
Capacity to innovate in the SRF


Complexity
Research and Capacity to Innovate

Capacity to innovate from a system CGIAR research program perspective

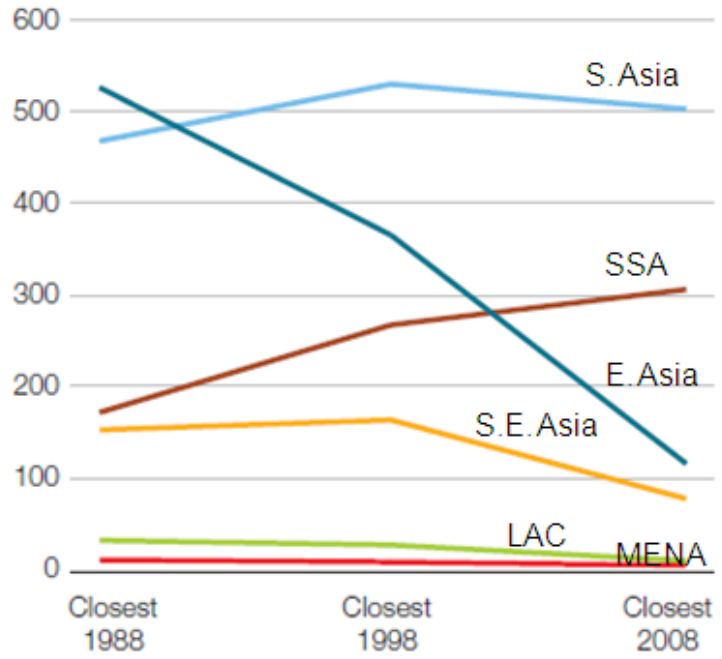
www.aas.cgiar.org

CGIAR RESEARCH PROGRAM ON Dryland Systems

CGIAR RESEARCH PROGRAM ON Integrated Systems for the Humid Tropics

CGIAR RESEARCH PROGRAM ON Aquatic Agricultural Systems

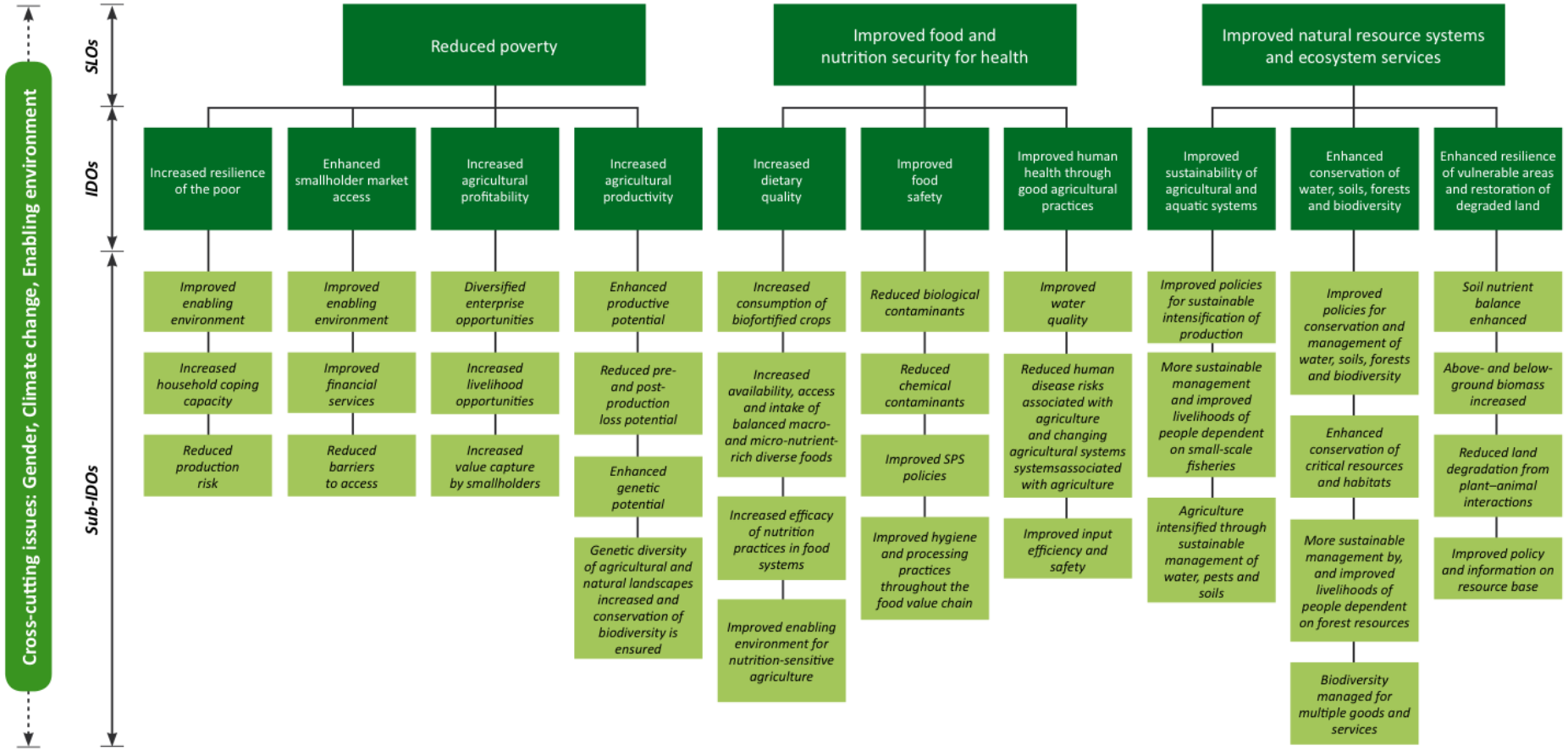
"… there are serious and growing threats to the productivity and resilience of the Green Revolution lands. Equitability has also been low. The larger landowners have reaped most of the benefits, while the poor and landless have missed out." (Conway 2012)



