



Impact of Humanitarian Food Aid on Food Security in Turkana County

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Abstract

Turkana County has been ranked as one of the most food-insecure Counties in Kenya, making it a hotspot of food insecurity. Turkana County has received substantial humanitarian food aid for over two decades, with funding increasing from US\$89.3 million in 2018 to US\$310 million in 2022 through multiple international and local organisations. The significant investments in humanitarian food aid call for the need to assess the chronic food insecurity. Despite this sustained intervention, the county remains Kenya's most food-insecure region, with persistent malnutrition rates and chronic dependency on external food assistance. This paradox raises critical questions about the effectiveness of these humanitarian food aid programmes and food security outcomes. The current study sought to assess the impact of Humanitarian food aid on food security in Turkana County. The study was anchored on a theoretical framework guided by the theory of access. The study utilised descriptive research design. The study which was conducted in Turkana County, targeted household heads, county government officials and humanitarian agencies involved in food security within Turkana County. The study used both probability and non-probability sampling techniques. The key findings of the study indicated that 106 (30.2%) agreed and 57 (16.2%) strongly agreed that food aid had improved household food security. The findings further revealed that 105 (29.9%) agreed and 34 (9.7%) strongly agreed that food aid had increased access to nutritious food in the County, and 97 (27.6%) agreed and 46 (13.1%) strongly agreed that food aid reliance had reduced due to better food security. Overall, the findings revealed that humanitarian food aid reached the most vulnerable households in Turkana County; however, there were concerns about the issues of utilisation of the food given to vulnerable individuals. The study revealed that food aid has played a crucial role in alleviating hunger, improving household food security, and reducing malnutrition among vulnerable populations in Turkana County.

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Introduction

The rising food insecurity is predominantly driven by conflict and extreme climate shocks. Developing nations that have limited resources and poor infrastructure are among the worst affected, as many depend on foreign assistance to respond to the growing food crisis (Tschunkert et al., 2023). There is an increasing policy consensus on the need to strengthen the synergy among humanitarian, development, and peacebuilding (Tschunkert & Vogel, 2023). Key donor governments, multilateral agencies and international organisations signed the 'Grand Bargain: Agenda for Humanity' at the 2016



United Nations World Humanitarian Summit (WHS), which contained commitments to better align and consolidate the humanitarian and development interventions while also integrating peace aspects. However, only a small proportion of foreign aid is directed in support of the integration of the pillars of food security (Redvers & Parker, 2019). Despite the significant volume of aid and, in some cases, foreign loans by the governments of developing nations, the prevalence of food insecurity is still on the rise.

To improve the effectiveness and impact of Human food aid, Cash-based approaches, or cash and voucher assistance (CVA) to delivering humanitarian aid have significantly increased in the last decade. This has been fostered by at least two key factors. First, in many contexts, cash-based programming is more effective and cost-efficient than in-kind aid (Tschunkert & Vogel, 2023). The structure of food systems is intertwined with short-term, medium-term, and long-term interventions. This makes integrated approaches within and outside the food system critical through collaborative efforts. Quack & Südhoff (2020) suggest that humanitarian actors can provide immediate food aid to people affected by disasters while simultaneously working with communities to increase long-term food production using local resources to help reduce conflicts linked to productive resources. Likewise, development and peacebuilding actors can incorporate elements of humanitarian activities into their work (Slim, 2019). All these require collaboration and support from the government and funding partners. There still exists a challenge in the silo way of operation of how donor agencies, state and non-state actors operate. This extends to the way operations are financed, thereby spilling over to how interventions are implemented (OECD, 2022). Therefore, an integrated approach is an opportunity to capitalise on the comparative advantage to help improve food security (WFP and Conflict Sensitivity Resource Facility, 2020).

