

DESIGNING THE NEXT GENERATION OF CO-PRODUCED CLIMATE SERVICES

Enabling funding partners to develop impactful climate services projects and programmes

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KEY MESSAGES

- Climate services are valuable and sustainable when they support decision-making within the wider context of national and regional development priorities. Funding for climate services projects and programmes should be targeted towards activities and interventions that support and complement sectoral development priorities.
- Funding should be made available to a wide range of actors and organisations involved in climate services, rather than exclusively focusing on producers of information or services. Each actor and organisation in the value chain have a unique and important role in delivering climate services, and should be able to benefit from donor funding.
- Funders should encourage project leads to dedicate adequate budget to coproduction and engagement processes which allow the inclusion of knowledge, strategies and interests of different actors and organisations.
- Impactful climate services respond to an expressed need or demand from users and should be able to evolve as these needs and demands evolve. Funders should allow greater flexibility in programmes, giving less emphasis to compliance and more to learning. Encouraging projects to be iterative and adaptive can ensure activities and deliverables are tailored to be impactful and sustainable, while still achieving programme-level outcomes.
- Strengthening the capacity of a range of actors in the climate services value chain is crucial to the sustainability and scalability of climate services. Sufficient funding should be made available to fill capacity gaps across the entire climate service value chain.



OUTLINE OF WISER AND THE LEARNING PROCESS

The Weather and Climate Information Services for Africa (WISER) programme aims to increase the resilience of African people and enhance economic development in response to weather and climate-related shocks. Funded by the Foreign, Commonwealth and Development Office (FCDO) and fund managed by the Met Office UK, WISER's goal is to improve the generation and use of weather and climate information across the Sahel and East Africa. Phase 2 of the programme was implemented from 2017 to 2021 through 12 projects. The aim was to develop new and improved climate services for regional, national and sub-national use, based on the specific needs identified through co-production approaches, and to enhance the capacity and capability of regional and national weather and climate service providers.

The programme Fund Managers organised an internal online learning event from 26th to 29th April 2021 to distil key learning from the design, delivery and results of projects and the programme overall. The event was attended by 90 participants from the 12 WISER Phase 2 projects. The participants ranged from scientists/producers, practitioners/intermediaries, researchers/knowledge managers, decision-makers/users, and donors. The event reflected on four thematic areas of learning to inform future project and programme design for weather and climate information services:

- 1 Programme functions
- 2 Approaches
- 3 Climate service and products outcomes
- 4 Programme/project impacts

1 INTRODUCTION

The WISER programme has demonstrated new approaches, examples of good practices and evidence of the impacts of coproducing climate services. However, projects also faced various challenges in delivering impactful and sustainable climate services. The experience of challenges and successes in the WISER programme offers important learning for funding future programmes. This brief highlights actions that funding partners could take to ensure that future climate services programmes result in improved, sustainable, impactful, equitable and locally owned services with positive impacts on partners and society.

The WISER programme has been pivotal in supporting the enhancement of climate services in the East Africa region. Through the individual projects, which deliberately engaged partners from the supply side (Met services) and demand side (intermediaries and users) in a range of co-production processes, the WISER programme achieved its aim of improving the availability, access and use of climate information. A review of the implementation experience by the WISER project partners raised key issues that, if considered by funding partners at the design phase, will help to maximise the impact of similar future programmes and projects. This brief communicates lessons and recommendations that were developed collectively by WISER partners in the final learning event, based on their programme experience.

2 THE CURRENT STATE OF CLIMATE SERVICES IN EAST AFRICA

Climate services continue to gain traction globally as communities work to adapt to the new normal brought about by climate variability and change. During this time, climate services in the East Africa region have grown and evolved through the leadership of National Meteorological and Hydrological Services (NMHSs) and Regional Climate Centers (RCCs) on the one hand and, on the other, climate resilience, adaptation, disaster risk reduction and climate-smart sector programmes and organisations (often intermediaries and users of climate information).

National and regional meteorological organisations, supported by funding partners, continue to develop and contextualise new technologies and methodologies to improve service delivery and enable investment in human, technical and financial resources through programmes and projects in response to this growth. However, climate variability

and change continue to affect the region, causing economic losses and loss of life. Along with improvements in technical capacities, there is a need to expand and strengthen coproduction of climate services to ensure that climate information services are relevant and useful for decision-making.

