

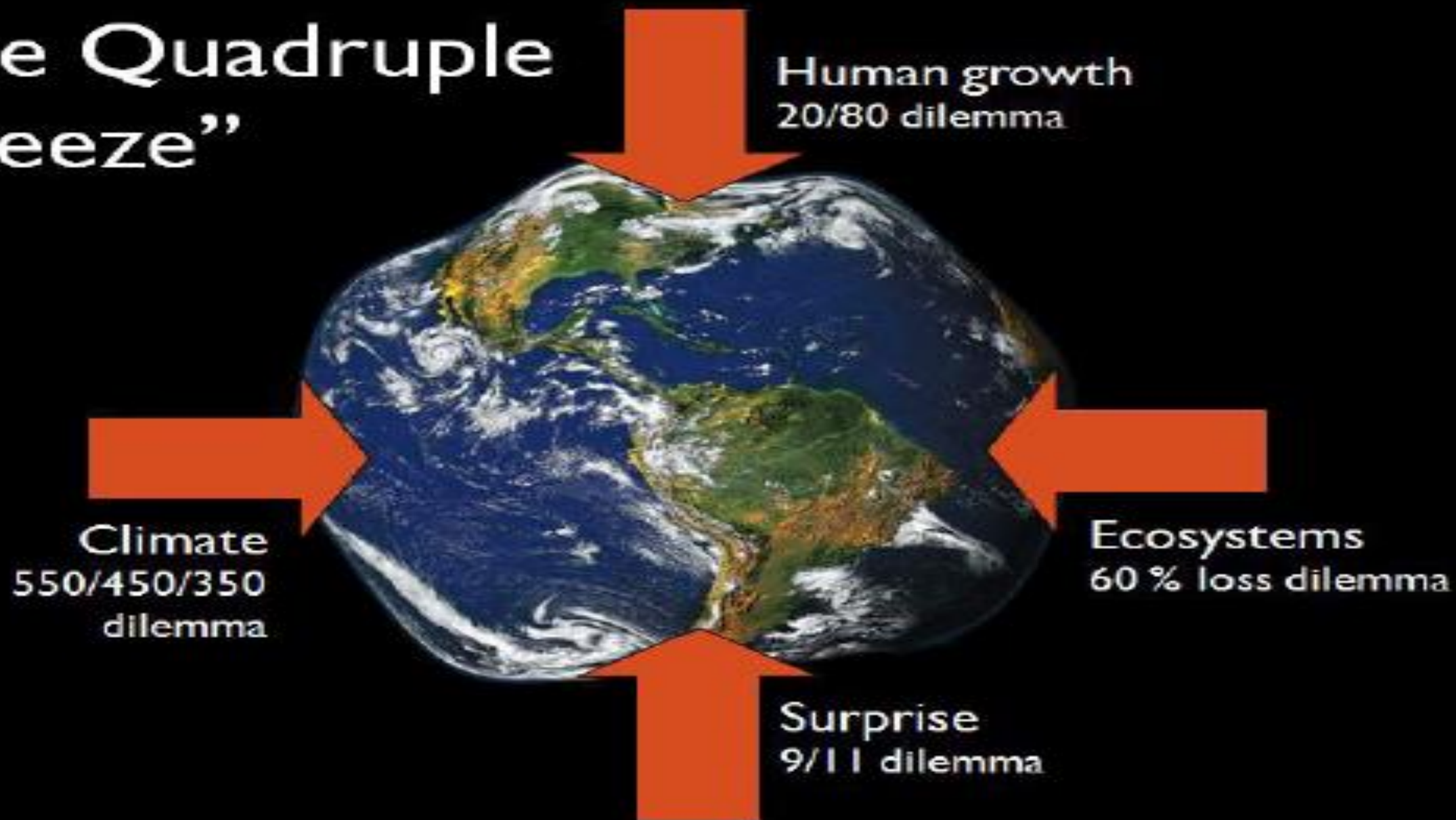
Outline:

- Background
- Defining agricultural innovations and AISs
- TAP framework of Capacity Development (CD) for AIS
- Considerations

