

Improving Community Resilience through the Integration of Climate Services in Adaptation Decision-Making in the Southwest Coastal Bangladesh



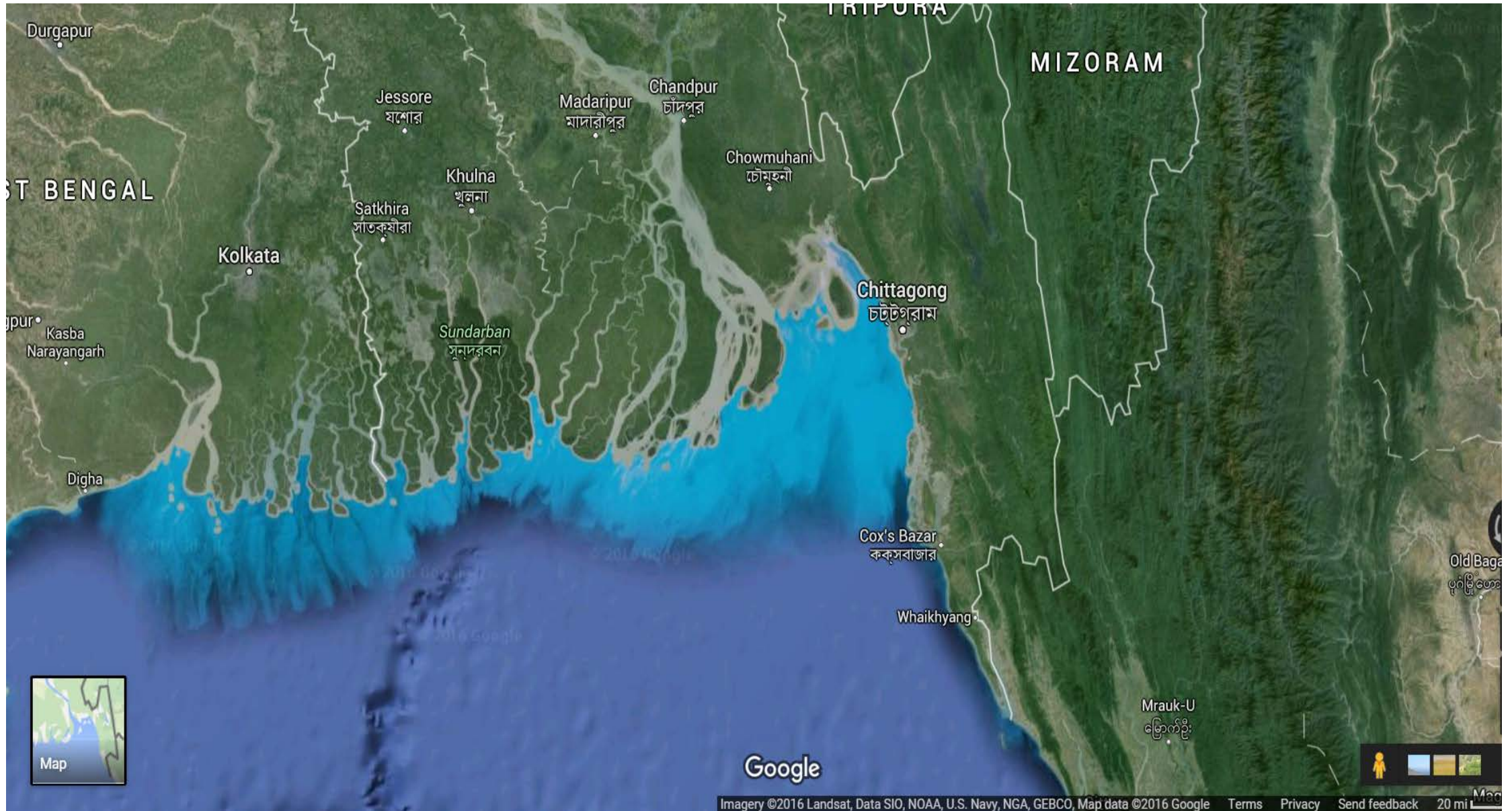
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Presentation Outline

