Effects of Interventions on Household Food Security in Ilchamus Ward, Marigat Sub-county, Kenya

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ABSTRACT

Widespread hunger and malnutrition persist today despite considerable growth in per capita food availability. This has prompted an evolving conceptualization of food security and of mechanisms to attain and maintain food security. Government and Non-governmental organizations are shifting from food relief provisions to diversification intervention strategies at the household level. However, there has been limited literature, especially from a sociological perspective, on the effects of interventions on household food security. The study adopted the descriptive research design, where household experiences were documented using a structured questionnaire. A proportionate stratified sampling method was used to divide the sample of 170 households into 4 locations. The obtained data was analyzed using SPSS v25.0, and the findings were reported using descriptive statistics, including frequencies and percentages presented in tables and charts. The results show that interventions are on nutrition, health, sanitation, education and local knowledge as ways of improving household food security. The study recommends that apart from providing food relief responses, the government, together with food provision stakeholders, should lay out sustainable food policies, implement them, and conduct capacity building with the farmers by arranging and conducting training seminars and sessions to equip the community with appropriate household food security information.

Keywords: Household food security, income diversification, social interventions, types of intervention.

1. Introduction

Achieving food security is, as yet a mission that is not best for non-industrial nations but likewise for the high level worldwide. Besides, the presence of contrasts exists in the significance of the difficulty regarding its seriousness and the extent of the populace impacted. The problem is alleviated in advanced nations by providing targeted food safety interventions, such as food resources in the form of direct food assistance, food stamps, or indirectly through backed production (Abdisalam & Mersat, 2022).

Oryem and Noah (2022) discussed how food mediation programs are a situation wherein anybody consistently has material and money-related rights of the section to enough protection and nutrition disappeared with an intricacy of things. These incorporate hazardous social and worlds of politics that hinder manageable monetary development, fight and joint attempt, base, orientation disparity, inadequate training, unfortunate wellness, homegrown fiascos alongside floods and grasshopper invasions, and the shortfall of goof administration.

The World Health Organization discussed the adverse effects of food intervention programs, estimating that nearly 60% of all childhood deaths in developing countries are caused by persistent hunger and malnutrition (WHO, n.d.). Pinstrup-Andersen (2021), in research on worldwide food security under COVID-19, played out an examination and illumination of inclusion reactions in various countries and found that progress has been accomplished in Northern Africa, Southern and
Eastern Asia, and Latin the US. However, in South Asia and Sub-Saharan Africa, unnecessary phases of appetite are referenced. Particularly, Sub Sahara has the highest rates of child stunting, child mortality and malnutrition of any region in the world. Additionally, it is home to 28 countries with the highest rates of food insecurity. According to FAO (2006), hunger is alarming in eight African nations, including Somalia, Comoros, Chad, Burundi, the Democratic Republic of the Congo, Madagascar, and Kenya.

2. Literature Review

2.1. Types of Intervention to Support Access to Household Food Security

To a countrywide degree, Kenya has usually pursued the policy of self-sufficiency in meal delivery as burdened in its first meals coverage report (GoK, 2017) and implied in various consecutive meals policy documents, such as the 5-year improvement plans and the poverty reduction strategy paper. The self-sufficiency goal has been the incentive behind the authority's agricultural rules that ruled the closing of 1/2 century. It is within the agricultural development guidelines that food protection goals are pursued. The tactics for agricultural improvement intervention were evolving to fulfil changing international challenges. The evolitional trend has been encouraged by the donor network (Nyong'o, 2007) and has shifted from the agricultural transformation of the 1960s, incorporated improvement inside the Seventies, to marketplace liberalization and poverty reduction strategy papers of the 1990s, succeeded using the redistribution of wealth (Ellis, 1998). The shifts have no longer been clean, and approaches overlap within the improvement intervention practice (Ellis, 1998). The need for context-specific intervention strategies has been confirmed by donor businesses that provide intervention frameworks to programmes under their financing (Nyong'o, 2007).

2.2. Social Support Access to Household Food Security

Food instability is frequently associated with limited productivity in the agriculture sector and prevailing poverty affecting food availability (Sseguya et al., 2018). New evidence still shows that ‘despite the increase in agricultural products in numerous corridors of the world, the average per capita calorie and protein food availability is below the recommended values (Sseguya et al., 2018). The increasing food instability in Africa is generally attributed to conflict, unstable husbandry, and environmental decline (FAO et al., 2020). Gathering further evidence to understand how homes can have more food security in similar situations has laid grounds for exploring the social confines and their goods on food security at house and collaborative position. Social support access refers to the social relations between and within groups of people that people calculate on to live their lives, for illustration, in the form of participated morals and values, networks and trust. Martin et al. (2004) set up a positive relation between advanced rates of social capital, defined as trust in one’s neighbour, and a lower liability of passing hunger in studied homes. In utmost analyses of food security conditions in developing countries, multiple pointers are used to reflect the colourful confines of the problem. Some of the most generally used pointers in assessing food security conditions include food products, income, total expenditure, food expenditure, share of expenditure on food, calorie consumption, and nutritive status (Porter et al., 2014).

