

### Context



**Complex and multidimensional challenges:** climate change, environmental degradation, food insecurity, inequality, and market volatility.

**Existing innovations do not reach** or do not reach sustainably the people who need them.

**Fragmented systems,** with weak coordination among actors and limited user orientation.



Research is typically supply-driven, with only partial involvement of producers.



Vertical extension: producers receive information without actively participating.



Limited dialogue among science, policy, and local realities.

### Conventional model



Researcher



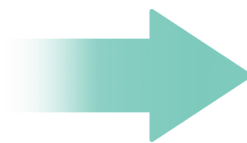
Extension Agent



Producer

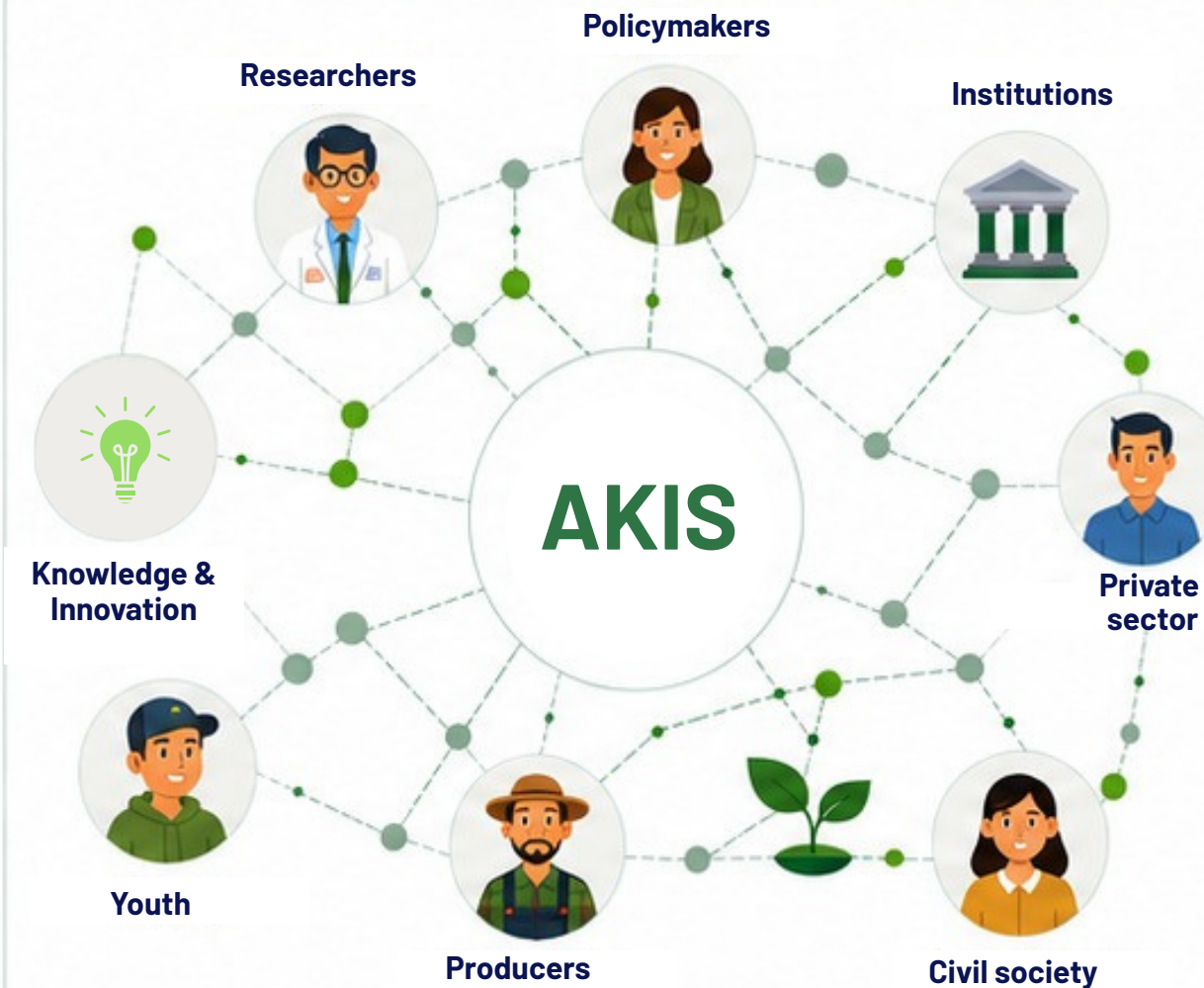
Single objective = Productivity

From a linear approach...



