Transformational Agroecology across Food, Land and Water Systems
OneCG Initiative

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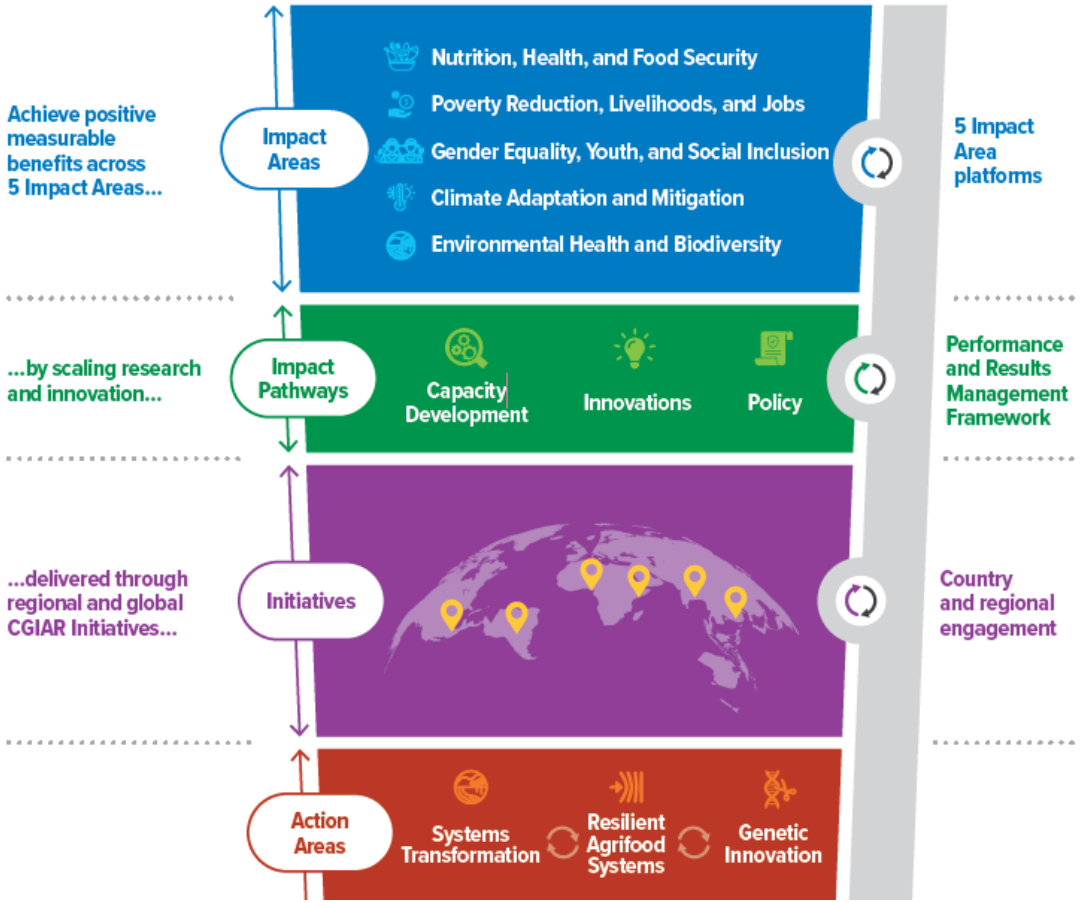
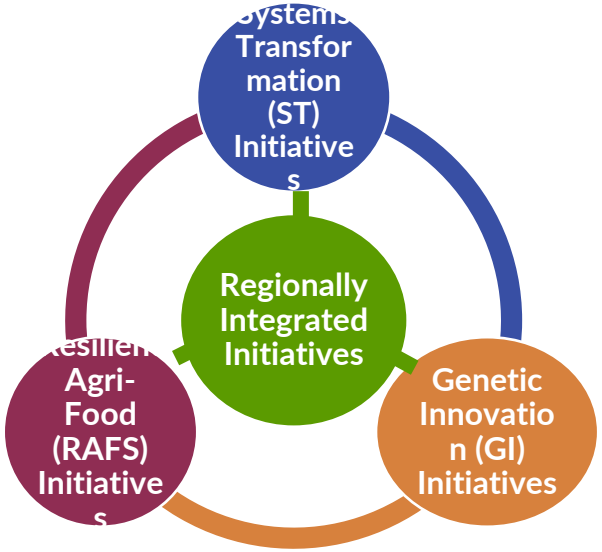
CGIAR
Science for a food-secure future

ONE CG


CGIAR
CGIAR 2030
RESEARCH AND INNOVATION STRATEGY
Transforming food, land, and water systems in a climate crisis


