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FOOD SYSTEMS
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Discussion Starter

Action Track 3: Boost Nature-Positive Food Production at Scale

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1. Our Context

We have only 10 years in which to deliver the 2030 Sustainable Development Goals, but the impacts of our current food systems on nature and climate is limiting our ability to achieve them. Current food systems are responsible for approximately 80% of deforestation and up to 29% of all greenhouse gas emissions. Agriculture uses 34% of all land on the planet, withdraws 70% of freshwater and is responsible for 68% of total biodiversity loss (70% on land and 50% in freshwater). Oceans are critically overfished, with 34% of fish stocks at biologically unsustainable levels. The recovery potential of these stocks is limited by aquaculture's dependence on marine fish for feed--20% of all wild-caught fish are used for aquaculture feed. One third of all food produced is never eaten, representing a huge waste in natural resources, human labour and financial capital. This happens while 690 million people go hungry each day; yet, nearly 2 billion people are obese or overweight. The hidden environmental, health and economic costs of the food system are estimated at almost USD12 trillion a year and are expected to rise to USD16 trillion a year by 2050.

Although the global population is projected to increase to approximately 10 billion by 2050, the corresponding impacts of food production do not need to increase. Firstly, there is actually already enough food produced to feed 10 billion people. Secondly, it is possible to reduce impacts by changing how we produce food. New and emerging approaches, when adopted alongside the use of traditional knowledge, and regenerative and inclusive practices (such as agroecology, sustainable fishing and democratic food governance), give the potential to transition to nature-positive food production systems--ones that deliver a larger diversity of plants and animals to a growing population, without degrading the functional integrity of ecosystems, whilst meeting the nutritional needs of all current and future generations.

Yet systemic constraints to adopting and combining these practices keep many of our current local and global supply chains stubbornly resistant to change. Action Track 3 will bring stakeholders together to address these lock-ins and co-design game-changing solutions that deliver food production systems that work for both people and nature.

2. Our Goal

Nature-positive food production systems recognize that biodiversity underpins the delivery of all ecosystem services on which humanity depends and that these are critical for the delivery of the Sustainable Development Goals, the Convention on Biological Diversity, and the Paris Agreement. By boosting nature-positive production at scale, we will specifically contribute to the delivery of SDG12 (Responsible Consumption and Production), SDG13 (Climate Action), SDG14 (Life Below Water) and SDG15 (Life on Land). Unsustainable food production and climate change are likely to lead to a net decrease in yields and lower nutritional quality of food. Adopting nature-positive production will therefore also help achieve SDG2 (Zero Hunger). Recognizing the importance to the food system and needs of women, indigenous peoples and local communities Action Track 3 will contribute to SDG1 (No Poverty), SDG5 (Gender Equality), SDG8 (Decent Work and Economic Growth) and SDG10 (Reduced Inequalities).

To achieve nature-positive food production systems, we must adopt practices that protect, manage and restore nature, while globally meeting the fundamental human right to healthy and nutritious food for all. Terrestrial, marine and freshwater ecosystems need to be *protected* to stop them being converted to, or degraded by, food production. Lands and waters used to produce food today need to be sustainably *managed* to increase input efficiencies, minimize externalities (i.e. the cost imposed on people and nature), improve yields while maximizing biodiversity and ecosystem functions, reduce greenhouse gas emissions, and enhance resilience to climate change. Abandoned or degraded areas need to be *rehabilitated* to support new and more sustainable food production, enabling a reduction in the conversion of natural areas, or be *restored* to natural ecosystems.

Action Track 3: Boost nature-positive food production



Nature-positive food production systems protect nature, rely on sustainable and regenerative practices that enhance the richness and abundance of biodiversity in land and water, and rehabilitate the functions of degraded natural systems to deliver a climate-positive future in which people and nature can thrive.

Our goal

The goal is to boost **nature-positive** production systems at scale to globally meet the fundamental human right to healthy and nutritious food while operating within planetary boundaries.



Our aspirational outcomes

Protect natural ecosystems against new conversions for food and feed production

Manage sustainably existing food production systems to the benefit of both nature and people

Restore and rehabilitate degraded ecosystems and soil function for sustainable food production.

