

IMPACT OF CLIMATE CHANGE RELATED DISASTERS ON THE RESILIENCE OF HOUSEHOLDS IN NYANDO AND LOWER NYAKACH SUB COUNTY, KISUMU COUNTY, KENYA

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ABSTRACT

Nyando and Lower Nyakach Sub-counties in Kisumu County experience both floods and drought in alternating cycles. Floods and drought have been documented as indicators of Climate Change; hence, they are considered Climate Change Related Disasters (CCRDs). The CCRDs leave trails of destruction and negates cumulative efforts at maintaining sustainable livelihoods and ecosystem health by the communities. The impact of the CCRDs on the environment (soils and water sources) is therefore likely to influence the resilience of households given the short period available for households to successfully cope with one disaster before the other one strikes, potentially compromising their resilience. This paper explores how impact of CCRDs on the environment influences resilience of households through the lens of coping mechanisms. The study adopted a descriptive survey design. Data for the study were collected through a survey of 374 households. 12 key informant interviews and direct observations in the two sub-Counties. Purposive sampling was used to select two wards from Nyando and one Ward from Lower Nyakach Sub-Counties prone to floods and drought. The target population was 64,103. Data processing and analysis was conducted using Descriptive statistics such as frequency, means, percentages, and inferential statistics (Chi Square, t-test, and regressions tested at alpha $p < 0.5\%$) were used to correlate Impact of Climate Change Related Disasters (CCRDs) to coping capacity. The Impact index ($M=3.47$) was higher than the coping index ($M=2.84$). Whereas Impact of CCRDs on environment was not significantly different across the Wards ($p = .155$), Coping of households was significantly different across wards ($p = .027$). Impact was found to significantly influence coping of households ($p = .000$) and the relationship was positive. ($r = .286$). The study recommends identification of site-specific interventions to mitigate the impacts of CCRDs, on the environment. It also recommends a communal approach to management of common resources and enhancement of extension services and resource allocation to the wards.

KEYWORDS: Resilience, Climate Change Related Disasters (Floods and Drought) & Coping, Impact