Achieve positive measurable benefits across 5 Impact Areas...
Impact Areas
Nutrition, Health, and Food Security
Poverty Reduction, Livelihoods, and Jobs
Gender Equality, Youth, and Social Inclusion
Climate Adaptation and Mitigation
Environmental Health and Biodiversity
5 Impact Area platforms
...by scaling research and innovation...
Impact Pathways
Capacity Development
Innovations
Policy
Performance and Results Management Framework
...delivered through regional and global CGIAR Initiatives...
Initiatives
Country and regional engagement
Action Areas
Systems Transformation
Resilient Agrifood Systems
Genetic Innovation


Transformation (ST) Initiatives
Regionally Integrated Initiatives
Agri-Food (RAFS) Initiatives
Genetic Innovation (GI) Initiatives

CHALLENGES

- Widespread recognition that food, land and water systems (FLWS) need to transform urgently
- Climate change, land degradation, loss of biodiversity, depletion of water resources, and pollution undermine food security and resilience
- In many places current agricultural practices have undermined our FLWS:
  - 40% of arable land degraded;
  - 64% of agricultural land contaminated by agrochemicals
  - Widespread forest and biodiversity loss
- A focus on increasing yield and calories has not eliminated world hunger and malnutrition nor reduced poverty in many rural areas.

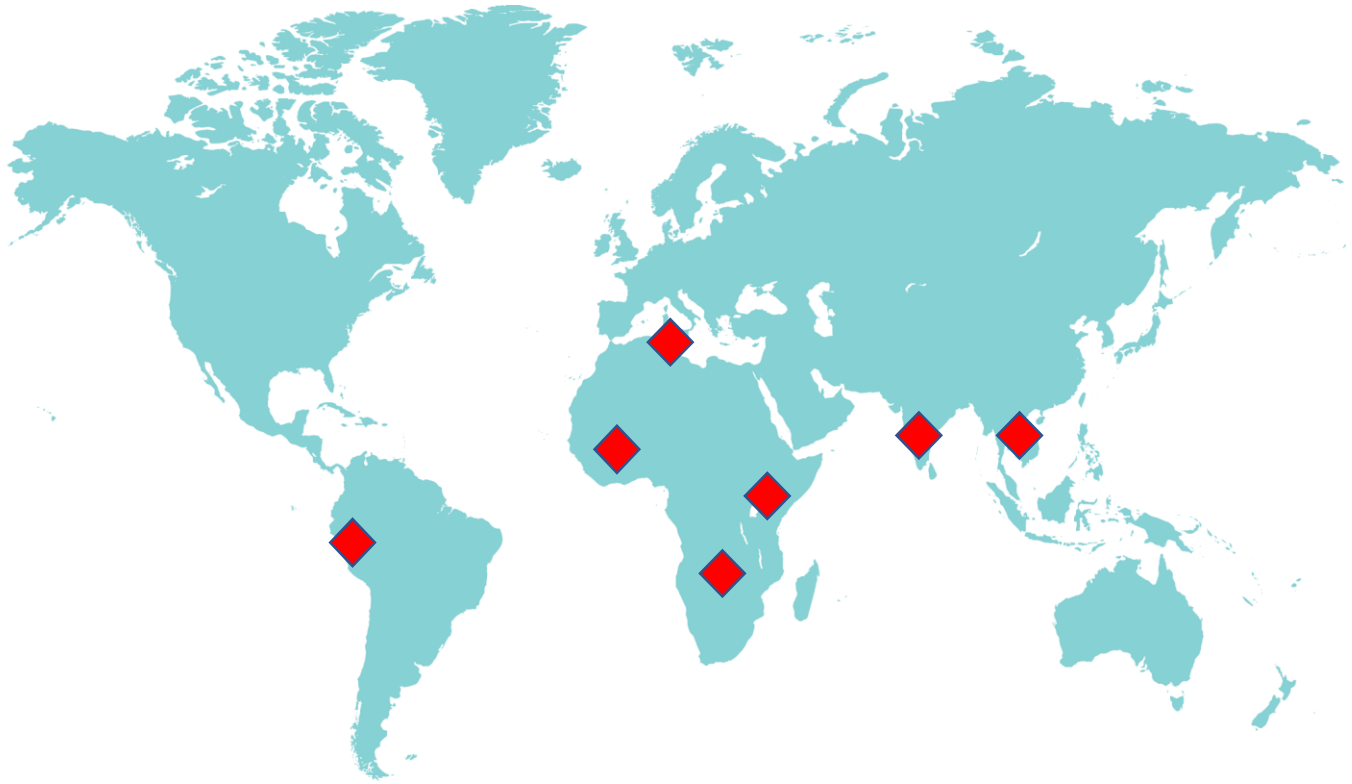
AE-I GOAL & OBJECTIVES

Develop and scale agroecological innovations for small-scale farmers and other agricultural and food-system actors across different socio-ecological contexts

