WEBINAR SERIES

CLIMATE-RESILIENT DEVELOPMENT

Climate Change, Climate Risks and Development Programs

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Climate Change, Climate Risks and Development Programs

As development practitioners you face a difficult challenge:

Incorporate best available knowledge in Development Programs

IRI’s Experience:

Communication between scientific “knowledge generators” and Implementing Agents is not easy
Informing Decisions, Plans with Climate Science:

Knowledge Chains, Networks

Knowledge Generation

New Research Questions

Knowledge “Translation”, “Tailoring” Boundary Organizations

New Knowledge Demands

Knowledge Application:
• Operation
• Policy
• Development

Here are the main Challenges:
(Translator, Integrator)
Science and Society: Information Networks
(Very) Simplified Example in Agriculture

International Research Agriculture

International Research Climate

Regional Research Institute

Local University

Local University

Local University

Agricultural Research Institute

Climate Research Institute

Meteorological Service

Extension Service

Advisers Ministry

Advisers Farmers

Farmer

Ministry

Agribusiness

Insurance

Financial Services

NGO

Understand the Network (links, processes)

Strengthen links, communication
A few basic premises for the Webinars:

Decisions, plans, policies should be better if they are better informed

Climate information is available (often in excess!)

**But:**
What is based on good science?
What is useful? What is usable?
What is relevant?

IRI Webinars intend to assist in this process
IRI Webinars:
Help practitioners to understand the *Science behind Information*

**For example:**
Development efforts must consider Adaptation to Climate Change

Adapt to what? What will future climate look like?

**Climate Models (GCMs)**

**But there are Limitations:**
- Scientific knowledge gaps (still lots to learn)
- Need to assume Greenhouse Gas emissions in the next 50-100 years

**Uncertainties**
Uncertainties are large at Regional level
Example in East Africa: 90% of the models agree it will be wetter

This is for large “Windows”
At local level uncertainties are much larger
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We tend to plan based on Average Climate Conditions

Example: Monthly rainfall in Guatemala

Select 10 years randomly:
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We tend to plan based on Average Climate Conditions

But the “average” year does not exist...
None of the years behaves like the long term mean

Probability of a year being “Average” = ZERO

Still, Planning/Decisions are often based on “AVERAGE” year

Can we do better?

• Seasonal Climate Forecasts
• Understand Historical Variability / associated risks
Understanding climate risks, issuing early warnings, require climate data with reasonable length and coverage

But:

Developing countries often lack long records of climate observations with good spatial coverage

IRI: Combine observations with satellite information
Informing Decisions, Plans with Climate Knowledge:

Requires a good dialogue

Needs practitioners understanding Science behind the knowledge

Requires Scientists asking the right questions to understand demands

Typically: “What information do you need?”

A better question:

“What problems are you trying to solve that can be informed with climate knowledge, tools, products?”
Thank you