



Malian farmers discuss the use of a rain gauge for agricultural decision-making (photo: Edward R Carr)

BRIEF / IDENTIFYING CIS USERS AND THEIR NEEDS: A LEARNING AGENDA

Climate Information Services (CIS) design has shifted from the packaging and delivery of existing information to addressing social concerns—such as food security or resilience building. Addressing such concerns requires identifying those who might use the information, and the needs that the information would meet.

A review of the current practices for identifying CIS users and needs in sub-Saharan Africa—captured in [Identifying Climate Information Services Users and Their Needs in sub-Saharan Africa: A Learning Agenda](#)—highlighted a number of challenges for CIS design and implementation. While some of these challenges are being addressed through current research and implementation, a larger set of questions remain. We organize these questions into a learning agenda that prioritizes them, creating a framework for inquiry that will maximize learning and allow the field to live up to its potential.

Current Practice

Providing decision-makers with timely, accurate weather and climate information can further the achievement of development and adaptation goals. For example, such information can support food security efforts by informing decisions that enhance agriculture production and mitigate or avoid harvest loss. Understanding who these decision-makers are, and what kinds of information they need, is essential to designing and delivering climate information in a way that is useful and actionable.

In sub-Saharan Africa, the vast majority of CIS target their users at the design stage. However, such targeting often rests on untested assumptions about what these users might need, which risks providing inappropriate or ineffective information. While some CIS used literature searches or surveys to empirically test their initial assumptions, both methods have limitations.

Literature searches are constrained by the amount and currency of the literature on the presumed user population. *Surveys* often bias the framing of questions asked about the needs of that population, their capacities, and the constraints they face. A survey that assumes a particular need might ask questions principally about that need or activities associated with that need, thus reinforcing the perceptions of the project.

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New Directions

A number of new CIS and CIS assessments suggest innovative approaches to identifying users and needs that address the challenges raised by contemporary practice. Whether using randomized surveys, ethnographic approaches, or mixed social scientific methods, these approaches all start with efforts to understand users and needs *before* designing the CIS, thus limiting the bias introduced by assumptions.

These new approaches capture the needs of a wider range of users and needs than seen in more conventional approaches. Currently, most CIS in sub-Saharan Africa target agriculturalists, and some target agropastoralists, governmental, or other institutional actors. However, the needs of pastoralists and agropastoralists emerged much more clearly in CIS employing new approaches that limit the effects of the design-stage assumptions.

A Learning Agenda

While new directions in CIS practice and research point the way toward better users and needs identification, we have identified a series of questions that remain. These questions have been organized into a learning agenda (Figure 1) which categorizes and orders these questions to facilitate coordinated research and practice efforts going forward:

Category 1: Can be done by gathering data from existing/completed CIS, can be learned with existing data, and will set up critical follow-on efforts

1. How often does bias obscure important information about users and needs?
2. Over what spatial region or social groupings can a particular CIS be scaled? What factors affect that?
3. How might engagement with the literature on agrarian change (and deagrarianization) in sub-Saharan Africa serve to identify current and likely future CIS needs?