To achieve this, the AE Initiative will

1. Support scale-out and **continuous innovation** for agroecological transitions in geographically-targeted food systems
2. Co-develop a **knowledge-base** that supports implementation of context appropriate agroecological innovations
3. Co-develop **business models and financing modalities**, linking bundled agroecological innovations to markets and investment
4. Promote recommendations to effect the **cross-sectoral policy** integration required to mainstream agroecological principles
5. Create understanding of **mechanisms to drive behavioral change** of farmers and consumers needed to implement agroecological transformation

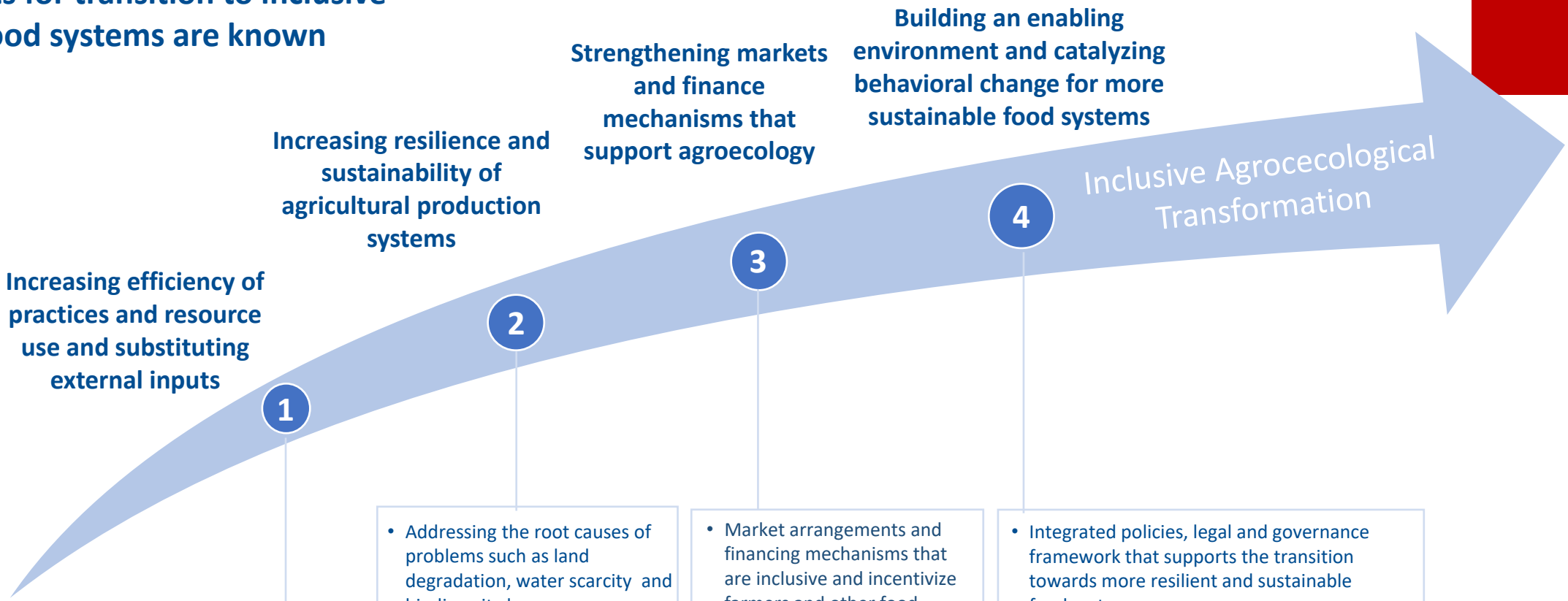
REGIONAL/COUNTRY FOCUS



1. India (South Asia)
2. Lao PDR (Southeast Asia)
3. Tunisia (North Africa)
4. Burkina Faso (West Africa)
5. Kenya (East Africa)
6. Zimbabwe (Southern Africa)
7. Peru (Latin America)

Agroecological Transition

The requirements for transition to inclusive agroecological food systems are known



- Optimizing biological processes and reducing external inputs
- Environmentally sound products and practices.

- Addressing the root causes of problems such as land degradation, water scarcity and biodiversity loss
- Diversification across landscapes enhances resilience to climate and other shocks

- Market arrangements and financing mechanisms that are inclusive and incentivize farmers and other food system actors to support agroecology

- Integrated policies, legal and governance framework that supports the transition towards more resilient and sustainable food systems
- Policies and legal frameworks that contribute to secure land tenure and natural resource security promote good practices
- Consumers and other behavior of other food system actors can help drive change

WORK PACKAGES

1. Develop an international network of Agroecology Living Labs (ALLs)
2. Evidence based assessments that enable comparison of benefits and tradeoffs between ‘business-as-usual’ and agroecological alternatives across ALLs
3. Develop inclusive business models and financing strategies in the ALLs
4. Strengthen the policy enabling environment
5. Develop understanding and influence behavior change