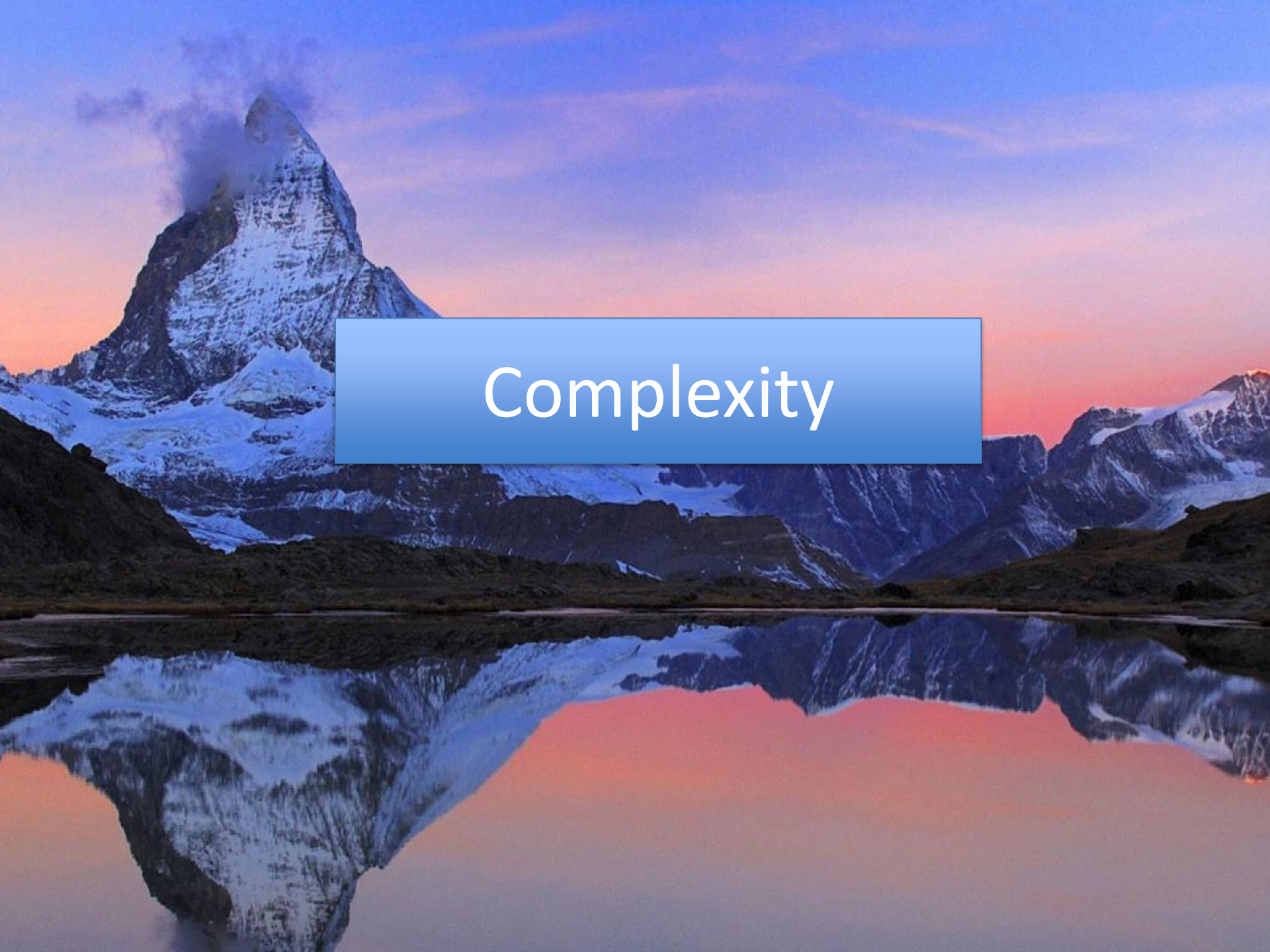
Number of rural poor (millions) (<US$1.25 per day)

