



## Applying Inter-Agency Logistics Planning to Management of Relief Food Aid in Turkana County, Kenya

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**ABSTRACT:** *The management of relief food by all the stakeholders such as the relief agencies, the government and the beneficiaries has proved a challenge specifically at the local level in the Turkana County. Many relevant stakeholders have collectively made efforts in applying a coordinated approach to address the challenges but the logistics related problems still persist. This study, therefore, seeks to evaluate the effect of interagency logistics planning on the management of relief food in Turkana County. The significance of this study is to contribute to the formulation of food distribution project designs and policies for better management of relief food as well as the findings adding to the theoretical body of knowledge in the area project management. The study applied a correlation research design targeting key informants including food distribution officers of the targeted agencies, the household heads and chiefs, assistant chiefs, security agencies and members of the public. Both probability and non-probability sampling techniques were used. The data were mainly collected using interview guides and questionnaires. Focus group discussions guidelines were also used to get data from community interest groups that included representatives of the elders and local administrators, the youth and the women. The data collected from the questionnaires were coded and posted into the computer data bank using the Software Package for Social Scientists (SPSS). The analysis of data was done using both descriptive and inferential statistical analyses. Inferential statistical analysis was used in testing the effectiveness of interagency logistic planning on the management of relief food aid using chi-square with a significance level of 0.05. The finding revealed that interagency logistic planning has a significant moderate effect on the management of relief food in Turkana County in terms of acceptability, community involvement, method of distribution and condition of food aid. The study recommends that all relief organizations should come together to contribute their resources in order to realize the inter-agency logistical planning, which is more expensive, but very efficient system of management. They should also ensure that there is a merged interest which is common to all, to avoid conflicts. This will ensure sufficiency of food aid to all beneficiaries.*

**Keywords:** *Food aid, interagency logistic planning, Relief food management*

### I. INTRODUCTION

The management of relief food aid is a prime responsibility of agencies involved in the alleviation of suffering or dislocation of livelihoods of communities in disaster stricken areas. The operations of these agencies are limited to designer tailor-made logistics manuals that guide their activities on ground according to their specific organizational mandates (Hale, 1999). At the global level the coordination and planning of logistics for humanitarian assistance is done by the United Nations through its implementing agencies particularly the United Nations Office for Coordination of Humanitarian Affairs (UNOCHA) which coordinates all of its emergency interventions. UNOCHA is responsible for bringing together humanitarian actors to ensure a coherent response to emergencies. The aim is to assist people when they most need relief or protection. According to the Pacific Disaster Center (2012), UNOCHA's mission is to mobilize and coordinate effective and principled humanitarian action in partnership with national and international actors in order to alleviate human suffering in disasters and emergencies, advocate for the rights of the people in need, promote preparedness and prevention and facilitate sustainable solutions (PDC, 2012). Further, the coordinating agency for logistics as an important cluster is World Food Program (WFP). Under the UNOCHA, therefore, the World Food Programme (WFP) mobilises and distributes food and coordinates logistics support for large-scale emergency relief operations through the UN Joint Logistics Centre (van Wassenhove & Samii, 2003).

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On the African continent interventions into the humanitarian emergencies is basically accomplished through the Cluster Systems established by and through the UNOCHA (UNOCHA, 2013). The cluster system aims to ensure a coordinated and more effective response in humanitarian emergencies. Under this system a lead agency is mandated to facilitate the coordination mechanisms that involve all agencies that operate in a country with a humanitarian crisis. For instance, in April 2011, after weeks of ad hoc coordination in Cairo, the Food Security & Livelihood Cluster – Libya Crisis (FS&LC), co-led by WFP and FAO, was officially activated by the Humanitarian Coordinator with the support from the newly formed, joint Global Food Security Cluster team in Rome and the regional WFP and FAO Offices in Cairo (FS&LC, 2011). However, these coordination mechanisms are not so clear in so far as the details of what is to be coordinated is concerned. More importantly, there is no clarity as to which logistics functions are articulated, handled or even planned at such platforms. The roles of national or local governments in the logistics planning process in such forums are also not clearly explained.

