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Climate change and interaction with labour issues in smallholder agriculture in sub-Saharan Africa

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Abstract

Farm households in sub-Saharan Africa (SSA) are increasingly affected by climate change. While a lot of international research is concentrating on effect on yield levels, the impact by reduced labour availability is less researched. The paper highlights the aspect of changing labour availability and decreasing stability of farm households in SSA. The research is done by a network of 5 partner universities in Uganda, Kenya, Togo and Germany starting in 2022. In a first step a comprehensive literature research was done. In a further step quantitative research will be established in 2023 in the areas of the PUs. Most SSA countries incl. Kenya, Uganda and Togo are already experiencing episodes of climate change of varying severity and duration. Climate variability impacts on food security, labour productivity, employment, and labour mobility. Labour migration results in farm labour scarcity through its effects on the viability of economic activities such as farming and livestock development, destruction of road infrastructures through floods and disruption of ecosystem functions. 75 % of smallholder farms in Kenya depended on household labour and also experience periodic labour fluctuation. The reduced supply of labour increases exposure to climate-related risks. The loss of farm labour due to migration cannot be balanced by hired labour. The most direct and wide-spread impacts of climate change on the labour sector is expected through heat-stress. It has reduced performance during working hours, excessive body temperature and dehydration has led to increased accidental injuries. According to a Climate Vulnerable Forum report (2016), approximately 5 % of hours worked will be lost in 2030 especially in West Africa. Another direct impact of climate variability are the incidences of malaria and other vector-and water-borne diseases which in turn affects labour productivity in SSA. In the next steps the involved PUs will collect data for better measuring and understanding the problem and to develop strategies to cope with reduced labour availability.

Keywords: Climate change, labour availability, university research network