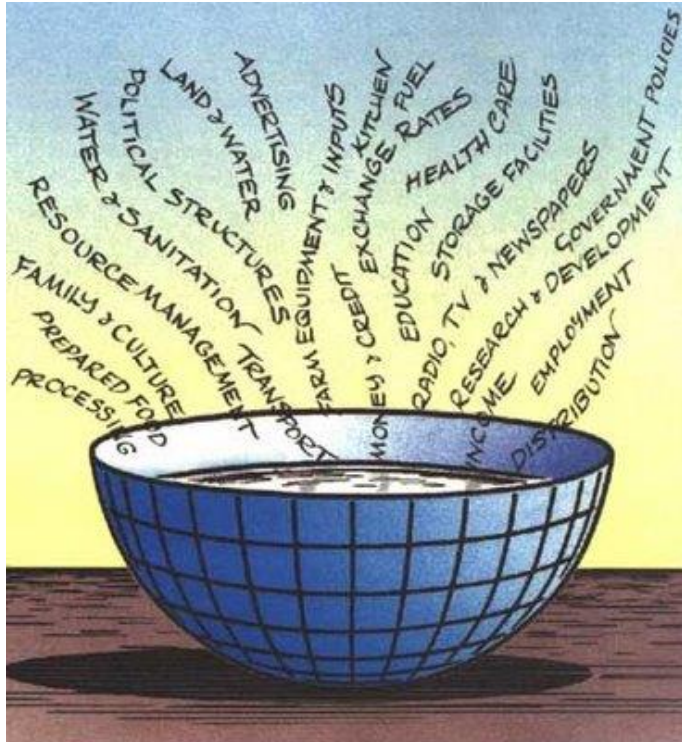
75% of the world's poor are rural and most are involved in farming. In the 21st century, agriculture remains fundamental for **poverty reduction, economic growth and environmental sustainability.**

World Development Report 2008

"The Quadruple Squeeze"



How to produce more with less?



- Change in agricultural practices
- Change in consumer preferences
- Change of agricultural policies
- Change in knowledge systems

Agricultural innovation

the process whereby individuals or organizations bring existing or new products, processes and forms of organization into social and economic use to increase effectiveness, competitiveness, resilience to shocks or environmental sustainability, thereby contributing to food and nutritional security, economic development and sustainable natural resource management

Interactive process

Multiple actors

Networking

Focus on the impact in terms of development

Participatory approach

Pluralistic origin

Demand driven

AIS concept

DEFINITION

A **network** of organizations, enterprises and individuals focused on **bringing new products, new processes and new forms of organization** into **social and economic use.**

interactions with institutions and policies that **affect their behaviour and performance.**

DRIVERS

Market

Environmental factors (Climate change)

Policy and legal frameworks

Science and technology

Infrastructure

Evolution of agricultural knowledge systems

Table 1: Defining Features of the Three Main Frameworks Used to Promote and Invest in Knowledge in the Agricultural Sector

Defining feature	National agricultural research systems	Agricultural knowledge and information systems	Agricultural innovation systems
Actors	Research organizations	Farmer, research, extension, and education	Wide spectrum of actors
Outcome	Technology invention and technology transfer	Technology adoption and innovation	Different types of innovation
Organizing principle	Using science to create new technologies	Accessing agricultural knowledge	New uses of knowledge for social and economic change
Mechanism for innovation	Technology transfer	Knowledge and information exchange	Interaction and innovation among stakeholders
Role of policy	Resource allocation, priority setting	Linking research, extension, and education	Enabling innovation
Nature of capacity strengthening	Strengthening infrastructure and human resources	Strengthening communication between actors in rural areas	Strengthening interactions between all actors; creating an enabling environment

Source: World Bank 2006.