There is an amorphous connection between the important players involved in the management of relief food because the Logistics cluster is independent of the Food security and Livelihood Cluster (FS&LC). It is also very clear that the government agencies play a very insignificant role in planning save for the provision of security and identification of the beneficiaries. In addition, the cluster systems seek to focus mainly on the coordinated approach of responding to emergencies, rather than on the planning process itself. Specifically, very little effort seem to be exerted on the establishment of inter-agency planning platforms to develop procurement, warehousing or transport plans.

It is also clear that at the continental level, there is no African-instituted agency that is mandated with the responsibility of coordinating humanitarian relief actions against the host of calamities, emergencies and crises. In the AU, focus is mainly on peace and security issues of the African states yet humanitarian emergencies are partly a result of conflicts on the continent. What is very clear as a mandate of the Africa Union is its main focus on conflict resolutions, peace, social justice and regional cooperation among its member states. None of its nine official bodies directly deals with basic humanitarian relief operations.

There are a few attempts at coordination and logistics planning for humanitarian intervention in Africa, though this is done through specific regional organizations such as IGAD on the horn of Africa, to address Food Security and environmental protection as well as promoting and maintaining of peace and security and humanitarian affairs (IGAD, 2010). ECOWAS through Department of Humanitarian Affairs has minimal role that it plays in coordinating the planning process for relief interventions. In Kenya, whether official or otherwise, the Kenya Red Cross Society (KRCS) has been regarded as the lead agency in responding to humanitarian crises. Whenever a crisis occurs in the country, the first responders are always the KRCS. This is a fact that was even admittedly confirmed by the government in 2003. “The Kenyan government has asked the Kenya Red Cross to take charge of coordinating all humanitarian efforts to deliver non-food assistance to victims of devastating floods that have left over 40 people dead and displaced tens of thousands” (IFRC, 2003). Although there is the presence of WFP which actually leads in both the food and logistics sectors of the UNOCHA, the operations of the Kenya Red Cross has somehow overshadowed their mandate.

The Turkana area is remote and living standards are low with majority of people living below the poverty line. Low literacy levels also have contributed to the low uptake of modern technology especially on issues of agricultural practices and environmental conservation. With exception of the peri-urban area and urban centers like Lodwar, majority of the rural people are poor. The districts are also dependent on relief food, as most of its areas are arid. The situation indicates that the majority of the people are food poor owing to the fact that they depend entirely on livestock (Kaijage & Nyagah, 2009).

There are numerous food aid agencies in Turkana County because of the prevailing food security constraints. There are around four major aid agencies that are specialized in food aid distribution. The lead agency in food distribution is WFP, which has contracted out its services to organizations such as World Vision, Oxfam and Child Fund. There are also other church-based institutions which have contributed to food aid provision such as the Diocese of Lodwar, which is one of the longest serving organizations which have been in the region for the last 50years and runs over 300 food distribution centers (Diocese of Lodwar, 2010). World Vision has also been in the region since the onset of the Sahel drought of 1975 and claims to have come much earlier in 1965 for religious activities (Waithera, 2011).

In spite of efforts which have been made to address food insecurity by the relief agencies and the government, starvation and malnutrition rates have remained alarmingly high in Turkana County. Whereas interagency coordination is feasible at the global level, especially through the auspices of United Nations Office of the Coordination of Humanitarian Affairs (UNOCHA), local level coordination in affected areas that includes the intervening agencies, the state officials, community leaders, transport and security agencies is manifestly lacking. This has led to ineffective management of relief food in affected areas. From the available literature, it is not clear if there is any coordination mechanisms that facilitate inter-agency logistics planning that involves the important players in food aid provision in Turkana County except that WFP being the lead agency in this

area, has the mandate of donating food to the affected community either directly or through partner organizations. It is against this backdrop that this study assessed the effect of inter-agency logistics planning in the management of relief food in Turkana County.