2.3. Income Diversification on Household Food Security

Ellis defines income diversity as “a composition of household income in a given time; diversification means an active social process where households are supposed to get involved in portfolio activities increasingly over time” (Ellis, 1998, p. 18). Meanwhile, occupation variety is more than a variety of exercises alone; preferably, it connects social supports that help households struggle for their endurance or to help their economic condition. Skilled are any of the studies examining the cause and impacts of revenue diversification on household revenue, want, and prejudice. According to drama, determinants that influence on diversification may be top-secret into five main groups: individual and household characteristics (age, matrimonial status, household size, and dependent ratio); household farm characteristics (agricultural land, number of cropping per year, value of farm equipment, participation in farm association, access to agricultural extension services, and access to irrigation system); region (access to roads, access to electricity, and distance from markets or towns); market constraints (market information and provision of affordable credit scheme); and risk (variation of returns from different economic activities) (Kimsun & Sokcheng, 2013). It is assumed that households desperately seek different income sources to sustain their livelihood and respond to this income shortfall. Few studies use household surveys to examine the critical factors of income diversification and its roles in poverty alleviation.
3. **Research Methodology**

The descriptive survey research design assisted the researcher in obtaining a picture of opinions, perceptions, and attitudes concerning interventions on household food security in Ichamus ward, Marigat sub-county. Stratified and systematic random sampling procedures were used in selecting and distributing the 170 households in the 4 locations. Proportionate stratified sampling was used in dividing the sample of 170 households into 4 locations in the study area. Data was collected using structured questionnaires, with the households’ heads being the key informants. The data collected was solely quantitative, and it was examined using descriptive statistics. Descriptive statistics, including frequencies, percentages and means presented in tables and cross-tabulations, are used to summarize, organize and analyze data and describe the characteristics of the sample. This was used in all the objectives of the study. After quantitative data analysis, the results were synchronized, interpreted and discussed.

4. **Data Analysis and Research Findings**

Descriptive statistics were used to discuss the study findings.

**4.1. Improved Off-Farm Employment Opportunities**

The study examined the effectiveness of enhanced off-farm employment opportunities as an intervention to improve household food security. Respondents rated their agreement with this intervention using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Fig. 1 shows the distribution of the responses.

The results given in Fig. 1 show that more than half of the respondents (53.5%) agreed with the intervention of enhanced off-farm employment opportunities. 22.7% of the respondents could not decide, while 32.8% disagreed with the intervention.

**4.2. Diversification of Production**

Based on the results in Fig. 2, the majority of the respondents (52.8%) were encouraged to diversify production (crops, home gardens, and livestock products). 36.7% of the respondents did not agree with production diversification. 10.5% remained.

![Fig. 1. Improved off-farm employment opportunities.](image1)

![Fig. 2. Diversification of production.](image2)
4.3. Increased Market Participation

On expanding cultivate pay (in part through expanding advertise cooperation, the findings in Fig. 3 showed that almost half of the respondents (49.3%) disagreed. 39.7% of them favoured the increased market participation). 11.4% of the respondents were undecided.

4.4. Improved Access to Credit and Market Information

At the types of intervention to get admission to family food security applied with the aid of families, they have a look at testing the component of improving entry to credit score and marketplace records as an intervention using a five-point Likert scale (1-Strongly disagree to 5-Strongly agree) to reply questions. Results are presented in Fig. 4.

4.5. Strategies to Raise Labour Productivity

There exist approaches aimed at enhancing labour productivity and purchasing power. The findings revealed that 26 individuals (15.3%) strongly concurred, 40 (23.3%) expressed agreement, 21 (12.1%) remained undecided, 63 (37%) disagreed, and 20 (11.9%) strongly opposed these strategies. The results are presented in Fig. 5.
5. Conclusion and Recommendations

5.1. Conclusion

The study was anchored on the theory of change. This was important because the study focuses on adequate human welfare, which requires maximum mobilization of human support and natural systems to address poverty sustainably and improve the living standards in the Ilchamus ward of Marigat Sub-county, Baringo. Inadequacies in any systems and their subsystems characterizing the ASAL area should be managed through social and economic interventions and support by state and non-state actors/agencies.

The food availability decline approach supplemented the theory to understand the food security strategies adopted in ASALs, the intervention by external agencies, and their implications. This framework is relevant and essential to the study in understanding how households survive the way they do in the face of increasing food insecurity in ASALs. The study found that there are improved off-farm employment opportunities, and people are encouraged to diversify the production of crops and livestock products. The aspect of household members being sent to eat elsewhere in social gatherings was found to be a coping mechanism. It was established that poverty may push households to earn income from different sources to secure consumption.

5.2. Recommendations

From the study, it was clear that the County and Sub-county officials should be aware of the existing loopholes in effective food security management. Therefore, there is a need to maximally and rightfully utilize the factors investigated in the study because they positively influence food security. Critical emergency stocks should be pre-positioned strategically within the area to avoid contextual and pipeline challenges. Moreover, more effort should be put into community-led disaster risk reduction strategies and early warning systems heading forward.

County and Sub-county officials should enlighten Marigat Sub-county residents on food as a fundamental human right and food security as an issue to consider beyond mere availability. Knowledge dissemination to farmers on the four pillars underpinning food security: food availability, food accessibility, utilization, and stability in the form of extension services can offer excellent opportunities to increase the capacity of residents’ awareness and knowledge of food security that could help fight food insecurity. An enlightened resident on food security will be able to appreciate the value of adequately storing harvested agricultural products for sustainability, increased productivity to enhance food availability and proper financial planning for improved accessibility.

5.3. Area for Further Research

A similar study could be done covering a wider geographical region in Arid and Semi-Arid Lands. A comparative study in relation to food security could be done covering both harvest and post-harvest seasons in the study area.

Author Contributions

EKL: Conceptualization, original draft preparation and writing. EKB: Supervision, validation. WM: Reviewing and editing.

Conflict of Interest

The authors state that they have no conflicts of interest.

References


