

A BRIEF HISTORY OF CO-CREATING AND THE INTEGRATION OF LOCAL KNOWLEDGES, DATA AND NEEDS IN CLIMATE SERVICES

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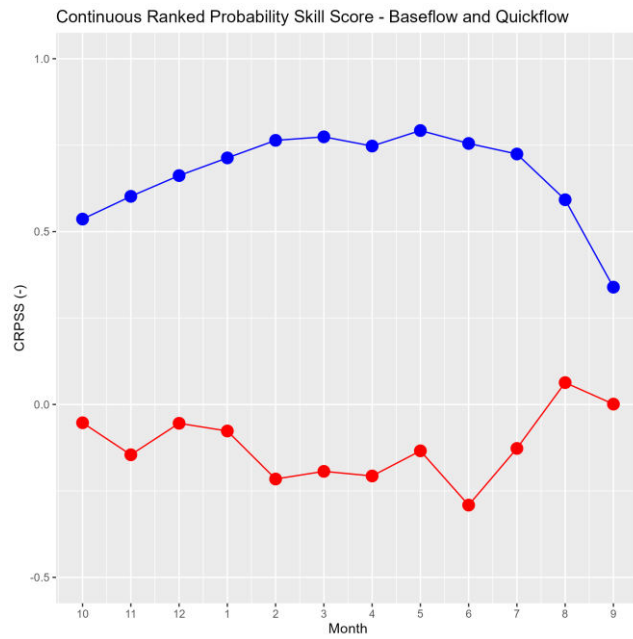
ICISK Partners and Living Lab Teams



Climate Services: Supporting the decisions that users make with relevant climate data

*The transformation of **climate-related data** — together with other relevant information into **customised products** such as **projections, forecasts, information, trends, economic analysis, assessments (including technology assessment), counselling on best practices, development and evaluation of solutions and any other service in relation to climate that may be of use for society at large. These services include **data, information and knowledge** that support **adaptation, mitigation and disaster risk management (DRM)**”***

*Adapted from **European Research and Innovation Roadmap for Climate Services, 2015, EC, Brussels***



Performance of a forecast

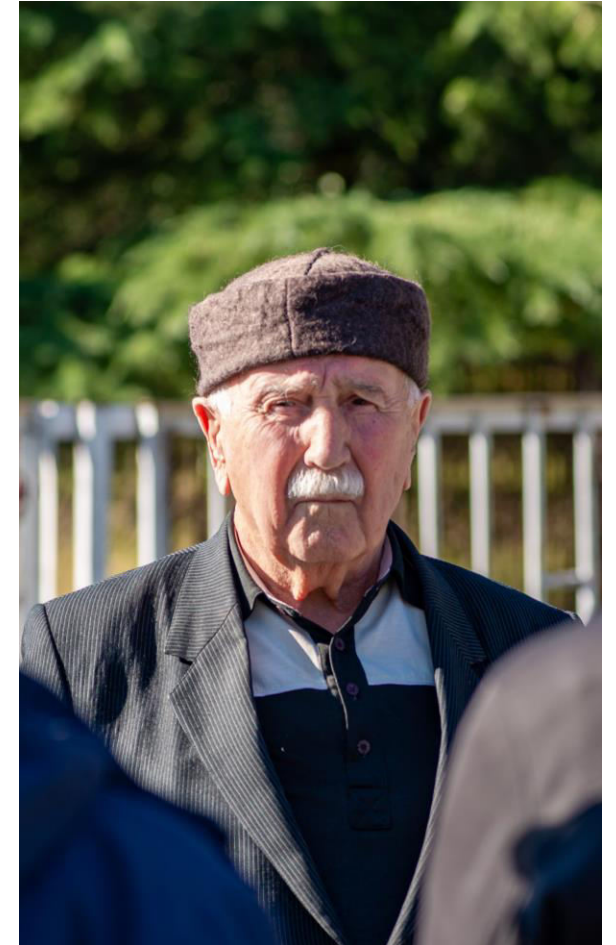


(Social) Performance of a climate service

Recognising that multiple knowledges are consulted when taking a decision

**“Climate services require more than just climate science”
(Goddard, 2017)**

- Scientific knowledge by itself is not enough: Users rely on their own local knowledge for risk appraisal and implementing coping strategies and may inform their decisions with other (scientific) knowledges.
- Barriers that impede the uptake of climate services based primarily on scientific data, including lack of understanding of:
 - the needs of end users
 - their decision-making processes, and
 - poor recognition of the knowledge of the users
- Premise: Integrating local knowledge within CS co-design and co-delivery can help in building services that are *credible, salient* and *legitimate*.