### 1.1 Theoretical framework

The study was based on the Humanitarian Relationship Model developed by Alessandra Cozzolino in his book; *Humanitarian Logistics: Cross-Sector Cooperation in Disaster Relief Management* (Cozzolino, 2012). Humanitarian relief operation management engages very different players, who may have a high degree of heterogeneity in terms of culture, purposes, interests, mandates, capacity, and logistics expertise. In this study, the focus is on the roles of the UN/NGOS, donor agencies, local provincial administration and relevant government ministry in the logistics planning and how this affects the management of relief food in Turkana County. The framework also indicates critical intervening variables which may in one way or another affect the effect of changes in the independent variables on the dependent variables.

The independent variable comprises of external networks, procurement plans, transportation plans, warehousing plans, security assessments, and collaborative needs assessments while the dependent variable is the management of relief food through financial & material resources availability, stocks and movements, distribution, monitoring and evaluation, information management. The intervening variables include; the scale of local level coordination, insecurity, poor planning and legislation & policy development. This model therefore is adopted in this study to denote relationship not just between different players within the project operation arena in its implementation, but also how the involvement of these different agencies collaborate to facilitate the planning processes of important factors; the independent variables to ensure proper management of relief food aid in Turkana County.

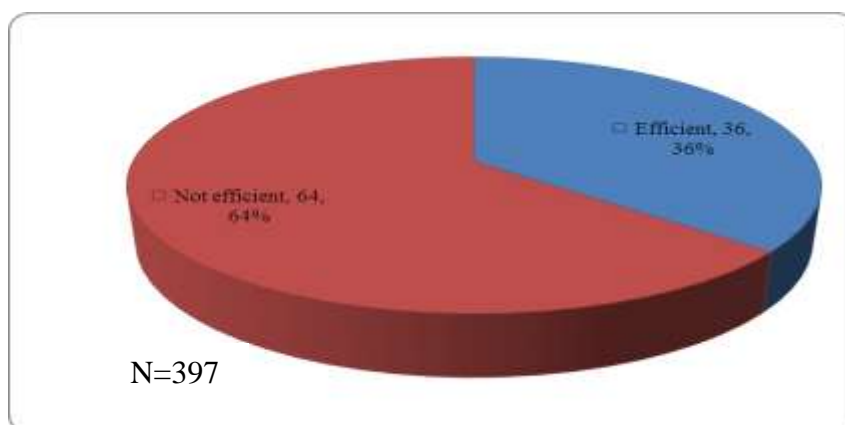
## II. RESEARCH DESIGN AND METHODS

Correlational research design was adopted. The study area was Turkana County in the North western region of Kenya. The study population included members of households, primary/secondary school heads, chiefs, assistant chiefs and village elders, coordinators of humanitarian agencies/program managers' and logistic officer of NGOs doing some relief in Turkana County. The study also targeted representatives from both National and County Government in Turkana County. Simple random sampling was also be used to pick 384 household members to be considered for data collection. Forty seven key informants and 3 community based organization were selected purposively. Instruments for data collection adopted included questionnaires, focus group discussion guidelines, interview schedules and observation checklists. This research is both quantitative and qualitative and thus used quantitative and qualitative data analysis to analyze text, interviews, field notes and questionnaires. Quantitative data was analysed by use of percentages, frequencies while inferential analysis was done using Pearson chi-square at significance level of 0.05. Data was presented in terms of charts, tables and verbatim.

## III. RESULTS AND DISCUSSION

### 3.1 Efficiency of relief food management

The objective of efficient relief food management is to reduce as many costs as possible, and it can be achieved through leanness. It is through preparedness and the immediate response that agility and leanness can be used to design and develop processes and procedures to be performed in the following steps, restore and reconstruction. In the Figure 1, the results show that majority, 64% (254) did not find the management effective, compared to 36% (143) who believed the management was effective.