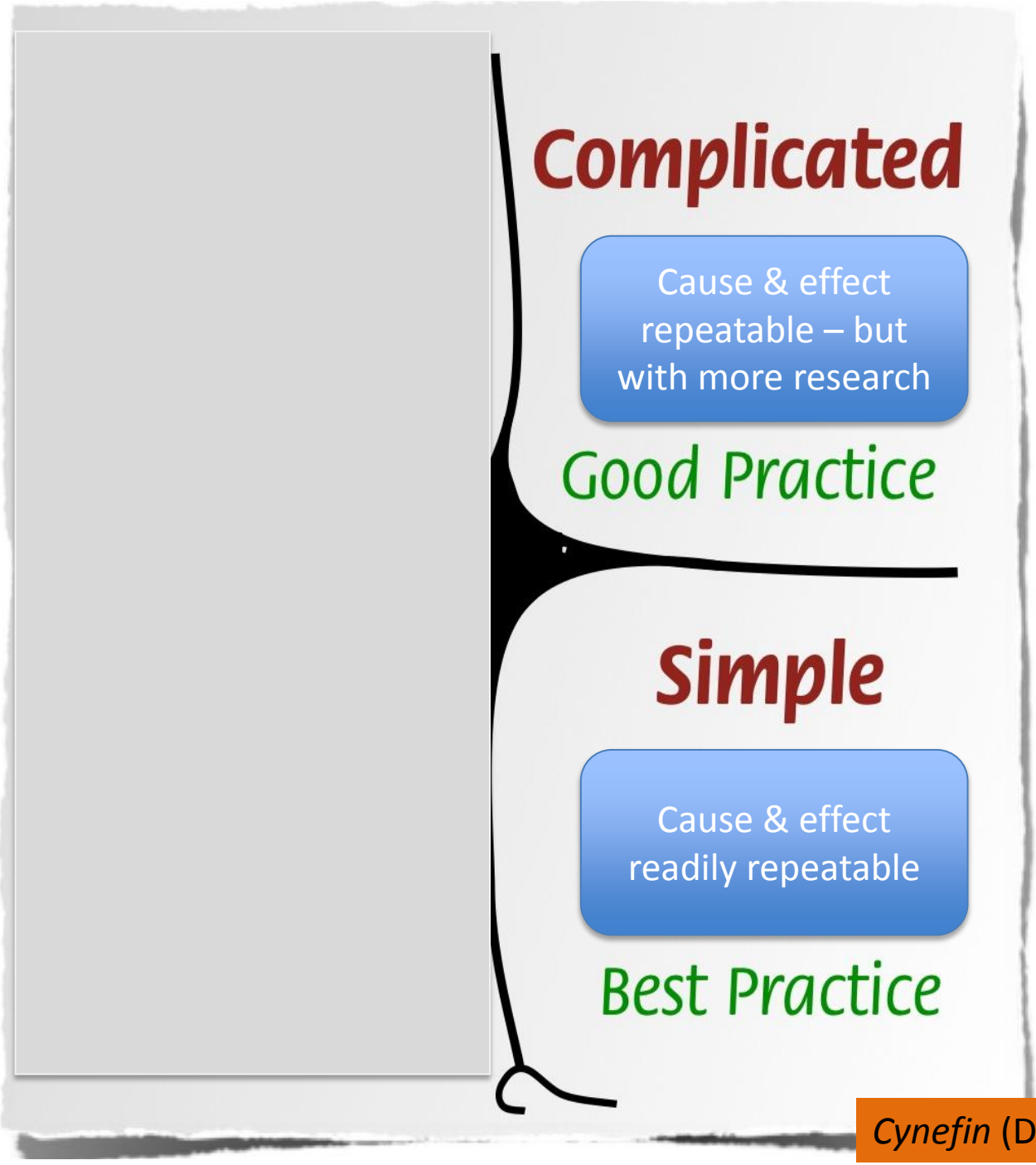
Capacity in the SRF?

