

# Effectiveness of Hunger Safety Net Programme on Beneficiary Households' Food Security in Turkana West Sub-County, Kenya

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## Abstract

*In response to the increasing extreme poverty and hunger among the most vulnerable populations, the debate in favor of social safety net programmes has gained prominence across countries in the global south. One such programme being implemented in Kenya is the Hunger Safety Net Programme (HSNP). The objective of this study was to determine how the hunger safety net programme impacts beneficiary households' food security. The study utilized the sustainable livelihoods approach as a theoretical framework. The sustainable livelihoods approach focuses on various factors, at different levels, that directly or indirectly determine or limit poor people's access to resources/assets of different kinds and why it is appropriate. A concurrent mixed-method design was used to collect data from 365 HSNP beneficiary households' and 30 key informants. A questionnaire was used to collect data from the households' heads while an interview guide was utilized to gather data from key informants. The survey gathered data on providing a clear description of the effectiveness of the Hunger Safety Net Programme on household food security. The results of the study indicated that a majority of the respondents agreed that the HSNP has improved food security in recipient households. The study recommends that the government enhance the HSNP program as an effective tool in the mitigation of food insecurity not only in Turkana West Sub-County but in the entire Arid and Semi-arid Lands. The results are expected to be of great importance to funding agencies and other development partners, as a tool for learning, accountability, designing of food security projects, programmes and policies that are evidence-based.*

**Key Words:** effects, Hunger Safety Net Programme, social safety nets, cash transfers, food security, Turkana County.

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Date of Submission: 12-08-2024

Date of Acceptance: 25-08-2024

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## I. Background of the Study

Alleviating food insecurity is a critical focus for governments and the international community, as articulated in Goal 2 of the 2030 Agenda for Sustainable Development: "End hunger, achieve food security" (Schwab, 2019; Asige & Omuse, 2022). In light of rising extreme poverty and hunger among the poorest and most vulnerable populations, there has been significant advocacy for social safety net programmes across the globe (Ndoka, 2020). Globally, there is strong political commitment to social safety nets, including social cash transfers. International calls, such as the African Union-sponsored Livingstone Call for Action Conference (2006), co-hosted by Zambia, have urged nations to integrate social safety nets into their development agendas. Supported by Help Age International and the UK Department for International Development, the conference emphasized adopting social protection as a key mechanism for reducing extreme poverty and addressing the rights of vulnerable citizens, recognizing social protection as a basic human right (International Policy Centre for Inclusive Growth [IPC-IG], 2023)

For instance, Brazil's Bolsa Família program launched in 2003 is the largest conditional cash transfer program in the world, reaching over 46 million people. It has been instrumental in reducing extreme poverty and hunger, as well as in lowering income inequality. By 2015, the number of people living below the international poverty line in Brazil had dropped significantly, and the program was responsible for approximately 28% of the

total poverty reduction in the country. The program also contributed to a decline in the number of people suffering from hunger from 22.8 million in 1992 to 13.6 million in 2012 (Centre for Public Impact, 2020; World Bank, 2019).

According to Babajanian (2016), 2.5 billion people in the Global South currently receive social safety net benefits, including 650 million from the poorest quintile. These programs have been effective in alleviating poverty, with 36% of those living in poverty globally being lifted from extreme hunger due to such interventions (World Bank, 2021). Amaya and Prain (2017) highlight that hunger safety nets are critical in emergency responses to prevent poverty and food insecurity, while also protecting livelihoods and reinforcing resilience during crises. As a result, all countries in the Global South have incorporated social safety net programs into their core development plans, leading to a significant increase in the number of such programs since the mid-2000s, despite their modest size (Siachiwena, 2021; World Bank, 2018).

In Sub-Saharan Africa, countries like South Africa and Namibia, social safety nets, particularly, cash transfer initiatives have been associated with improved dietary diversity and increased food consumption among beneficiary households, thus enhancing food security (Peterman et al., 2017). Additionally, cash transfers have facilitated increased school enrollment and attendance rates among children from beneficiary households, contributing to improvements in education outcomes (World Bank, 2021). The Productive Safety Net Program (PSNP) in Ethiopia has effectively mitigated food insecurity by providing support to vulnerable households, ensuring access to food during times of hardship (World Bank, 2020). PSNP has been associated with improved health outcomes among beneficiary households, as increased income and access to food contribute to better nutrition and healthcare utilization (Hirvonen et al., 2016). Currently, PSNP benefits around 8 million people, making it one of Sub-Saharan Africa's greatest social safety net programme (Abay, et al., 2023).

In Kenya, the government has implemented various policies aimed at guiding social protection initiatives. For instance, Article 43(1) of the Constitution of Kenya, 2010 guarantees all Kenyans the right to be free from hunger, and to have adequate food of acceptable quality. Other policy frameworks, such as the Kenya Vision 2030, and the National Social Protection Policy (2011) recognize the importance of addressing food insecurity and poverty through programs like the National Safety Net Programme (NSNP) popularly known as *Inua Jamii*, which includes cash transfer initiatives like the Hunger Safety Net Programme (HSNP) (World Bank, 2020).