A seasoned professional! Irrigation canal headworks operator for 42 years, Alazani Basin, Georgia

What is the benefit of local knowledge to Climate Service uptake?

Incorporating LK can produce benefits, which include (Taylor and Loe, 2012):

Credibility

- Allow local actors to contribute new data and information to science based climate services
- Helps validate data from larger scale (global) scientific datasets
- Can help improve the resolution and contextualise information

Saliency

- LK can inform and help better embed research in the local reality;
- Produce more grounded understanding of systems that are owned by the users CS serve;
- Help in co-identifying management decisions that are contextually appropriate

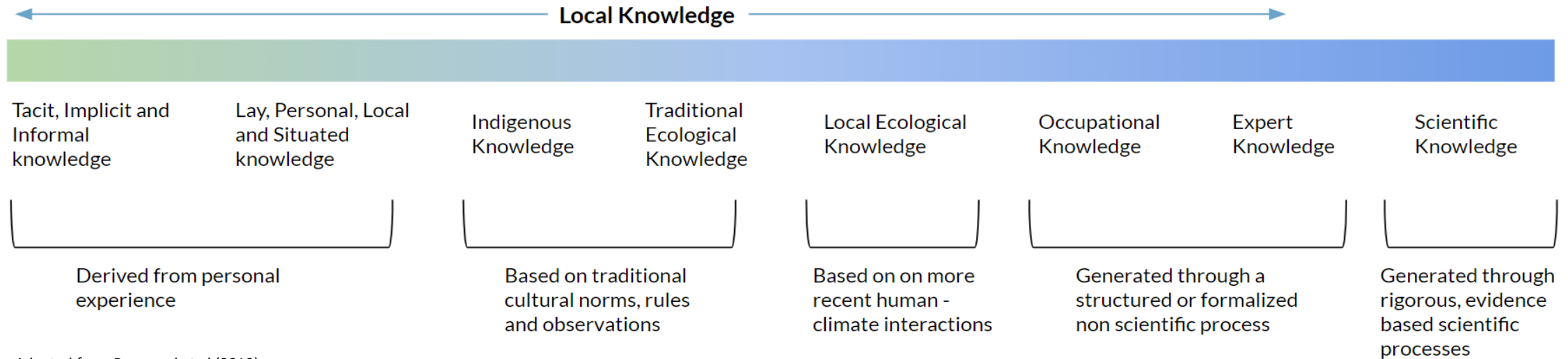
Legitimacy

- Building trust between providers/purveyors and users;
- Insight into the social dimension of CS use can help mediate interests and goals as well as help in achieving common goals
- Local knowledge can inform inclusive strategies for effective knowledge transfer and dissemination.

“Knowledge, we argue, is socially mediated information. Societies, communities, groups, professions, and neighbourhoods develop forms of discourse that frame and give meaning to the information that is brought in. Knowledge, in this view, cannot be separated from the application, use, and development of information”.

Weber & Khademan, 2008

Towards defining local knowledge (LK)



Adapted from Raymond et al (2010)

Local knowledge is an all-encompassing term that includes a range of different knowledges derived either through traditional or cultural norms, personal observations, lived or occupational experiences.

LK includes how individuals perceive their surroundings, solve problems, and validate (new) information

LK can be both tacit or implicit in nature, or more intentional as in the case of it being derived from structured and formalized processes.

Local knowledge is accumulated over time and is dynamic in nature.

Who are the holders of local knowledge?



