POLICY BRIEF

(Source: Stanley Mutuma, 2013)

Building blocks for co-producing climate services

KEY MESSAGES

- Co-production is gaining popularity in weather and climate services. It helps to ensure that different knowledge sources are brought together to create new and combined knowledge that is better able to support decision-making.
- Six building blocks for co-production outline the different stages at which co-production can be used. These are: identify key actors and build partnerships, build common ground, co-explore need, co-develop solutions, co-deliver solutions, and evaluate.

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Introduction

This brief provides decision-makers with practical information on how to use a co-production approach to achieve better informed development of climate services with relevance for African decision-makers.

It draws on the learning from the Weather and Climate Information Services for Africa (WISER) and Future Climate for Africa's (FCFA) manual for Co-production in African weather and climate services and highlights the process steps (building blocks) of co-production, including practical examples from weather and climate case studies across Africa.

What is co-production?

The co-production process involves 'bringing together different knowledge sources and experiences to jointly develop new and combined knowledge which is better able to support specific decision-making contexts.'[1]

By taking part in co-production, decision-makers can actively inform the content and format of climate services, thereby making them more context-specific and relevant to a decision or intervention.

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FUTURE CLIMATE FOR AFRICA

For example, through co-production approaches, in AMMA-2050 decision-makers identified variables of interest which modellers had previously not thought relevant. In Burkina Faso and Senegal, in addition to temperature and rainfall, decision-makers requested medium- and long-term information on strong winds.[2] Over the course of the project, a range of approaches were employed to support inclusive, iterative discussions, enabling researchers and decision-makers to jointly explore the relevance of different adaptation policy options in the context of a changing climate.

What is the value of co-produced climate services?

There are a number of demonstrated benefits from taking a co-production approach, including:

- Co-production **tailors climate information to a specific context**, so that it is more likely to be relevant to the user of that information.
- Co-production supports **wider reach and impact** through multiple communication channels.
- Co-production promotes **joint ownership and integration** of climate information into actions, plans and budgets.

Theatre Forum organised in Senegal with Kaddu Yaraax group (Source: A. Barnaud, IRD, 2018)

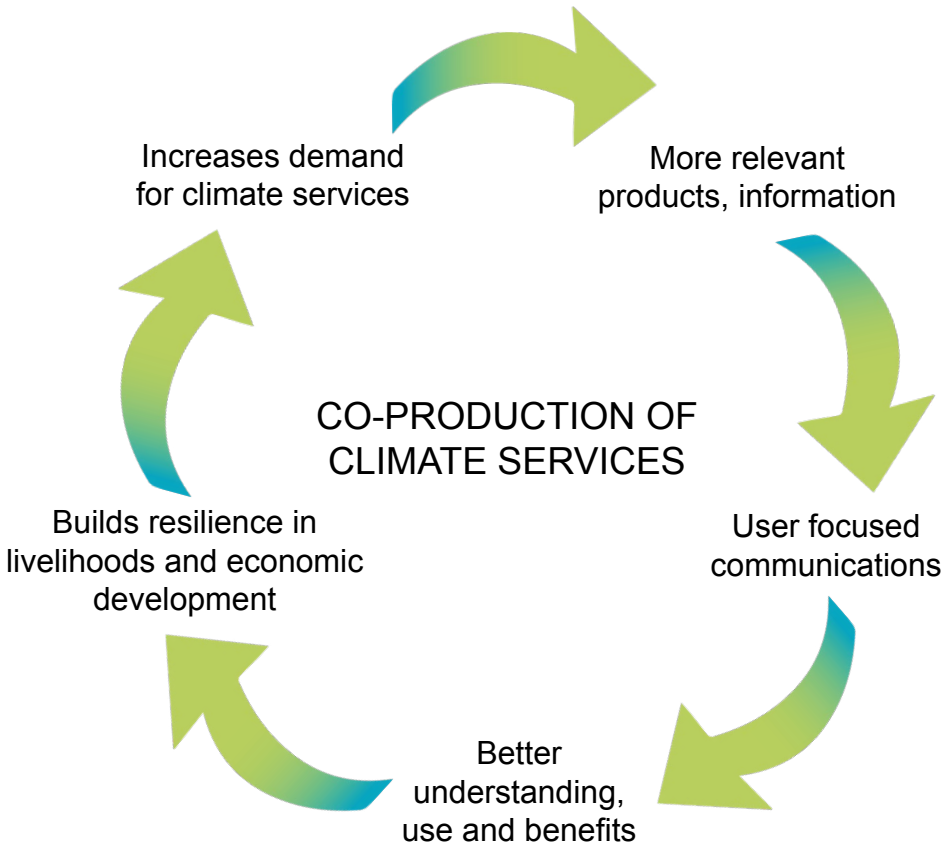

Figure 1: Co-production creates a virtuous cycle

The six key building blocks of co-production:

