

ABSTRACT

Climate change is a global concern that requires urgent interventions to ensure that it doesn't jeopardize their livelihoods, especially food and the ecosystem. West Pokot is among those counties adversely affected by extreme climatic conditions especially given that a larger section of population is pastoralist.. Climate change is exacerbated by the anthropogenic activities that increase emission of greenhouse gases. The main objective of the study was to examine the impacts of climate change on livelihood of pastoralist community in West Pokot County. The study was guided by the following specific objectives: (1) to analyze community vulnerability to effects of climate change in West Pokot County, (2) to evaluate implication of climate change on food production of the Pokot Community, (3) to evaluate the existing strategies for building community resilience to effects of climate change in West Pokot and (4) to develop an effective and sustainable livelihood framework in West Pokot County, Kenya. Respondents were selected through random and purposive sampling methods. Questionnaires were used to collect data from 398 respondents randomly selected from different strata of the stakeholders in Climate Change. Interview guides was used to collect data from the key informants and focus group discussions. Quantitative data that were obtained from the relevant institutions was analyzed using SPSS and other statistical methods. The results obtained from the analysis of data were presented in forms of tables, charts, graphs and narratives. These results would be useful in developing climate change adaptation and mitigation measures to reduce risks from climate extreme events and enhancing the communities' resilience to impacts of climate change. The results was further used in developing an effective, sustainable livelihood and food security framework, which could reduce the risk posed by weather related hazards that compromise pastoral livelihoods and food insecurity in ASAL counties like West Pokot County. It was noted at majority of residence in West Pokot County are pastoralist with 48% being pastoralist, agro 32% and mixed farming 20%. It was further found that climate change has increased, with 54.2% indicated there is an increase in impacts of climate change on water sector, 49.5% indicated increased impact on pastures, 46.1% of change associated with livestock production, 41.1% is associated with change in crop production, 36.5% associated with change in forest cover and 25.3% associated change in livestock population Pastoralist are highly exposed to effects of Climate change, with (59.5%), indicated that high, medium (23.2%), low (13.3%) and (4%) no change. Pastoralist indicated low adaptive capacity to Climate change. The respondents' indicated (4.5%), high, (5%) medium, (87%) low and (3.5%) no change. The livestock body condition during climate extreme event shows that 71.4% are in deteriorating condition, 26.8% are in fair category and 1.8% is in good condition. The study indicated that livestock are threatened by Livestock Diseases, Shortage of pasture and water shortage during natural disaster like drought. Pastoralists adapt to climate change by practicing pasture establishment and conservation of livestock feeds. In livestock disease control, it was found that 45% of the respondents preferred livestock vaccination, 25% of the respondents appreciated regular dipping/ spraying as effective, while 20% indicated livestock treatment as their remedy and 10% preferred disease surveillance as a strategy. To with climate variability, pastoralist locally embrace conservation of crop residuals and use of tree branches as livestock feeds,. It was further noted that pastoralist coping mechanism during drought period showed that, 63.5% migrate, 35.2% stay at home, 1.0% take to parks and 0.3% distributed to friends and relatives. In terms of livestock breeds that resilience to impacts of climate changes the respondents indicated 53.9% goats, 23.7% camels, 14.1% cows, 7.0% sheep and 1.3% donkeys. Sustainability of pastoralist can be achieved through enhancing disease surveillance and frequent Mass vaccination.