

## **Assessing 30 years historical climate data and its implication on livelihoods in Kapsokwony division, Mt. Elgon Sub -County, Kenya**

Mountain ecosystems represent unique areas for the detection of climate change and assessment related impacts. Highlands are warming faster than lowlands. People living on the margins of the forested part of the MEE are particularly vulnerable to extreme climate events in addition to widespread poverty and marginalization. The overlapping climate change impacts in the region include declining crop yields, increased surface temperatures, altered precipitation regimes, increased poverty levels, degradation and decimation, prolonged drought and increase in waterborne diseases. Little has been done in tracking indigenous and new scientific technologies that can be used by farmers in the study area to address impacts of climate variability and climate change on food security, poverty levels and health of subsistence farmers. An interdisciplinary research team together with community actors will work together to achieve state of the art solutions to complex societal problems based on different scientific and non – scientific (epistemic) knowledge to improve livelihoods and sustain economic development in the region. The research findings will include new transformation knowledge, community empowerment, capacity building, new policy measures, and adaptive governance strategies which will be achieved through participatory and collaborative learning. The results obtained during this research to be used to enhance resilience, influence policy formulation, and institutionalize practice responses and sustainable adaptation to climate change adverse impacts.