



ENACTS: Developing Climate Services for Malaria Surveillance and Control in Tanzania



Authors

Madeleine Thomson
(mthomson@iri.columbia.edu);
Aisha Owusu,
International Research Institute
for Climate and Society (IRI);
Sumaiyya Thawer,
Swiss Tropical Institute Tanzania



Aim of the project

The aim of the **Enhancing National Climate Services** (ENACTS) project is to create operationally relevant climate services for the national malaria programme in Tanzania.



Dates

2012–present



Countries

Tanzania



Participants at Climate Services for Resilient Development (CSRd) Technical Exchange: ICPAC and National Climate Maprooms – Existing and New Tools for Drought Monitoring and Forecasting in Eastern Africa, held in Zanzibar, August 2017 (Source: Catherine Mungai, CCAFS, 2017)

Aim of co-production:

The purpose of the co-production process in Tanzania was to identify both general and specific climate information needs of the health sector – primarily the malaria community – that could be reasonably filled using the **Enhanced National Climate Services** (ENACTS) data and products delivered via the ENACTS Maprooms of the **Tanzanian Meteorological Agency**. The aim of this co-production process was to inform malaria decisions in a systematic way and change relationships, trust, and demand in a manner that had not been realised through previous singular and siloed approaches.

Context:

ENACTS creates quality assessed climate data at the national level, combining the best available global and local data. Through ENACTS Maprooms – a data tailoring service – the data is tailored to create pre-digested products and services that explicitly meet the needs of operational communities, specifically in the agriculture and health sectors. The evolution of these ENACTS Maprooms is dependent on a co-production process that requires pro-active user engagement and iterative interaction with ENACTS implementers and maproom developers.

Who was involved and what were their roles?

Initially the **International Research Institute for Climate and Society**, a boundary institution, led on co-production activities. The IRI had the role of intermediary in the process as it has strong links to both the meteorological and health community. Also the IRI is well positioned to access external funding to support capacity-building activities for both the health and climate sectors. However, once the ENACTS Maproom services were integrated into the malaria control programme planning process, the National Malaria Control Programme (NMCP) continued to engage directly with the Tanzania Meteorological Agency and reported back to the IRI on continuing progress, when requested.

The major and multiple actors involved in this co-production process through different initiatives included: (i) the TMA who implemented ENACTS, built internal capacity and helped train users; (ii) the National Malaria Control Programme of the Ministry of Health who engaged in stakeholder discussions, trained NMCP district-level staff and gave feedback on relevance and usability of information provided; (iii) the President's Malaria Initiative (PMI) – both Centre for Disease Control (CDC) and US Agency for International Development (USAID) staff – who invested time and energy in the coordination and identification of funding; (iv) the **Swiss Tropical Institute** and the **Ifakara Health Institute** (IHI) who provided technical support to the NMCP; (v) the **Global Framework for Climate Services** project partners who organised training activities; (vi) the **Roll Back Malaria** executive board who identified new ways of expressing the value of climate information in terms of reputational risk to control programmes; and (vii) coordinating staff from the **World Health Organization** (WHO) Tanzania Office and World Meteorological Organization/WHO Joint Office (Geneva) who provided resources, coordination and political engagement between the Ministry of Health and the TMA.

What was co-produced?



- **Readily available maprooms:** Designed using global data, maprooms were recreated using higher quality ENACTS data products. ENACTS products and services were tested for use in specific health contexts and modified as needed based on user recommendations.
- **New ENACTS Maproom products and tools:** These were tailored for the national malaria programme in Tanzania. One specific tool, Weighted Anomaly Standardized Precipitation (WASP), was developed to assist with the assessment of the impact of interventions. A description of the tool and its use was later published in a special issue of the *American Journal of Tropical Medicine and Hygiene*. This issue, on malaria impact assessment, was organised by the President's Malaria Initiative (Thomson et al., 2017). This new tool was then integrated into other implementing countries of the ENACTS Maprooms.



Benefits of the co-production approach

- The National Malaria Control Programme reported a significant improvement in the responsiveness of the Tanzania Meteorological Agency to their requests. A much greater interest from the malaria community in using climate information has been observed.
- The capacity at the TMA to implement ENACTS and maintain the system over five years has significantly changed the ability of the TMA to service user needs.
- The co-production processes in Tanzania have already extended beyond individual projects and beyond IRI's facilitation. For example, the NMCP incorporated 'climate information' as a component of its National Malaria Transmission Surveillance System – a part of the larger, integrated and comprehensive Malaria Surveillance Framework.

How was co-production done?

Co-production of climate services for malaria in Tanzania was first initiated in 2012 in response to a request to IRI by members of the Tanzanian Malaria Impact Evaluation Group involving NMCP, Ifakara and the President's Malaria Initiative (Smithson et al., 2015). Over the years, different requests have been made to the TMA and IRI, and new capacities in the malaria community, and at the TMA, have been developed.

Co-develop solutions

In practice, the ENACTS implementation approach in Tanzania has evolved slowly over time with a series of in-country workshops, hands-on training, and other interactions involving multi-stakeholders (policy-makers, practitioners, meteorologists, etc.) and technical support to the TMA and the NMCP. Specifically, technical support to the TMA to develop the ENACTS data and Maprooms was provided with USAID funding through a cooperative agreement with the IRI.

Co-production processes effectively began at the point where decision-relevant climate products were being conceptualised. The process involved the development of climate data, information, products and services as well as their uptake and use by practitioners, researchers and policy-makers. ENACTS was conceived through the ongoing interaction of climate and sectoral specialists at the IRI with over a decade of practical experience working with national meteorological services and health practitioners in Africa.

Co-deliver solutions

Evidence of the utility of ENACTS data and services for malaria control and elimination programmes was shared at a number of capacity-building workshops in Tanzania and Ethiopia. These engagements helped to communicate the approach amongst the malaria community and get further buy-in from policy-makers and practitioners in the co-production process.

Lessons to learn from:

- **Continued support and engagement:** Through experience, the IRI/NMCP and the TMA found that stand-alone training events are insufficient to build capacity of users to proactively use climate information. Workshops need to be reinforced with appropriate online training materials, follow-through technical support and engagement with peers who are also interested and motivated to use climate information.
- **The need for a basic understanding of climate:** A basic understanding of how the climate works and how climate drives health impacts is also critical for the user community.
- **Involvement of high level organisations:** The IRI found that engagement at the higher policy level in the malaria community was also important – both through the IRI’s status as a World Health Organization Collaborating Centre – and its direct work for the President’s Malaria Initiative in Washington DC and the Global Framework for Climate Services. Policy congruence is clearly critical in the development of climate services as it creates the link between international funding streams and national priorities.

REFERENCES

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