3. Way to engage

Stakeholders will engage in the work of Action Track 3 by participating in three *Areas of Collective Action & Innovation* (ACAIs). These multi-stakeholder platforms will establish working groups to unwrap challenges and identify existing or new game-changing solutions that boost nature-positive production. Each ACAI will have two co-facilitators to ensure inclusion and consideration of all voices and deliver collective propositions. Because ACAIs will focus on systemic solutions, participants are encouraged to work across ACAIs and Action Tracks to identify tradeoffs, synergies and opportunities to co-design game-changing solutions.

ACAI 1: Protect

Aspirational outcome: Protect natural ecosystems against new conversions for food and feed production.

This ACAI is designed to propose ways and means to safeguard natural ecosystems (land, coasts, inland and offshore waters) and ensure that they are not converted or degraded for food production. We cannot do this without system actors recognizing that natural ecosystem services and biodiversity underpin nature-positive food production, that they hold value, and that such value needs to be factored into their decision-making process. We must work towards deforestation-free, conversion-free and overfishing-free production and trade systems. ACAI 1 will work together with ACAIs 2 and 3 to address the need to repurpose harmful agricultural subsidies and other agri-food supports so they generate co-benefits for people and nature. Fundamental aspects of this work include social safeguards, the development of (new) legislation and governance mechanisms, working with indigenous and local communities (especially the most vulnerable) to secure their rights (notably access to land, water and genetic resources), with particular regard for rural women.

ACAI 2: Sustainably Manage

Aspirational Outcome: Sustainably manage existing food production systems to the benefit of both nature and people.

Enabling farmers and fishers to design nature-positive solutions for their own geographies and socio-economic contexts is at the heart of ACAI 2. Since there are no one-size-fits-all solutions, this ACAI embraces all nature-positive approaches, from digital farming to traditional and indigenous knowledge. The focus is on context-specific solutions that increase input efficiencies; minimize externalities; and improve yields, while maximizing biodiversity and ecosystem functions, improving livelihoods and enhancing resilience to climate change. Since human and social values are fundamental principles that will underpin just outcomes, the management of nature-positive production systems must protect rights and improve livelihoods, and promote equity, justice, and social well-being particularly for women and vulnerable communities. The balancing of regional markets and global trade can also support locally relevant and globally significant solutions for food security through nature-positive food production.

ACAI 3: Restore

Aspirational outcome: Restore degraded ecosystems and rehabilitate soil function for sustainable food production.

There are approximately 2 billion hectares of degraded lands on the planet (an area larger than South America). In addition to the 500 million hectares of abandoned agricultural land, more than half of our current farmland is considered to be degraded and thus underperforming as both an economic and environmental asset.

Rehabilitating these lands to support new or more sustainable food production will reduce pressures to convert natural areas. A similar picture exists in oceans, where we have fished down food webs and reduced the range and abundance of many species, reducing the ecological resilience of marine and freshwater ecosystems. Nature-based solutions can restore ocean, coastal, inland and aquaculture fisheries, and build ecological resilience. Restoration of terrestrial and aquatic ecosystems can create jobs while enhancing biodiversity. Restorative innovations need greater support and an enabling policy environment in order to scale up. We need to develop and implement innovative and appropriate governance mechanisms, financing models and instruments where system actors are enabled to rehabilitate existing agricultural land and fisheries, and thus avoid conversion of natural ecosystems or unsustainable management practices. ACAI 3 will focus on the social, technical and financial potential needed to restore degraded systems at scale and determine how much land can be restored and the investment required. ACAI 3 will link up with the UN Decade on Ecosystem Restoration (2021-2030).

Box 1. Ten elements suggested for the design of nature-positive food production systems

Regenerative and sustainable approaches are key to transitioning to nature-positive food production. The ten elements below can help guide and inform the design of nature-positive production systems.

