development Goals. Due to the delay between starting restoration and seeing the full benefits, the window...is estimated to close over the next decade¹." Ipbes 2019

The current agriculture system provides people globally with an abundance of food and beverage products, and has improved food security for the most vulnerable groups. But this success comes at a considerable cost: as stated in the recent Intergovernmental Panel on Climate Change (IPCC)² report, agriculture accounts for 70% of global fresh-water use and a third of global greenhouse gas emissions. According to the United Nations Food and Agriculture Organization (UN FAO)³, it is also associated with 80% of global deforestation.

3 FAO - News Article: Productive and healthy forests are crucial for meeting sustainable development, climate, land and biodiversity goals Nevertheless, agricultural systems hold vast potential for reducing global greenhouse gas emissions, preventing land degradation and protecting terrestrial biodiversity. Carried out in a regenerative way, agricultural production could improve the livelihoods of more than 1 billion farm workers worldwide.

Regenerative Agriculture is a nature-based solution⁴ that aims to transition agriculture from being a primary source of environmental degradation to a primary source of regeneration of modified ecosystems.

Scientific research shows that regenerative agricultural practices, such as using cover crops or tillage reduction of perennials, can contribute significantly too.

With only nine harvests left until 2030, One Planet Business for Biodiversity (OP2B) believes that the moment to act is now, transforming agricultural systems to deliver positive change.

A fundamental overhaul of our current global agricultural model towards regenerative practices is needed, to ensure the world's growing population can be fed, and to secure continued economic prosperity. This transformation will only be possible through the involvement of all stakeholders, embarking on the journey with common objectives and through developing a common set of metrics for Regenerative Agriculture to ensure consistency in implementation.

¹ Ipbes, The Assessment Report on Land Degradation and Restoration. 2019 2 IPCC, Climate Change and Land. 2019

meeting sustainable development, climate, land and biodiversity goal: 4 IUCN Global Standard for NbS | IUCN

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Our approach

Using a collaborative, science-driven approach and in close partnership with farming groups, scientists and civil society, OP2B has developed a suggested Regenerative Agriculture framework with a set of objectives and impact indicators and a process to measure impact.

This comprehensive process included:

- 50+ working sessions with members and external partners
- Shared expertise of more than 20 partners and 15 member company practitioners
- Leveraging more than 20 existing Regenerative Agriculture frameworks, featuring more than 150 potential indicators

The framework embodies the efforts of all stakeholders and aims to provide consistency across the industry, enable regenerative farming practices, inform corporate strategies and provide an essential process for measuring impact in a transparent way.

The framework's ambition

Scaling up Regenerative Agriculture will take time and involve partners from all stages of the value chain. The ambition of the framework is to enable companies to:

- Support the transition of land, farms and farmers to a Regenerative Agriculture approach
- Report on progress within corporate value chains
- Drive continuous improvements across the industry by sharing results and experiences

It aims to provide alignment on:

- How to act: the four mutually reinforcing objectives that shall be addressed when implementing or assessing a Regenerative Agriculture strategy
- What to monitor: a set of science-based impact indicators for measuring and achieving progress and impact
- When and what to report: a roadmap to help partners report against targets

OP2B acknowledges that it is only the beginning of the journey. Visible impact will take time. Continuous collaboration with farmers and stakeholders along the value chain will be essential to making change happen, and show progress. OP2B will continue to support the evolution of the framework accordingly.

This is OP2B's ongoing contribution to supporting a global agricultural transition.







The four key objectives of Regenerative Agriculture

- Protecting and enhancing biodiversity at and around farms
- Improving or preserving carbon and water retention in the soil, leveraging the power of plants, livestock and agricultural practices
- Enhancing the resilience of crops and nature, while decreasing pesticide and fertiliser usage
- Supporting the livelihoods of farm communities

The framework – in practice

OP2B and partners aligned on the following objectives as the most relevant to assess when scaling up Regenerative Agriculture practices across supply chains:

- Protecting and enhancing biodiversity at and around farms
- Improving or preserving carbon and water retention in the soil, leveraging the power of plants, livestock and agricultural practices
- Enhancing the resilience of crops and nature, while decreasing pesticide and fertiliser usage
- Supporting the livelihoods of farm communities

Based on practices in the field and available data and knowledge, this framework proposes using the following indicators to assess progress⁵:

- 1. Soil organic carbon content (tons of carbon/ha)
- 2. Blue water withdrawals (m³/ha)
- 3. Number of crops per ha per crop cycle
- 4. Percentage of natural habitats (% per km²)
- 5. Pesticide usage Environmental Impact Quotient (EIQ)
- 6. Fertiliser usage Nitrogen Use Efficiency (NUE)
- 7. Farmer household annual income (tbc)
- 8. Key social indicators for farm community (tbc)



As Regenerative Agriculture is a systemic approach, the four objectives and eight indicators are not to be taken individually. The ambition of this model is to find equilibrium between the four objectives, adapting to differences in soil, culture, landscapes, or farm structure. Hence, there is a value in measuring the eight indicators in parallel, enabling companies to fully implement Regenerative Agriculture.

- 5 As for some indicators it will take time until there is visible impact. OP2B has also identified shorter-term proxies for key indicators:
- Implementation of key practices (e.g. low tillage, crop rotation, cover crops) as a proxy to 1. Soil organic carbon content
- Water management plan coverage as a proxy to 2. Blue water withdrawals

Implementation of integrated pest management practices as a proxy to 5. Environmental Impact Quotient
Indicators on farm communities to be further investigated as part of joint work between OP2B and partners



Moving forward

This framework represents a first attempt at fostering alignment and enabling acceleration of the transition. More collaboration, on-the-ground experimentation, and research will solidify the framework.

Are you interested in supporting the transition to Regenerative Agriculture? If so, consider:

- Utilising the framework, or testing it against your approach
- Contributing to the framework by <u>sharing</u> your on-theground experience
- Spreading the word by promoting the framework in your networks and social media

About OP2B

One Planet Business for Biodiversity (OP2B) is a unique coalition of leading businesses that are committed to transforming agriculture to protect and restore biodiversity and farmer livelihoods. We are working to achieve this through promoting Regenerative Agriculture, product diversification and the protection of high-value ecosystems.

We recognise that systemic transformation cannot be achieved by businesses alone. Supported by a rigorous and science-driven approach, OP2B engages constructively with policymakers, institutions and supply chain actors to initiate action at scale.

Please follow @OP2B_OnePlanet for updates Learn more about OP2B and get in

touch by visiting <u>https://op2b.org</u>

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