Delivery of humanitarian food aid presents opportunities for capacity building of the community in various skills including food production (Grace, 2020). This enhances the food systems and promotes robust food security structures through resilience-building over time. For instance, investing in farming activities is a long-term solution to alleviate hunger and poverty (Sargison, 2020). Social protection approaches such as financial support promote early recovery to the population affected by crisis in addition to economic stimulation of the local markets. This ensures that the affected population can meet their basic needs and improve their livelihoods.

Theoretical Review

The study was anchored on the Theory of Access. The theory was conceived by Ribot & Peluso (2003) who theorised that access is a broad concept that includes the ability to derive benefits from things. They denote that access is tied to the “bundle of power” which is a wider range entailing structural and relationships that enable people to derive benefit from capital, social relations, identity, knowledge, authority, technology, labour and market mechanisms (Ribot & Peluso, 2003; Mutea et al., 2020).

Guided by this theory, the study assessed how food security is achieved through access to humanitarian food aid. Therefore, people derive benefit from humanitarian food aid programmes through the associated food people can access from such programmes. People also benefit from the other opportunities including provision of agricultural inputs, empowerment (bundle of power) and the associated training (knowledge) to boost peoples’ livelihoods. Thus, the presence of humanitarian food aid programmes prevents the depletion of productive resources (capital) such as land and livestock which tend to be exchanged for food leading to long-term chronic food insecurity and poverty.



Materials and methods

Research Design

The study utilised descriptive research design. Descriptive research design was utilised by the researcher to understand the research problem before investigating why it even happens (Bouchrika, 2025).

Study Area

The study was conducted in Turkana County, which is located 3.3122° N, 35.5658° E. Turkana County is the second largest county in Kenya after Marsabit County with a land area of 71,597.8km². It borders Uganda to the west, South Sudan to the northwest and Ethiopia to the northeast.

Turkana is the most food insecure county and receives many humanitarian food aid programmes (Ngasike & Gitonga, 2024; Etyang, 2021; Kenya Commission on Revenue Allocation, 2011) due to frequent disasters. The county also experiences severe food insecurity in comparison to other counties and it is a hotspot of food insecurity and severe malnutrition (IPC, 2023).

Study Population

The Primary Population for this study consisted of Household Heads in Turkana County who represent the direct recipients and intended beneficiaries of humanitarian food aid programmes. According to the Kenya National Bureau of Statistics (KNBS, 2019), Turkana County has 164,519 households distributed across six sub-counties, with a total population of 926,976 people. In this study two of the six sub-counties were selected for the data collection exercise. The two wards were Turkana South with 9,692 households and Turkana South with 6,373. In this regard, the target population of the study was 16,065 households.

The Secondary Population comprised Key Institutional Stakeholders who play critical roles in the design, implementation, coordination, and oversight of humanitarian food aid programmes in Turkana County. This population included county government officials responsible for disaster management and food security policy, local administrative leaders who interface directly with, institutional implementers of food aid programmes, and educational sector representatives. These stakeholders provide essential perspectives on programme design rationale, implementation challenges, coordination mechanisms, policy frameworks, and observed impacts from institutional viewpoints.

Sampling Techniques and Sample Size

The sample size of the household heads was determined using Yamane (1967) method.

$$n = N / (1 + N (e)^2)$$

Where:

n: is the sample size.

N: size of population

e: the margin of error considered is 5% for this study.

Therefore:

$$n = 16,065 / (1 + 16,065 \cdot (0.05)^2) = 386$$

The sample size was proportionately distributed in the four wards and their respective sub-locations.

The researcher utilised purposive sampling to select the four wards where the study was conducted. The wards were Kalapata, Lokichar, Kerio and Kangattha wards. In each of the wards, the researcher used simple random sampling, systematic sampling and convenience sampling to reach each household head who participated in the study. The researcher randomly selected a starting point for



each of the wards to determine the household to start from; this was done by tossing a coin in order to determine a random starting point. The researcher and research assistants then applied systematic sampling by counting three households from the random starting point and picked each third household as a respondent in this study. The process was repeated in each ward until the required number of respondents was reached. In cases where the household picked did not have anyone present at home; convenience sampling was used to pick the next available house.