3 DEVELOPING AND IMPLEMENTING THE NEXT GENERATION OF CLIMATE SERVICE PROGRAMMES AND PROJECTS

The following sections provide specific in-practice learning and targeted recommendations emerging from the WISER learning event that are aimed at supporting funding partners in developing and implementing future programmes and projects focused on delivering impactful climate services.

3.1. Ensuring long-lasting impact, sustainability and scale

Ensuring support to climate services that have a long-lasting impact, with sustainable results that can be scaled-up, is important in considering the value for money of such funding. The WISER learning event offered some insights on how co-produced climate services are appreciated by end users and are being used to enhance development goals. The co-production process generated ownership, enthusiasm and high expectations for the services that need to be sustained beyond project life. The level of co-production within WISER should be considered the minimum viable level of co-production for climate services, and funders should continue to encourage and scale up immersive co-production.

For further detail on immersive co-production see the accompanying WISER brief, 'Enhancing co-production in climate services projects – Lessons from the WISER programme'.

Relevant, reliable and timely information, which responds to the expressed need and demand for climate services, is required in order to ensure climate services are able to support decision making that improves the resilience of societies. However, this remains a challenge due to the disconnect

between climate scientists and meteorologists producing climate information and the national policies, projects and programmes that require climate information. Providing dedicated resources to understand and strengthen the connection to the demand side of climate services is important. Including intermediaries and user organisations at national, sub-national and community levels in the design, implementation and leadership of programmes ensures that their organisations' strategies, plans and development priorities are aligned with programme outcomes.

This requires a climate service with plans and resources that enable climate information to be used to benefit decision making. Mobilising funding for climate-resilience-focused programmes with embedded climate services can also be written into project designs. The uptake and sustainability of project activities, post-closure, are more likely when projects support the implementation of the partners' core mandate, as seen in the Tanzania Meteorological Authority (TMA) case study that follows.

Relevant and reliable climate services are also needed on an ongoing basis. They are not a one-off project deliverable. Sustainability and scaling are critical to enable continuity of services. Embedding project activities into mainstream regional, national and sub-national systems, plans and policies contributes to ownership of the services at the level needed and also contributes to the sustainability and potential scaling of project impacts beyond the project lifetime. Even without an explicit goal of ensuring that projects were embedded into existing systems, some WISER projects did result in a level of sustainability and institutionalisation,

either through being led and owned by the NMHS, or through the change in stakeholders' perception and capacity, who then began owning and wholly supporting the co-production processes and some of the climate services developed. Future programmes should be designed to ensure funding supports improvements within existing systems, with explicit requirements for projects to institutionalise activities and interventions.



CASE STUDY 1

TANZANIA METEOROLOGICAL AUTHORITY SUCCESSFULLY SCALES DELIVERY OF IMPROVED WEATHER FORECAST

In 2017, the **WISER Tanzania national project**, successfully operationalised a new and **improved five-day weather forecast** developed through a partnership between the TMA and the Met Office UK. Through a collaborative process with key user communities from the coastal region, including fishermen, coastal traders and seaweed farmers, several innovations were made to improve the usefulness and accessibility of weather information. Feedback from the Disaster Management Department, local fishermen and farmers confirm that the new forecast provides relevant information in an understandable format.

This has since been successfully continued as a standard TMA service, and has even been extended in geographic coverage to include areas around the lakes in the north and west of the country. The collaborative process for developing the impact-based forecast, as well as sustained engagement with a growing stakeholder community, has also enabled TMA to progress its implementation of the User Interface Platform of the Global Framework for Climate Services, a key guiding goal for the authority. Collaboration with the Met Office has enabled TMA to continually produce the forecast and employ the new innovations and standard operating procedures developed during WISER. Along with the sustained production of the new service, TMA has convened a growing stakeholder community to raise awareness of the new service and to improve dissemination to people who need the information most.

