



Social sciences, user engagement and co-production of climate services

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Social Science approaches to CS

- Turn the process of knowledge building upside down
- Start from the ground, from place-based studies assessing people's needs, and knowing their capacities, seeing climate as an additional driver and vulnerability multiplier
- Climate information as part of contexts, histories, cultures, traditions, people's basic needs and rights and their well-being and aspirations for themselves and their children

Social science approaches to CS II

- Understanding decision making processes, contexts and institutions, the limitations of available data and the challenges and bottlenecks facing providers of climate information
- The goal is to generate more salient, credible and legitimate scientific information that empowers people to make robust decisions

Lessons from the GFCS APA

- First multi-agency initiative under the GFCS; pilots in Tanzania and Malawi
- Agriculture/food security, Health and DRR
- WMO, WFP, WHO, IFRC, CCAFS, CICERO, CMI + national met offices and local partners
- Unique partnership between climate and social scientists, researchers, development and humanitarian agencies and key user sectors

What is Co-production?

“...a **collaborative** and **dynamic** knowledge generation process that more fully grounds scientific understanding in a relevant **social, cultural, and political context** [...] an explicit intention to create **usable knowledge** that influences decision making.” (Schuttenberg & Guth 2015,15)

Multiple definitions....

"...a **process** that not only concerns the generation of content or substance, but also how individual actors, groups, or organizations collaborate and organize their actions to produce this knowledge"
(Brugnach et al. 2014, 9)

Knowledge Co-production

- Not easy, even in a country like Norway, with excellent met service and excellent observing and forecasting capabilities
- Limitations to what can be provided, and how useful it may be to decision-makers
- Requires/involves capacity building for both providers and users of information
- Challenges are all the more daunting in poor communities and countries that lack institutional capabilities to demand, produce, absorb, access, and use climate information

Engaging «users» and their knowledge

Why?

- To increase the salience and credibility of climate information and services
- To enhance adaptation decision-making
- Enhance legitimacy of the process

Communicating climate information and services

- Climate information is often **misunderstood, ignored, or mistrusted**
- **Understanding reasons for lack of trust.** Trust in climate information is not only about trust in science, but trust in what the content tells the user in her context, priorities and experience
- Trust in the **form** and **channel** that accompanies the facts

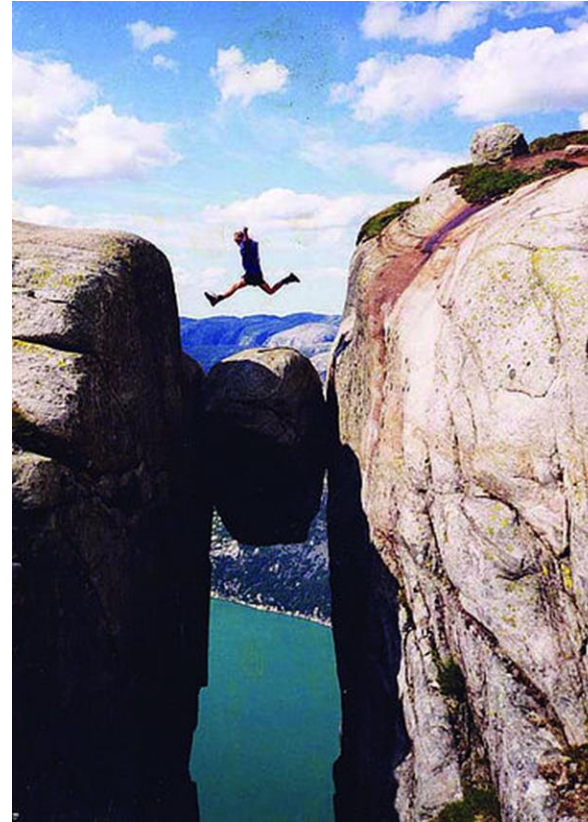
Knowledge communication

- Knowledge **never travels without friction**. Good communication is important, but not sufficient. Must **build** and **balance legitimacy, credibility** and **salience**
- So-called "**users**" are **not empty buckets** waiting to be filled, already have lots of knowledge (often more than they need). Active and **pragmatic problem solvers** under **time pressure**
- Research is **never used instrumentally**, but **actively repacked** and **reformatted** by **many actors** while travelling. **Sender** important
- **Different knowledge cultures** research vs. policy: **nice to know vs. need to know**
- **Timing, context, framing** and **presentation** of message essential