Purposive sampling was used to sample Key informants from the county government officials, including the County Commissioner, County Secretary, Director of Public Service and Disaster Management, Director of Nutrition and Dietetics, Chief Officer for Administration and Disaster Management, and Chief Officer for Agriculture and Land Reclamation.

A sample size of 10% was used to determine the sample size of School Heads, FBO Programme Managers, CBO Programme Managers and Chiefs, whereas 30% was used to determine the sample size of NGO Programme Managers. This led to a total of 20 key informants. Simple random sampling and convenience sampling techniques were used to identify and select these key informants.

Focus Group Discussions (FGDs) were conducted with opinion leaders within the community who included elders, women and the youths. There are four wards that were targeted by this study. As such, two FGDs were conducted in each ward, leading to a total of eight FGDs. Three FGDs were conducted for only males who were community elders from different wards, another three FGDs were made up of women opinion shapers in the community, and there were two FGDs for the youths, where there was one for male youths and another for female youths.

Data Collection and Study Instruments

Primary data was obtained through field research. This included the use of Questionnaires, FGD Guides and KII schedules.

Questionnaire for Household Heads

The study employed pre-tested structured questionnaires to get information from household heads. The questionnaires were administered directly to the respondents through face-to-face interviews by the researcher and the research assistants to avoid misinterpretation of the questions.

Key Informant Interview Schedule

The Key Informant Interview Schedule (KII) was used to obtain qualitative data from key informants.

Focus Group Discussion Guide

A Focus Group Discussion Guide was used to collect qualitative data from groups of respondents in the study area.

Data Analysis and Presentation

Data analysis involved both qualitative and quantitative techniques. The quantitative data were analysed through descriptive statistics like percentages and frequencies (Mugenda & Mugenda, 2019). Data was analysed using SPSS version 26. SPSS was used to generate descriptive statistics. Descriptive statistics in the form of frequencies and percentages were used. Qualitative data analysis was done using content and interpretive analysis for a comprehensive description to provide insight into the study. Qualitative data were transcribed before coding into categories and then organised into thematic areas related to the research objectives. Generalisation of the findings from the various data collection instruments was conducted. Quantitative data were presented in the form of tables. Qualitative data were presented in narrative form and through verbatim quotations of respondents.



Results and Discussions

The study sought to establish the Impact of Humanitarian Food Aid on Food Security in Turkana County. The findings were as shown in Table 1 and discussed in the subsequent sub-sections.

Table 1: Impact of Humanitarian Food Aid on Food Security in Turkana County

Impact on Food security	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total (N)
Food aid has reduced instances of hunger	55 (15.7%)	48 (13.7%)	104 (29.6%)	97 (27.6%)	47 (13.4%)	351 (100%)
Humanitarian food aid has improved household food security	24 (6.8%)	63 (17.9%)	101 (28.8%)	106 (30.2%)	57 (16.2%)	351 (100%)
Food aid has increased access to nutritious food for vulnerable populations	45 (12.8%)	44 (12.5%)	123 (35.0%)	105 (29.9%)	34 (9.7%)	351 (100%)
Reliance on food aid has decreased over time due to improved food security	23 (6.6%)	58 (16.5%)	127 (36.2%)	97 (27.6%)	46 (13.1%)	351 (100%)
Food aid has contributed to reducing malnutrition among children	30 (8.5%)	57 (16.2%)	114 (32.5%)	106 (30.2%)	44 (12.5%)	351 (100%)

Source: Field Data, 2025

Food Aid and Hunger in Turkana County

The study assessed the extent to which household heads believed that food aid had contributed to reducing hunger in Turkana County. Of the 351 respondents, 55 (15.7%) strongly disagreed and 48 (13.7%) disagreed, indicating that nearly 30% of participants were doubtful about the impact of food aid on reducing hunger. Meanwhile, 104 (29.6%) remained neutral, suggesting uncertainty or variability in experiences across the county. On the other hand, 97 (27.6%) agreed and 47 (13.4%) strongly agreed that food aid has indeed reduced hunger. These results suggest a fairly balanced perception, with slightly more respondents leaning toward agreement, but with a considerable number expressing scepticism or uncertainty.