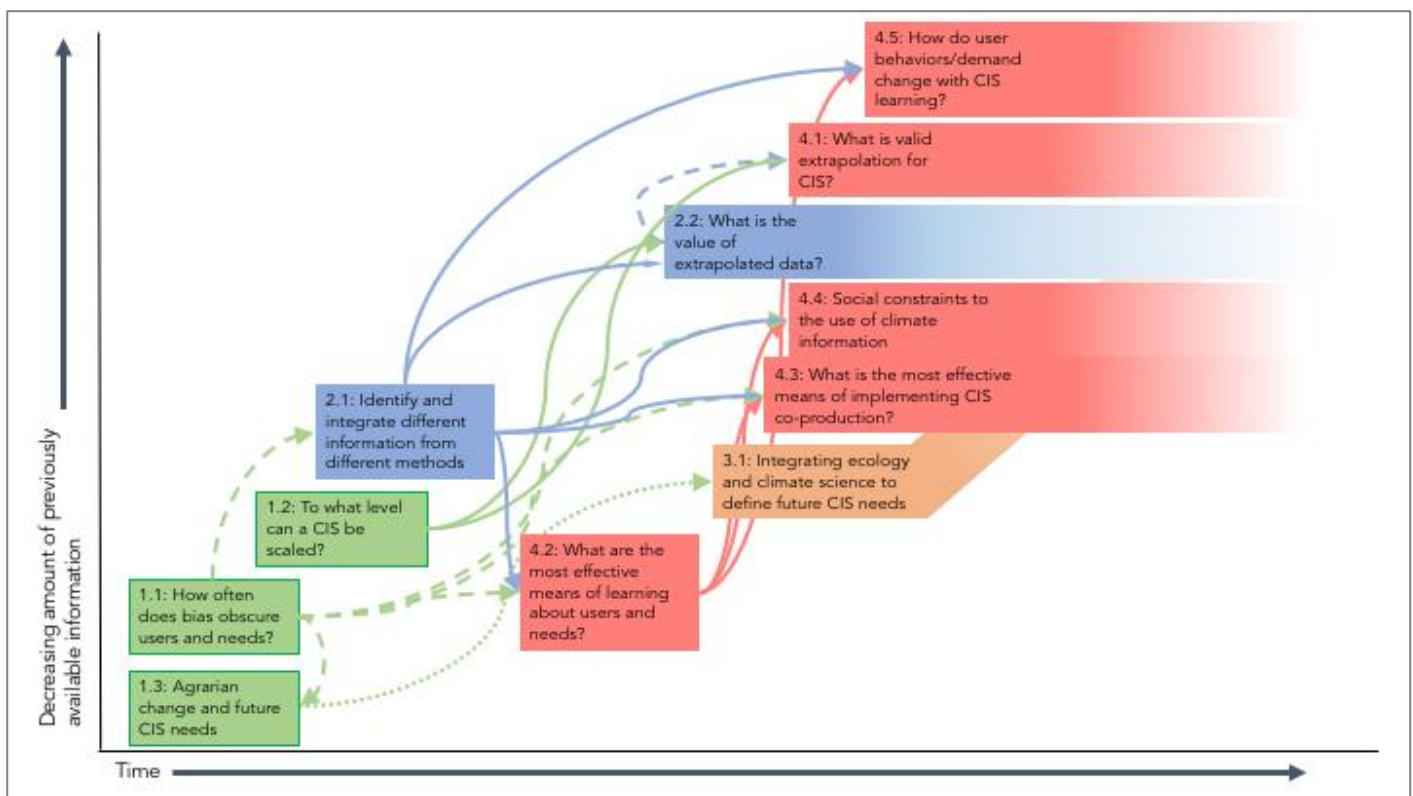


Figure 1: The learning agenda. Knowledge gaps are shown as boxes indicating when and for how long we expect them to be addressed. Their vertical position indicates how little information is presently available. The four categories of questions are color-coded and arrows show how answers from a question can be used by further questions.

Category 2: Those that can be engaged through existing research teams and projects

1. What are the differences in information gleaned through different methods, and how might different approaches be integrated to draw on strengths and eliminate gaps?
2. What is the value of a particular CIS to its users? And how can that value be extrapolated for an upscaling or downscaling of the CIS? Such information can help assess the utility of particular CIS interventions now and in the future

Category 3: Major independent research projects

1. How might we define and target future CIS demand by integrating existing scientific understandings of climate change and its impacts on specific ecologies such that current local/traditional sources of livelihoods information change or fail?
 - 1.a How might such integration inform the direction of future climate science research in support of CIS?
 - 1.b How might such integration inform the likely future effective need for CIS in particular places, thus prioritizing future investments?

Category 4: To build into future projects

1. What is valid extrapolation for CIS?
2. What are the most effective means of learning about users and needs in a given place?
3. Where co-production is the most appropriate way to learn about user needs and designing CIS, what are the most effective means of implementing CIS co-production efforts?
4. What are the broad lessons we might learn about the social constraints to the use of climate information?
5. How does learning about CIS change the behaviors of users and their demands for information?

Going Forward

The USAID-funded Climate Information Services Research Initiative (CISRI) is working to address some of the foundational questions of this research agenda. This includes work in Rwanda and Senegal that integrates

quantitative analysis of large scale survey data and the ethnographic analysis of community-level decision-making. This work explores the extent to which the CIS needs of different members of a community are representative of needs across a larger population, which addresses question 1.2: *To what level can a CIS be scaled?* Further, consortium members will work to first compare, and then integrate, these different forms of data to address question 2.1: *What are the differences in information gleaned through different methods, and how might different approaches be integrated to draw on strengths and eliminate gaps?* Through these efforts, CISRI will advance this research agenda, and produce the knowledge necessary to improve CIS outcomes in the present, while furthering research and practice that will continue such improvements in the future.

LEARN MORE

The USAID-funded Climate Information Services Research Initiative (CISRI) was designed to enhance understanding of the **user end** of the climate information chain. Its research investigates the factors that impact access and use of climate services, and applies new methodologies for evaluating CIS effectiveness in sub-Saharan Africa. Led by Mercy Corps, CISRI draws on the expertise of its consortium partners: Humanitarian Response and Development Lab (HURDL), International Research Institute for Climate and Society (IRI), CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS), World Agroforestry Centre (ICRAF), Practical Action, and Catholic Relief Services (CRS).

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www.climatelinks.org/projects/learningagendaonclimateservices

For more information about *Identifying CIS Users and Their Needs: A Learning Agenda*, please contact:

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