Agricultural Innovation

Innovation ≠ Invention → Innovation implies application

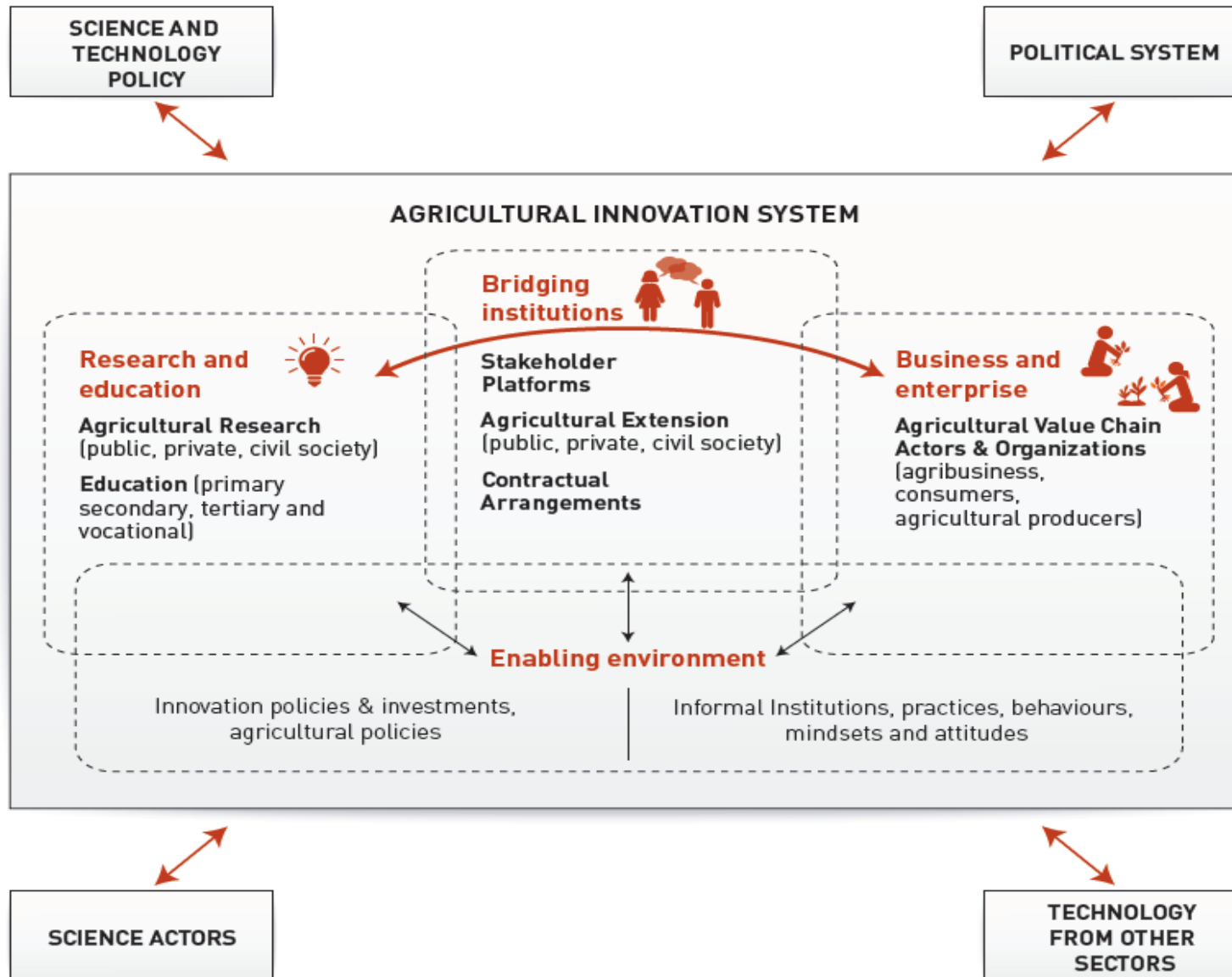
Innovation refers to technologies and practices

- Improved varieties
- Sustainable land management techniques
- Methods to reduce post-harvest losses
- Etc.

BUT it also refers to processes and organizational forms

- Public-private partnerships
- Farmers' cooperatives
- Performance contracts
- Etc.

Agricultural Innovation System (AIS)



As agriculture increasingly involves complex interactions among stakeholders at multiple levels, agricultural innovation needs a **system perspective**.

Key elements of AIS

- **Partnership and network building**
- **Reflection and joint learning**
- **Co-creation of knowledge**
- **Facilitation/brokerage**
- **Facilitative leadership**
- **Documentation of change processes**