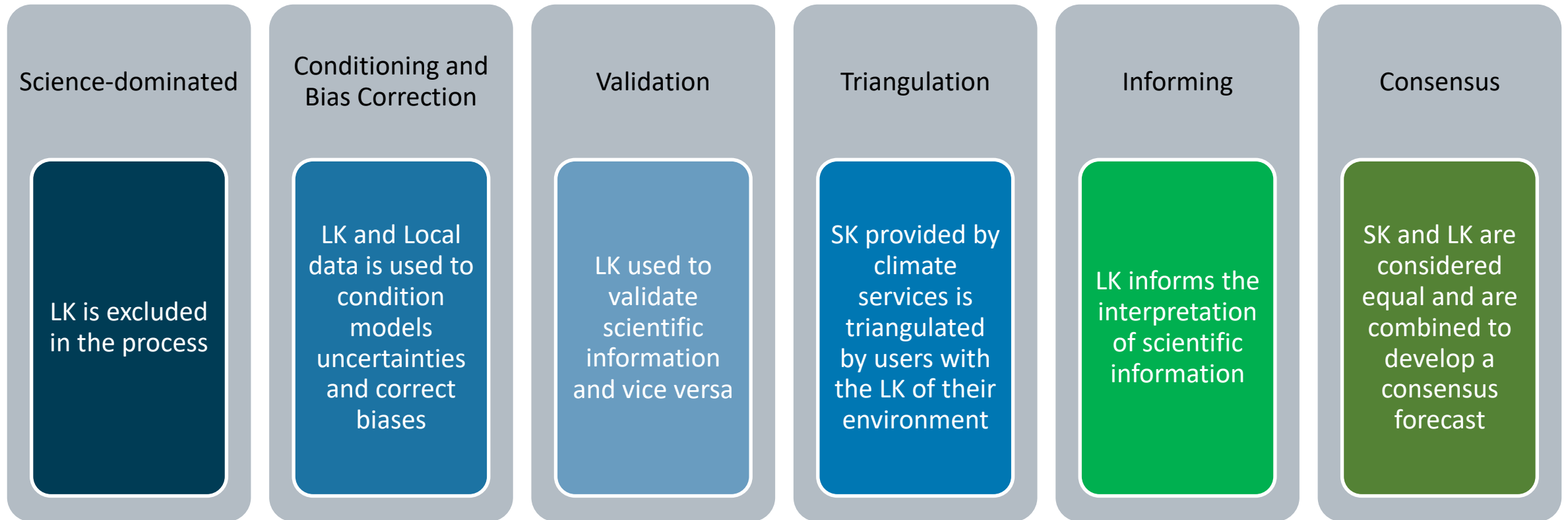
LK holders can range from indigenous, rural or urban communities to professionals working at various levels of governance and boundary organizations.



Climate Services Value Chain

What are dimensions of integration of Local Knowledge?

- Several methodological challenges and approaches when integrating different knowledge bases.
- Differing focus on product or process, depending on the function of local knowledge.