The inception of the HSNP in 2008 served as an alternative to traditional food aid in Kenya's arid and semi-arid areas (ASALs); Mandera, Marsabit, Turkana, and Wajir counties (National Drought Management Authority, 2023). The HSNP is a key initiative under Vision 2030, implemented by the National Drought Management Authority (Song & Imai, 2019). Initially, it aimed to help 69,000 households, providing each with a monthly stipend of KES 2,150 until 2014 (Costella et al., 2022). In 2015, the program expanded to include an additional 207,000 drought-affected households (Fitzgibbon, 2016). The primary goals of HSNP are to alleviate food insecurity and enhance financial inclusion for marginalized communities. By 2020, the program had benefited approximately 600,000 individuals, or 100,000 households, in the four most impoverished arid counties: Mandera, Marsabit, Turkana, and Wajir (National Drought Management Authority, 2021).

Despite the efforts of the government and development partners to achieve food security in arid and semi-arid lands (ASALs) through the HSNP, these nomadic pastoralist-dominated regions continue to face severe food insecurity. For instance, in 2023, nearly 282 million people live in acute hunger worldwide- an increase of 24 million from 2022 (Lawrence & Omuse, 2021; FAO, IFAD, UNICEF, WFP, & WHO, 2023), and particularly, 2.8 million in Kenyan ASALs (National Drought Management Authority, 2024) he population experiencing food insecurity.

The four counties targeted (Mandera, Marsabit, Turkana, and Wajir) by HSNP-located in northern Kenya's arid zones-frequently suffer from drought and low rainfall and are among the poorest and least developed in the country. Moreover, HSNP operates under challenging conditions characterized by inadequate infrastructure, limited network connectivity, and insufficient social amenities (Kenya Food Security Steering Group, 2024). As a result, families in these areas often rely on emergency food aid or are forced to sell their livestock at low prices to afford food, undermining their livelihoods and perpetuating a cycle of poverty.

The protracted production and management of smartcards have significantly impacted the timeliness of payments to beneficiaries under the Hunger Safety Net Programme (HSNP). This has led to delays in disbursing funds, with some beneficiaries needing to travel to pay points farther than the stipulated 20-kilometer limit, thereby compromising the speed and efficiency of the program's implementation (CALP Network, 2021). The present study aims to evaluate the effectiveness of the HSNP in addressing food insecurity in Turkana West Sub- County, Kenya.

### **Statement of the Problem**

Article 43(1)(c) of the Constitution of Kenya, 2010, enshrines the right for all Kenyans to be free from hunger and to have adequate food of acceptable quality. This constitutional guarantee aligns with Sustainable

Development Goal (SDG) 2, which aims to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture. In a bid to actualize these constitutional provisions and the global SDG 2, the Government of Kenya, in collaboration with various development partners, introduced the Hunger Safety Net Programme (HSNP). This initiative targets the four arid and semi-arid counties of Mandera, Marsabit, Turkana, and Wajir, which are particularly vulnerable to food insecurity due to their harsh climatic conditions and recurring droughts.

Despite the implementation of the Hunger Safety Net Programme (HSNP) in the arid and semi-arid counties of Mandera, Marsabit, Turkana, and Wajir in Kenya, high levels of food insecurity persist, particularly in Turkana County. The region, predominantly inhabited by nomadic pastoralist communities, faces recurrent droughts, limited access to resources, and poor infrastructure, exacerbating food insecurity challenges. While HSNP aims to alleviate hunger and poverty through cash transfers to vulnerable households, its effectiveness in mitigating food insecurity in Turkana West Sub-County is not well understood. This study focused on assessing the effectiveness of the Hunger Safety Net Programme in addressing food insecurity among beneficiary households in Turkana West Sub-County.

### **Objective of the Study**

The main objective of the study was to determine effectiveness of Hunger Safety Net Programme on food security in Turkana West Sub-County, Kenya.

### **Research Question**

The study was guided by the following research question:

- i. To what extent does the Hunger Safety Net Programme affect beneficiary households' food security in Turkana West Sub-County, Kenya?

## **II. Literature Review**

### **2.1 Empirical Literature**

According to the World Food Programme (WFP) and the United Nations Children's Fund (UNICEF), an estimated 670 million people will still experience food insecurity in 2030 (WFP & UNICEF, 2022). A recent analysis by the Intergovernmental Panel on Climate Change (IPCC) reported that approximately 3.5 million people in Kenya, or 24% of the population in arid and semi-arid regions, faced severe acute food insecurity in 2022. The IPCC further projected that by the end of 2022, the situation would likely deteriorate, with 4.4 million people expected to experience high levels of acute food insecurity (Monteiro et al., 2022). These figures underscore the urgent need for effective interventions to address food insecurity, particularly in vulnerable regions like Turkana County.

According to Bagnetto (2022), climate change, failed rains, locust infestation, the COVID-19 pandemic, the Russia-Ukraine war are the core contributors of food insecurity in Kenya and other parts of the world. Kenyans cannot afford to eat three meals a day due to high costs of food. The situation seems even worse in the Kenyan arid and semi-arid regions; including Turkana County where many people have no food. The World Food Programme (2022) has noted that drought has resulted in unimaginable suffering amid the traditional nomadic populations. An estimated 7 million livestock have been lost due to extreme food and water scarcity across the in Kenya arid and semi-arid counties, imperiling the livelihoods of pastoralists, who rely on them for food and income (Bagnetto, 2022). This loss not only threatens their immediate survival but also their long-term economic stability.

