EVALUATION OF AGRICULTURAL CLIMATE SERVICES IN AFRICA
- A REVIEW OF RECENT WORK -

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Climate Services Evaluation Methodological Review Workshop

I.LEARN.CIS / ICCS – 5

LEARNING AGENDA ON CLIMATE INFORMATION SERVICES FOR SUB-SAHARAN AFRICA

- USAID-funded project to learn more about constraints and effectiveness of CS in sub-Saharan Africa.

- Goals include:

  - Develop metrics to assess sustainable and effective provision of climate services, baseline assessment methodologies, and approaches to bridge existing gaps

  - Identify options to improve the sustainability of climate information services

- Two consortiums (Winrock, IRI, CSAG, WMO, Agrhymet & Mercy Corps, IRI, ICRAF, HURDL, Practical Action, Catholic Relief Services)
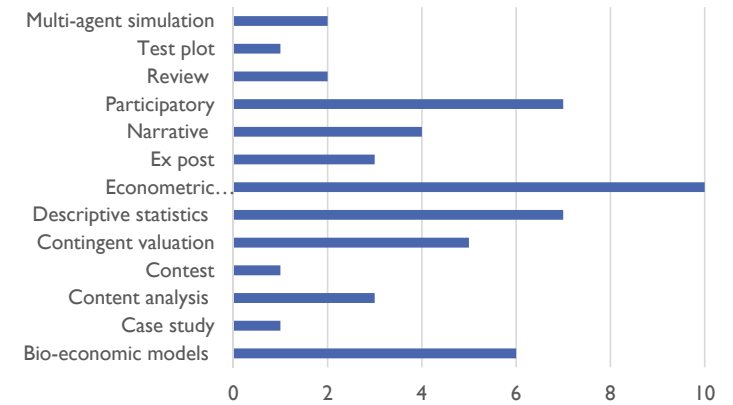
OVERVIEW OF DOCUMENTS

Evaluation Studies by Country
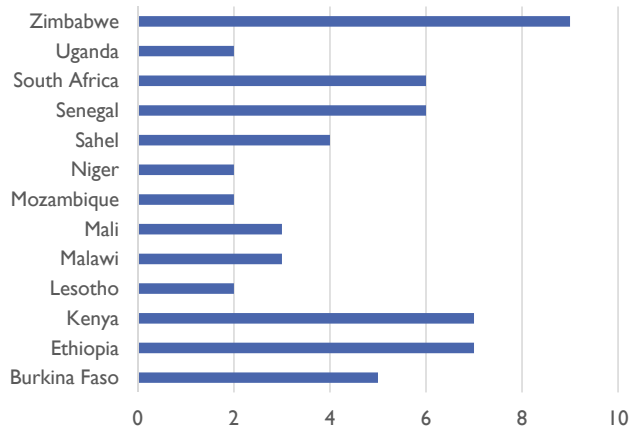
Number of Studies by Year
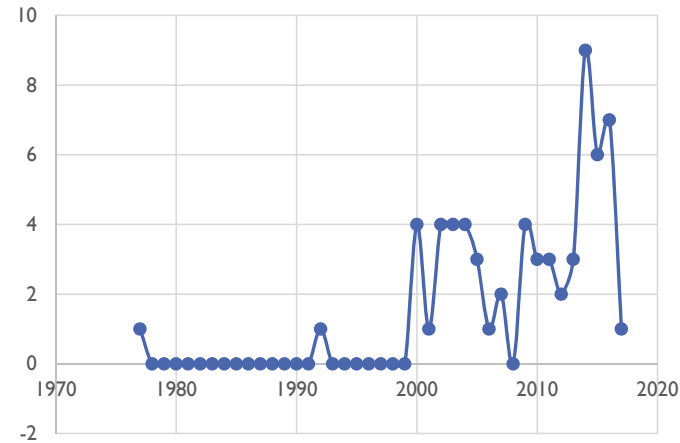
Frequency of Different Approaches

ORGANIZING QUESTIONS

- How and to what extent do farmers and other agricultural decision-makers access and use climate services to change their decisions?

