

## **The influence of climate change on household food security in Uganda: a case study of Luweero District**

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**Keywords:** *Climate Change, Food Security, Household Food Security*

### **Introduction**

The study examined the influence of climate change on household food security in Luweero District.

### **Objectives**

The study was based on the following objectives;

1. to assess the household food security situation in Luweero District,
2. to examine the relationship between climate change and household food security in Luweero District, and
3. to analyse community adaptation strategies towards climate change in Luweero District.

### **Methodology**

A descriptive, correlation research design was used for this study. It used a sample size of 343 respondents from whom data were collected using self-administered questionnaires and an interview guide as data collection instruments. Quantitative data were analyzed using frequency counts, means and percentages while qualitative data was analysed by tallying the numbers of similar responses.

## Key findings

The study found some degree of food insecurity in Luwero District related to a lack of production/reliance on purchasing of food by some households, as well as poor post-harvest handling. The study further reported a relationship between food insecurity and climate change. It also found out that there was tree planting, mulching, mixed cropping on hill slopes as measures used to deal with changes in temperature and rainfall patterns.

## Key recommendations

The study recommended that there should be enhancement of operational use of climate data and forecasts, particularly seasonal forecasts to improve the resilience of agricultural production systems. There should be mitigation through carbon appropriation practices that can restore wastelands, soils and ecosystems to enhance soil organic carbon and improve soil quality and health. There should be a promotion of sustainable land management practices that increase carbon in the soil.

## Key references

- Adger, N. W., Arnell, N. W., Tompkins, E. L., (2005). Successful adaptation to climate change and human security. *Global Environmental Change*, 15 (2), 77-86.
- Barnett, J., Matthew, R. A., and O'Brien, K. (2013). Global environmental change and Human Security. *Annual Review of Environment and Resources*, 38, 373-391
- Gbetibouo G, A. (2009). Understanding Farmers' Perceptions and Adaptations to Climate Change and Variability, IFPRI Discussion Paper 00849.