Food insecurity is a persistent social issue in Kenya, affecting millions. The latest data reveals that approximately 3.5 million individuals, representing 24% of the population in arid and semi-arid regions, are experiencing severe food insecurity, leading to significant disruptions in their livelihoods (Maxwell et al., 2022). Despite the long-standing efforts of the Kenyan government and donor agencies to combat this issue through food aid distributions, such provisions have proven ineffective (National Drought Management Authority, 2020). In contrast, regular cash transfers are increasingly recognized as a more effective strategy, helping vulnerable households build resilience against food insecurity and break the cycle of poverty (Song & Imai, 2019).

Falb et al. (2020) examined cash assistance programming and its impact on meeting basic needs and reducing food insecurity in Raqqa Governorate, Syria. Using a mixed-methods approach with a pre-posttest design in 2018, the study found that short-term emergency cash assistance significantly improved food security and helped women and their families meet basic needs in an emergency setting. The cash transfers were primarily spent on essential items, including food. This study focused on the effectiveness of cash transfer programs during acute humanitarian emergencies, specifically targeting women beneficiaries.

Jeong and Trako (2022) conducted a descriptive literature review of non-contributory humanitarian assistance interventions in low- and middle-income countries, focusing on cash and in-kind transfers in humanitarian settings. Their findings revealed that the majority of the studies reviewed demonstrated positive and statistically significant effects of humanitarian assistance programs on food security outcomes. Notably, four of these studies reported improvements in the Household Dietary Diversity Score (HDDS), highlighting the effectiveness of such interventions in enhancing food security.

Overall, these findings indicate that most humanitarian assistance interventions significantly impact food security outcomes in fragile and conflict-affected areas, enhancing not only food consumption but also diet quality and reducing the severity of food insecurity. However, Lombardini and Mager (2019) found that a cash-for-work program in a Jordanian refugee camp had no positive effect on food security. A notable limitation in the current body of evidence is the inconsistent results regarding the effectiveness of cash transfers on food security. This inconsistency highlights a knowledge gap concerning the impact of programs like the HSNP cash transfer on the food security of beneficiary households in Turkana County.

Raghunathan et al. (2017) evaluated the effectiveness of the Mamata cash transfer scheme in enhancing household food security in Odisha, India. This study focused on pregnant and lactating women, analyzing survey data from 1,161 households. It specifically assessed the scheme's impact on pregnancy registration, antenatal services, receipt of iron and folic acid (IFA) tablets, prenatal and postnatal counseling, exclusive breastfeeding, full immunization, and household food security. In contrast, the current study aims to determine whether the implementation of the HSNP in Turkana County yields similar food security outcomes for beneficiary households. Unlike Raghunathan's study, this research will not be limited to women but will consider all beneficiaries, regardless of gender.

Households benefiting from Familias en Acción in Colombia notably increased their consumption of protein-rich items like milk, meat, and eggs (Thome et al., 2016). Cash transfers have the potential to enhance the availability, access, and utilization of food for households vulnerable to sudden shocks such as droughts, floods, and climate change. Additionally, they can help stabilize household income, thereby smoothing consumption patterns (Hidrobo et al., 2015). The food security indicators examined in Hidrobo's study align with those of the current research. However, the current study will specifically evaluate whether the Hunger Safety Net Programme (HSNP) is effective in improving additional food security indicators such as accessibility, utilization, stability, and adequacy among beneficiary households in Turkana West Sub-County.

Omotesho et al. (2016) investigated the impact of non-farm income on food security in Kedah, Malaysia, utilizing primary data gathered from a survey of agricultural households, with face-to-face interviews conducted with 384 selected respondents. Their findings revealed that non-farm income reduced food insecurity by 42.94% and poverty by 51.47%. Additionally, the severity of food insecurity decreased by 23.35% when transfer payments were included in the income. However, the study did not account for other factors influencing food security beyond non-farm income and did not specifically address the effectiveness of the Hunger Safety Net Programme on household food security, which is the primary focus of the current study.

A recent study in Tanzania by Rutenge (2023), titled "Hope on the Horizon: Cash Transfers Fueling the Fight against Hunger and Poverty," highlights the impact of the Tanzanian Productive Social Safety Net II (PSSN-II) in alleviating food insecurity among beneficiary households. The study found that the majority of beneficiaries interviewed reported being able to have at least two, if not three, meals every day. In comparison, the current study aims to assess whether the Hunger Safety Net Programme (HSNP) has effectively addressed food insecurity in Turkana County. The researcher plans to sample 367 beneficiaries, significantly more than the 30 surveyed by Rutenge. Additionally, while Rutenge's study was conducted in four urban settings (Dar es Salaam, Zanzibar, Kigoma, and Mtwara) in Tanzania, the current study will take place in a rural area of Turkana West Sub-County.

In Kenya, Ng'ong'a (2020) investigated the impact of cash transfer programs on the socio-economic well-being of recipient households in Migori County. Employing a descriptive research design, the researcher examined the cause-effect relationship among various variables. Primary data were collected through survey questionnaires, Key Informant Interviews, and observation. The study found an increase in the number of meals among households, although balanced meals were not always affordable. Additionally, cash transfers were used to improve housing for Orphans and Vulnerable Children (OVC) households, leading to enhanced food security and livelihoods. Ng'ong'a recommends that social cash transfers could be a vital tool in national poverty reduction and social development strategies across Kenya. While Ng'ong'a's study focused on affordability and the number of meals as food security indicators, the current study aims to contribute to the existing knowledge by examining the effectiveness of cash transfers on additional indicators such as accessibility, utilization, and sustainability.