Science communication

- The **deficit model** of science communication is limited and often misguided
- state-of-the-art science combined with a good science communication strategy **is not enough to improve the usability of science**
- **Recommendations to IPCC**

http://www.ipcc.ch/meeting_documentation/meeting_documentation_ipcc_workshops_and_expert_meetings.shtml



* Source: St. Clair, A., Hermansen, E. and project team. 2016
"IPCC AR 5 in Europe: Usability, Framing and Communication of Scientific Information. Lessons for Climate Services". NFR Climate Services Seminar, April 13th

Opportunities and challenges related to co-production in the GFCS APA

- Partnership and process issues
- Engaging «users» and their knowledge in climate services co-production
- Knowledge communication and translation

** Salience, credibility and legitimacy of the process affect the salience, credibility and legitimacy of the outcomes*

Partnership issues

- Development of partnerships often an implicit goal of climate services projects
- Time, commitment, resources to do so often underestimated
- Different ontologies/epistemologies, areas of expertise and framings and understanding of problems
- Goals, agendas, mandates and politics of funding agencies and project participants shape focus and content

Engaging «users» and their knowledge

- Who are the «users»?
- Different understandings of what ‘co-production’ entails and how to go about it
- Politics of knowledge and challenges to institutionalizing climate services

Institutional context for climate service development and delivery in Tanzania

- Developing National Steering Mechanisms - TANDREC
- Political legitimacy vs operational capacity within structures for national level CS development
- Supporting institutional structures that deal with substantive «nitty gritty» issues (and are not project based – PDT)

GFCS APA experience

- Co-production necessary at multiple levels, not only between «providers» and «users», but within the partnership itself and within and across the natural and social sciences
- Attention to power differentials, knowledge politics and institutional structures are needed to improve the salience, credibility and legitimacy of GFCS efforts
- Need for appropriate forums, sustained resources and political will

Publications

1) Establishing a baseline for monitoring and evaluating user satisfaction with climate services in Tanzania

<http://brage.bibsys.no/xmlui/handle/11250/2382516>

2) Institutional analysis for climate services development and delivery in Tanzania:

<http://brage.bibsys.no/xmlui/handle/11250/2360430>

3) Climate change policy inventory and analysis for Tanzania

<http://brage.bibsys.no/xmlui/handle/11250/2367251>

Social science contributions to the CS enterprise

- Social science expertise is a fundamental element of the research required to support climate services and the move **from supply driven services to those that are informed by demand and supply**
- Often social science does exist, but, it is not supported and is fragmented and not connected with the climate service agenda or community
- Clear opportunity for social scientists to engage with and advance the European research agenda for climate services
- CICERO, University of Leeds and SEI have proposed an Action Group on strengthening Social Science inputs to the JPI Climate and European Climate Services Research Agenda

Key social science research challenges associated with climate services

- As a new concept, there needs to be critical social science asking: **what is it? How is it developing? Why is it developing in such a way? Where is it going?**
- How to prevent a culture of expertise to take over what may be public decisions to be deliberated and debated; how to be aware of the limits of scientific, expert information? What is the value of developing climate services?
- The social sciences can answer important questions: to what extent are current services and information useful or usable to decision-makers? **How can more valuable knowledge be produced?** Is it a matter of better co-production (between users and producers)?
- **Who should provide climate services?** Are they a private or public endeavour?
- **Are there winners and losers from the development of climate services?** Which kinds of programs, institutional arrangements and types of knowledge can most effectively harness climate science and services for the sustainable adaptation of society to a changing climate.

Key social science questions related to climate service development and delivery

- **Socio-economic issues:** How do local (more urgent) needs conflict with uptake or delivery of climate information?
- **Power and inequality:** How do power relations, inequalities, culture, history, traditions, religion, values, political economy, global feedbacks, markets ...etc., influence the quality, delivery and access of scientific information
- **Critical moments:** How is it possible to provide “timely” scientific information that is usable and trusted in critical decision making moments?
- **From knowledge to acting upon it:** How to think through the whole process from generating new science to its applicability and the ability of users to act upon it?
- **Bridging worlds and experiences:** How can we think about bridging scientific cultures, cognitive worlds, relate that to local and in-country knowledge capacities? How to include existing SSH knowledge, and fast-track their engagement