



Transformational
Agroecology Across Food,
Land and Water Systems

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**Harnessing nature's goods and services,
while fostering social inclusion and co-innovation,
for a sustainable food future**

Food systems worldwide are falling far short of sustainability goals. Not only do these systems leave a global total of 820 million people undernourished, while also worsening social inequities and – from food production to consumption – biodiversity loss, water pollution, and natural resource depletion. Moreover, food systems account for about a third of the global greenhouse gas emissions causing climate change.

Agroecology is a transdisciplinary, participatory, and action-oriented approach for codesigning options that enhance food system resilience, equity, and sustainability. Based on a thorough understanding of the ecological, economic, and social dimensions of food systems, these options can be implemented at

the farm, landscape, or food system level, contributing to more efficient resource use, reducing agriculture's ecological footprint, strengthening its resilience, while contributing to social equity and responsibility – all necessary for achieving sustainability. Agroecology further assigns importance to involving a range of stakeholders, especially, farmers, in the co-creation of knowledge and options that fit particular contexts.

The CGIAR initiative **Transformational Agroecology Across Food, Land and Water Systems** will engage with food system actors in seven countries (Burkina Faso, India, Kenya, Lao PDR, Peru, Tunisia, and Zimbabwe) to find better ways of putting into practice the 13 agroecological principles listed in this brochure.

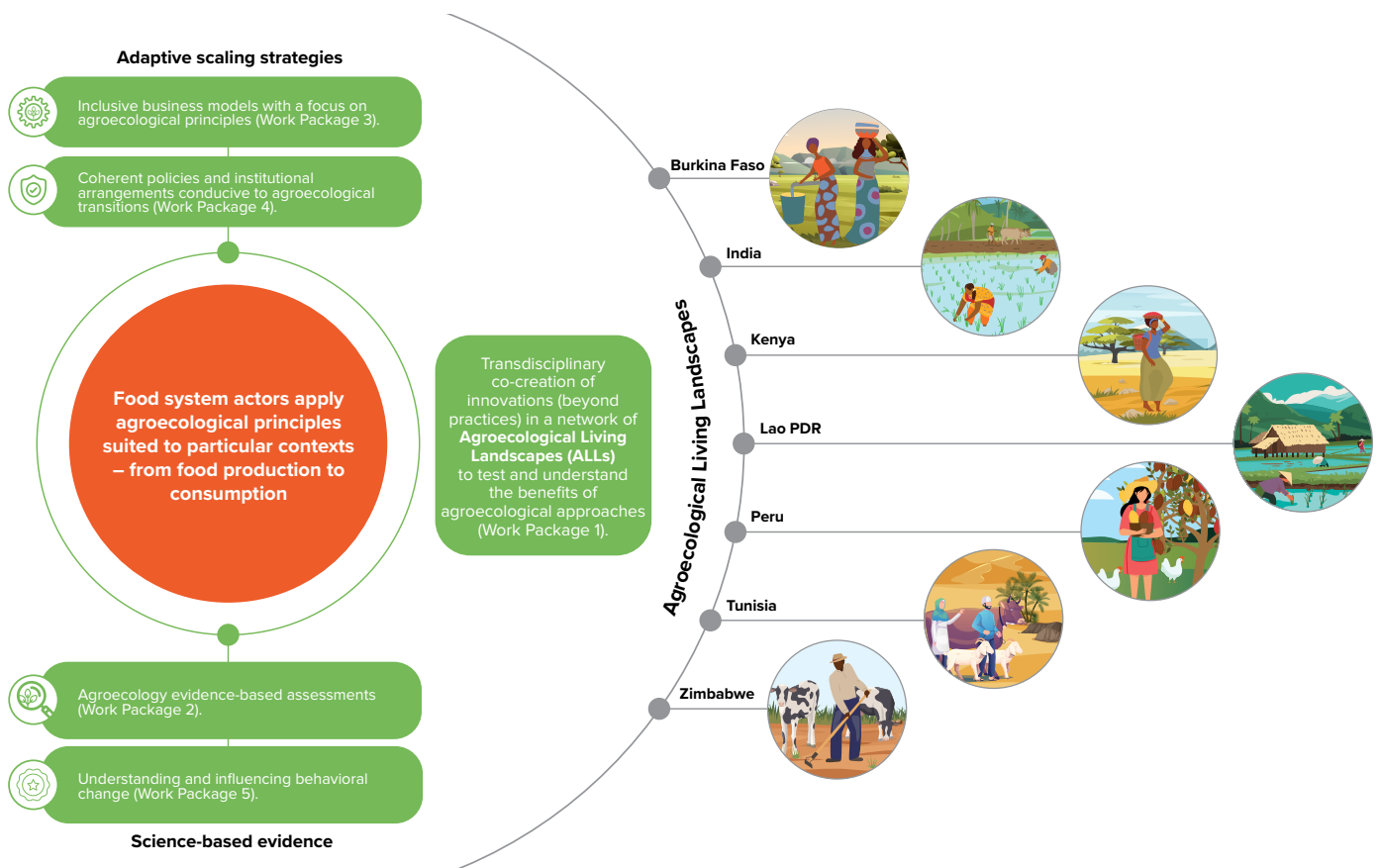
Learning together about agroecology in territorial food systems

If you are a food system actor (farmer, researcher, business partner, or representative of a food company or governmental or non-governmental organization) and you already use agroecological approaches or are interested in applying and promoting them, we invite you to participate in this opportunity to exchange experiences on the design, testing, and adaptation of agroecological innovations (both technological and institutional), from food production to consumption. Together, we can support coherent action to achieve agroecological transitions.