Capacity to innovate in the SRF?



Enabling outcomes


Complexity



Cynefin (David Snowden)

Complicated

Simple

NRM

Commodities

Systems

Complex

Complicated

Chaotic

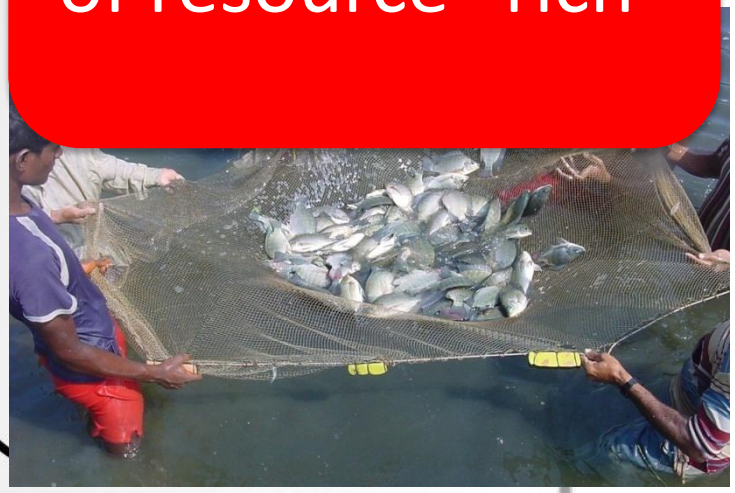
Simple

Complex

Greater numbers of poor and marginalized

Complicated

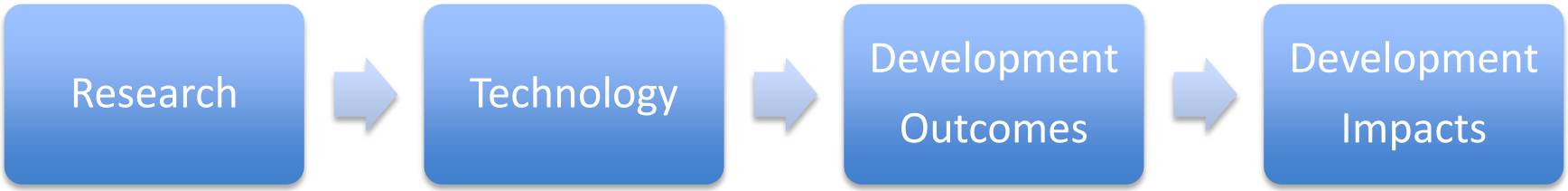
Greater numbers of resource “rich”



