



Vulnerability Assessments in OROMIA REGION, ETHIOPIA - Dawe and Darara Delecha Communities

GOALS OF THE PROCESS:

- Understand the links between local livelihoods and climate in **DISTRIC NAME, COUNTRY**
- Assess a project's impact on livelihood resources important for climate change adaptation
- Devise adjustments to improve a project's impact on these key livelihood resources

OBJECTIVES FOR DISTRICT:

- Build capacity of local communities to manage their water resources
- Establish sustainable water delivery and sanitation systems
- Increase the scale of interventions for greater water access and water-related benefits
- Improve information dissemination

PROJECT OVERVIEW: The initial focus of Empowering Poor People to Manage Water in Arid and Semi-Arid Lands in Ethiopia is to see poor rural communities in arid and semi-arid zones reduce their vulnerability to water-related shocks and improve their quality of life through Integrated Water Resource Management.

THE PROCESS: Using a combination of adaptation and participatory tools from Climate Vulnerability and Capacity Analysis (CVCA) project managers are able to obtain information on the regional, ecological and country-wide climate context for the project area. The Community-based Risk Screening Tool: Adaptation and Livelihoods (CRiSTAL) can then be utilized as a decision-support tool to analyze the vulnerability assessment information gathered using CVCA. The process integrates climate change adaptation into community-level projects, as well as identifies adaptation actions that can improve resilience to climate related hazards (i.e. droughts and floods).



IN OROMIA REGION: The main goal of the program in Ethiopia is to see improved access to safe water and improved hygiene/sanitation practices in two distinct zones of the Oromia Region (Borena and Misraq Shewa). The vulnerability assessment took place in the Misraq She. wa Zone. The program will work with the Oromia Regional Government, local leadership at the woreda level and planning committees to identify sites for water and sanitation infrastructure and target interventions appropriately.



IMPACT TO LIVELIHOOD RESOURCES: Upon identifying the climate-related hazards and the relevant livelihood resources within the project region, the next step is to determine the impact of the hazards on these resources in order to more effectively analyze current and possible coping strategies.

DAWE: Within Dawe community desertification has the greatest impact across multiple sectors of livelihood resources, with the most significant impacts seen on natural resources (land, water and forest) and financial resources (livestock, crops, charcoal). Drought shows the greatest impacts to natural resources, with some important impact also being seen on financial resources.

Extreme heat appears to have slightly less influence on the community and livelihood resources, with the greatest impacts in areas of natural resources, as well as human resources such as the skills of educated people and the health of community members.

DARARA DELECHA: The Darara Delecha community will be most greatly impacted by drought, particularly in areas of natural (land, water, forests) and financial (crops, livestock, micro-credit schemes) resources. Flooding will have its greatest impact on financial resources as well. Extreme heat was seen to mostly directly affect the land, with a reduction in crop yield translating to diminished financial livelihoods.

ABOUT GWI: The Global Water Initiative (GWI) addresses the declining state of the world's fresh water supply and the lack of access to clean water services by the world's poorest people. It brings together the talents and experiences of seven leading international organizations—Action Against Hunger-USA, CARE, Catholic Relief Services (CRS), International Union for Conservation of Nature (IUCN), International Institute for Environment and Development (IIED), Oxfam America and SOS Sahel UK—to work out effective solutions.

The creation of the GWI comes at a time when more than one billion people lack access to improved water sources and more than 2.6 billion people lack adequate sanitation.

Overview of Results

Hazard	Impact	Alternative Coping Strategy - Dawe	Alternative Coping Strategy - Darara Delecha
DROUGHT	Famine	Petty Trading	N/A
	Livestock death	Migration	Promote trading and casual labor in non-farming activities
	Human disease	Use of modern health services	N/A
	Water shortages	N/A	Drill boreholes
	Crop failure	N/A	Introduce and promote furrow irrigation to supplement rainfed agriculture
EXTREME HEAT	Human disease	Planting and conservation of trees on bare land	N/A
	Crop failure	Early warning system	N/A
	Water shortages	Management and protection of water resources	N/A
	Livestock diseases	N/A	Seek veterinary services for livestock treatment and vaccination
	Increased physical fatigue	N/A	Adjust working hours to reduce exposure to the sun's heat
	Increases in malaria	N/A	Introduce anti-malarial impregnated bed-nets
DESERTIFICATION	Decline in soil fertility	Harmonizing traditional and modern land use management systems	N/A
	Food shortages	Develop irrigation system	N/A
	Decline in livestock productivity	Preparation of hay for breeding animals	N/A
FLOODS	Crop damage	N/A	Adopt and promote early maturing crops
	Infrastructure damage (housing and roads)	N/A	Permanent resettlement in non-flood affected areas
	Damage and loss of pasture	N/A	Promote de-stocking

Developing a summary of climate-related hazards, their impacts on the community and existing coping strategies for these hazards is crucial in developing a community adaptation strategy. Additionally, the efficacy and sustainability of each coping strategy must be determined in order to identify where progress can be made for sustainable adaptation. The main climate-related hazards, their impacts and key current coping strategies identified in Dawe and Darara Delecha are indicated in the table to the left.



The Global Water Initiative
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WAY FORWARD—The final step in the vulnerability assessment process is to complete a way forward assessment in which the efficacy and lessons learned from the assessment are determined and documented for the particular project area. This will aid in future implementation of the GWI project and adaptation actions, as well as provide a summary of key points for the project area in question. For the Ethiopia program, Empowering Poor People to Manage Water in Arid and Semi-Arid Lands ha, the way forward has been developed as follows:

Borana Zone: The next steps for the GWI partners in the Borana zone is to roll out vulnerability assessments with full participation of stakeholders. Current project activities that may be impacted by the expected climatic variability for the region include the development of irrigation infrastructure, the creation of linkages between producer cooperatives and consumers to sell cash crops, facilitation of debate and dialogue forum between farmers, upstream catchment management and establishment of credit facilities for alternative income generating activities. Barriers to these activities include conflicts over pasture closure, financial and personnel limitations, gender equity issues and governmental/legal restrictions.

Misraq Shewa Zone (Rift Valley): Moving forward in the Rift Valley will be facilitated by holding another planning session with all stakeholders (Oxfam, government, CRS, etc.). Negative impacts from climate change can be expected for project activities such as drilling boreholes, development of irrigation canals, promotion and construction of household pit latrines and creating environmental awareness. Potential barriers to these activities include financial constraints, personnel and human resource limitations, community willingness to participate, limited technical resources and pervasive poverty in the community.

ABOUT GWI EAST AFRICA: The GWI program in East Africa has three strategic objectives (SO):

SO1: Good Governance Improved local and community governance and the enabling policy framework

SO2: Sustainable Multiple Uses of Water - Efficient, effective and equitable domestic and productive uses of water, sanitation, hygiene, and watershed management

SO3: Risk Management - Vulnerable rural communities and their environments have increased resilience to water-related shocks.

The vulnerability assessment is providing input to achieve SO3.

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