## CLIMATE CHANGE AND SMALL HOLDER FARMERS IN UGANDA



Agriculture has always been deeply dependent on the weather, with farmers needing a steady mixture of sun, warmth, and rains in order to reliably produce the food that all of humanity depends on for survival. Now, these once predictable growing cycles are at risk from climate change, and smallholders.

Unless humans take significant steps to reverse course and cut greenhouse gas emissions, the situation may continue to intensify. Farmers in Sub-Saharan Africa are particularly vulnerable, in part because they mostly rely on rain-fed agriculture instead of irrigating.

## Because of climate change, farmers in Uganda are experiencing

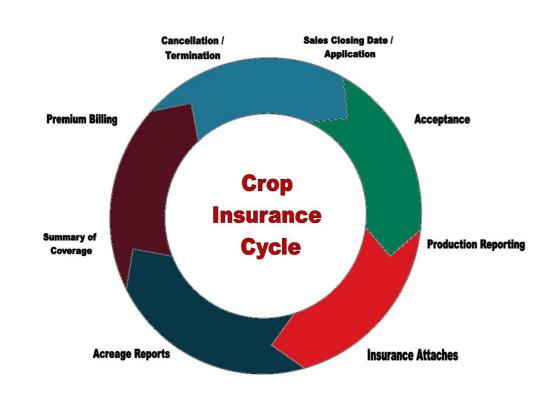


- **Extreme weather:** Volatile weather is a hallmark of climate change, and it can manifest in any number of ways droughts, floods, severe storms, heat waves, cold snaps, frosts.
- **Pests and diseases:** Changes in temperatures and moisture conditions can allow crop diseases and pests to migrate into new areas. Recently, Sub-Saharan Africa has witnessed the spread of fall armyworms, an invasive caterpillar that can devastate maize yields when left unchecked.



• Hotter temperatures long term: Average global temperatures are expected to rise over the coming decades, which could lead to desertification and smaller harvests in Sub-Saharan Africa.

## What we can do?



**Crop Insurance** - Agriculture is inherently an unpredictable livelihood strategy. Crop insurance is critical to buffering this volatility, providing a financial safety net in the case of crop losses due to extreme weather, pest outbreaks or other shocks.

Compost and Soil Organic Matter - Degraded soils that have lost their fertility are causally linked to chronic poverty in Sub-Saharan Africa. Fertile and healthy soils—in particular soils that are rich in organic matter—are a critical resource bank, providing water and nutrient retention, resilience to drought, high crop yield potential, and other adaptive services by integrated soil fertility management and provide products that build long-term soil health.

**Crop Diversity & Intercropping** - Optimized seed choice for staple crops through a constantly updated catalogue of seeds tailored to agro-ecological zones and farmer preference, and also promote dozens of alternative and supplementary crops such as millet, soybeans, and vegetables