3.2. Allocating sufficient time and resources for co-production

WISER's focus on co-production required projects to identify and engage all actors in the climate services value chain and to understand and integrate their knowledge, needs and interests in the implementation of climate services. Beyond engaging individual actors, climate services require strong relationships and coordination among multiple actors. It is important to identify, understand and connect with local partners, their relevant plans and mandate, whether at local, national or regional level. This connection enables the project and programme to speak to the needs of their target communities. While various WISER projects have echoed the importance of connecting with actors, and coordinating and strengthening relationships for co-production, projects felt this was highly iterative and time consuming – a consideration which was, in many cases, underestimated during project design.

Ensuring sufficient and dedicated resources for co-production (i.e. time and finances) is key to co-producing climate services. In addition, effective co-production requires dedicated personnel, with technical knowledge of climate services, and skills in facilitating engagement and knowledge-brokering processes, in order to connect user groups to producers. Joint collaboration between producers, intermediaries and users at all levels creates a shared understanding of services, stimulates demand and creates feedback loops to allow for continuous improvement. However, to ensure feedback loops are effectively improving the development of climate services, a co-development monitoring, evaluation and learning (MEL) strategy needs to be in place. Funders should ensure that appropriate technical support and sufficient resources are provided to projects to ensure this can be implemented from the start of projects.

3.3. Allow iterative and adaptive programming

Flexible programming can ensure that project activities are able to shift as local needs change or challenges arise, while still meeting programme goals. The relatively flexible nature of the WISER

programme allowed for some projects to adjust some of their predetermined activities to ensure the programme achieved its intended outputs and outcomes, while speaking to challenges at local, national and regional levels. Key lessons from WISER have also demonstrated the challenges and limitations projects experienced in management arrangements.

Firstly, logframes and theories of change (ToC) need to be co-designed with project stakeholders during the inception phase of programmes, and should be regularly reviewed and adjusted. In WISER, the programme level logframe and ToC was developed through a co-production approach, with contributions from all 12 projects. The Met Office Fund Management (FM) was responsible for supporting implementation and delivering the overall programme in line with indicators and targets agreed with the programme's donor, the UK's Foreign, Commonwealth, and Development Office (FCDO).

Each project also generated its own logframes and complied with budgeting and reporting requirements set by FM. However, during implementation, various opportunities and challenges emerged for projects. This resulted in projects either not being able to pursue or report benefits from unanticipated opportunities, or not meeting logframe milestones due to unforeseen challenges. Funders should anticipate and acknowledge challenges and changes during the implementation of projects, and should be open to flexibility in programme design and reporting. Regular programme and project reflection of performance, including logframe indicators and activities, should be encouraged by funders.

Ensuring logframes and ToCs are co-designed and iteratively examined by all stakeholders involved ensures that projects and programmes can actively address local and changing needs. As local needs and demands shift, projects also require iterative responses. However, the demands of project management and reporting in WISER required significant time from projects, which limited their ability to respond to emerging needs and demands. Funders should ensure that projects and programmes are designed with structured reflection points of logframes and ToCs.

Monitoring, evaluation and learning systems are not only valuable for donor reporting and compliance, but also have an important role in feedback and iterative learning. MEL can inform improvements in project delivery, address challenges experienced and take advantage of emerging opportunities. It can also produce robust evidence of successes and failures of impactful climate services. The frequent reporting and compliance requirements for WISER projects to meet contractual expectations, distracted implementation leads away from focusing on learning and realising impacts. Funders should ensure that compliance requirements for projects and programmes do not overburden staff and limit their ability to generate new knowledge on delivering impactful climate services.

3.4 Integrate capacity strengthening and learning

Capacity development and co-production are at the heart of climate services sustainability. Integrating capacity development and learning for all stakeholders into climate services projects and programmes creates a solid foundation for co-production and strengthens the potential for future sustainability. This is not limited to NMHSs. Rather, all actors require their own combination of capacities related to their roles. Capacity development in climate services starts from identifying key stakeholders and their needs and understanding the best way to fully engage them in the co-production and climate services process. Funding should be dedicated to collaborative capacity needs assessments during the design phase, in order to identify capacity gaps and to work together to bridge these gaps and build understanding of the process.

