



District officials and community members at the water outlet in Sanzara.
— Photo Julie Karami-Dekens, IISD

CRiSTAL helps farmers adapt to drought on the slopes of Mount Elgon, Uganda

By Julie Karami-Dekens (IISD) and Sophie Kutegeka (IUCN)

Until recently, locals referred to Sanzara, in the Kapchorwa District of Eastern Uganda, as “the forgotten parish.” Comprised of three villages on the slopes of Mount Elgon, on the border with Kenya, the area’s struggles with adapting agricultural practices to climate variability have received little attention.

As part of the United Nations Development Programme-funded Climate Risk Management Technical Assistance Support Project, the International Institute for Sustainable Development (IISD), in collaboration with the International Union for Conservation of Nature (IUCN), studied Sanzara in order to understand the impacts of climate variability and change on crop production in Uganda. In April 2011 IUCN organized a series of local consultations where the Climate Vulnerability and Capacity Analysis (CVCA) Handbook¹ was used to collect information from community members and the Community-based Risk Screening Tool—Adaptation and Livelihoods (CRiSTAL)² framework was used to organize and analyze the information gathered.

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—Sophie Kutegeka (IUCN)

“Applying CRiSTAL helped us get more nuances about the climate and its specificities in the area,” explains Sophie Kutegeka (IUCN). More than one third of Kapchorwa District is located within the Mount Elgon National Park. This forested mountain ecosystem is characterized by a moist and cool agro-ecology with fertile soil that is favourable for growing maize and Arabica coffee. Due to its proximity to Mount Elgon,

Sanzara is prone to floods and landslides. But the area is also part of the “cattle corridor”—a region that runs from the northeast to the southwest of the country and is characterized by a semi-arid climate with high average temperatures and low mean annual rainfall. Regular droughts combined with dependence on rain-fed agriculture and poor soil fertility in the cattle corridor make communities prone to chronic food insecurity.

¹ For more information about the CVCA Handbook, please refer to: www.careclimatechange.org/tk/integration/en/quick_links/tools/climate_vulnerability.html



Maize growing following an unusual rainy season in July 2012 in Sanzara. — Photo Julie Karami-Dekens, IISD

The CRiSTAL application revealed that water stress is one of the main challenges faced by the communities. Despite the available water resources, such as the River Sippi, Sanzara experiences long dry spells and is prone to high levels of seasonal variability. This issue had been overlooked thus far because of the uniqueness of Sanzara’s climate compared to the rest of the district.

“During the community consultations, we were asked to map our resources and we realized that our environment was highly degraded. We also realized that only coffee survives floods and only cassava survives droughts. But coffee needs trees to grow well and due to deforestation in the area, coffee growing has decreased,” recalls a villager from Sanzara.

Not only has CRiSTAL allowed communities and development agencies to better understand the challenges that they are facing, but it also probed communities to find solutions to their own problems. They proposed that, by tapping water from the nearby River Sippi, a water gravity flow scheme for irrigation would help them adapt to prolonged dry spells—a trend that may increase in the context of climate change. They learned from IUCN and district officials that such technology actually exists; and this marked the beginning of a new, community-driven project.

The CRiSTAL process provided a platform for all key actors to build a common understanding of the climate issues and a strong ownership of the solutions proposed, because it is based on local needs and priorities. The participation of the district officials during the CRiSTAL consultations was crucial to ensure political support. In collaboration with IUCN, the district environment office conducted an environmental impact assessment for the gravity scheme and the three villages developed a community action plan. The implementation of

the community scheme started in two of the three villages in April 2012. The district officials and IUCN have been providing technical expertise, while the communities have been responsible for all the labour.

The CRiSTAL application and its outcomes also increased cohesion among all actors of the parish, who came together to address the common challenge of water scarcity. This can be seen through the water community groups formed to establish and manage the water scheme.

Sanzara is starting to cease being the “forgotten parish,” as other partners are also supporting the community to adapt to climate change. In a context of increasing climate uncertainties, the gravity flow scheme is expected to support livelihoods and catchment restoration for the conservation of Mont Elgon National Park. The community scheme is likely to be completed by end of 2012.

To learn more about **CRiSTAL** and associated training opportunities, please contact:

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Women are spearheading the building of the trenches in Sanzara. — Photo Julie Karami-Dekens, IISD



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