- Climate Vulnerability in SW Coastal Bangladesh
- Climate Services in the Country/Region
- [Dissertation] Research Questions
- Study Area
- Methods
- Local Responses on Climate Services
- Visions/Possible Outcomes
- Process Diagram

Climate Variability in Bangladesh







Climate Services Scenario

- A recent study reveals that **45%** people of all who are affected by different extreme climate events (e.g. farmers) in Bangladesh do not receive **adequate and appropriate climate services**.
- Evidence suggests that poor and marginalized farmers in the developing regions can plan more effectively by optimizing their adaptive decisions if they **receive the appropriate, user-inspired, demand-driven climate services/information**.

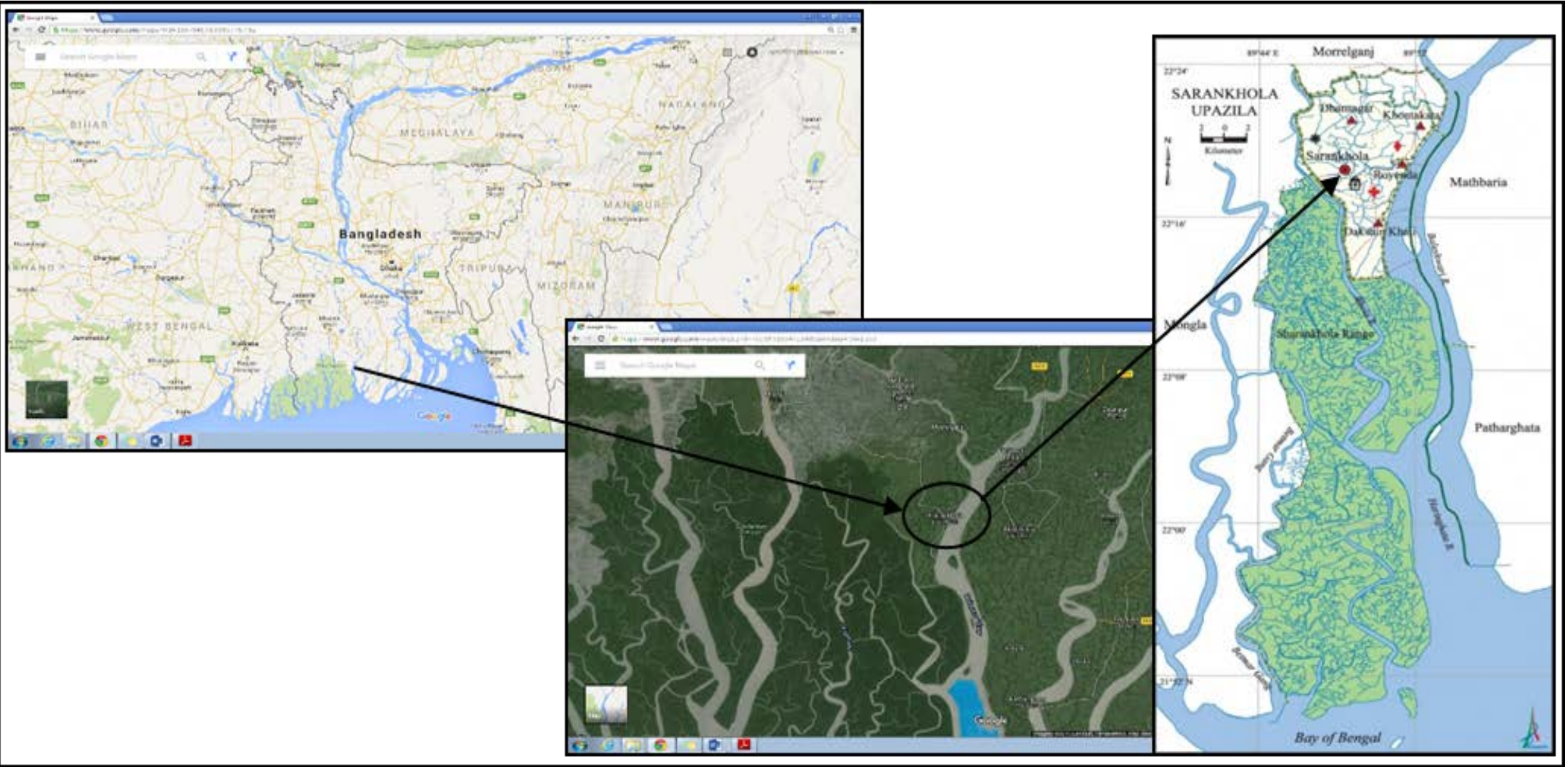
Climate Variability as Part of Decision System