Capacity development was a key element in the WISER projects and programme design as a whole, and the benefits are being experienced beyond the programme. Some key examples of strengthened capacity can be seen through the number of Memorandums of Understanding (MoUs) that were created between meteorological authorities at national and regional levels with intermediary partner institutions as well as **transformational stories** from NMHSs and government institutions at national and sub-national levels and the continuation of approaches, processes, forums and partnerships supported through WISER, which are still ongoing.

Co-production processes are also learning opportunities, with stakeholders from different disciplines meeting to share knowledge and co-create new learning and ideas for action. Experiences of co-producing climate services were highly valued by WISER projects, as these are new ways of working and can involve a wide range of activities requiring strategic thinking and innovation. Facilitated peer learning, such as the final learning event from which this brief draws, is important for knowledge exchange, strengthening relationships and trust and building confidence and expertise in climate services. A programme such as WISER, with multiple projects working on similar issues in different contexts, has an opportunity to use cross-project and peer learning to maximise the capacity and delivery of each project. Connecting with others and generating new learning and knowledge at programme level can contribute to the general body of knowledge on climate services. Such a learning strategy can also draw on the different expertise of climate scientists, researchers and practitioners involved in project implementation. Programmes should be designed to have regular in-person sharing events during their life cycle. Funds should be set aside to facilitate the participation of project staff at programme-level events at the start, mid-point and end of programmes, with funders encouraging projects to allocate budget for attendance at these events.

Project stakeholders can be engaged in co-designing the monitoring, evaluation and learning strategy and co-developing clear guidelines for learning, what is to be measured and how to report it at the project design and inception phase. This will help to create an inclusive and iterative learning strategy, as all stakeholders will understand and co-own the process. WISER knowledge products (such as the **co-production manual** and the **ICPAC guide to engagements in co-producing climate services**) capture key learning, support continued capacity strengthening and contribute to the sustainability of WISER results.



CASE STUDY 2

CHANGE FOR TRADE: CLIMATE SERVICES FOR A TRANSFORMING GRAIN SECTOR

The Eastern Africa Grain Council (EAGC) was one of the stakeholders involved in the capacity development workshops and co-production process for the agricultural sector in the WISER Support to Intergovernmental Authority on Development (IGAD) Climate Prediction and Application Centre (ICPAC) Project (**W2-SIP**). EAGC has been supporting grain trade in 10 countries within Eastern Africa and has an ongoing relationship with the ICPAC to access tailored agrometeorological information. Their involvement with WISER was in an effort to improve EAGC's understanding of co-produced climate services. Through this process, EAGC gained a clearer understanding of their role as intermediaries of agricultural climate services. Drawing from their experience during the WISER co-production process, and through an ongoing funded partnership with the Climate and Development Knowledge Network (**CDKN**), EAGC was able to **start the co-production process** with their members. This included facilitating climate information User Needs Assessments and hosting discussions sessions during the Eighth African Grain Trade Summit in order to understand the climate risks facing their members.

Going forward, EAGC will seek, through future partnerships, to provide its' members with training and capacity development on how to utilise climate information within the grain sector. In addition, it will seek to explore further partnerships with the National Meteorological Departments to develop customised climate information for the grain sector in different countries. This initiative showcases the value of stakeholder capacity development for sustainability, continuity and scaling of co-production and climate services approaches.



RECOMMENDATIONS



RECOMMENDATIONS FOR DESIGNING FUTURE PROGRAMMES

Ring-fence an inception phase to align activities to local strategies and co-design logframes and theories of change.

Funding should be made available (potentially through seed funding) to allow all actors in the design phase to collectively plan activities and time frames for programmes and projects; to co-define roles and responsibilities and to foster co-ownership with key stakeholders. Including key stakeholders and user groups in the co-design of programmes can ensure activities are relevant to their intended outcomes and address known needs, creating a foundation for the potential for sustainability. Funders and fund managers should facilitate consultations with project staff before the implementation phase to ensure the programme level logframe, theories of change, and reporting requirements are well understood and achievable.

Funding cycles and implementation phases should reflect realistic time frames.

