CLIMATE INFORMATION SERVICES RESEARCH INITIATIVE

PROJECT OVERVIEW

Africa is one of the most vulnerable continents to climate variability and change due to its high exposure to climate shocks and stresses (e.g., droughts) and relatively low adaptive capacities (IPCC Fifth Assessment Report, 2014). In sub-Saharan Africa (SSA) rain-fed agriculture, which is vital for a large percentage of the rural population and contributes significantly to GDP, is particularly vulnerable. Providing decision-makers with timely, accurate information on climate and weather variations can help inform decisions that enhance agricultural production and avoid harvest loss, thereby improving food security, lifting agricultural incomes, and increasing the resilience of farmers to future shocks and stresses.

While investments in climate information services (CIS) are on the rise, little objective evidence exists concerning efficacy and learning for future investments. To address these gaps, the Climate Information Services Research Initiative (CISRI) will:

- Improve understanding of, and access to, knowledge on the effectiveness of CIS programming.
- Produce evidence and tools to improve understanding of the factors and structures that influence CIS delivery, uptake, use and effectiveness.
- Produce innovative evaluation methodologies and evidence on the degree of effectiveness of CIS.
- Research, design and implement a plan for the dissemination, uptake and application of research, synthesis, evidence, and knowledge gaps.

A companion project – Assessing Sustainability and Effectiveness of Climate Information Services in Africa – will focus on sustainable and effective models for CIS. For more information see https://www.climatelinks.org/projects/learningagendaonclimateservices.

THE CHALLENGE

The provision of weather and climate information has the potential for increasing the resilience of rural communities in SSA to the impacts of a variable and changing climate. However, while innovative approaches to generating and communicating useful climate information to farmers show promise, there are gaps in the evidence of their effectiveness.

General knowledge exists around how climate fluctuations affect farmers, and the types of climate-related information relevant to decision-making for different user groups. While this research is valuable, published evidence on the effectiveness of CIS programs in benefiting farmers' livelihoods, and the factors that determine those benefits, remains inadequate – particularly relative to recent and planned investments in CIS delivery. These challenges are compounded by the fact that much of the existing information has not been synthesized in a manner that easily informs the design and implementation of CIS. Without a nuanced understanding of the factors that affect the functioning and efficiencies of CIS, and what types of CIS are most effective at improving livelihood outcomes, it is difficult to design and implement effective CIS programs.

"The climate has lost its memory"
Nkasala Farmer

Photo: S. Sheridan, Niger 2014 | Mercy Corps

LEARNING AGENDA ON CLIMATE INFORMATION SERVICES IN SUB-SAHARAN AFRICA

The U.S. Agency for International Development is supporting a learning agenda to better understand how to develop effective, sustainable, country-led CIS programs in SSA. This learning agenda will generate new information, evidence, and learning on the effective and sustainable production, delivery and use of climate information to improve rural agricultural livelihood decision-making and outcomes. The learning agenda harnesses a wide range of partners in order to examine CIS systems from the production of information at the national level down to the use of tailored products by individual farmers and other decision-makers.

Previous research has clearly demonstrated that uptake and effectiveness vary significantly with a number of socio-economic factors, including gender, ethnicity and access to agricultural inputs.

OBJECTIVES

CISRI focuses on the user-end of the climate information services equation. The goal is twofold: 1) to build knowledge of which factors impact the uptake and use of climate information in such a way that this information improves livelihood outcomes within a variable and changing climate, and 2) in doing so, to develop methods that effectively evaluate this impact.

To achieve these goals, CISRI will implement a suite of integrated analysis and evaluation activities. Taken together, these activities will lead to a greater understanding of how CIS systems function and which external interventions lead to the biggest impact on livelihoods. Learning from these evaluations will be distilled into the development of publications and guidance advancing the efficiency and function of CIS design and implementation, ultimately advancing the impact of future investments on the livelihoods of SSA farmers.

It is expected that the knowledge generated from the project will lead to the design and implementation of more effective CIS programs in SSA. It will also increase CIS investment in response to strengthened evidence of the benefits. This in turn will lead to a greater number of farmers applying CIS to inform an expanded range of livelihood and risk management decisions, thereby improving livelihood outcomes in the face of climate variability and change. It is also expected that this will encourage government, market, and humanitarian decision-makers to increasingly use CIS to improve their programs and planning, in ways that further protect and enhance the livelihoods of farmers.

ACTIVITIES

The project strategy is organized around four integrated activities that will be implemented within the three-year project lifespan. These include three research streams in the first two years, and an uptake and application of learning work stream, which will be active throughout.

Synthesis of the State of the Art and Evidence: CISRI will begin with a synthesis and critical analysis of existing knowledge on CIS programming, identifying gaps, and generating peer-reviewed manuscripts that will expand and challenge current theory and evidence.

Systems Analysis of CIS: The CISRI consortium will evaluate existing CIS systems by piloting participatory CIS mapping and evaluation techniques, with a focus on identifying inefficiencies and breakdowns, which would be the foundations for interventions.

Piloting Evaluation Approaches in Select CIS Programs: CISRI will also develop and pilot innovative processes and methodologies for evaluating the uptake and effectiveness of existing CIS programs, targeting identified knowledge and evidence gaps.

Uptake and Application of Learning: Efforts throughout the three-year initiative will distill and ensure uptake of generated knowledge and new methodologies, through development of guidance and strategic stakeholder engagement with major CIS funders and implementers.

Work will focus in the countries of Kenya, Niger, Senegal, and possibly Rwanda, and is expected to conclude by September 2019.

CONSORTIUM MEMBERS

Mercy Corps serves as the overarching consortium lead, manages the development of systems analysis of CIS programs, and harnesses their field presence in East and West Africa for implementation and coordination of research activities across the consortium.

International Research Institute (IRI) / The World Agroforestry Centre (ICRAF) leads synthesis of existing evidence and practice, provides overarching technical expertise to the consortium contributing to the design of evaluation approaches, and supports uptake and application of learning.

The Humanitarian Response and Development Lab (HURDL) leads the research and application of new monitoring and evaluation approaches, documenting the process of implementation, and the report on findings, in addition to providing technical expertise to other areas of evaluation across the consortium.

Catholic Relief Services provides technical input on methodologies for CIS systems analysis and implements on-the-ground research activities with farming communities, local governments, and other pertinent stakeholders.

Practical Action Consulting (PAC) leads the consortium's efforts to ensure uptake and incorporation of learning by donors, technical institutions, governments, and implementing agencies of the generated knowledge and new methodologies. PAC also contributes to the development and implementation of CIS systems analysis methodology**.**

Kristin Lambert
Mercy Corps
klambert@mercycorps.org

Sarah Henly-Shepard
Mercy Corps
shenlyshepard@mercycorps.org

David Nicholson
Mercy Corps
dnicholson@mercycorps.org

www.climatelinks.org/projects/learningagendaonclimateservice