- **“Indigenous knowledge”** about climate always a factor in livelihood systems for farmers, herders, and fishermen
 - Examples: Saudi Bedouins, West African swamp rice producers, Brazilian subsistence in the backlands
- **Emergence of climate science** in the 1980s:
 - Greater understanding of dynamical relationships between ocean and atmosphere: seasonal forecasts, drought forecasting, climate change modeling, hydro-climatology
- **New challenges:**
 - Limits of climate science, what products needed, how to package and communicate: “co-production”

Research Questions

- Globally, particularly in the Global South, what are the **limits or opportunities of climate science/services** to help improving peoples' livelihoods and resilience?
- What climate information do local people **use, trust, and find useful** in the southwest coastal Bangladesh?
- What are the gaps **between current supplies and potential requirements** of climate information/products for adaptation decision-making in the communities?
- How to design a **user-inspired, stakeholder-driven climate services** that promote coproduction of climate knowledge and improve adaptation decision-making and community resilience?

Location: Southwest Coastal Bangladesh



Methods

- Preliminary Pre-doc Field Visit and Meeting with Local Development Partners (e.g., USAID, ADB, UK DFID), Summer, 2015
- Meetings with Govt. (e.g., GoB), Development Partners (e.g., USAID), and Local Policy-Makers (e.g., BMD, Dr. Saleemul Huq), Jan., 2016
- In depth Field Research, Summer, 2016
- Additionally,
 - “Native” experiences from the region
 - Previous experiences working with GoB, United Nations, and World Bank
 - Almost a decade long research on the issues related to climate change adaptation, resilience, and community development in coastal Bangladesh



Local Experiences...

- No one asked about community needs (*e.g. no needs assessment*)
- Community people were neither invited nor part of any development planning/solution (*e.g. no coproduction of knowledge*)
- Usually all decision come from the top officials/policy makers (*e.g. top-down development strategy*)
- Often development interventions address the wrong/undesired issues (*e.g. maladaptation*)



Stakeholders: Science – Policy – Community Interactions



- Local Community in Saronkhola, Bagerhat (*as users of science*)
- Bangladesh Meteorological Department (*as producers of science*)
- Local Government (*as distributors of science*)
- NGOs/other development partners (*as community development enablers*)
- Research Institutes (*as potential boundary organizations*)
- Others