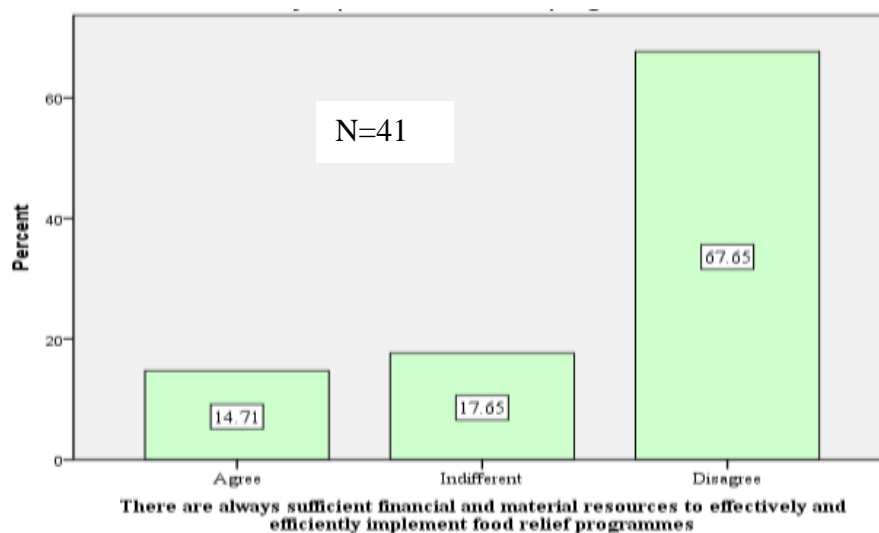
**Figure 1:** Management of relief food in Turkana County Source: Field Data (2015)

Further, 15% (60) responded that the management is not efficient because they believe that not all needy and vulnerable families benefit from relief food, while majority 25% (99) said that there is variation in the mode of distribution and the target groups. This is common, considering the fact that the residents are pastoralists, and therefore they move from one region to another in search of greener pastures. Lack of long term solutions to the residents of this region, makes them feel like the management of relief food is inefficient. Long term solution in this area would include introduction of irrigated farming. Corruption and unequal food distribution according to 20% (79) respondent was another factor that makes the management inefficient, amongst other factors like untimely distribution of relief food 10% (40), malnutrition 5% (20). The key informant interview schedule postulated that the logistic officers, co-coordinators and generally all workers in the relief food organizations who find the management efficient and gave the following reasons: 50% (14) believe that the management is effective because the targeted beneficiaries get enough food, 33% (9) believe that the food supply to the community is timely and therefore saves life and 17% (5) find the management very efficient because food loss cases are reduced.

According to IFRC (2012), in humanitarian supply chains, effectiveness ensures that we save time, and time saved means more lives saved; efficiency ensures that we save costs, and costs saved means more lives helped. The objective of the restoring sub-stage (as part of the response phase) is saving as much time as possible, and it can be achieved through agility. The basic task of humanitarian logistics comprises acquiring and delivering requested supplies and services, at the places and times they are needed, whilst ensuring best value for money. In the immediate aftermath of any disaster, these supplies include items that are vital for survival, such as food, water, temporary shelter and medicine, among others.

### 3.2 Efficiency on Financial and Material Resources

Financial and material resource availability is critical in the management of relief food. These resources are mainly acquired from donors both internally and externally. Donors provide the bulk of funding for major relief activities. Generally, donations consist of giving financial means (in-cash donations) to support humanitarian operations or providing goods and/or services for free (in-kind donations) while performing logistics operations. Therefore efficiency on financial and material resources was examined through external networks and procurement plans which determine availability of funds from the donor. The findings indicated that there were no sufficient financial resources to effectively and efficiently implement food relief programmes, according to the majority 28(68%). Among the key informants only 6(15%) revealed that financial resources availability as efficient as shown in Figure 2. Therefore, generally planners have to explore ways of financial resources availability. This will need a thorough search for the potential donors, other aid agencies, government input and local capacities.