In Kakamega County, Kenya, Eyase (2015) conducted a study to examine the impact of cash transfer grants for orphans and vulnerable children (OVC) on their well-being. The study had four main objectives: assessing households' utilization of the cash transfer grant, determining the perceived influence of the grant on food consumption and education of OVC, and examining its impact on social status and relations for household well-being. Using a descriptive survey design, primary data were collected through questionnaires targeting household heads benefiting from the cash transfer. Data analysis relied on descriptive statistics, revealing that cash transfer grants positively influenced the well-being of OVC in the sub-County. However, the study primarily focused on cash transfer utilization among households. In contrast, the current study will delve deeper into the effectiveness of the Hunger Safety Net Programme (HSNP) on household food security in arid and semi-arid regions. Additionally, it will explore whether the cash transfer program significantly affects food security.

## **2.2 Theoretical Framework**

Acknowledging that food security programmes and policies should be multi-sectoral and customized in line with the Kenyan and particularly the Turkana West Sub- County local context, the current study utilizes the Sustainable Livelihoods Approach (SLA).

### **2.2.1 The Sustainable Livelihoods Approach**

The SLA was adopted by Department for International Development (DFID) following the 1997 UK Government White Paper on International Development, which prioritized eliminating extreme poverty in poorer countries. DFID's policies and programs promote sustainable livelihoods to achieve this goal (Sati & Vangchhia, 2017). The SLA provides measurable household-level indicators to understand food insecurity, categorizing household assets into five types: human, social, financial, physical, and natural capital (DFID, 2020). The concept of livelihoods, as defined by Chambers and Conway (1992), includes three key elements: human capabilities (education, skills, health, and psychological orientation), access to various assets, and the presence of economic activities. The interaction of these elements determines a household's livelihood strategy.

Krantz (2001) highlights the importance of SLA in several ways. It helps understand the root causes of food insecurity by examining various factors that limit access to resources. The SLA provides a more comprehensive assessment of living conditions than traditional productivity or income measures, allowing for a broader conceptualization of food insecurity. However, SLA has been criticized for focusing solely on five types of capital. Researchers argue that cultural and political capitals are also important in specific contexts and should be included (Chowdhury, 2021). This study extends the SLA to consider community culture and traditions and their influence on household spending and asset accumulation in Turkana.

Additionally, this study includes government interventions, and policies, such as cash transfer programs, which impact food security beyond the SLA framework. The traditional practices of the Turkana people can significantly affect how they use the Hunger Safety Net Programme (HSNP) benefits, the types of productive assets they purchase, and their definitions of social wellbeing (e.g., access to education, healthcare, and clean water).

Sseguya (2009) notes that the Sustainable Livelihoods Approach (SLA) primarily focuses on the household level, reflecting a European perspective that emphasizes individual and family solutions. However, food insecurity is a complex issue influenced by community factors such as culture, traditions, government interventions, and the physical environment. Busse (2017) argues that applying SLA universally to all development initiatives, including community-based programs, may not be practical for local contexts.

## **III. Research Methodology**

This study employed a concurrent mixed-methods research design, which integrates both qualitative and quantitative approaches to achieve the research objectives (Almeida, 2018). Bell, Warren, and Schmidt (2022) describe this design as simultaneously collecting both qualitative and quantitative data. The target population comprised 7,333 HSNP recipient households and 100 key informants, including 42 NGO representatives, 37 NDMA officials, and 21 village administrators (NDMA, 2022). Stratified sampling was employed to select household heads. In this study, the strata were the seven wards of Turkana West Sub-County. The sample size for household heads was determined using the Krejcie and Morgan (1970) formula, as detailed below:

$$n = \frac{\chi^2 \times N \times P(1-P)}{(ME^2 \times (N-1)) + (\chi^2 \times P \times (1-P))}$$

Where;

$n$  = sample size

$\chi^2$  = the chi-square value for degree of freedom at the desired confidence level (3.841 for 95% confidence level)

$N$  = population size

$P$  = population proportion (assumed to be 0.5 for maximum sample size)

ME = degree of accuracy (margin of error) expressed as a proportion (0.05)

For selection of household, the sample size was calculated as follows;

$$n = \frac{3.841 \times 7333 \times 0.5 \times 0.5}{0.05^2 \times (7333-1) + 3.841 \times 0.5 \times 0.5}$$

$$= 365 \text{ households}$$

Proportional allocation was applied to calculate the sample size for each ward. Simple random sampling (lottery method) was used to select household heads at the location and village levels. Purposive sampling was applied to choose the sample size for NGO representatives, village administrators, and NDMA officials. This study used a 30% sample size for each of the three groups, resulting in 30 key informants: 13 NGO representatives, 10 NDMA officials, and 7 village administrators. The total sample size for the study was thus 365 household heads and 30 key informants. A structured questionnaire was utilized as the primary instrument for data collection from HSNP beneficiary households' heads, aligning with the research objectives. Additionally, an interview guide containing open-ended questions was utilized to gather data from key informants recognized for their expertise on the topic. Quantitative data was analyzed using simple descriptive statistics. After all responses had been coded into a code book, the researcher used Statistical Package for Social Sciences (SPSS) to generate simple descriptive data in form of frequencies, means and percentages. After transcription of recorded raw data, deductive coding was employed to analyze qualitative data. Patterns of relationship among the study variables were established through correlation analysis of the Spearman's rank. The Statistical Package for Social Sciences (SPSS) version 28 aided in data analysis. Finally, frequency tables, pie charts, and graphs were used for data presentation. Verbatim were also added to complement quantitative findings.

