## CASE STUDIES: CRiSTAL

### Sector-Oriented Lens: Sectoral

<table>
<thead>
<tr>
<th>Illustration</th>
<th>CRiSTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Study</td>
<td>CRiSTAL: Drought, Vulnerable Communities And Adaptation In Makoya, Chingali, And Manchali</td>
</tr>
</tbody>
</table>

### Description:

**Summary:**

CRiSTAL is a screening tool designed to help project designers and managers integrate risk reduction and climate change adaptation into community-level projects. Dodoma is a semi-desert zone with bimodal rainfall patterns that determines agricultural activities and migration patterns. In 2005, communities in Dodoma experienced severe drought. Coping strategies would require the purchase of drought resistant crop varieties and new irrigation strategies, both too expensive for poor communities.

The aim of the project was to look for other coping strategies more achievable for poor livelihoods, such as through the promotion of new income generating activities at household level.

Although some recommendations to improve CRiSTAL were made, the tool was proved generally useful as it helps analyse how changes in the climatic system could affect livelihoods with regard to ongoing or planned activities in a given project, and simplifies the complexity of climate change into the realities of daily life.

**More information:**

Meetings were held in all three villages (Makoya, Chingali, and Manchali) to understand the perception of the community of the four major issues, as included in the Cristal tool:

1. Observed climate variability (climate hazards);
2. Impacts of the climate variability on livelihoods;
3. "Autonomous adaptation" (coping strategies developed by the community);
4. And expectations for future climate scenarios.

Specific objectives of the project were to enable communities to:

1. Explore and utilize commercial opportunities available in their local areas,
2. Prepare household-based economic plans,
3. Build their capacity to produce profitable and marketable goods,
4. And identify potential markets for the foods they generate and help them develop efficient linkages.

The specific activities considered in the tool testing were:

1. Improvements on crop production,
2. Processing and marketing,
3. And production and marketing of honey.

Though CRiSTAL was proved useful, some recommendations were made to improve the tool:

1. First, CRiSTAL needs to be more user-friendly;
2. Secondly, it would be useful to find ways of going beyond screening risks and coping strategies towards assessing vulnerabilities at the livelihood level, for instance by:
   - Defining the scope for using the tool and the need for adjustment according to different areas of use;
   - Identifying some guidelines on C&I;
   - And developing a method to look at the sustainability of coping strategies.

Other factors that can limit the potential of the tool:

1. Although a participatory approach is very informative and an effective awareness-raising strategy, it can be very time consuming;
2. Many project managers/staff lack basic understanding on climate change;
3. And finally, the tool should call for prioritization of responses.

### Key Contacts:

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