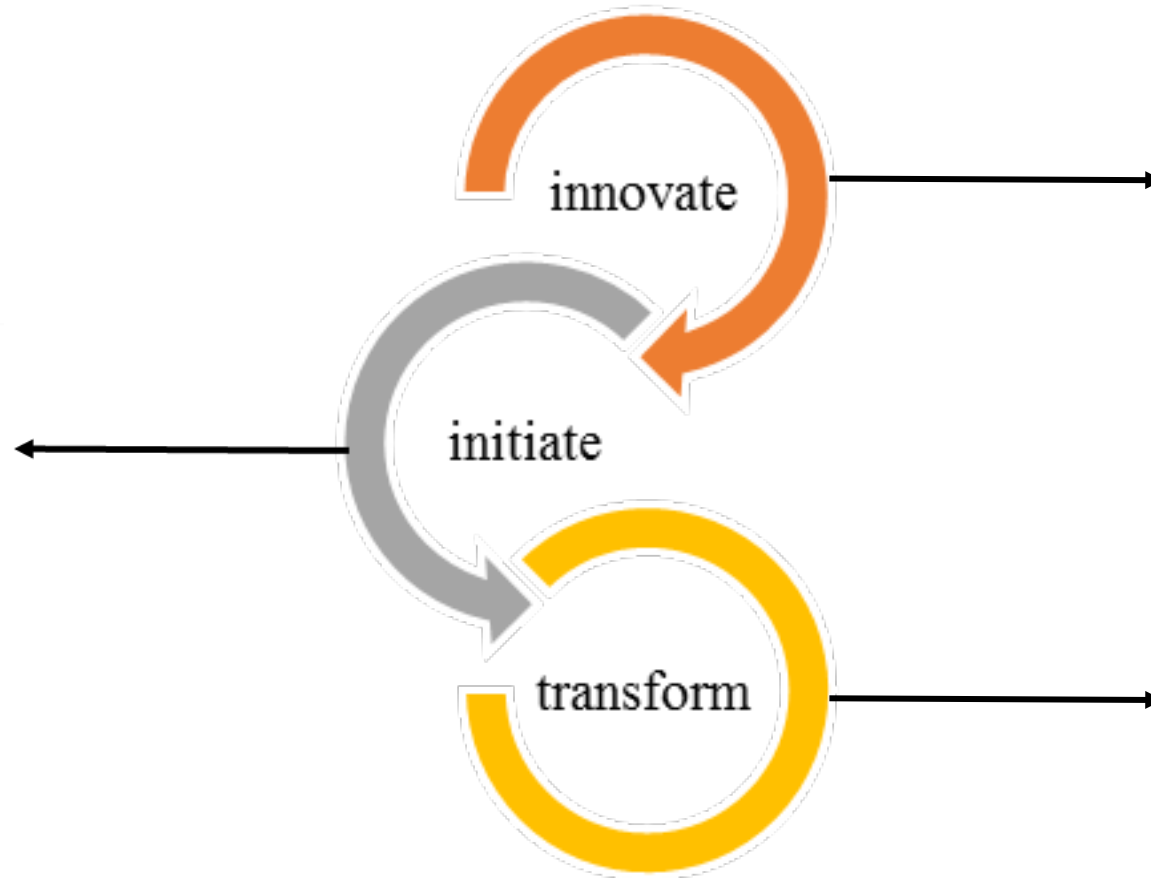
In general,

- Climate information more available in the case of sudden onset events
- Climate understanding of slow onset events still evolving
- Still there are limited understanding of coproduction of climate information/knowledge

Key Achievements...

- **Create an institutional network:** consortium of stakeholders (academic community, BMD, line ministry services, NGOs, CBOs, and donors) as the vehicle for the production and delivery of climate information to communities that “demand” it
- **Compile and analyze (“warehouse”) existing data sets** on community, HH, livelihood vulnerability creating national maps of climate information needs (and fill in the gaps through research)
- **Enhance and expand the supply of climate applications** as determined by local demand
- **Integrate (“mainstream”) the climate-smart approach** into existing development programming : eg. current NGO projects
- **Evaluate** the impacts of such climate-smart programming

Process Diagram



The Next Steps...

- Field Research in Summer 2016
- Apply for Research Grants in Fall 2016
- Develop Manuscripts Based on Field Research in Summer 2016
 - Topics: Integrated Vulnerability Assessment, Coproduction of Climate Knowledge
- Go Back to Research Sites again in Spring and Summer 2017

THANK YOU...

