ORIGINAL RESEARCH

Strategies to Mitigate Food Insecurity During Harsh Climatic Conditions in Nyakach Subcounty, Kisumu County

Mr. Kevin Otieno¹,

¹The Mawego National Polytechnic (TMNP), Homabay County, Kenya

¹Correspondence Authors Email; <u>otienokevin946@gmail.com</u>

Abstract

Food insecurity is a pressing issue in Nyakach Subcounty, exacerbated by harsh climatic conditions such as droughts and floods. The research objectives were: to identify the current state of food insecurity in Nyakach Subcounty, to assess the impact of harsh climatic conditions on food security, to evaluate the effectiveness of existing strategies to mitigate food insecurity, and to propose new strategies based on empirical evidence and best practices. The study adopted a mixed-methods research design, integrating both qualitative and quantitative approaches. An estimated sample size of 120 households and 60 farmers was targeted, along with 12 key informant interviews. Data was obtained from both primary and secondary sources. Findings showed that; 49.6% of residents rely on small-scale subsistence farming as source of livelihood, 63.5% obtain their foods from local markets, there is 18.3% prevalence of severe food insecurity, and harsh climate increases severe food insecurity by 20%, reduces crop yields by 15% and increases child malnutrition by 10%. The paper recommends scaling successful programs such as farmers training and food aid to new areas affected within the Subcounty, strengthening partnerships by collaborating with local and international organizations, enhance monitoring by improve data collection and analysis for better decision-making as this will ensure there is fact-based solutions, and promote innovation through encouraging adoption of new technologies and practices especially in farming such as greenhouse farming, irrigation and kitchen gardening.

Keywords: Food security, climate, malnutrition, household, mitigation.