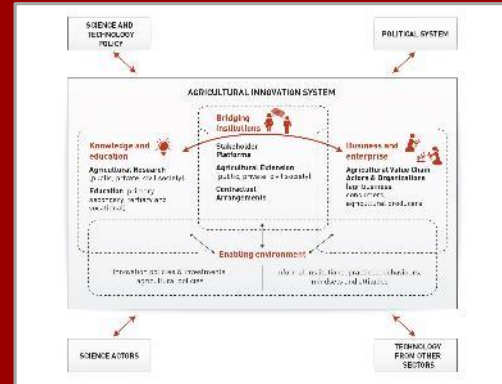
The TAP Framework



Global coherence of CD approaches for AIS



Advocacy and
policy dialogue



Common
Framework
on CD for AIS

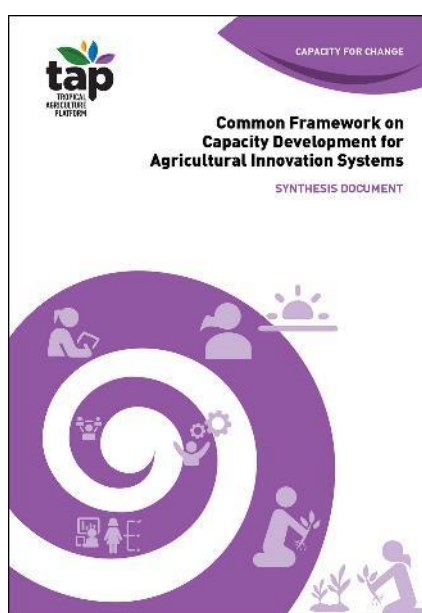
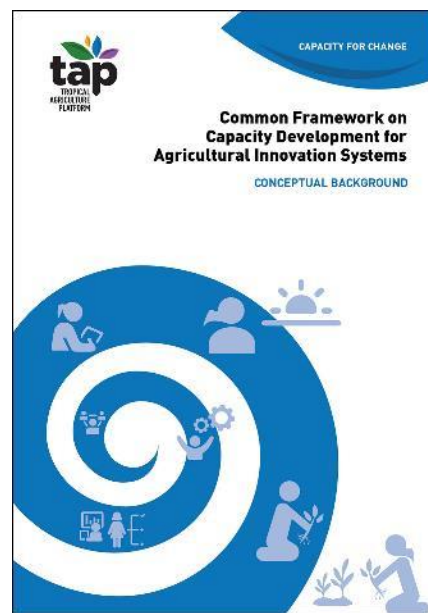
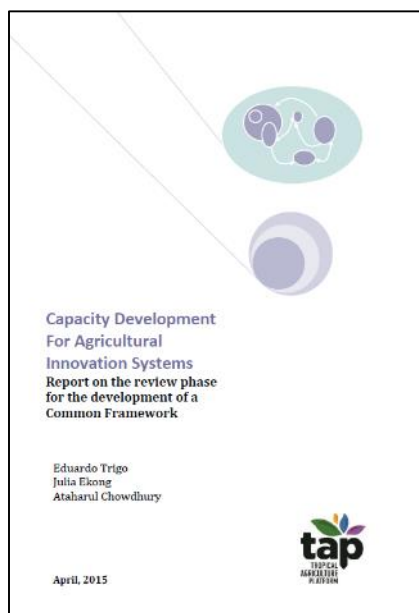


TAPipedia
knowledge hub

The TAP Framework

Framework Products

1. Review Report: Review of existing resources on CD for AIS
2. Conceptual Background: Theory, concepts, principles, definitions
3. Synthesis: Summary of Conceptual Background
4. Guidance Note on Operationalization: Approach and tools

