

Workshop Report: Toward synthetic learning across the CCAFS Flagship on Climate Services and Safety Nets

Bali, Indonesia, October 2019

CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS)

Catherine Vaughan
Alison Rose
Stephen Zebiak



RESEARCH PROGRAM ON
**Climate Change,
Agriculture and
Food Security**



The 5th Global Science Conference on
**CLIMATE-SMART
AGRICULTURE 2019**
8-10 October 2019 | Bali, Indonesia

Citation:

Vaughan, C., Rose, A., and S. Zebiak. 2019. Toward synthetic learning across CCAFS Flagship on Climate Services and Safety Nets, Bali, Indonesia, October 2019. CCAFS Workshop Report. Wageningen, the Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available online at: www.ccafs.cgiar.org.

CCAFS Workshop Reports aim to disseminate interim climate change, agriculture and food security research and practices and stimulate feedback from the scientific community.

The CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) is led by the International Center for Tropical Agriculture (CIAT) and carried out with support from the CGIAR Trust Fund and through bilateral funding agreements. For more information, please visit <https://ccafs.cgiar.org/donors>.

Contact:

CCAFS Program Management Unit, Wageningen University & Research, Lumen building, Droevendaalsesteeg 3a, 6708 PB Wageningen, the Netherlands. Email: ccaafs@cgiar.org



This Workshop Paper is licensed under a Creative Commons Attribution – NonCommercial 4.0 International License.

© 2019 CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

Photos:**DISCLAIMER:**

This Workshop Report has been prepared as an output for Flagship 4: Climate Services and Safety Nets under the CCAFS program and has not been peer reviewed. Any opinions stated herein are those of the author(s) and do not necessarily reflect the policies or opinions of CCAFS, donor agencies, or partners. All images remain the sole property of their source and may not be used for any purpose without written permission of the source.

Abstract

Immediately prior to the 5th Global Science Conference on Climate-Smart Agriculture 2019, held in Bali, Indonesia, the team responsible for Flagship 4 gathered the diverse group of scientists and practitioners responsible for the portfolio of projects together in order to explore avenues to produce synthetic learning across the Flagship. The goal of the activity was to brainstorm about common challenges, experiences, and insights, and to create opportunities for world-class scientists that comprise the Flagship to work together to distil key learning and thus advance the field of agricultural climate services.

Keywords

Synthetic learning; climate services and safety nets, CCAFS Flagship on Climate Services and Safety Nets

About the authors

Catherine Vaughan is a senior staff associate at the International Research Institute for Climate and Society (IRI).

Alison Rose is the Science Officer for the CCAFS Flagship on Climate Services and Safety Nets.

Stephen Zebiak leads the CCAFS Flagship on Climate Services and Safety Nets.

Acknowledgements

The workshop was supported by CCAFS Flagship 4: Climate Services and Safety Nets.

Contents

Introduction	7
Initial Discussion.....	7
Brainstorming.....	8
Way Forward.....	9
Appendix 1	10

Acronyms

CIAT	International Center for Tropical Agriculture
IRI	International Research Institute for Climate and Society
CCAFS	CGIAR Research Program on Climate Change, Agriculture and Food Security
CIMMYT	International Maize and Wheat Improvement Center
ISAT	Intelligent Agricultural Systems Advisory Tool
CSA	Climate Smart Agriculture
IRI	International Research Institute for Climate and Society

Introduction

Immediately prior to the 5th Global Science Conference on Climate-Smart Agriculture 2019, held in Bali, Indonesia, representatives from the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) Flagship on Climate Services and Safety Nets met to discuss opportunities to generate and disseminate synthetic learning across the Flagship. The day started with an outward-looking discussion of priority research questions in the field of climate services, followed by more inward-looking discussion of key lessons coming out of the projects associated with the Flagship. In the afternoon, a large number of possible research topics were proposed and discussed within the group. These ideas will form the basis of future work, including a synthesis paper and/or special issue that can be used both to publicize the important work that project teams have done and to inform investment and programming decisions at a range of scales.

Initial discussion

To generate grist for discussion, six speakers presented their perspective on pressing research questions in the field of agricultural climate services.

Steve Zebiak, the flagship leader, identified a range of topics that are of interest to the climate services community. These included: the need for research into co-development of climate services; the communication of climate information; valuation / evaluation of climate services; equity and ethical issues; quality control and the need for standards; innovation; and organization, including governance.

Julian Ramirez-Villegas, research fellow at the International Center for Tropical Agriculture (CIAT), referenced Kolstad et al. 2019¹, in identifying common challenges to climate services. These included a wide gap between the needs and expectations of climate

¹ Kolstad et al. 2019. [Trials, errors and improvements in co-production of climate services](#). Journal Bulletin of the American Meteorological Society. DOI:10.1175/BAMS-D-18-0201.1

information users and providers; a lack of financial and human resources needed to facilitate the kind of dialogue that would bring these different groups together. He also referenced several of CCAFS outcome statements, some of which report very large target audiences.

Based on this, he suggested three questions to explore:

- What makes large-scale climate services interventions (un)successful?
- Are our current climate services approaches really capable of reducing climate risk?
- What is the typology of ‘users’ of climate services and how does it change depending on the context?

Tatiana Gumuccio, post-doctoral researcher at IRI, presented on gender and social inclusion in rural climate services. She talked about issues that determine different groups’ ability to access, use and benefit from climate services, and the various pathways by which those different outcomes manifest itself. She suggested exploring these topics across the Flagship in order to produce a synthetic look at climate and social inclusion.

