

Drought and pest epidemics among top climate risks in rural Uganda

The early onset of rain is also expected to bring relief to millions of farmers who were watching helplessly as their crops and livestock were being destroyed by the severe dry spell.



Agricultural production that rely depend on rainfall faces the highest risk compared to that of irrigation. Rainfall has affected production and productivity in agricultural sector by making crops and vegetation to grow, animals and fish to have enough water for livelihood and flourish. Animals for example depend largely on vegetation while fish and crops production and productivity are largely determined by rainfall availability. Farmers continue to struggle due to over reliance on rain fed agriculture.

Smallholder farmers in Kikandwa sub county Uganda have continued to face a wide range of agricultural production risks. Climate change and variability present new risks and vulnerabilities. Climate related risks such as prolonged dry seasons are becoming more frequent and intense with negative impacts on agricultural livelihoods and food security. Farmers are continuing to report variations in temperatures have increased drought, increasing disease and pest incidences, decreasing water sources, lack of pasture, bush fires, hailstorms, changes in crop flowering and fruiting times were the major climate-related risks reported.

In order to cope with climate change and climate variability, farmers use a wide range of agricultural technologies and strategies. Mulching, intercropping and planting of food security crops are on top agenda among the most commonly used practices. Other strategies included water harvesting (mainly for domestic consumption), other soil and water conservation technologies and on-farm diversification. Farmers often use a combination of these technologies and practices to enhance agricultural productivity. Analysis of trends in temperature and rainfall showed an increase in average maximum temperatures, while average annual rainfall showed mixed results, where a general decline was observed in the area a relatively stable trend .

Farmers' perception of changing rainfall characteristics and increasing temperatures were consistent with observed historical climatic trends based on meteorological data.

This impact of lack of water for the crops, shortage of pasture for the animals, increased incidence of livestock and crop pest and disease and the end result is increased food shortage and reduction in farmer's income.

In order to mitigate this trend, farmers have ensured adoption on farm technologies to harvesting water road run off to irrigate, practices both subsistence and commercial farming

In this analysis, through the donation an increased budget 2018/2019 prioritizing on increasing production and productivity according to farmers voice platform. The budgeting aims at ensuring supply of inputs, extension of services and research, equipping resource center with good ICT equipments as well as agro-processing and value addition of output making for famers who are unable to adapt to the changing climate may find alternative source of livelihood or remain impoverish for life.



How ICT has increased production of agriculture in Kikandwa.



The overall goal of starting up resource center was to increase the sharing of knowledge decision making and net working farmers through social media platforms as women set firs. This has increased the capacity of farmers to discuss, analyze, respond to cross cutting issues on gender and agriculture effectively.

The internet is a potentially transformative space. But there is a seriously the increased demand and lack of few ICT equipments, unstable internet, unrealizable power source limits farmers from accessing fully the information they need . This is essential if the internet is to fulfill its transformational potential for all.

The organization has continued to build the capacity of women, youth and men to increase their participation in internet information research and decision making processes and empower them to influence the development of agricultural policies and demand of agricultural National budget. The internet and ICTs has respond to farmers concerns in Kikandwa. In addition the donations have increased demand of capacity building on other use of computer programs on the Internet.

Focused Groups

We find it difficult to plan our farm activities; rainfall patterns are very variable and confusing.



dry spells are common during crop production seasons,” said farmers in rural, during a focus group discussion session convened farmers continued to understand perception of climatic trends and climate-related risks. Climate-related risks such as prolonged dry seasons have become more frequent and intense with negative impacts on agricultural livelihoods and food security. The farmers demonstrate and promote early maturing; drought tolerant and water efficient crops and crop varieties; pastures and fodder varieties; rainwater harvesting and soil nutrient and moisture management technologies; and livestock management

options and strategies that restore sustainable productivity. Knowledge sharing, farm development initiatives need to foster integration of crops and livestock that exploit synergies of indigenous traditional practices and modern technologies and innovations. Efforts should be mobilized to establish effective climate risk management information flow networks to inform farm-level decision making, taking into account the already existing communication channels or structures.

Conclusion

Local farmers Kikandwa thanked partners through Global Giving and its heartfelt partners on the support of a number of local coping strategies that enabled them reduce vulnerability to climate variability and change. Farmers had often used a combination of technologies and strategies, and these include the use of indigenous traditional innovations and modern technologies; mulching, intercropping, use of manure and improved crop varieties. Farmers have adopted on other local innovations that included the establishment of kitchen gardens, rainwater harvesting for domestic and agricultural use, use of organic pesticides, micro irrigation, and use of non-conventional organic fertilizers.



Although traditional coping strategies provide important lessons on how local communities there still a gap on raising more resource to better prepare and adapt to climate change in the long-term, the increasing climate variability, frequency and more severe shocks are likely to surpass traditional coping strategies. Moreover, some of these local coping strategies can only assist families in the short-term.