...to a systems approach.

### Systems approach (AKIS)



### How does AKIS contribute to agrifood systems?



Generates and mobilizes high-quality, relevant knowledge.



Facilitates territorial and inclusive co-creation.



Improves the adoption and effective use of innovations.



Promotes environmental, social, and economic sustainability.



Strengthens resilience and competitiveness across agrifood systems.

### Traditional approach vs. AKIS approach



Knowledge generation.



Role of producers.



Interaction among actors.



Extension and knowledge transfer.



Territorial approach.



Expected outcomes.

#### Traditional (Linear) Approach

- Focused on supply and disciplines.
- Passive recipients of technology.
- Fragmented and vertical.
- One-way and standardized.
- Homogeneous, with limited sensitivity to context.
- Increased productivity.

#### AKIS (Systems) Approach

- Co-creation of knowledge through transdisciplinary collaboration among multiple actors.
- Stakeholders actively identify problems and develop solutions.
- Collaborative, horizontal, and network-based.
- Two-way, context-specific, and process-oriented.
- Adapted to local realities and priorities.
- Systemic impacts: productivity, sustainability, inclusion, and resilience.

### The role of AKIS in scaling innovations



#### Co-creation

Joint identification of needs and solutions.



#### Validation

Participatory testing under real-world conditions and across multiple contexts.



#### Learning and adaptation

Continuous feedback to improve and refine innovations.



#### Scaling and impact

Effective dissemination, sustainable adoption, and impact measurement.