The results aligned with Wahlberg (2008), who contended that food aid significantly mitigates hunger and can be provided either as tangible food products or through cash for purchasing food. By providing emergency food aid, governments, UN agencies, and non-governmental organisations can save millions of lives when natural disasters or conflicts jeopardise individuals' access to food. Furthermore, providing non-emergency food assistance, such as school lunches, can enhance health and incentivise school attendance, which is crucial for a nation's long-term growth. However, the existing global food aid system is fraught with issues. Donors frequently neglect to provide sufficient food assistance and provide aid tardily and inconsistently. Food aid may also compromise local agricultural output in recipient nations and jeopardise long-term food security.

Cassimon et al. (2023), contend that the significance of food aid in combating hunger and malnutrition among the impoverished and vulnerable populations in developing nations is mostly undisputed, except in instances of corruption and inadequate governance. Donors may also seek to allocate food aid to nations that have enhanced food security and nutrition in an effort to attain a zero-hunger status, hence leading to a correlation between increased aid and improved food and nutrition security levels, rather than a direct causation.



The findings further conformed to Ribot & Peluso's Theory of Access by indicating that the impact of humanitarian food aid in Turkana County is more about the ability to benefit from the aid rather than formal eligibility (Ribot & Peluso, 2003). This suggests that those with stronger social networks and physical access, such as timely information and short travel distances, were more likely to report that food aid reduced hunger than those in remote places with very little access.

Humanitarian Food Aid and Household Food Security

The study sought to assess whether respondents believe that humanitarian food aid has improved household food security in Turkana County. Of the 351 respondents, 24 (6.8%) strongly disagreed and 63 (17.9%) disagreed, indicating that about one-quarter of the respondents were sceptical about the effectiveness of food aid in enhancing food security. A significant portion, 101 (28.8%), remained neutral, suggesting uncertainty or varied experiences. On the other hand, 106 (30.2%) agreed and 57 (16.2%) strongly agreed that food aid has improved household food security. Overall, the findings indicate a generally positive perception, with nearly half of the respondents affirming the role of food aid in enhancing food security, despite some reservations.

The results indicate the beneficial effect of food aid on food security outcomes. WFP (2020) indicates that in drought-impacted areas of Kenya, including Wajir and Turkana counties, humanitarian food aid has consistently alleviated the severity of hunger and malnutrition among at-risk communities. Food assistance initiatives orchestrated by entities like the World Food Programme (WFP) and local collaborators have augmented dietary diversity, increased child nutrition, and allowed households to sustain a minimum food consumption during drought crises (WFP, 2021).

In this context, humanitarian food assistance has been crucial in enhancing household food security, especially in areas impacted by conflict, natural disasters, and persistent poverty. Humanitarian aid delivers vital food commodities during crises, enabling households to fulfil their fundamental nutritional requirements, normalise consumption habits, and prevent the adoption of detrimental coping mechanisms such as meal omission, asset liquidation, or child withdrawal from education.

In precarious environments, where agricultural output is minimal and markets are unreliable or inaccessible, humanitarian food aid mitigates the adverse impacts of food scarcity on households. This is especially apparent during periods of scarcity or displacement due to conflict, when food availability and access are severely limited (FAO, 2023).

Moreover, targeted food-for-assets or food-for-education initiatives enhance long-term food security by bolstering community infrastructure, promoting school attendance, and fostering resilience. These interventions extend beyond acute hunger alleviation to improve household stability and future production (Maxwell & Fitzpatrick, 2012).

In contrast, household food insecurity poses a complex challenge, as different individuals within a home may encounter varying degrees of food insecurity, each with unique repercussions (Tarasuk et al., 2019). Adults often diminish their food consumption by omitting meals or decreasing portion sizes to shield children from hunger, a practice that can severely impair the nutritional content of the adult's diet (Loopstra & Tarasuk, 2013).