#### IV. Results and Discussions

The study findings are presented using frequency tables, pie charts, and bar graphs. Quantitative data was analyzed using descriptive and inferential forms, while qualitative data was analysed using thematic analysis. These are then interpreted in the discussion section to determine whether they are complementary or divergent (Creswell & Plano, 2018).

##### 4.1 Response Rate

The study targeted a sample of 365 households from Turkana West Sub-County, Kenya. The results were presented in table 4.1 below.

**Table 4.1: Response Rate**

<b>Response</b>	<b>Frequency (N)</b>	<b>Percentage (%)</b>
Completed questionnaires	352	96.4
Uncompleted questionnaires	13	3.6
<b>Total</b>	<b>365</b>	<b>100</b>

352 questionnaires were successfully administered and completed hence a response rate of 96.4%. Kothari (2019) suggests that response rates above 70% are considered appropriate for data analysis. Therefore, the response rate of 96.4% in this study was considered suitable for analysis and generalization of the findings. For the key informants, 27 out of the 30 (90%) interviews were successfully conducted.

##### 4.2 Demographic Information of Respondents

The study sought to understand the demographic information of the respondents, including gender, age, marital status, household size and how long a household has benefited from HSNP.

###### 4.2.1 Gender of Respondents

According to Alawode *et al.* (2020), and Lawrence and Rotich (2021), gender is a very important variable of any household. Gender plays an important role in influencing decision-making on pertinent issues at the household level since male may have different perspectives on the food security agenda as compared to their female counterparts. The results on gender of the respondents are presented in Figure 4.1.

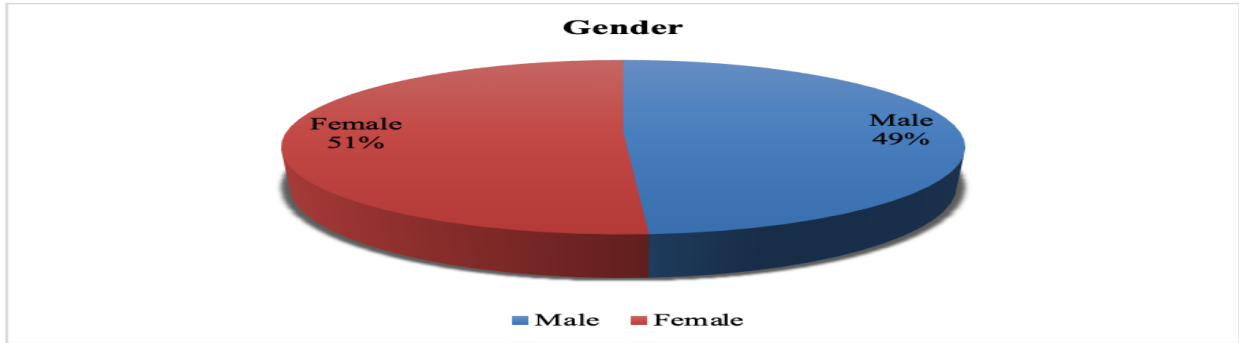


Figure 4.1: Gender of Respondents

The results revealed that majority of the respondents (51%) were female and 49% were male. The results represent a traditional Turkana community household where matters of household food-related matters are handled by women hence given a chance by men to take part in the study.

#### 4.2.2 Age of Respondents

The study findings on the age distribution are presented in Table 4.2.

Table 4.2: Age of respondents

Age	Frequency (N)	Percentage (%)
18 years and below	5	1.4
19-25 years	27	7.7
26-35 years	58	16.5
36-50 years	206	58.5
51 years and above	56	15.9
<b>Total</b>	<b>352</b>	<b>100</b>

The results indicate that the majority of respondents (58.5%) were aged between 36 and 50 years. Additionally, 16.5% fell into the age range of 26 to 35 years, 15.9% were 50 years and above while 7.7% of the respondents were between 19 to 25 years. The least percentage was for households of 18 years and below which was represented by 1.4%.

#### 4.2.3 Marital Status

Findings on the marital status of the respondents are presented in Figure 4.2.