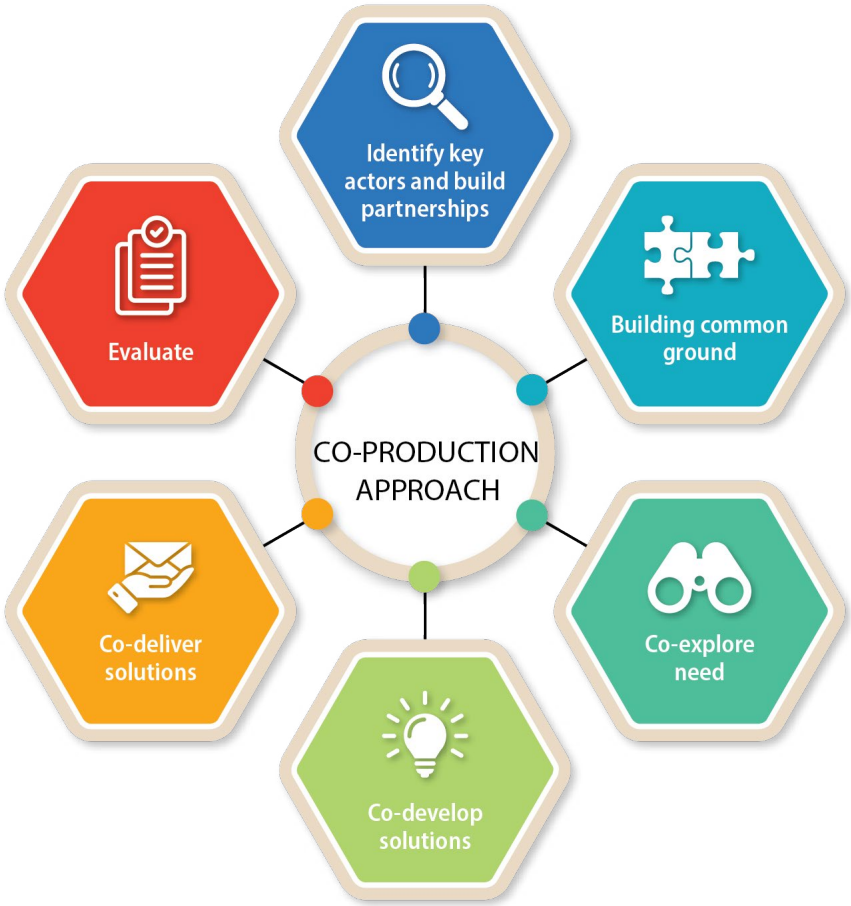

Figure 2: The building blocks of co-production (building on models developed by AMMA-2050[3] and KCL engagement in two BRACED consortia projects.[4]

IDENTIFY KEY ACTORS AND BUILD PARTNERSHIPS

At the outset of any co-production process, it is essential to ensure the inclusion of all relevant actors. Excluding critical actors from the process can invalidate or undermine the co-production process. While some actors may have previous experience of working together, others may not. The range of actors may need to be extended and revised as the project focus matures and understanding about the ways to address this issue develops. Decision-makers have a key role in this building block as they often have relationships with relevant actors and have convening power to bring them together.

KEY ACTORS INVOLVED IN CO-PRODUCTION PROCESS

Producers = those who produce weather and climate data and information. e.g. national meteorological services, university researchers, private sector forecasters, regional and global climate centres.

Intermediaries = those who support engagement between producers and users. e.g. sectoral experts, extension services, public engagement actors, economists, communicators, and donor-funded programme teams.

National, regional, and local users = those who will take action based on the weather and climate information. e.g. government ministers, local government decision-makers, community-based organisations, sector-based service officers, farmers or pastoralists, urban planners and humanitarian agencies.