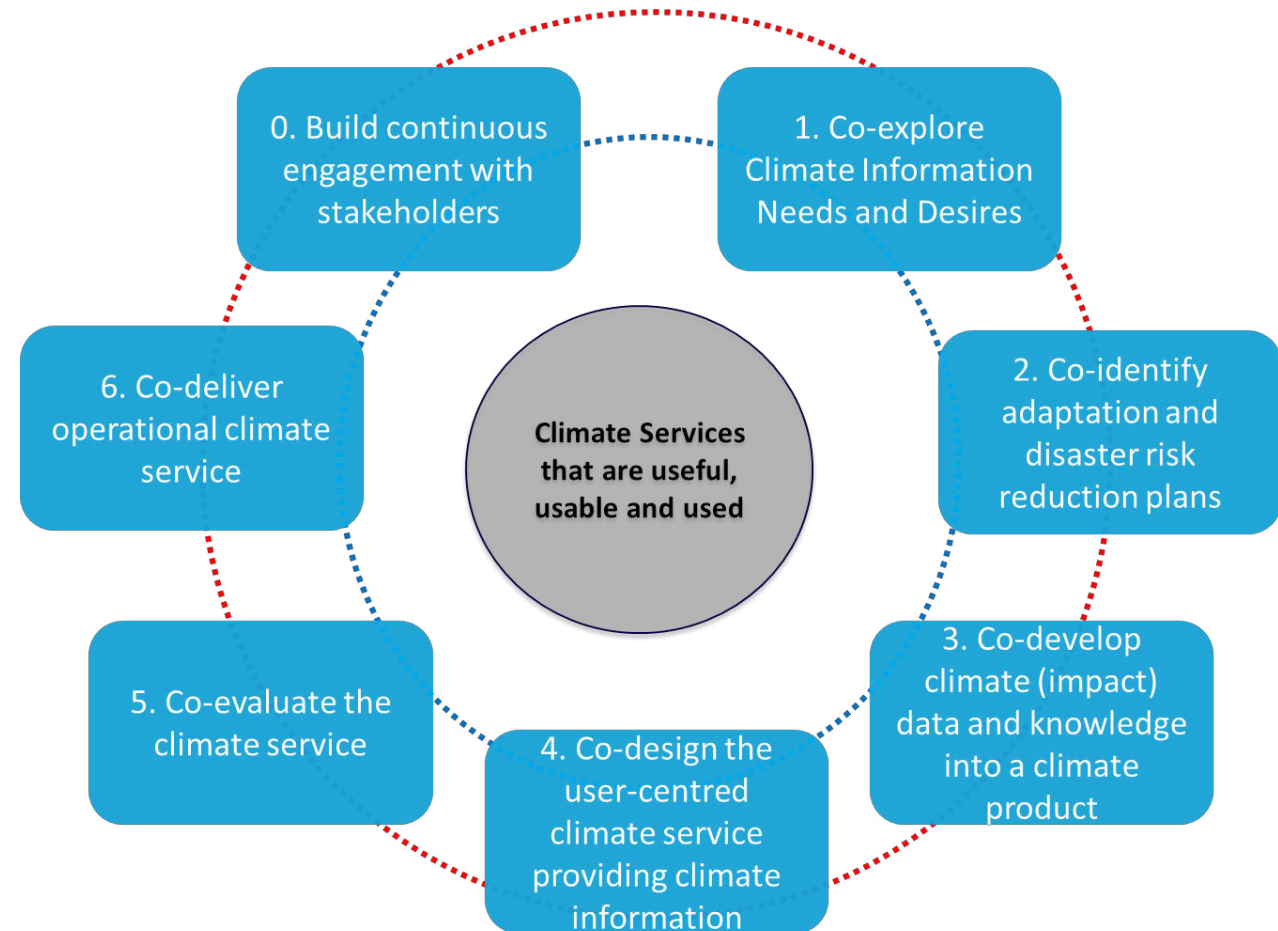
Adapted from Plotz and Chambers, 2017

How is local knowledge discovered in the climate services co-creation process?

LK most pertinent in the first three steps of co-creation

- 1. co-exploring** user needs
- 2. co-identifying** adaptation strategies
- 3. co-developing** climate data and knowledge

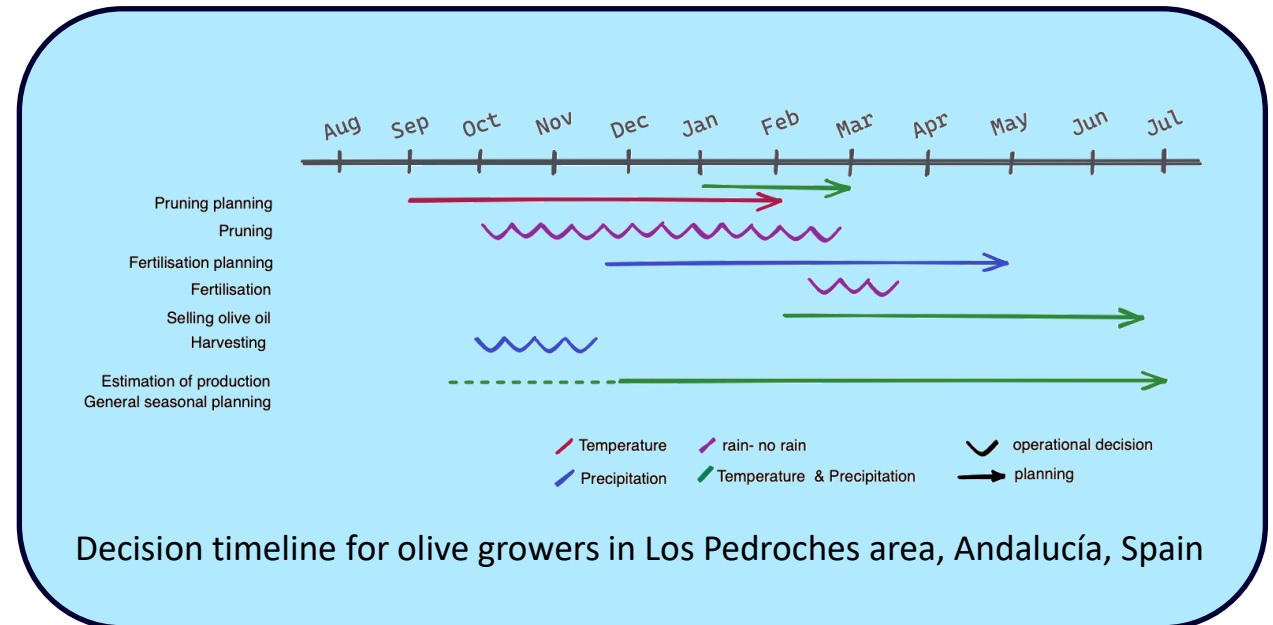
Several participatory methods relevant for production of local knowledge (surveys, focus group discussion, informant interviews, participatory mapping, transect walks, etc, etc).



I-CISK (prototype) co-creation framework

Reflections and experiences

- An eye-opener: Co-creation process conducive to intense engagement with (intended) users of CS in multi-actor platforms – enriching and helps gaining an in-depth mutual understanding of climate information needs & desires and adaptation options. Context
- Learning how to work together in a truly inter-disciplinary team
- The meaning of bias in stakeholder interaction
- Managing expectations
- Identifying a shared innovation potential
- Contribute to shared goal:
Increase social performance of climate services



Thank You!

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Further Reading: Deliverables D2.1, D2.2, D2.3, D3.1
<https://icisk.eu/resources/>



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