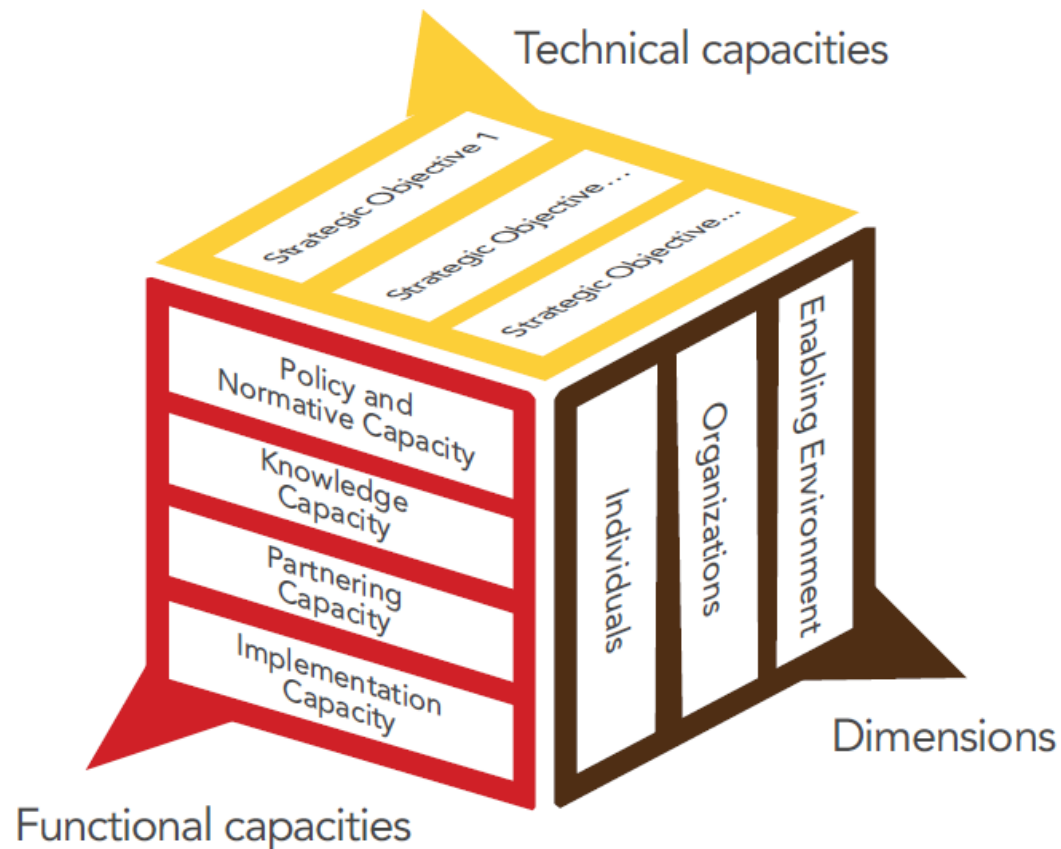


CD for AIS

- responds to expressed needs of actors.
- an endogenous process and ownership of local actors is paramount to its success;
- not politically neutral, questioning the status quo ;needs strong, facilitative leadership and commitment.
- an iterative process.
- a multi-dimensional and multi-actor process beyond the direct transfer of knowledge and skills at the individual level and addresses in an integrated manner organizational and institutional dimensions.
- interventions go **beyond improving immediate performance** and develop the capacity to adapt to new and constantly changing environments, to learn and analyse the internal and external context and to relate and build partnerships and pro-actively plan the future.
- is context-specific and no blueprint or one-size-fits-all recipe can be applied.
- a shift in the culture of research and development (R&D) organizations from an exclusive focus on individual merit and competition to promoting collaboration and teamwork within and between organizations.

Integrated approach to CD

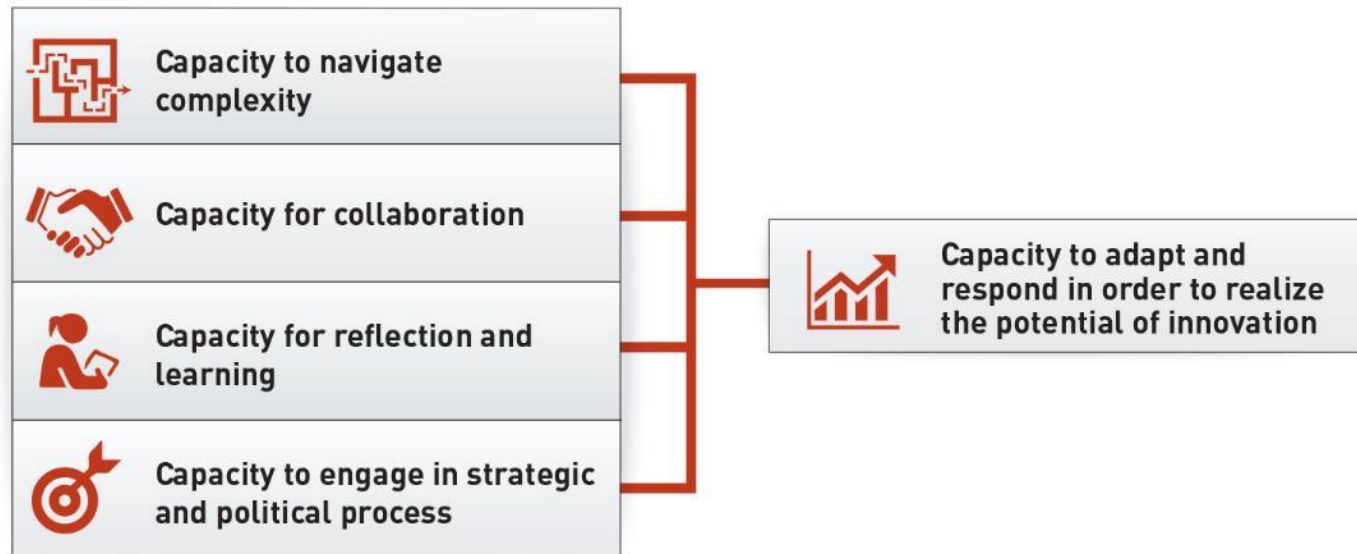
The Framework emphasizes the need to strengthen **functional capacities** alongside **technical skills**.