Outcome:

Contextually relevant agroecology principles are applied by farmers and communities across a wide-range of contexts and supported by other food system actors

Living Labs

User-centered multi-actor environments for codevelopment, participatory and evidence-based asssement,and co-adaptation of inclusive agroecological options in agro-landscapes (Work Package 1)

Science-based evidence

Agroecology evidence-based assessments (Work Package 2)

Understanding and influencing behavioral change (Work Package 5)

Adaptive scaling strategies

Inclusive business models with a focus on agroecological principles (Work Package 3)

Coherent policies and institutional arrangements conducive to agroecological transitions (Work Package 4)

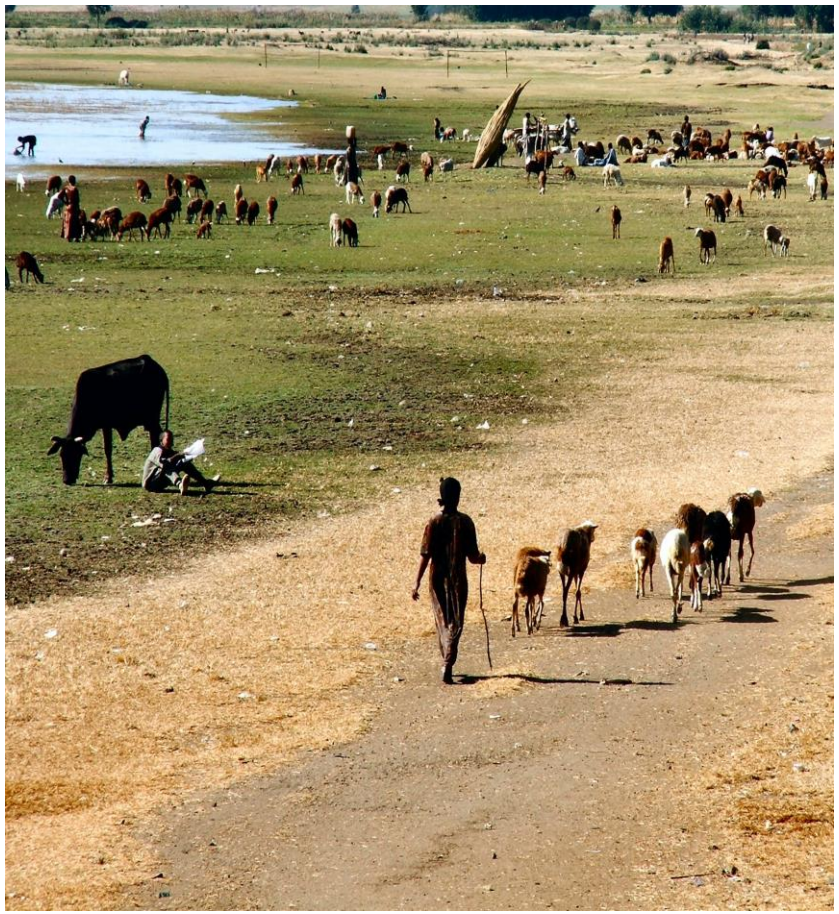
INALL

International Network of Agroecology Living Labs: a Network of territorial food system for scaling out and accelarating innovation for agroecological transitions

Planned comparisons across different contexts under different agroecological transition pathways

i) intensify" (i.e. low production systems with low inputs)
ii) "redesign" (i.e. unprofitable small-scale farmers using high levels of external inputs)
iii) "convert" (i.e. profitable medium-scale enterprises that use high levels of external inputs)

OUTCOMES (2022-2024)



- Small-scale farmers collaborate with researchers, and other partners in ALLs - co-developing, testing, and scaling context-relevant agroecological innovations.
- Researchers, farmers, communities, policymakers and investors use knowledge gained from science-based assessments to implement agroecological innovations that are economically viable, environmentally sound and socially inclusive.
- Investors, trading partners, NGOs, and farmer organizations participate in at least one strategic business partnership established in each ALL
- National and regional policymakers and representatives of sectoral organizations co-develop/promote recommendations to effect policies to mainstream agroecological principles
- Scientists, funders and civil society reorient their strategies and action plans informed by knowledge gained from scientific studies and ALLs, to contribute to agroecological transformation

IMPACTS (by 2030)

- Agroecological innovations that enhance food security/ nutrition and improve health, implemented at scale.
- Mechanisms created for generating revenues and jobs that will help to sustain livelihoods supported by agroecological principles.
- Adaptive scaling strategies (e.g. business models and policy instruments) and dialogue platforms within ALLs will increase the agency of women, youth and marginalized social groups.
- Agroecological practices implemented that enhance household resilience and improve adaptive capacity.
- Biodiversity actively managed and ecosystem services protected.


Thank you