GUIDING STEPS

- Identify and involve relevant actors
- Develop/create new networks or strengthen existing partnerships
- Gain political buy-in
- Enable open interaction amongst actors
- Recognise all partners' roles, strengths, and limitations
- Recognise gender and cultural differences
- Prioritise listening
- Develop a clear plan, which is also flexible
- Develop any required contractual documentation
- Secure adequate resources for ALL partners
- Factor in sufficient time and resources to support the other building blocks of co-production

"The longer we work together the more familiar we get with each other, the closer we get, and the better we work together"

A participant in FRACTAL process (Future Climate for Africa project)

IN PRACTICE

In undertaking Participatory Scenario Planning in Kenya a local task force was selected to plan the workshop. The task force involved sub-national government officers from the meteorological agency, planners, agriculture, disaster risk management and other relevant sectors, as well as some NGO and civil society participants particularly where they were leading adaptation and resilience programmes. This allowed for political buy-in to be gained across the relevant decision-makers.

An agro-pastoralist in Garissa, Kenya, reading climate advisories (Source: CARE ALP/E. Aduma, 2014)

BUILD COMMON GROUND

Very early on in the process, it is necessary to develop a shared understanding, amongst actors, of the intention and desired outcomes of the co-production process. This includes identifying any competing priorities across the group. This building block is critical for managing expectations across all the actors and agreeing on foundational principles for the interaction going forward. An additional function of this building block is the capacity development of all actors to ensure an equal footing for discussion, across multiple disciplines, throughout the co-production process. Decision-makers can share their knowledge on the context to help build capacity amongst all actors.

GUIDING STEPS

- Make clear impact or benefit requirements of all the actors
- Reach a shared vision and common purpose
- Develop agreed principles and ways of working together
- Strengthen climate information producers' understanding of the decision-making context and decision-makers' understanding of key climate concepts and the extent of current climate science capacities

IN PRACTICE

In the FRACTAL project, Learning Labs and Dialogues were used as a means for stakeholders within cities to gather, get to know each other and share and develop knowledge. A lot of focus was given to developing a shared understanding amongst actors, and collectively exploring the intention and desired outcomes of the process.[5]

CO-EXPLORE NEED

The focus of this building block is on cementing the relationships and understanding between actors, which underpins the co-production process. It is about creating a space where a relationship of equals can form and thrive and where jointly defined issues can emerge as the focus of the co-production activities. This is also the building block in which the responsibilities and roles of each of the actors can be agreed upon and formalised, if necessary.

GUIDING STEPS

- Create a space for ongoing interaction and relationship building
- Create a relationship of equals amongst partners
- Maintain an unbiased and open agenda
- Allow for learning and understanding to take place in all directions (among actors)
- Allow for burning issues to emerge through the process
- Jointly identify issues to work on, to address a concern prioritised by the people whom an initiative seeks to support
- Clearly map out co-production roles and responsibilities

Local communities must travel long distances in search of safe water in Turkana County, Kenya (Source: D. Ochieng Ong'eng, 2018)

IN PRACTICE

In the REACH project in Kenya, local residents affected by water stress described the specific contexts in which they use climate information and also the limitations of what climate information is currently available. Rising insecurity, especially livestock raids, were connected to periods of acute water stress. They identified the need for reliable climate information for local law enforcement agencies to be able to put additional security measures in place during periods of higher risk.

"(I)nteraction with stakeholders and decision makers adds another dimension to how research should be undertaken. Research questions are often selected based on the likelihood of them receiving funding, the availability of data and methods, as well as personal interest. However, confronted with people who are struggling with very concrete problems in their everyday life and with uncertainties in their future, the most pressing research questions arise out of necessity…."

Dr Conni Klein, UK Centre for Ecology and Hydrology[6] from AMMA-2050 (Future Climate for Africa project)

"I had never thought that I would come across Tanzania Meteorological Department (TMA) people and sit and discuss together these issues because I thought it was more of expert things and less related to me, that's why even my interest was not that much because I thought it is none of my business, through this project I have seen that we need to work together".

Miss Agnella Faustine Malilima, Community Member participating in DARAJA (WISER project)

CO-DEVELOP SOLUTIONS

Through this building block, the actors can build on the identified issues to focus on a collaborative effort that will lead to the development of solutions. This will involve a series of knowledge exchanges and the contribution of a variety of expertise from across the actors. This building block results in an agreed-upon output (tangible or intangible) that aims to improve previous approaches and better enables the uptake and use of weather and climate information. Co-development should support ongoing feedback from those actors, including decision-makers, using the co-developed output to continually improve the delivery of weather and climate services.

GUIDING STEPS

- Support ongoing learning and research that takes into account local culture and knowledge
- Enable knowledge exchange amongst all partners
- Gain consensus agreement of the group
- Integrate learning from previous experiences (successes and failures)
- Develop plans for succession and sustainability

IN PRACTICE

The Raising Risk Awareness project engaged with key decision-makers and the media about extreme event attribution analyses which informed the types of outputs that would be most useful to the key actors (including the media). This exchange of knowledge among all actors resulted in co-development of a range of communication products, including videos, animations, infographics, and an image library.