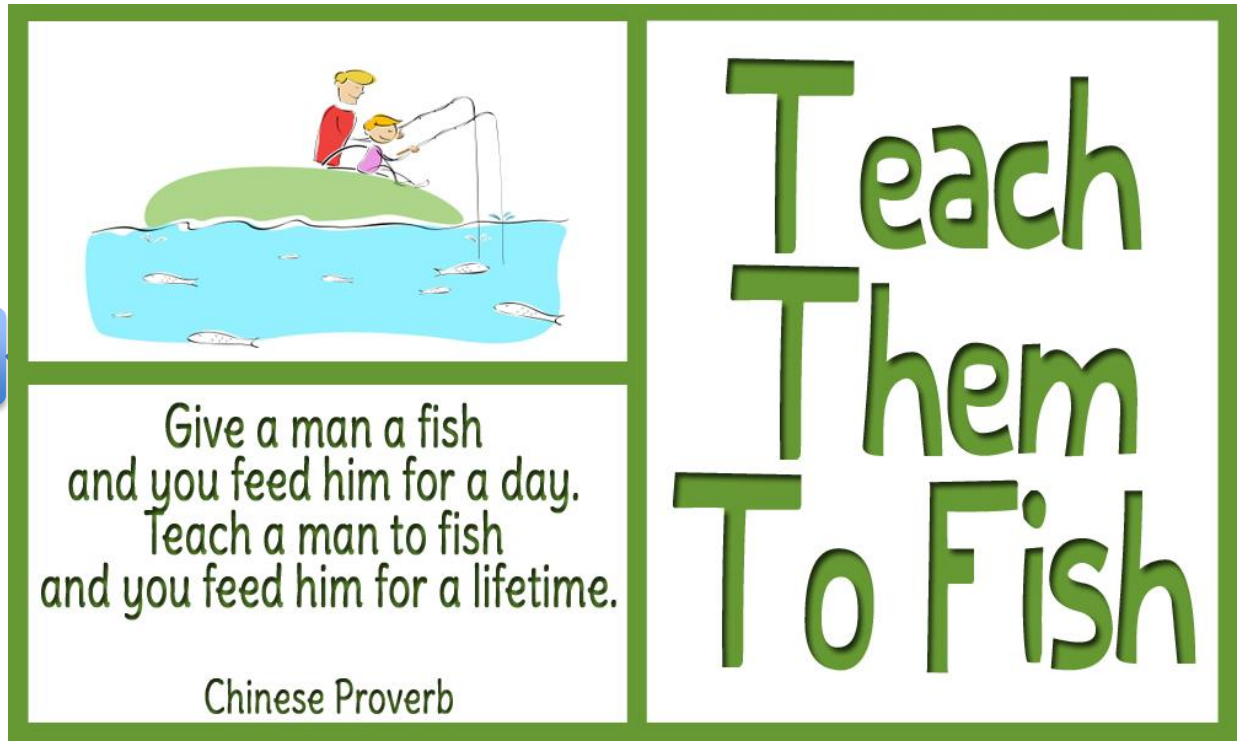

Complex
Simple
Rural Road Nakhon Nayok 4009
Smaller field size
Greater diversity of crops, trees, fish
Less predictability
Poor infrastructure = less access to information and supplies


Research and Capacity to Innovate

Pathway 1: technology research



Pathway 2: technology research that builds capacity to innovate



Research

- Capacity to innovate
- Technology → Development outcomes → Development impacts

Capacity to Innovate

Stakeholder capacity to:

- continuously identify and prioritize problems and opportunities in a dynamic systems environment
- take risks, experiment with social and technical options, and assess trade-offs
- mobilize resources and effective coalitions in support of promising options and visions for the future
- collaborate to access, share and process information and knowledge, and take concerted action

How research can enhance Capacity to Innovate

Through processes and platforms to help people:

- understand their situation, problems and opportunities
- understand their networks and how to use them
- identify critical uncertainties and translate these into research questions for different disciplines
- experiment with options and analyze trade-offs
- document and reflect on the process as part of monitoring and evaluation efforts

Participatory Action Research

UK farmers in the Duchy Originals Future Farming Programme.

Engage farmers in research

A new wave of small-scale agricultural innovation will boost yields and protect the planet, contend **Tom MacMillan** and **Tim G. Benton**.

Nature, 1 May 2014

Measuring capacity to innovate

Outcomes	Indicators	Measures
Capacity to Innovate: *Increased systems capacity to innovate and contribute to improved livelihoods by and for low income agricultural communities*	Improved capacity of systems actors to: a. identify and prioritize systems problems and opportunities; b. invest, test, experiment and adapt; c. assess tradeoffs between alternative social and technical options; d. network, learn and share knowledge.	• *No. of organizations, networks and platforms using reflective learning approaches (e.g. PAR) to foster innovation, and the number of people involved* • *Degree of adaptation, adoption, improvement and scaling of reflective learning processes that foster innovation* • *No. of prototypes of social and technical innovations tested using learning approaches* • *Existence and use of linkages in order to access and share knowledge and information* • *Extent of network and coalition formation around promising options* • *Policies and support systems in place that enable innovation*

Capacity to Innovate

- Key pathway to impact in complex systems
- Research has critical role to play
- Systems approaches important – but:
  - What does an effective systems approach look like?
  - What is the role of the CGIAR?

- Research vs Development
- Partnerships
- IPGs
- Innovation in M&EIA


Thank You