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"Resilience of agricultural systems against crises"

Community Resilience and Climate Change

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Abstract

The effects of climate change present some of the major challenges that will haunt mankind for a long time to come. Climate change has already affected the livelihoods of many smallholder farmers across Africa, who largely rely on rain-fed agriculture and other natural resources.

For instance, farmers around Soroti, Northern Uganda, can observe a change in rainfall patterns over the past few years. Living in the floodplains close to Mount Elgon, they are used to frequent floods but also droughts. However, the unpredictability of rainfall patterns is a new phenomenon and presents a challenge they have to adjust to and cope with. An investigation was undertaken by a team of DAAD Alumni from eastern Africa region to i) assess the climate change resilience of the rural communities and ii) identify their coping strategy to the above challenge brought by climate change and variability. Household surveys and historical data analysis were conducted in two sub-counties namely Gweri and Dokolo of Soroti district. The rural communities of Soroti district are very vulnerable to climate change related impacts, due to their low level of resilience to these shocks; exacerbated by high demographic pressure, low income; inappropriate food storage, inadequate access to health services, erosion of indigenous knowledge, limited access to energy; violent conflicts with neighbouring communities, high frequency and magnitude of the shocks. Farmers have taken steps to adapt to the climatic changes and variability related negative impacts. The most common adaptation strategies in the region include change in lifestyle from livestock keeping to agriculture; change in the types of crop, planting date and migrating to other areas. A strategy to enhance resilience was participatory developed with the two rural communities in order to increase their productivity with minimum soil degradation, increase their access to market and market information, empower them in participatory planning and plan implementation.

Keywords: Climate change, participatory planning, resilience, rural communities, vulnerability

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