More specifically, we propose to jointly:

- 1 Assess and demonstrate which agroecological innovations (practices, business models, and institutional arrangements) work best, where, why, and for whom.
- 2 Identify business opportunities and financial mechanisms for local enterprises to deal with agroecological innovations.
- 3 Develop strategies and action plans that encourage and support sustainable behavior change oriented to agroecological principles and transitions.
- 4 Determine the most suitable policies and mechanisms of policy integration for promoting effective and sustainable agroecological transitions.

In territories that we refer to as “**Agroecological Living Landscapes**”, we will engage with diverse stakeholders, including farmer associations or communities, researchers from multiple disciplines, private companies, international and national non-governmental organizations as well as local, regional, and national policymakers.



In cocreating options for agroecology, we will link markets with investments, while taking into account the policy dimensions and consumer behavior in specific contexts. Together, we will form an active international network of Agroecological Living Landscapes to advance the implementation of agroecological innovations.

The Initiative

Target countries: Burkina Faso, India, Kenya, Lao PDR, Peru, Tunisia, and Zimbabwe.

This research is being implemented by a multi-disciplinary team of researchers and other specialists, which includes CGIAR researchers from:

- Alliance of Bioversity International and the International Center for Tropical Agriculture (CIAT) and International Water Management Institute (IWMI) – lead Centers;
- International Maize and Wheat Improvement Center (CIMMYT);
- International Potato Center (CIP);
- International Center for Agricultural Research in the Dry Areas (ICARDA);
- International Food Policy Research Institute (IFPRI);
- International Institute of Tropical Agriculture (IITA);
- WorldFish;

as well as researchers from the Center for International Forestry Research (CIFOR) and World Agroforestry (ICRAF); French Agricultural Research Centre for International Development (CIRAD); and various national and local partner organizations in the target countries.

The Agroecology Initiative was conceived within, contributes to, and learns from the **Transformative Partnership Platform on Agroecology (TPP)**, which convenes multiple stakeholders from civil society, agricultural research, rural advisory, and development sectors. The initiative cooperates with key partners for scaling and impact including the TPP, GIZ, Biovision, and national authorities.

Transformational Agroecology Across Food, Land and Water Systems is one of 32 initiatives of CGIAR, a global research partnership for a food-secure future, dedicated to transforming food, land, and water systems in a climate crisis.

The Initiative contributes to **Sustainable Development Goals**:



It is part of the **United Nations Forum on Sustainability Standards (UNFSS)** Action Tracks: Nature positive production, Resilience.



Primary CGIAR impact area:
Environmental Health and Biodiversity

13 Agroecological principles (HLPE, 2019)¹

- 1 Recycling:** Preferentially use local renewable resources and close as far as possible resource cycles of nutrients and biomass.
- 2 Input reduction:** Reduce or eliminate dependency on purchased inputs and increase self-sufficiency.
- 3 Soil health:** Secure and enhance soil health and functioning for improved plant growth, particularly by managing organic matter and enhancing soil biological activity.
- 4 Animal health:** Ensure animal health and welfare.
- 5 Biodiversity:** Maintain and enhance diversity of species, functional diversity and genetic resources and thereby maintain overall agroecosystem biodiversity in time and space at field, farm, and landscape scales.
- 6 Synergies:** Enhance positive ecological interaction, synergy, integration, and complementarity amongst the elements of agroecosystems (animals, crops, trees, soil, and water).
- 7 Economic diversification:** Diversify on-farm incomes by ensuring that small-scale farmers have greater financial independence and value addition opportunities while enabling them to respond to demand from consumers.
- 8 Co-creation of knowledge:** Enhance co-creation and horizontal sharing of knowledge including local and scientific innovation, especially through farmer-to-farmer exchange.
- 9 Social values and diets:** Build food systems based on the culture, identity, tradition, social and gender equity of local communities that provide healthy, diversified, seasonally and culturally appropriate diets.
- 10 Fairness:** Support dignified and robust livelihoods for all actors engaged in food systems, especially small-scale food producers, based on fair trade, fair employment, and fair treatment of intellectual property rights.
- 11 Connectivity:** Ensure proximity and confidence between producers and consumers through promotion of fair and short distribution networks and by re-embedding food systems into local economies.
- 12 Land and natural resource governance:** Strengthen institutional arrangements to improve, including the recognition and support of family farmers, smallholders, and peasant food producers as sustainable managers of natural and genetic resources.
- 13 Participation:** Encourage social organization and greater participation in decision-making by food producers and consumers to support decentralized governance and local adaptive management of agricultural and food systems.

¹ <https://bit.ly/3am5QtT>



We wish to thank all the funders supporting this research through their contributions to the CGIAR Trust Fund
<https://www.cgiar.org/funders/>

To learn more, visit: <https://on.cgiar.org/3x6kv1F> and follow us on social media **#AgroecologyInitiative**

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