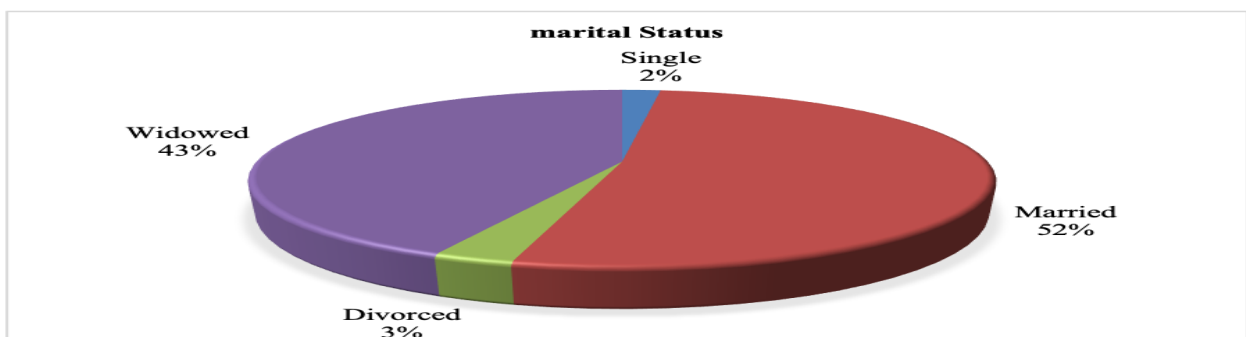


Figure 4.2: Marital Status

Majority (52%) of the respondents were married indicating they had families. Additionally, 43% were widowed while 2% and 3% represented single and divorced respectively.

#### 4.2.4 Household size

The findings on the number of members in each household are presented in table 4.3.

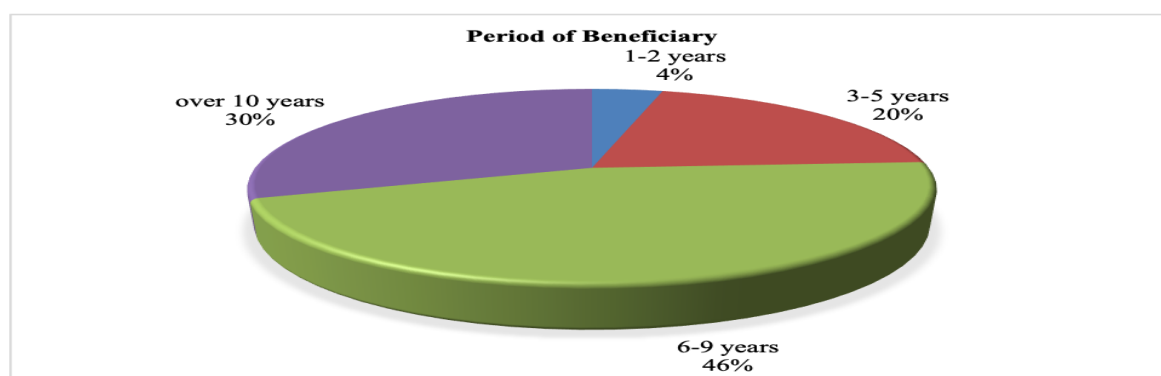
**Table 4.3: Household size**

Household size	Frequency (N)	Percent (%)
1-4	23	6.5
5-9	300	85.2
10 and above	29	8.3
<b>Total</b>	<b>352</b>	<b>100</b>

The findings indicate that majority (85.2%) of the respondents had a household size of 5 and 9 members, while 8.3% were represented from households that had 10 and above household members. Only 6.5% respondents had a household size of 1 to 4 members. These results suggest that majority of the households enrolled in HSNP cash transfer are large in size. Thus, the ripple effect of the HSNP cash transfers on households can be felt to the greatest extent.

#### 4.2.5 Period of Benefiting from HSNP

In order to determine how long a household has benefited from HSNP, the study provides the results as shown in Figure 4.3.



**Figure 4.3: Period of Benefiting from HSNP**

The findings revealed that a notable percentage (46%) of the respondents have been beneficiaries of HSNP for 6 to 9 years. 30% of the respondents had been in HSNP for a period of over 10 years. Consequently, 20 % of the respondents indicated having been on the programme for 3 to 5 years. Only 4% of the respondents had been on the program for less than 3 years which implies a recent enrolment of new households into the programme.

### 4.3 Results Based on the Objective of the Study

This section presents findings of the study in line with the specific objections. Results from the key informants: NGO officials, NDMA Officials and village administrators. These officials were coded as **NG00x** for NGO officials, **ND00x** for NDMA officials and **VA00x** for village administrators where x represents numeric (1, 2, 3.....n) are added to complement the quantitative data. The findings are shown below.

#### 4.3.1 HSNP Cash Transfer and Food Insecurity

The study sought to determine the impact of HSNP cash transfer on households' food security in the study area. The findings are presented in Table 4.4.

**Table 4.4: HSNP cash transfers and Food Insecurity**

Statements	SD	D	NS	A	SA	Mean	S. D
HSNP has enhanced accessibility to food in 0 this household		80 (22.7%)	12 (3.4%)	156 (44.3%)	104 (29.5%)	4.00	.813
HSNP has improved diet diversity in this household	0	65 (18.5%)	11 (3.1%)	200 (56.8%)	76 (21.6%)	3.97	.725



Food utilization has improved as a result of provision of HSNP cash to this household	58 (16.5%)	16 (4.5%)	181 (51.4%)	97 (27.6%)	4.02	.790
Food availability in the household is influenced by HSNP cash benefits	53 (15.1%)	11 (3.1%)	179 (50.9%)	109 (31.0%)	4.10	.760
HSNP cash has enhanced sustainability of food in this household	77 (21.9%)	0	209 (59.4%)	66 (18.8%)	3.97	.638
Overall, household's food security has been affected by HSNP provision to the households	65 (18.5%)	11 (3.1%)	200 (56.8%)	76 (21.6%)	3.97	.725