Technical and functional capacities must be seen as complementary and should be developed in an integrated manner across the three CD dimensions.



Functional capacities

The Common Framework identifies **4 + 1 key capacities** for AIS to perform effectively. These apply to all three dimensions of CD.



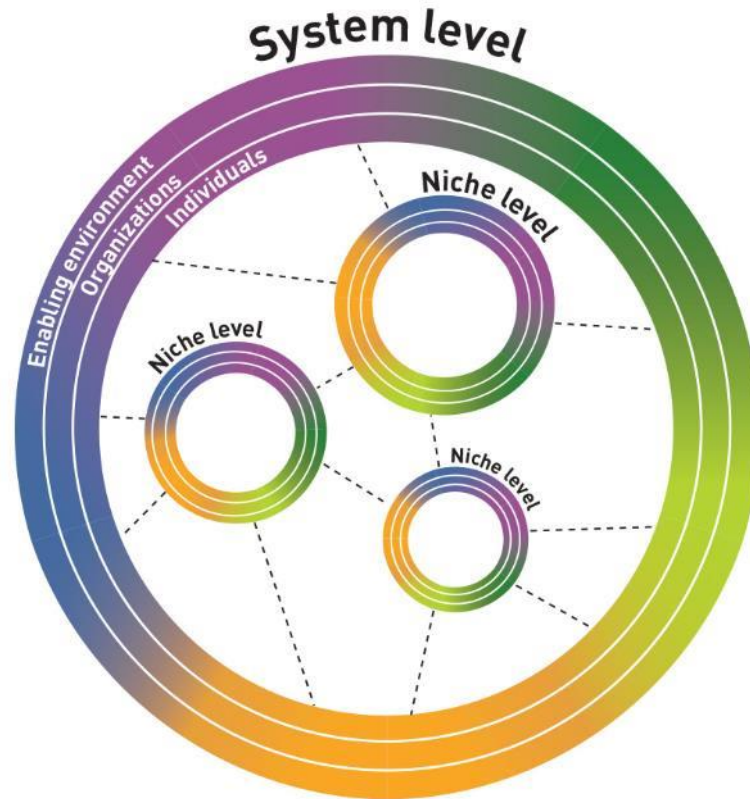
The 4 capacities on the left are the core of an overarching capacity to **adapt and respond in order to realize the potential of innovation.**

Functional capacities

The key capacities in detail			
 Navigate Complexity	 Collaboration	 Reflect & Learn	 Engage in Strat. & Polit. Process.
<p>Value chain analysis</p> <p>Proposal writing</p> <p>Strategy / vision development</p> <p>Assessment of requirements</p> <p>Evidence-based decision-making and scaling-out</p>	<p>Team building, conflict resolution, leadership</p> <p>Incentives for networking, partnering, multi-stakeholder interaction</p> <p>Diversity management</p> <p>Creating enthusiasm, shared responsibility</p>	<p>Methods to track progress and feed back results</p> <p>Documentation of lessons learned</p> <p>Encouragement to reflect and learn jointly and to try new approaches</p> <p>Improvement of transparency and knowledge flows</p>	<p>Policy analysis</p> <p>Understanding power relations</p> <p>Building linkages and partnerships across organizations</p> <p>Influencing decision-making processes</p> <p>Creating mechanisms for collective decision-making</p>

Dual pathway

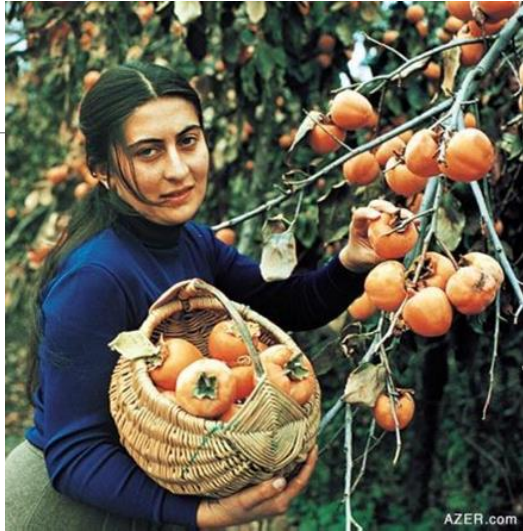
The Common Framework proposes a dual pathway approach to CD for AIS. This conceptual approach includes two aggregated processes: at **system level** and at **innovation niche level**.



System level: the focus is on the functionalities and performance of the system as a whole.

Innovation niche level: CD takes place around specific innovation agendas, in which actors of all types allocate time and resources to achieve change.