Food Aid and Access to Nutritious Food for Vulnerable Populations

The study explored whether food aid has enhanced access to nutritious food for vulnerable populations in Turkana County. Of 351 respondents, 45 (12.8%) strongly disagreed and 44 (12.5%) disagreed, indicating that roughly one-quarter of participants were doubtful about improvements in nutritional access. A significant number, 123 (35.0%), remained neutral, suggesting either uncertainty or varied experiences across communities. Conversely, 105 (29.9%) agreed and 34 (9.7%) strongly agreed that food aid had increased access to nutritious food. These results indicate a moderately



positive perception, with about 40% acknowledging improved access, though a large portion of respondents remain unconvinced or uncertain.

During an interview, an official indicated that:

To spur utilisation of the vegetables produced from the kitchen garden, we conducted nutrition education training for community health volunteers and community health extension workers from all the participating communities, who now offer continuous nutrition education and regular cooking demonstrations to their respective communities. (Interview with an officer from TUPADO, 31st May 2025).

The results concurred with Cassimon et al. (2023), who asserted that food aid can enhance the overall domestic food supply and contribute to a decrease in food prices, thereby positively affecting nutritional security for the impoverished and most vulnerable populations, particularly women and children. Furthermore, there may be a lasting impact on human capital if it increases school enrollment for children and improves maternal nutrition during gestation.

Carrillo-Álvarez et al. (2025) asserted that although the distribution of food parcels allows disadvantaged populations to obtain unaffordable food, food insecurity is likely to persist. Recipients face an elevated risk of deficiencies in protein, zinc, folate, vitamin D, and fibre. This trend is propelled by the insufficient availability of fresh fruits, vegetables, and animal-derived foods, alongside a substantial supply of sugary products, ultra-processed foods, and ready-to-eat meals. As Ribot and Peluso's Theory of Access indicates, different access points, which include several factors like social networks, logistical access, among other factors, can improve food availability and can lead to long-term human benefits, including improved schooling for children and maternal health (Ribot and Peluso, 2003).

Reliance on Food Aid and Food Security

The study examined perceptions regarding whether reliance on food aid has decreased over time due to improved food security in Turkana County. Of 351 respondents, 23 (6.6%) strongly disagreed and 58 (16.5%) disagreed, indicating that a minority believe food aid dependency has not declined. A large proportion, 127 (36.2%), remained neutral – possibly reflecting uncertainty about long-term trends or regional variation. On the positive side, 97 (27.6%) agreed and 46 (13.1%) strongly agreed that food aid reliance has reduced due to better food security. These findings suggest a cautiously optimistic perception, with over 40% seeing improvement, yet a substantial share remaining neutral or unconvinced.

The findings agreed with those of key informants, who noted that the Kenya Hunger Safety Net Programme (HSNP) sought to reduce vulnerability by providing regular cash transfers to poor households in Turkana County to reduce dependency on food aid and promote stability. They further argued that, unlike traditional food aid, the HSNP empowers beneficiaries to purchase food locally, supporting household choice and stimulating local markets. The Director of Agriculture further added that these HSNP strategies have been integrated with resilience-building efforts such as livestock insurance schemes and early warning systems.

The results contradicted Mushitsi et al. (2023) who asserted that "aid to Africa does more harm than good" and that "Africans are being compelled to be beggars, rather than achieving independence." They assert that food aid exacerbates corruption, as local officials might misappropriate portions of the aid to pay voters and sell it to wealthier nations for profit. They contended that the WFP readily acquiesces to requests from corrupt governments and dispenses excessive food aid, resulting in diminished production by local farmers, as "no one can compete with the UN World Food Programme." Recognising the issue of food aid misappropriation, the WFP re-evaluated its approach



in the 2000s and, alongside emergency food aid, introduced the concept of food assistance, which seeks to offer more sustainable solutions through multi-year plans that incorporate structural initiatives.