Ensure funding time frames are realistic in terms of the iterative and time-consuming nature of co-producing sustainable climate services. Significant time is required for projects to build relationships, develop capacities and ensure deliverables are impactful and have the potential to be sustainable. Sufficient time for immersive co-production should be reflected in the length of projects and programmes and their intended outcomes.

Encourage budgeting for immersive coproduction processes.

WISER has demonstrated the value of co-production for climate services, which should be considered as the minimal level. Going forward, funders need to continue investing in co-production, ensuring that projects allocate sufficient budget for: stakeholder engagement, iterative social processes, knowledge brokering and

feedback mechanisms, relationship building, collective processes and co-ordination of multi-stakeholder interaction. Funders need to be aware of the time and resources required to seriously engage the full range of producers, intermediaries and end users inclusively; to understand their needs comprehensively; to create better awareness and development of climate services and to allow for this in the design stage.

Fund continuous capacity development for all actors and organisations in the climate services value chain.

Funders should prioritise holistic skills development for all actors and organisations within climate services. Capacity development should be tailored to the needs and competencies of different actors, with emphasis on capacity that can be sustained beyond funded periods. Funders should require programmes to plan for stakeholder capacity development and to encourage collaborative capacity needs assessments during the design phase to ensure activities support broader programme and project outcomes and support national capacity development needs.



RECOMMENDATIONS FOR MONITORING PROGRESS

Support monitoring, evaluation and learning strategies from the outset.

Encourage and incentivise the co-development of MEL strategies at the programme and project level, from the start. Setting requirements for projects to ensure budget and expertise for MEL early on in projects supports the establishment of baselines and the ability to measure progress against these through the project life cycle. Additional funding may be required to support the development and alignment of MEL strategies at the programme and project level. This ensures project strategies are relevant to project activities, while still being able to feed into the broader programme strategy. Programme-wide shared learning events are also vital in sharing project learning and supporting cross-project collaboration, and these events should be planned throughout the programme time frame. Funders should encourage projects to assign sufficient budget to ensure staff are able to attend these shared learning events.

Provide greater emphasis on learning through easing reporting burdens.

Funders and fund managers need to ensure that reporting requirements do not overburden project staff, resulting in their focus being primarily on ensuring compliance. Project implementers should be encouraged to focus on delivering outcomes, knowledge generation and addressing known demand and capacity gaps. Funders should encourage flexibility in the activities which underpin outputs and outcomes, so as to allow projects to adapt when planned activities are ineffective or costly and to take advantage of emerging opportunities. This ensures projects are adapting to evolving needs and demands to deliver impactful climate services. Requiring regular reviews of logframe indicators and allowing changes to these can ensure that projects are able to reflect their impact in reporting and incorporate learning to achieve programme-level outcomes.



RECOMMENDATIONS FOR ENSURING THE POTENTIAL FOR SUSTAINABILITY

Encourage projects to design for sustainability and scale.

Funders should encourage project leads to consider the potential sustainability and scalability of impacts from the programme at the design stage. Projects should do this through aligning their proposals to their own, and national, strategies and plans and through resourcing the strengthening of capacity. Projects could also align activities with mainstream government systems and resources to contribute to systematic mainstream investment techniques, such as matched national government funding or pooled resources for the development and implementation of a national plan.

Set aside a sustainability fund.

Ensure funds are available for continued support for projects or processes that demonstrate impact, while pursuing a more robust transition. To assess the long-term impact, include a commitment to an ex-post evaluation some years after project close.

4 FINAL THOUGHTS

WISER has developed new perspectives and understanding of climate services in the East African region. The approach and process employed through the programme have created new opportunities for partnerships, fostered new ideas and the emergence of new projects at sub-national, national and regional level that are expected to further enhance climate services in the region. However, there is still more work to be done in order for climate services to be able to support long-term climate resilience and disaster risk reduction within East Africa.

Despite the high cost of co-production, the long-term, socio-economic benefits of co-produced climate services, emerging from the WISER programme, demonstrates the value for money of such approaches, as can be seen in the socio-economic benefits of the High Impact Weather Lake System (**HIGHWAY**) project. While WISER demonstrates the real-world value of investing in climate services, dedicated efforts are still needed to ensure project activities are sustainable in the long term and can be scaled in order for the full benefit of such programmes to be realised.

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