# AKIS

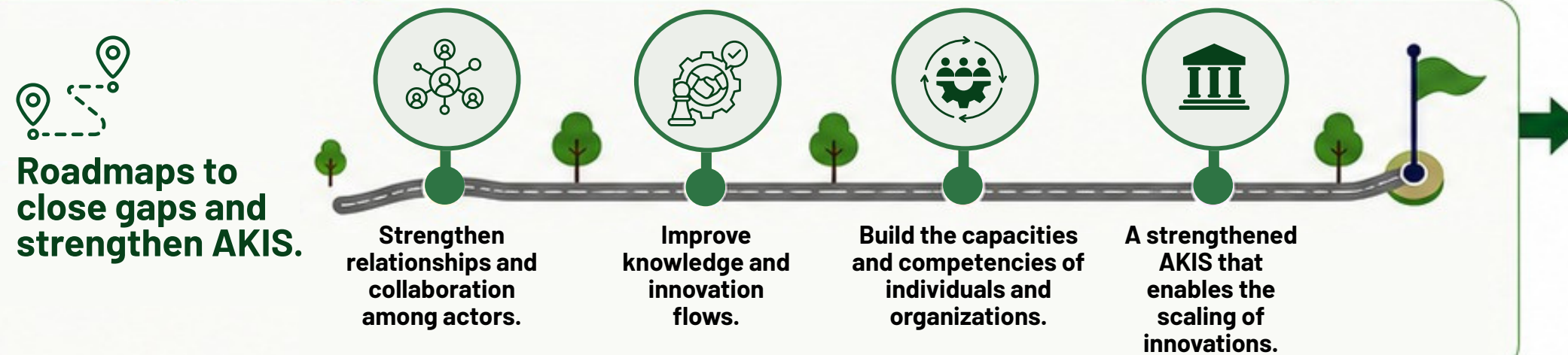
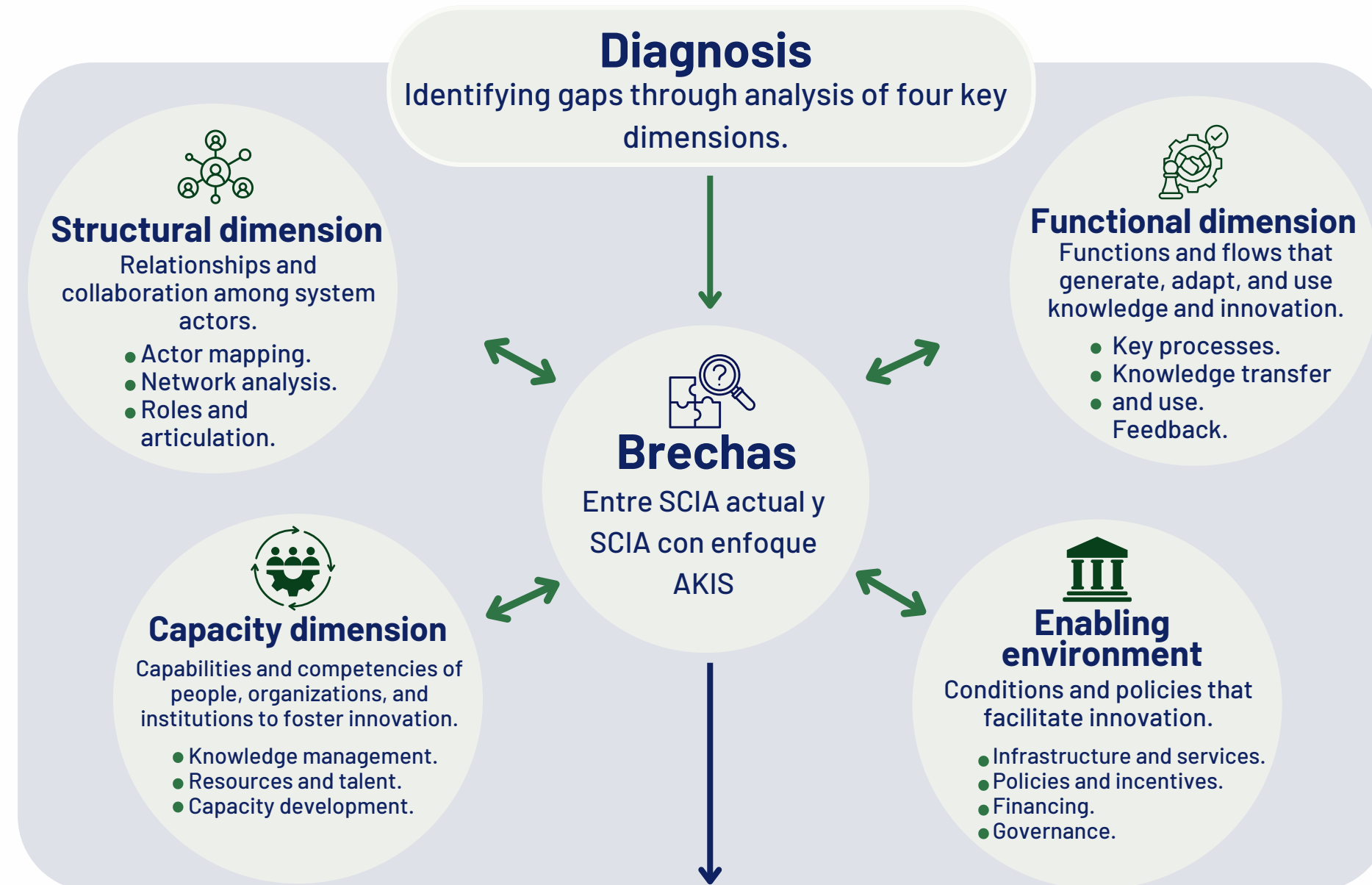
## A methodological approach to diagnose and strengthen an Agricultural Knowledge and Innovation System

### Why is it important?

-  Understand how knowledge and innovation flow within the system.
-  Identify key constraints that limit impact.
-  Support evidence-based decision-making to prioritize and optimize resources.
-  Enable more effective and inclusive policies and interventions.

### How is it carried out?

- 1 Information gathering.
- 2 Mapping and analysis of the four dimensions.
- 3 Identification and prioritization of gaps.
- 4 Definition of improvement opportunities.
- 5 Synthesis and roadmap development.



### How does it help? Results

-  Better evidence-based strategic decisions.
-  Greater impact and scaling of innovations.
-  More inclusive and participatory systems.
-  Stronger sustainability and resilience.
-  Better institutional alignment and more efficient use of resources.

### In summary



This diagnostic identifies gaps and guides roadmaps to close them and strengthen AKIS, creating better conditions for scaling innovations and contributing to more resilient, sustainable, and inclusive agrifood systems.