Abstract

The study evaluated the effects of climate change on the availability of NTFPS in Kavonge and Museve hilltop forests in Kitui County, Kenya. The specific study objective was to assess local community perception on rainfall and temperature patterns on NTFPs availability. A sample size of 120 respondents were selected for the study using the Yamane formula. A purposive sampling method was used to select villages within 5 kilometer radius to both hilltop forests and a systematic transect line design of 1km by 1km was used to select households for data collections. Data were collected by employing structured questionnaires, key informant interviews and focus groups discussions. The data was analyzed using descriptive statistics (frequencies, percentages, bar charts), chi-square test and logistic regression. The result revealed that majority 83.0% of respondents strongly agreed that climatic conditions of the area has changed. The results submit that 96% of the respondents perceived an increase in temperature pattern during this recent period of 2018-2023 while, 100% perceived a decrease in rainfall pattern during this recent period of 2018-2023. The logistic regression model results revealed that, age, education, occupation and residency period significantly ($p < 0.05$) influenced community perception of climate change (rainfall and temperature) patterns on NTFPs availability in the study area. It is ascertained that the Kavonge and Museve forests edge communities still rely on the available NTFPs as a safety net when faced with unfavorable circumstances, such as crop failure due to climate change. However, it was reported that the available quantities of NTFP are declining due to climate change. I conclude that, available NTFPs will continue to decrease if stringent sustainable utilization and management measures are not implemented.