The study examined whether HSNP has enhanced accessibility to food in households in Turkana West Sub-County. The results revealed that 44.3% agreed while 29.5% strongly agreed with the statement. 22.7% of the respondents disagreed and while 3.4% unsure with the above statement. This implies that majority of the respondents felt that receiving HSNP cash transfer improved their ability to obtain food from the market or other sources and reduced food insecurity. Supporting these results, a 47-year-old household head (HH053) with two children stated that:

*"The program has been a significant milestone for the residents in our village. Vulnerable households now have access to food and can at least have a meal each day. It's a vast improvement from the past when some families went days without food."*

Additionally, a village administrator (VA002) commented:

*"This program has been crucial for the residents in our village. The most vulnerable households can now access food, ensuring they have at least one meal per day. It's a considerable improvement compared to the past, where some families went without food for days."*

The study also highlights the impact of HSNP diet diversity among households in Turkana West Sub-County. A significant majority of respondents; 56.8% agreed and 21.6% and strongly agreed with the statement. However, 18.5% of the respondents perceived that HSNP had not improved diet diversity, and 3.4% of the respondents were uncertain of the HSNP's impact on diet diversity. This indicates that households receiving HSNP cash transfers are able to consume different types of food. In support to those with divergent perceptions on the impact of HSNP on diet diversity, VA001 stated that;

*"We appreciate the significance of HSNP. It has supported households here. However, there is not much impact on diet diversity since the amount is little and can only be used on cheap foods. Many of the households cannot eat variety of food because the amount received is too little"*

Regarding the impact of HSNP on food utilization, that is, making good use of food accessed, the results established that 51.4% of the respondents agreed and 27.6% strongly agreed respectively with the statement. Conversely, 16.5% felt that food utilization had improved as a result of provision of HSNP cash to households in the study area. These results are an indicator that HSNP has significantly enhanced food utilization, reflecting an overall improvement in nutritional status and food security among households in the study area. Findings on the impact of HSNP on food availability revealed that majority: 50.9% and agreed and 31% strongly agreed that HSNP cash benefits positively influenced food availability in the household. However, 15.1% of the respondents disagreed, indicating that while HSNP cash benefits enhanced availability of food and reduced food vulnerability, minority thought otherwise.

The study also investigated whether HSNP cash benefits had improved the sustainability of food in households within Turkana West Sub-County. A significant portion of respondents, 59.4%, agreed, while 18.8% strongly agreed that HSNP had enhanced the sustainability of food in their households. However, 21.9% of respondents disagreed, indicating dissatisfaction with the program's effectiveness in ensuring sustainable food security.

Verbatim statements from NGO officials and village administrators, such as NG005, NG011, NG013, VA002, VA003, and VA007, supported these findings. For instance, NG013 expressed:

*"HSNP is beneficial for local households in this area. However, there are delays in payments and the amount received, KES 2,700 monthly per beneficiary, is insufficient in the long run. Even those who have been part of the program for an extended period still face poverty, inadequate food, and water scarcity."*

Similar sentiments were shared by village administrators VA002 and VA007, as well as NDMA official ND001, and NGO officials NG003 and NG012. The study finally assessed whether household's food security had been affected by HSNP provision to the households. The results revealed that 56.8% of the respondents agreed while 21.6% strongly agreed that HSNP provision had a positive impact on food security. Nonetheless, 18.5% of the respondents disagreed, pointing to a proportion of households who had realized impact of HSNP on food security of beneficiaries.

#### 4.4 Correlation Analysis

The study examined the relationship between HSNP and food security (FS) using Spearman's rank correlation (r). The Spearman's Correlation analysis is discussed below.

##### Spearman's Correlations Analysis

The Spearman's Correlation analysis, as described by Cohen, West, and Aiken (2013), assesses the linearity between variables to make population-wide inferences. The relationships were tested at a 95% confidence level. A correlation was deemed strong and significant if  $r > 0.6$  and  $p < 0.05$ , moderate if  $0.5 < r \leq 0.6$ , and weak if  $r \leq 0.5$ . The results are detailed in Table 4.8.

**Table 4.8: Spearman's Correlations Analysis**

	HSNP		HSNP	FS
Spearman's rho	HSNP	Correlation Coefficient	1.000	.912**
		Sig. (2-tailed)	.	.000
		N	352	352

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

Correlation measures the strength and direction of relationships between variables, ranging from -1 to 1. A positive correlation indicates that as one variable increases, so does the other, while a negative correlation means one variable decreases as the other increases. The Hunger Safety Net Programme (HSNP) shows a highly significant positive correlation with food security ( $r = 0.912^{**}$ ), indicating that HSNP has significantly improved household food security in Turkana County. Effective implementation of HSNP is linked to improved food security. Thus, HSNP is effective in mitigating food insecurity and improving living standards in the study area.

#### 4.5 Discussion of Findings

##### 4.5.1 Hunger Safety Net Programme and Households' Food Security

The first objective of the study sought to examine effectiveness of HSNP on mitigating households' food insecurity in Turkana West Sub- County, Kenya. The study results established that the HSNP had influenced households' food security in the study area. This study implies that receiving HSNP cash transfer had improved the ability of the residents of the study area to obtain food from the market or other sources and reduced their food insecurity. The study results further revealed that majority of the households in the study area were able to diversify food requirements in the study area. Further, it was established that households benefited from receiving HSNP cash transfer and made them to increase their food stocks which aided them in reducing their food vulnerability.