CO-DELIVER SOLUTIONS

Once collaborative outputs have been agreed upon, this building block allows for the outputs to be effectively applied or packaged and communicated to ensure that they are useful and usable by external user groups. The co-delivery process, again, requires agreement about how to communicate the output to ensure that it is accessible; that cultural considerations have been taken into account and that all contributors have been given appropriate acknowledgment. This process will also need to ensure that the actors, who will be using the product, are confident enough to appropriately use the co-produced service. Likewise, those 'intermediaries' responsible for onward communication, as well as feedback – such as media or extension services – should have the required capacities to both communicate and train other users, including regarding inappropriate uses of the climate service.

GUIDING STEPS

- Ensure co-branding and ownership of the product by the group
- Consider/incorporate local cultures and languages
- Build capacity amongst the recipient group
- Ensure accessibility of product, as well as ongoing feedback
- Co-develop a plan for communicating the climate service and solutions that ensure maximum impact

IN PRACTICE

In the USAID Tanzania energy project, capacity development was undertaken through intensive working sessions with power sector actors. Through this process, climate information produced was translated into decision-relevant information on climate risks and adaptation options for power sector decision-makers.

EVALUATE

Since co-production is often such an unpredictable process that ebbs and flows over time and involves so many actors, who would otherwise not work together, it is particularly important to schedule regular reflection and monitoring. Therefore, evaluation is a building block that is both stand-alone and also extends across all the building blocks in the co-production process. Each of the co-production building blocks should include an evaluative process in order to allow for ongoing feedback, learning from experiences to date and regular review of the process as it is unfolding, providing the space for course correction if required. Similarly, a review of the entire co-production process should be undertaken, usually towards the end of the process. This allows for the documenting of successes and failures as well as learning from the process that can inform future activities. Supporting partnering decision-makers to share learning within their respective institutions can also enable ongoing or new co-production activities that benefit from emerging understanding.

GUIDING STEPS

- Regularly review and co-evaluate the product and the process
- Continue to monitor and reassess the solution after completion
- Ensure ongoing learning and continuous feedback loops
- Document successes or failures in the process

IN PRACTICE

In Rwanda, the Climate Services for Agriculture programme was able to build on experiences and evaluations of the application of Participatory Integrated Climate Services (PICSA) in other contexts. Among the learnings were the fact that a typical one-time, survey-based needs assessment is not enough to adequately capture user (farmer) needs. However, an iterative co-production process that captures and aggregates users' needs and evolving demand, as they gain experience, has proven to be beneficial. Similarly, learning from experience highlighted the importance of feedback processes to bring out users' voices in improved climate services.

Participants engaging with the climate risk screening tool at a FONERWA workshop (Source: J. Araujo, 2017)

Conclusion

There is no 'one size fits all' approach. Co-production needs to be context specific and adjusted for the individual needs of the decision context that the process seeks to support.

This policy brief provides decision-makers with practical advice on how to incorporate co-production through six key building blocks. This application of co-production can support better informed decisions to be made particularly around weather and climate services aiming to mitigate climate-related risks facing affected people, sectors, and livelihoods.

End notes

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3. Visman, E., Rowell, D., Fitzpatrick, R., Warnaars, T., Klein, C. and Tazen, F. (2017b) Poster from AMMA-2050 for the FCFA September 2017 conference.
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5. Arrighi, J., Koelle, B., Besa, M.C., Spires, M., Kavonic, J., Scott, D., Kadihasanoglu, A., Bharwani, S. and Jack, C., 2016. Dialogue for decision-making: unpacking the 'City Learning Lab' approach. FRACTAL working paper #1
6. Visman, E, Audia, C, Crowley, F, Ilboudo, J, Sanou, P, Henley, E, Victor, M, Ritchie, A, Fox, G, Bologo Traoré, M, Tazen, F, Diarra, A, Warnaars W, Klein, C, Fitzpatrick R, Pelling, M and McOmber, C. (2017) Developing decision-relevant climate information: Learning from the Zaman Lebidi BRACED consortium in Burkina Faso and collaboration with AMMA2050, Learning Paper #6, p 10

Further resources

For more information, including the principles that should guide implementation, visit the digi-book https://futureclimateafrica.org/coproduction-manual/. There is also a poster outlining 10 principles for good co-production https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/business/international/wiser/wiser0133_10_principles_coproduction.pdf.

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