Food Aid and Malnutrition Among Children in Turkana County

The study sought to determine whether respondents believed that food aid had helped reduce malnutrition among children in Turkana County. Of 351 respondents, 30 (8.5%) strongly disagreed and 57 (16.2%) disagreed, reflecting some doubt about the impact of food aid on child nutrition. A large number, 114 (32.5%), remained neutral, suggesting uncertainty or limited awareness of nutritional outcomes. On the positive side, 106 (30.2%) agreed and 44 (12.5%) strongly agreed that food aid has contributed to reducing child malnutrition. These findings indicate a generally favourable perception, with over 40% acknowledging positive nutritional outcomes, though neutrality remains the most common stance.

In agreement with the findings, it emerged during the interviews that one of the most significant ways food aid has addressed malnutrition among children in Turkana is through the provision of Ready-to-Use Therapeutic Food (RUTF). These nutrient-dense pastes, often administered through Outpatient Therapeutic Programmes (OTPs), have been instrumental in treating cases of severe acute malnutrition. The Director of Nutrition in Turkana County indicated that these programmes were donor-funded by the United States Agency for International Development (USAID) and the United Nations International Children's Emergency Fund (UNICEF), providing funding to help such vulnerable children. She stated that:

With support from USAID, UNICEF has provided RUTF to 219 health centres and 490 outreach sites across Turkana to treat children with malnutrition. UNICEF has also provided medicines and a fridge for storing vaccines, renovated a borehole to provide safe water to patients and health workers, and is supporting the health centres to do mobile outreach to remote villages in the area. We partnered with UNICEF to provide critical support such as water and sanitation, as well as therapeutic food for children and pregnant women. We are hoping to help communities overcome the impact of the drought, build resilience and for children to have their basic needs met, such as nutrition, so that they can achieve their full potential here in Kenya (Interview with Director of Nutrition, Turkana County on 2nd June 2025).

School-based feeding programmes have emerged as important food aid interventions in Turkana County. Organisations such as Mary's Meals have partnered with local school institutions to provide daily meals to primary school children. These programmes not only support child nutrition but also promote school attendance and cognitive development. By offering consistent access to food, especially during hunger seasons, school feeding programmes create a safety net for vulnerable children whose households may lack sufficient food.

The results concurred with a study by Situma et al. (2019), which determined that food aid is crucial in combating hunger in Turkana County. The results of this study concurred with a publication by the International Peace Institute (2010), which indicated that WFP nutritional interventions are associated with food assistance that provides optimal nutritional benefits through both blanket and targeted supplementary feeding, as well as the integration of nutrition across all interventions. The aim is to provide the appropriate food at the designated time.

Watkins et al. (2024) asserted that a parliamentary inquiry in the United Kingdom found in 1904 that it was 'the height of cruelty' to introduce universal schooling while permitting poverty to deprive youngsters of the opportunity to study. Subsequently, the nation inaugurated its inaugural school



lunch programme. In the United States, school lunch initiatives were integral to the struggle against child poverty and the advancement of civil rights. In India, civil society organisations successfully litigated a historic lawsuit that recognised access to a nutritious school meal as a legally enforceable human right. Brazil's nationwide school feeding programme was a crucial component of the country's 'zero-hunger' initiative, which, in the decade following 2003, yielded one of the most significant human development achievements of our time.

Conclusion

In conclusion, the study reveals that while food aid has played a crucial role in alleviating hunger, improving household food security, and reducing malnutrition among vulnerable populations in Turkana County, its overall impact remains mixed and context-dependent. The study highlights that food security in Turkana will require a shift from emergency-based aid toward resilience-building strategies that strengthen local food systems, enhance agricultural productivity, and promote community ownership. Ultimately, while food aid remains a lifesaving intervention in the short-term, its long-term success depends on integrating humanitarian assistance with development-oriented approaches that foster self-reliance and adaptive capacity.

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