Innovation niche



Spaces in which groups of AIS actors become part of a learning process

Starting point for capacity development activities

Examples:

- ***Value-chain related multi-stakeholder platform***
- ***Community production centres***
- ***Initiative to promote climate smart agriculture***
- ***Scheme for efficient small-scale irrigation***

The CD for AIS Cycle



The Framework proposes a **CD CYCLE** in **5 STAGES** for the operationalization of CD interventions in AIS.

The CD cycle stimulates learning and interactions between the 3 CD dimensions.

Galvanizing Commitment



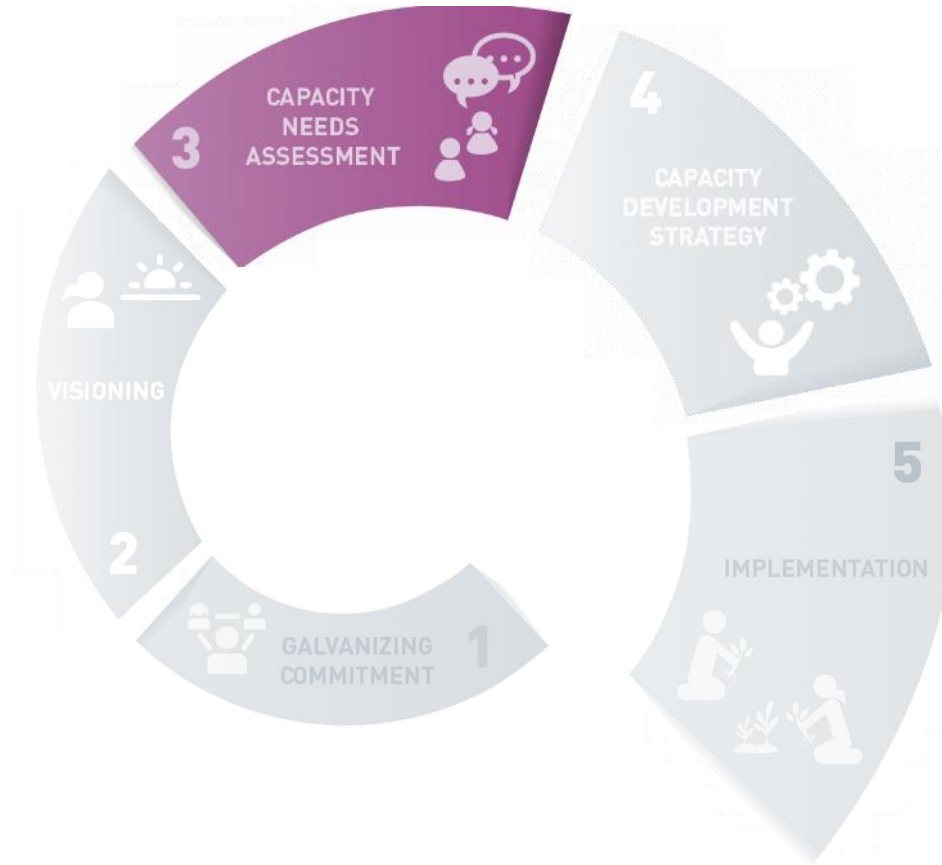
- Sensitize key actors to promote agricultural innovation through participation, reflection and joint learning;
- Perform a scoping study;
- Ensure common understanding;
- Create ownership;
- Secure high-level support.

Visioning



- Further develop common understanding
- Discuss coordinated approach;
- Identify innovation niches / candidate niches;
- Inform learning and adaptation in the system.

Capacity Needs Assessment



- Determine levels of functional and technical capacities;
- Focus on key organizations at systems level and on innovation niches;
- Use as a baseline for M&E;
- Can be based on interviews, literature reviews, surveys, ...