- **Diversity:** diversification is key to food system transitions to ensure food security and nutrition while conserving, protecting and enhancing natural resources.
- **Co-creation and sharing of knowledge:** innovations on food production (in land and water) respond better to local challenges when they are co-created and contextualized through participatory processes.
- **Synergies:** building synergies enhances key functions across food systems, supporting production and multiple ecosystem services.
- **Efficiency :** innovative practices that rely on regenerative food production systems or agroecology produce more using less external resources.
- **Recycling:** more recycling means agricultural and fisheries production with lower economic and environmental costs.
- **Resilience:** enhanced resilience of people, communities and ecosystems is key to sustainable fisheries, food and agricultural systems. Resilience is the capacity of socio-ecological systems to maintain key aspects of its biological, social and functional identity, in a context of constant internal and external change.
- **Human and social values:** protecting and improving rural and coastal livelihoods, equity and social well-being is essential for sustainable food systems.
- **Culture and food traditions:** it is necessary to support healthy, diversified and culturally appropriate diets, thus contributing to food security and nutrition while maintaining the health of ecosystems.
- **Responsible governance:** sustainable food production requires responsible and effective governance mechanisms at different scales – from local to national to global.
- **Circular and solidarity economy :** circular and solidarity economies that reconnect producers and consumers provide innovative solutions for living within our planetary boundaries while ensuring the social foundation for inclusive and sustainable development.

4. Considerations about our approach

Landscape/seascape as the unit for planning and action. Food systems find their most prominent expression at the landscape/seascape level. As such, a landscape approach, broadly defined as a framework for integrating context specific policy and practice for multiple land uses within a given geographic area, can help to balance the interests of multiple stakeholders across different timescales. A similar approach would work for coastal fisheries and aquaculture production, while for open ocean and high seas fisheries targeting migratory and straddling stocks, larger management units may be appropriate.

Multi-stakeholder platforms to cross-fertilize ideas and co-design solutions. To reach our goal, Action Track 3 will convene multi-stakeholder platforms to discuss systemic lock-ins or bottlenecks and co-design feasible game-changing solutions. Although Action Track 3 will be a convening space to cross-fertilize ideas, we hope it will inspire the design of local solutions, respecting the conditions of specific landscapes or seascapes. Since there is not a one-size-fits all solution, we will explore various existing and emerging approaches that deliver nature-positive solutions at scale.

Building on existing efforts. Action Track 3 will build on the diverse body of knowledge and work done in the Committee on World Food Security (CFS), particularly on the *Agroecological and Other Innovative Approaches* report and the *Voluntary Guidelines for Sustainable Food Systems and Nutrition*. Notably, the work on *Land Degradation Neutrality targets* (SDG target 15.3) under the United Nations Convention to Combat Desertification (UNCCD) and the *post-2020 Global Biodiversity Framework* of the Convention on Biological Diversity (CBD) have enormous potential to create opportunities for synergies between Action Track 3 and global sustainability goals. Action Track 3 will strive to integrate these efforts in our work.

Integration with other Action Tracks. Nature-positive production has strong linkages with the other four Action Tracks. We will work with them to better understand tradeoffs, explore synergies and co-design solutions.

Governance that is fit for purpose. Action Track 3 will strive to strengthen landscape/seascape level networks and participatory planning. We hope that this approach will lead to inclusive processes for policy design at the local level, democratic coordination and oversight at multiple scales. Special care will be taken to include the diversity of interests, rights and voices of indigenous peoples and local communities. At the same time, national, provincial, and municipal levels of governments must pursue integrated approaches to enable and support the decentralized processes that are key for successful scaling up of nature-positive production. Combined, these approaches to governance are likely to significantly expand the possibilities and benefits of nature-positive food production in today's context of increasing uncertainty and rapid change.

Biodiversity and social safeguards. Solutions, interventions and technologies that have the most synergies while maintaining safeguards for biodiversity, nature and people must be prioritized. 'Biodiversity safeguards' or 'nature safeguards' must ensure that solutions are contributing to ecosystem and planetary health, protecting and increasing biodiversity, restoring and sustainably managing natural capital; and strengthening the ecosystem services on which our food production depends. 'Social safeguards' must also be clearly defined to ensure proposed innovations or technologies are equitable and inclusive for all people, regardless of gender, age, race, class, caste, indigeneity or (dis)ability, and build on traditional knowledge and practices by indigenous peoples and local communities.

Action Track 3

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