ADAPTATION OF SMALL-SCALE LIVESTOCK RANGE FARMERS TO CLIMATE CHANGE IMPACTS IN NAKASONGOLA DISTRICT

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ABSTRACT

The effects of climate change are progressively felt within the community, especially among vulnerable social groups like small-scale livestock farmers. This is due to their production systems that are nature based and greatly rely on ecosystems such as dry rangelands, water stock and pastures. Adaptation by small-scale livestock farmers to a reasonable extent depends on their local knowledge base about climatic change; perception and conceptualization of the drivers and their responsive capacities. A study was therefore done to establish functional local knowledge base, awareness impact and adaptation of small-scale livestock range farmers' to climate change impacts in Nakasongola district. The study was undertaken in Wabinyonyi Sub-County, Ssaasira parish, one of the most cattle grazing parishes with majority of its inhabitants depending on livestock for livelihood. Respondents were small-scale cattle keepers of 2-20 herds. A sample of 94 farmers was used in the study in addition to the key informants. Data was analyzed using SPSS version 16.0 for windows. Results showed that small-scale livestock farmers' knowledge base is based on unusual changes in climate and weather patterns such as; extreme and prolonged weather events resulting in changes in timing of and conditions for grazing and also cropping seasons. Some of the drivers of climatic change were mentioned as anthropogenic activities such as massive deforestation for wood fuel and charcoal burning. Some of the cultural imputations about drivers of climatic change were associated with sorcery and witchcraft. Climate change adaptation strategies in the study area are several such as: early morning grazing, exchange of animals for grazing rights to other people with better grazing grounds, selling off cattle during prolonged dry spells, reservedly fencing off part of the land to use during the dry season, burning dry grass in anticipation of better grass and as a catalyst for rains, and moving long distances in search of water. Limited knowledge about climatic change drivers, pressures and negligence by small-scale livestock farmers limits the preparedness and adaptive capacity. Some of the adaptive strategies like periodic bush burning during the dry seasons were counterproductive to climatic change mitigation and adaptation efforts. The study concludes that small-scale livestock farmers' resilience to climatic change impacts is low and needs to be enhanced. However, the local knowledge is based more on the observed weather and climatic changes rather than on properly conceptualized drivers and pressures. This limits not only adaptive capacities but also efforts to improve their resilience to adaptation and mitigation efforts against climatic change impacts.