Capacity Development Strategy



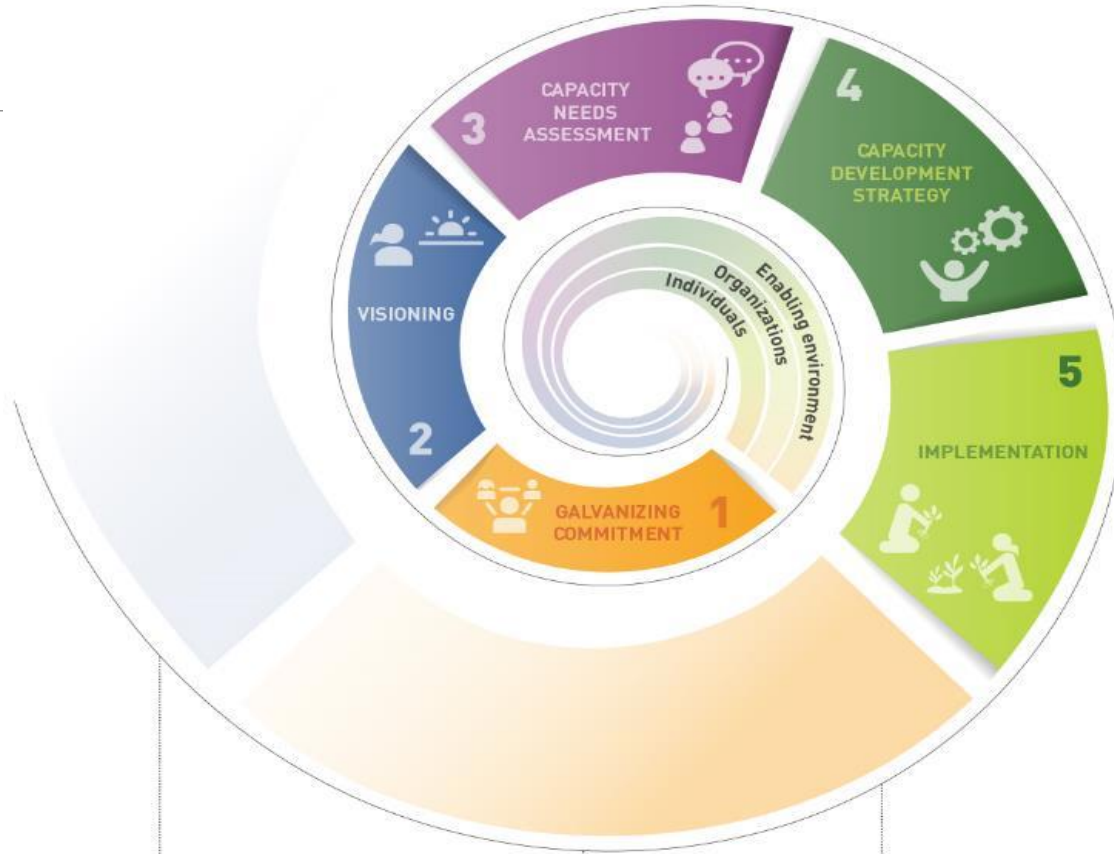
- Decide on goals, objectives, priorities;
- Consider implementation options, e.g. training of trainers, policy dialogue, incentive mechanisms;
- Take account of existing initiatives, commitment of actors, availability of funds;
- Formulate Action Plan to outline roles of different actors;

Implementation



- Provide for reflection and learning within organizations, within niches and across sectors;
- Strengthen the 4 + 1 capacities at systems and at niche level.

Elements of the CD for AIS Cycle



- Facilitation
- Reflection, Learning and Documentation
- Monitoring and Evaluation

FACILITATION

is a continuous process that enables the interaction of actors in the system and strengthens capacities for change

REFLECTION, LEARNING & DOCUMENTATION (RL&D)

happens among the actors in each stage and feeds into the M&E process

MONITORING & EVALUATION

aspects need to be considered in each stage in order to effectively track and assess the performance of interventions

Continuous process



Considerations

- ▶ We are facing several challenges at global and regional level that affect food security which require adequate actions now
- ▶ Agricultural innovations and capacity development much are needed
- ▶ A pluralistic agricultural innovations concept can succeed, if properly embedded in adequate national policies, programmes and infrastructure
- ▶ Set of attitudes & practices needed for a “culture of knowledge sharing and innovation”
- ▶ FAO advocates a shift from single components interventions towards a system-approach aimed at strengthening stakeholders’ networks

- Research important, but not always central, for innovation
- Competitiveness depends on collaboration for innovation
- Public sector has a role to play (regulation, integration of small scale farmers, supportive policies)
- Support needed to establish two way flow of communication, interactions and learning to enable respond to continuous challenges
- Integration and organization of rural stakeholders is central
- Actions for facilitating knowledge sharing and innovation systems are critical

The CD for AIS Impact pathway

***From CD interventions
to development
outcomes
to impact***

***Capacity
development
interventions***

***More
efficient,
viable and
demand
oriented
agricultural
innovation
systems***

***Innovations
that contribute
to making
agriculture
more productive
and sustainable
and improve the
livelihoods of
smallholder
farmers***

Thank you!

