# A framework on co-creating end-user centred climate services







#### What is cocreation?

- Deliberate collaboration of science, technology and society
- Interdisciplinary, Interactive, and Iterative process
- Inclusive interactions at different project stages
- Creative, immersive partnership
- Leads to co-evolution of knowledge and service





#### Goal of cocreation

Recognise needs wrt adaptation strategical perceptions about risks, capacity and knowledge, and adaptive behaviours,

Remove the barriers for effective climate information use,

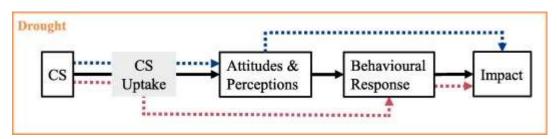
Advance science and technology,

Foster a sustainable CS market se

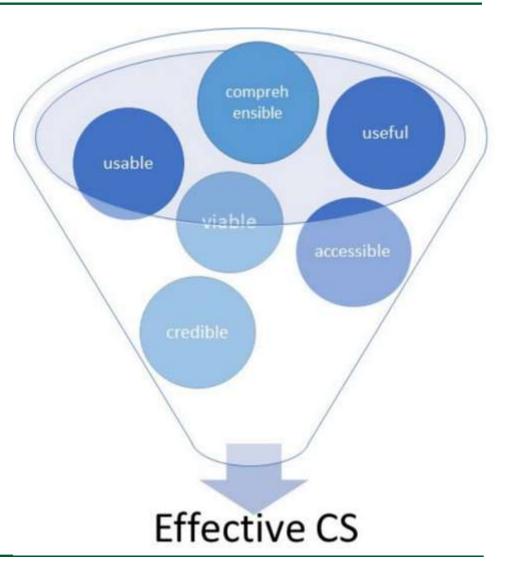
Through tools that best meet end-users

#### Co-creation for effective climate services

 Criteria to ensure effective use of CS can be better monitored, evaluated and learned from through cocreation



MULLER ET AL 2024 Responding to climate services in the context of drought: A systematic review





## Co-creation in phases



A. co-explore climate information needs and desires

B. co-identify adaptation and DRR plans to support

C. co-develop climate data and climate knowledge

D. co-design climate service providing climate information E. co-evaluate co-created climate service

F. co-deliver pre-operational climate service information system



# Build continuous engagement in the LL



This step focuses on **empathy** and trust building: who are potential users; what is important to them? It cements the relationships and understanding between actors and creates a space where jointly defined issues can emerge



# A Co-explore climate information needs and climate service desires



This step aims to **define** the user needs through **identifying** gaps in climate information to support decisions and barriers to using existing CS.



# B Co-identify adaptation plans and disaster risk reduction strategies to be supported



Building further on the gap analysis of step A, this step provides an opportunity for stakeholders to **ideate**: collective brainstorming should result in a multitude of decisions that can be supported by the CS.



# C Co-develop climate (impact) data and knowledge into a climate product



Building further on the strategies to be supported of step B, this step too allows stakeholders to ideate: collective brainstorming should result in a multitude of climatic parameters, thresholds, and climate knowledge, to be integrated into the climate product.



# D Co-design the user-centred climate service providing climate information



The climate product, and adaptation and DRR strategies are combined into a comprehensive, actionable climate information.
The output of this step is a **prototype** of a user-centred CS that communicates this climate information to end users.



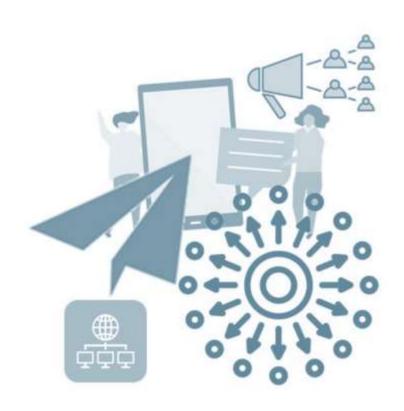
#### E Co-evaluate the climate service



The prototype service is collaboratively **tested** after which improvements are suggested. This will lead to an **iteration** of steps A, B, C and D, where LL stakeholders need to agree on the number of iterations and timelines.



# F Co-deliver pre-operational climate service information system



Collaborative business development & embedding CS in existing institutions





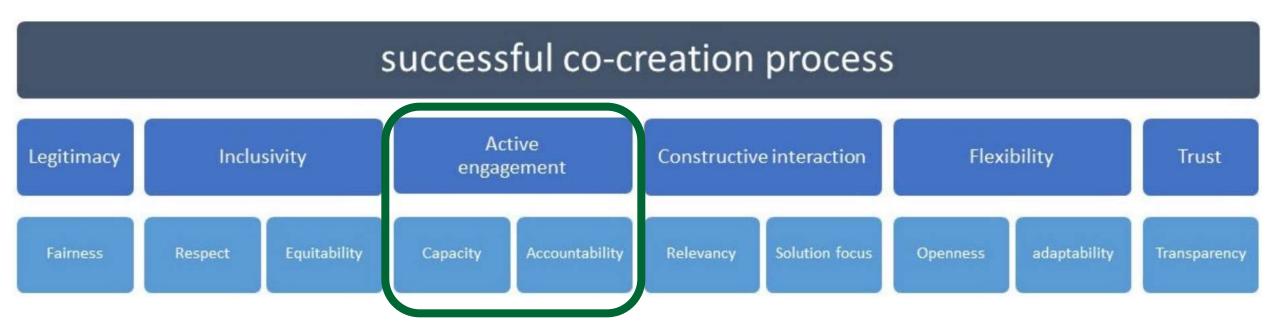


























#### SUMMARY