- What is the impact of the use of climate services on farmers' livelihoods and agriculture-related development goals?

- To what extent do aspects of climate service design and implementation influence use and effectiveness (in terms of livelihood and development impact) of climate services?

- Access & use
- Livelihood impacts
- Design & implementation
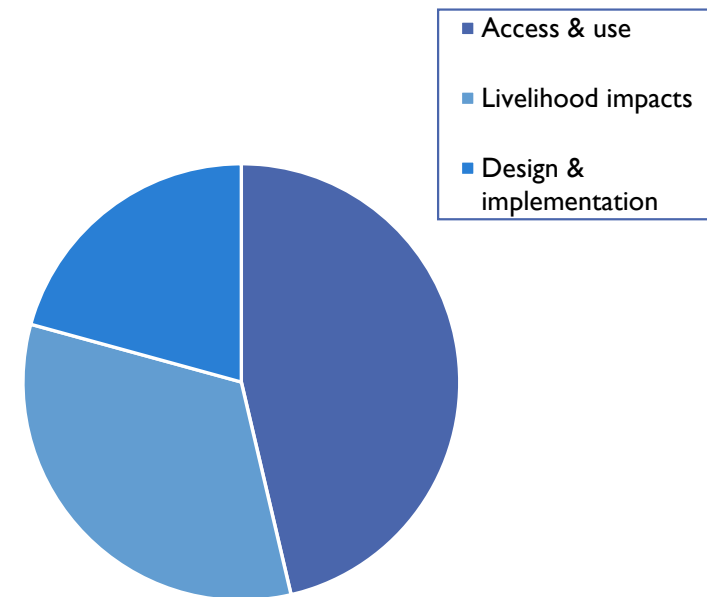
ACCESS AND USE

EVALUATION QUESTIONS

- Are farmers aware that information exists?
- Are they able to access it when they need it?
- Do they understand the information?
- How does the presentation of the information affect their ability to understand it?
- What factors influence access?
- Who uses information? How is information used?
- What factors influence use?

METHODS

- **Data collection**: surveys, interviews, focus groups, participatory methods
- **Analysis**: Content analysis, descriptive statistics, econometric approaches (regression)

ACCESS & USE: PRIORITIES

- Extend to different countries, communities, and members of the agricultural value chain

- Improve understanding of the factors that determine access and use – user typologies, etc.

- Explore the role of boundary chains in facilitating access and use, community mapping, etc.

- Increase the number and scope of baseline studies

LIVELIHOOD IMPACTS

- Ex post studies in which evaluation was built in to the project

- Post hoc studies, in which evaluation was not previously considered

- Ex ante studies

  - Bio-economic models → link climate information to crop simulation forecasts to estimate economic impact

  - General equilibrium models → consider aggregate impacts in which choices of decision makers are linked

  - Designed experiments → estimate potential impact by comparing test plots

LIVELIHOOD IMPACTS: PRIORITIES

- Improve the quantity and quality of impact studies (including re: controls)

- Explore economic impacts at different levels of the value chain

- Assessment of impacts at national scales (GEM)

- Protocols for test plots

- Develop indicators to compare benefits across services

- Identify factors relevant to benefits transfer

DESIGN & IMPLEMENTATION

- Ex ante modeling, under different scenarios
    - Farm-level models (bio-economic, agent-based)
    - Contingent valuation – willingness to pay
- Process-based evaluation

DESIGN & IMPLEMENTATION: PRIORITIES

- Explore the potential of willingness to pay methods
- Explore the potential of participatory methods linked to bio-economic models
- Explore the potential of econometric approaches
- Connect existing work to identify constraints to climate services to evaluation
- Advance process-based evaluation and link this to outcomes-based monitoring

OTHER CS-SPECIFIC CHALLENGES

- How to isolate impacts from information use given that information itself is leaky?

- How to identify information use when use itself may be confounded by different factors?

- How to understand impact in a stochastic system?

- How to evaluate impact when impacts may take a long time to evolve?

- How to monitor access and use at scale?

- How to evaluate the potential impact of climate services knowing that many services are not employing good practice in design and/or implementation?

NEXT STEPS