

# Challenges of farming systems design in the drylands of Africa and Asia

Cases of the "Transformational agroecology across food, land, and water systems"

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## Transformational agroecology across food, land, and water systems



**Objectives of the Initiative** 

Create an understanding of mechanisms to drive behavioral change of farmers and consumers needed to implement agroecological transformation

Co-develop business models and financing modalities, linking bundled agroecological innovations to markets and investment.

Support scale-out and continuous innovation for agroecological transitions in geographically-targeted food systems

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

Promote recommendations to affect the cross-sectoral policy integration required to mainstream agroecological principles

Co-develop a knowledge-base that supports implementation of context appropriate agroecological innovations

**Primary Action Area:** System

transformation

Geographic scope: South Asia, Africa,

Latin America

Total Budget: 6.8 millions / year

Adaptive scaling strategies
Science based evidences
Co-creation of innovations

7 countries

#### **5 WORKPACKAGES**

WP1: transdisciplinary co-creation of innovations in Agroecological Living Labs

WP2: Evidence-based agroecology assessments

WP3: Inclusive business models and financing strategies

WP4: strengthening the policy- and institutional-enabling environment

Peru (Latin America)

Burkina Faso (West Africa)

Lao PDR (Southeast Asia)

India (South Asia)

Kenya (East Africa)

Zimbabwe (Southern Africa)

Tunisia (North Africa)

WP 5: Understanding and influencing agency and behavior change

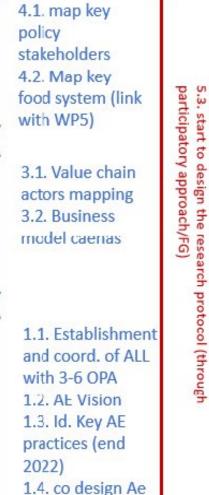
#### Contextually relevant agroecological principles are applied by farmers and communities across a wide range of contexts and are supported by other food system actors.

Co-creation of	Science-based evidence		Adaptive scaling strategies	
Co-creation of innovations  WP1: Transdisciplinary cocreation of innovations in ALLs  FSA collaborate with researchers in an International network of ALLs, that promote integration of research and innovation processes to facilitate co-design and testing context-specific agroecological innovations and broader learning of the biophysical and socioeconomic conditions	WP2: Evidence-based agroecology assessments  FSA use knowledge gained from science- based assessments, implemented in all the ALLs, to implement agroecological innovations that are economically viable, environmentally sound and socially inclusive	WP5: Understanding and influencing agency and behavior change  FSA re-orient or adjust their strategies and action plans based on knowledge gained from scientific studies about the mechanisms underpinning behavior change and the capacity of farmers, business partners and consumers to implement agroecological transformation	WP3: Inclusive business models and financing strategies  FSA participate in at least one strategic business partnership established in each ALL that leads to the co-development or adaptation of business models linking agroecological innovations to markets	WP4: Strengthening the policy- and institutional-enabling environment  • National and regional policymakers and representatives of sectoral organizations co-develop and promote recommendations to effectuate horizontal (across sectors) and vertical (across scales) policy integration required to mainstream agroecological principles.  • Local organizations and authorities co-develop,
required for agroecological transitions		ti ansionnation		strengthen, or adjust current local institutions and governance mechanisms to better support agroecological transitions in each ALL.

### **Targets**



Indicator	Target			
The Number of FSA engaged in the co-creation of	250 national and international researchers			
agroecological innovations	• 7,000 farmers			
	• 70 policymakers			
	<ul> <li>35 private-sector companies</li> </ul>			
The Number of policies/ strategies/ laws/	• 7 Business models			
regulations/ budgets/ investments/ curricula (and	<ul> <li>7 Financial Mechanisms</li> </ul>			
similar) at different scales that were modified in	<ul> <li>4 country policy integrations</li> </ul>			
design or implementation, with evidence that the	<ul> <li>4 country institutional arrangements</li> </ul>			
change was informed by CGIAR research.	<ul> <li>7 country behavioral strategies</li> </ul>			
<ul> <li>7 peer reviewed publications</li> </ul>				



changes (in the food system)

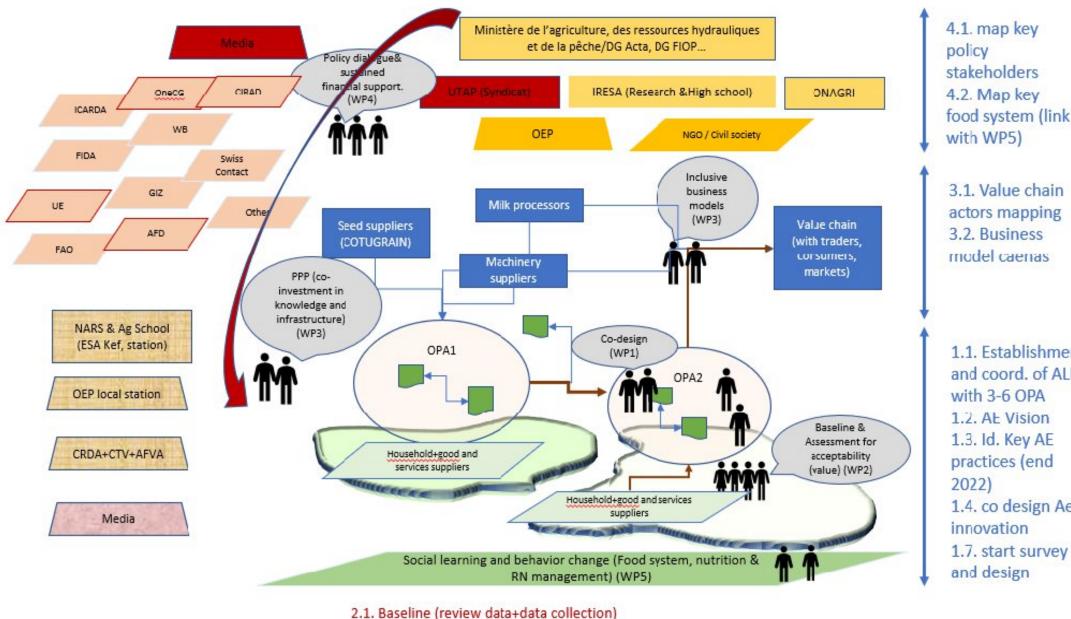
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.2. identify key determinants

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of behavior

5.1. inventory of research intervention



2.2. design of the assessment framework