

Methodology

Participatory Climate Risk Analysis and Development of Adaptation/Mitigation Plans in the Malawi-Zambia TFCA and Kasungu-Lukusuzi Area

Background

A participatory climate risk assessment (PCRA) was carried out in the Malawi-Zambia (MaZa) Transfrontier Conservation Area (TFCA) and its Kasungu-Lukusuzi sub-component. MaZa TFCA is a jointly managed cross-border area between Zambia and Malawi.

Scientific data versus personal perceptions

Personal perceptions on climatic conditions and changes are based on past and present experiences in a specific location such as communities. Scientific approaches are based on historic data used to calculate future trends. Spatial resolution of scientific data and future projections mostly have a national or regional, focus. Main differences in these two sources are thus related to their **time perspectives** and **spatial resolution**. Furthermore, scientific projections on climatic changes hardly consider **knowledge on local conditions and customs**. Moreover, involving local population in the problem definition generates ownership for solution finding and implementation.

Triangulation

Climate change interventions imply working in an uncertain context. Future climate patterns, timing and severity of climate hazards is unknown. Collecting inputs from different sources such as the local population, science and local experts or stakeholders and via different approaches such as desk research, focus group discussions and key informant interviews is essential to reduce the level of uncertainty.



Triangulation refers to using multiple datasets, methods, theories,

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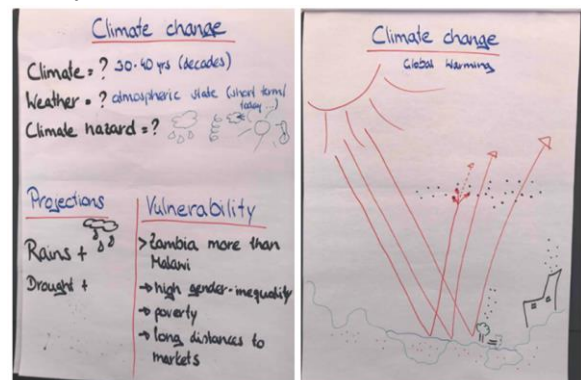
Step 1: Desk Study

A desk study was conducted to identify scientific data and climate change predictions for Malawi and Zambia, and where available, specifically for the MaZa TFCA. Open-source information for such a task is available via:

- [World Bank Climate Change Knowledge Portal](#)
- [Climate Action Tracker](#)
- [Registered Nationally Determined Contributions](#)
- [Submitted National Adaptation Plans](#)
- [UNDP Climate Change Country Profiles](#)
- [World Meteorological Organisation](#)
- [Global Forest Watch](#)

Step 2: Three community assessments

In October, workshops with three Zambian communities in the MaZa TFCA were held, namely, Mwasemphangwe, Chikomeni and Zumwanda. The 1.5-day-workshops were based on participatory group work exercises. Men, women, and where possible youth representatives were divided into separate groups to ensure gender-sensitivity.



At the beginning of each workshop a short plenary discussion was held looking into the definition of climate change, causes of man-made



climate change, the concepts of climate change adaptation and mitigation and the existing scientific predictions for the region from the desk study.

During these workshops community representatives analysed changes in their local climate comparing today and 30-40 years ago, implications of these changes on their agricultural production cycles, resources needed to preserve community livelihoods, hazards endangering these resources and countermeasures perceived as feasible and effective.

As a result of the workshops each community had an overview on the most pressing hazards on local level, adaptation/ mitigation actions considered feasible to be implemented by the community and effective to address the issues arising from the hazards, a list of resources needed to implement the prioritised measures and a list of potential supporters for implementation.

The results from all three community assessments were presented, discussed, and enriched during a stakeholder workshop with representatives from local and regional public and civil society entities.

Step 3: TFCA-level assessments

After the desk study and the community assessments, virtual sessions with representatives of the MaZa TFCA management and with local authorities took place. During these sessions the results from the desk study and from the community assessments were discussed and further enriched. Thereby a first step was taken towards identifying main overlaps and differences across the results from the different sources were detected and countermeasures specified.

Step 4: Triangulation and results presentation

To arrive at overarching conclusions, methodological, investigator and data triangulation was applied.

All results were screened, analysed, and discussed to assess the interaction of the findings from the data collection processes. This led to a systematic mapping of themes across all data sources and resulted in the development of a proposed over-arching TFCA-level climate change adaptation and mitigation plan.

The results of the assessment were finally presented and discussed for last feedback during a virtual session with TFCA-level stakeholders.

The outcome is a plan that is risk-informed in the sense that it is based on a process including many different stakeholders in the generation of the needed knowledge. The participatory approach generated, shared, and validated knowledge. Furthermore, the process reduced the risk of climate change by jointly developing adaptation and mitigation plans. The plans are gender sensitive considering socio-cultural norms and discriminations.



Some guidance towards a successful participatory climate risk assessment:

- The process benefits from a balanced team of consultants (male – female, national – international).
- These consultants are facilitators of the process, not experts offering solutions.
- Expectation management right from the start is crucial: What is planned as follow-up? To what extent will prioritised measures be implemented?
- Involvement of local leaders is crucial for participation and uptake at community level.
- Division of working groups according to gender and minority groups is crucial during the community assessments to integrate their respective considerations.

Author: Kerstin Linne, February 2023

Contact: sepo.sitali@giz.de

SADC-GIZ Climate Resilience and Natural Resource Management Programme, Gaborone, Botswana.