T.S. Amjath-Babu, of the International Maize and Wheat Improvement Center (CIMMYT), presented on the process of providing context-specific climate information for tactical farm decision making, including the Intelligent Agricultural Systems Advisory Tool (ISAT). He showed that there is a growing demand for tailored climate information services among farmers in targeted villages in India, where information was particularly useful for planning.

Jim Hansen, senior research scientist at IRI, presented some concepts from the CCAFS proposal that he suggested might be useful to help the group think about synthetic learning. He reminded the group of the two hypotheses that underpin the Flagship. These are:

- *Describing the connection from outcome to impact:* Effective use of relevant climate-related information by farming communities; and by the insurance providers, agricultural planners, food security safety net interventions that serve them; enables more climate-smart agricultural systems and climate-resilient farmer livelihoods.
- *Describing the connection between output and outcome:* Overcoming key gaps in available climate information, in knowledge and methods to effectively target and

implement climate-informed services and interventions, and in the evidence of their benefits, leads to more effective use of climate information by farmers and by the institutions that serve them.

Research toward these hypotheses was specifically intended to target:

- Key gaps in the information, knowledge, methodology and capacity needed to develop effective, equitable climate services and climate-informed safety nets (including insurance) at scale
- Innovations that address major bottlenecks to the delivery of effective services at scale, within the comparative advantage of CCAFS and its partners
- Evidence on the role that these interventions can play in building resilience and enabling climate smart agriculture (CSA).

Overall, Hansen reported, the Flagship has made less progress in generating evidence of the first hypothesis than of the second.

Brainstorming

With these initial discussions over, each member of the group submitted ideas for synthetic papers that they might like to use to explore learning within and across the Flagship. This led to the creation of more than 15 ideas, presented in Table 1, below.

In each case, a number of Flagship representatives showed interest in each paper; those topics garnering the most interest were related to: trade-offs, communication channels, and bundles. The group also explored commonalities between topics. For instance, communication channels may be some of the many trade-offs that climate service providers face. Scaling, sustainability and trade-offs might also be integrated, and bundling may also involve integrating climate services and climate-smart agriculture.

Key word	Short description
----------	-------------------

Bundling	Bundling -- how to integrate climate services (CS) with other needs of farmers
Communication channels	Communication channels / delivery mechanisms -- What works and what doesn't, for whom, in different contexts; targeting different types of farmers (farmers who are medium tech-savvy, not PICSA or Met Office farmers); typologies of users (commercial, smallholder, etc.)
CSA	Integrating CSA and climate services
Farmer groups / social inclusion	Using farmer groups as a mechanism to address gender-based challenges to access climate information (using the SE Asia project, Rwanda, etc.). How do different types of group processes address equity issues?
Maladaptation	Climate services and maladaptation
Policy	Policy & governance -- can we characterize how different types of environments lead to different outcomes
Role of CGIAR	What is the role that the CGIAR plays in this area? Practitioners vs researchers; an examination of different roles of partners
Scaling	Scaling – tradeoffs in scaling; explicating assumptions about what works, what doesn't
Standards	Standards what types of data would we need to certify, assess, whether there are minimum standards for quality of climate services and insurance products; how could the community move forward on this
Sustainability	Sustainability of climate services; business models; also related to scaling ... moving from pilot to scale, moving from scale to sustainable; how to facilitate an environment that could contribute to sustainability of CS
Tradeoffs	Tradeoffs among different approaches (communication channels, etc.) - - illustrate the tradeoffs, discuss costs & benefits of tradeoffs, not a binary choice; take stock of what's known, articulate research agenda; choice in project design; supply driven vs very user driven
User-oriented design	User-orientated design, user-friendly dissemination systems
Valuation	Valuation of climate services -- valuing different types of services offered by different providers; value to different types of farmers, etc.
Value chains	Value chain -- pros and cons of CS along the value chain

Table 1: Initial list of synthetic learning opportunities generated through brainstorming activity

Way Forward

With many interesting ideas on the table, the group decided to pursue two key avenues to advance this synthetic work. These are: (1) a high-level paper that summarizes the discussion

and lays out a research agenda for agricultural climate services; and (2) a special issue that allows for joint papers to highlight both synthetic insights and more project-based papers. This is expected to develop over the course of the 2020.

Appendix 1: Workshop Participants

Name	Institutional Affiliation
Amjath Babu	CIMMYT
Alison Rose	IRI/CCAFS
Ana Maria Loboguerrero	CIAT/CCAFS
Andrea Castellanos	CIAT/CCAFS
Berber Kramer	IFPRI
Catherine Mungai	ILRI/CCAFS
Cathy Vaughan	IRI
Deissy Martinez	CIAT/CCAFS
Francisco Ceballos	IFPRI
Jim Hansen	IRI
Julian Ramirez	CIAT
Kindie Fantaye	CIMMYT
Maren Radeny	ILRI/CCAFS
Philip Thornton	ILRI/CCAFS
Palanisamy Ramaraj	ICRISAT
Rumana Peerzadi Hossain	WorldFish
Sibiry Traore	ICRISAT
Sridhar Gummadi	IRRI
Steve Prager	CIAT
Steve Zebiak	CCAFS
Tam Le Thi	ICRAF
Tatiana Gumucio	IRI
Tiffany Talsma	CIAT