The findings of the research concur with Bastagli *et al.'s* (2019) study, which established that various global studies show positive impacts of cash transfer programs on poverty reduction and food security. The current study aligns with the positive impact of HSNP cash transfer benefit on mitigating food insecurity both at the global level and at the local level. The findings also align with Raghunathan *et al.'s* (2017) study, which established that a cash transfer scheme in India positively affected household food security.

The study aligns with these findings, emphasizing the importance of improving the quantity and quality of food for the households. However, Bastagli *et al.'s* (2019) study contradicts with the findings of the key informants who noted that while HSNP has been in existence for many years, the question of food insecurity still exists in the study area and this has minimized dietary of the residents. Majority of the Key informants noted that HSNP program was effective in the short run but not in the long run. They noted that even those who have been on the HSNP program for long still complain about its effectiveness to promote dietary diversity in the study area.

Key informants also noted that HSNP has been effective in mitigating household food insecurity in Turkana West Sub- County but to the minimal extent. The study results revealed that while some of the respondents agreed that HSNP had mitigated food insecurity in the study area, others disagreed that HSNP may have worsened the situation in the study area. They noted that in some households, expenditure on food was not enough as many households had other needs like education, water, medicine amongst other needs and it also brought about unnecessary conflicts between husband and their wives.

The data from key informants above agree with Falb *et al.* (2020), who found mixed and inconclusive results of cash assistance or humanitarian assistance programs on food security outcomes in Syria. The researcher noted that some of the households have many issues that the proceeds of the cash transfer program may not be able to solve to entirety and they may not give these households power to improve on their purchasing power parity. The study by Falb *et al.* (2020), also highlight the need for more rigorous and

comprehensive evidence on the impact of cash transfers on food security in contexts of acute food insecurity like Turkana County.

Furthermore, the findings support Donkoh et al.'s (2014) study, which found that cash transfers in Ghana increased food expenditure and consumption. The study supports this study by underscoring the link between cash transfers and food security outcomes. Additionally, the findings confirm Eyase's (2015) study, which found that cash transfers in Kenya positively influenced well-being, including food consumption and education for orphans and vulnerable children. The study confirms these findings and expands on the effectiveness of HSNP in arid and semi-arid settings.

The findings contrast with the study of Jeong and Trako (2022), who found mixed or inconclusive results of cash assistance or humanitarian assistance programs on food security outcomes in Ethiopia. These studies suggest that the effectiveness of cash transfers may depend on various factors, such as the size, frequency, duration, and modality of the transfers, the market and financial conditions, the household and community characteristics, and the complementary interventions and policies. The study summararily shows that HSNP has mixed results on food insecurity in the study area since food security had not been achieved fully for the many years the program has been in existence. The changes that have been brought about by the above programme have been minimal for the time the program has been in existence.

In light of these findings, the SLA emphasizes the importance of diverse assets and strategies for improving livelihoods. The HSNP has enhanced access to financial assets (cash transfers), allowing households to improve food security. However, the mixed results suggest that solely financial interventions may not be sufficient. A comprehensive approach addressing human (education, health), natural (water, land), physical (infrastructure), and social (community networks) assets is necessary for sustainable livelihood improvement.

## **V. Conclusions and Recommendations**

### **5.0 Introduction**

This section presents the conclusions and recommendations for the study.

### **5.1 Conclusions of the Study**

The findings underscore the substantial positive impact of the Hunger Safety Net Programme (HSNP) on food security and accessibility in Turkana West Sub-County. While a majority of respondents reported positive impacts across various aspects of food security, there remains a notable minority facing challenges. These findings emphasize the need for ongoing support and targeted interventions to address disparities and ensure equitable benefits for all households. It underscores the importance of sustained efforts to combat food insecurity and maximize the effectiveness of the HSNP in improving the lives of vulnerable communities in the region.

### **5.2 Recommendations of the Study**

The following recommendations were drawn from the findings of the study;

- i. Targeted support programs within the HSNP framework should be developed to address specific needs identified in the study, such as providing financial and livestock literacy training to enhance savings and cash management skills among beneficiaries.
- ii. The Government and development partners should foster community engagement and participation in the design and implementation of HSNP initiatives to ensure a responsive and need-based programme.
- iii. Provide capacity-building initiatives to empower beneficiaries with the skills and knowledge necessary to maximize the benefits of HSNP cash transfers. This could include financial literacy training, healthcare education, or vocational skills development, enabling them to better support and sustain the gains achieved through the HSNP.
- iv. Implement robust monitoring and evaluation mechanisms to continuously assess the effectiveness and impact of the HSNP interventions, ensuring that they remain responsive to the evolving needs of beneficiary households.

### **5.3 Areas for Further Research**

Based on the findings of this study, several areas warrant further research;

- i. Longitudinal studies should be undertaken to assess the sustained effects of HSNP on household food security, wellbeing and accumulation of productive assets over time. This will help to understand whether the initial positive impacts observed in this study persist or change over the long term.
- ii. Comparative studies can be conducted to assess the effectiveness of HSNP relative to other social protection interventions of addressing household food security. Outcomes of HSNP across different geographic areas or demographic groups can help to identify best practices and areas for improvement.

- iii. Gender-sensitive research can be conducted to understand how HSNP impacts intra-household dynamics between men and women, and whether there are differences in outcomes between male-headed and female-headed households.

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