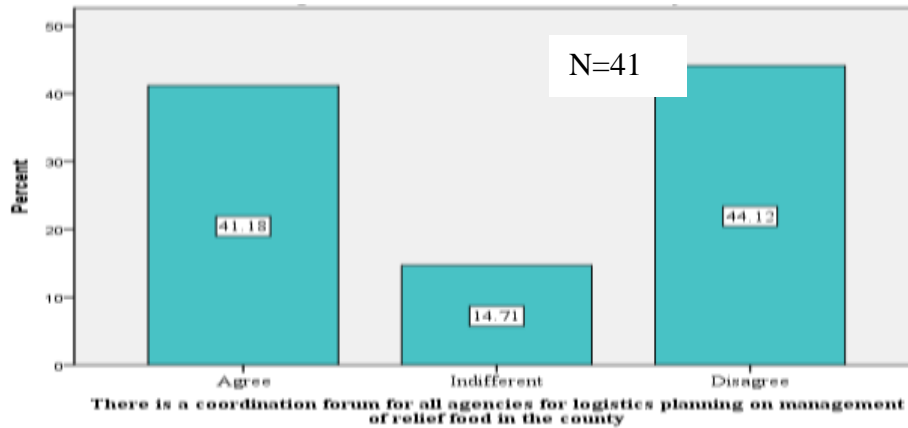
**Figure 2:** Availability of Financial Material in Turkana County

**Source:** Researcher (2016)

#### 3.2.1 Effect of External Networks of Inter-agency Logistic Planning on the Management of Relief Food

The key players in this planning are the: Government of Kenya, Non-Governmental Organizations, Donors, Churches, Schools and aid agencies. The findings revealed that NGO, CBO and County Government are the main important players in interagency logistical planning. However, faith-based organizations played the least 2(4.2%) role in interagency logistic planning. When asked if there is coordination forum for all agencies

for logistic planning on management of relief food in the county, it was evident that less than half of the interviewed respondents revealed that there was coordination 17 (41.18%) as shown in Figure 3. This revealed that interagency logistic planning has not been fully implemented to effectively manage relief food in Turkana County. Coordination is key in the management of relief food as different agencies work together to realize information management, distribution, monitoring and evaluation, stock and stock movement as well as availability of financial and material resources.

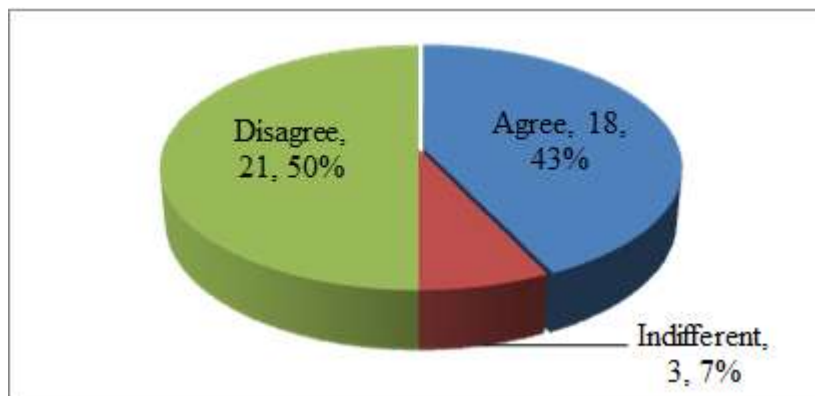


**Figure 3:** Coordination Forum for all Agencies in the Management of Relief Food Management  
**Source:** Researcher (2016)

From the Pearson Chi-square of association, there was significant moderate association between external network and availability of financial and material resource with  $\chi^2(4, N=39) = 82.821, P=0.000$ . This indicates that the level of crucial players in interagency logistical planning is slightly moderate which translates to moderate relationship with financial and material resource availability hence affecting management of relief food in Turkana County. Subsequently this results into insufficiency of food aid to the benefitting community as the procurement of food aid requires financial resources which is mostly offered by external networks. Balcik et al. (2010) states that humanitarian relief-operation management engages very different players, who may have a high degree of heterogeneity in terms of culture, purposes, interests, mandates, capacity, and logistics expertise. Kaatrud et al. (2003) specifies that key players can be categorized as governments, the military, aid agencies, donors, non-governmental organizations (NGOs), and private sector companies—among which logistics service providers are preminent. It is therefore notable that these findings confirm the critical role that the external networks especially the donor agencies play in the planning process.

**3.2.2 Effect of Procurement Plans of Inter-agency Logistic Planning on Financial and Material Resources Availability.**

A well drafted procurement plans would make donors to have confidence in the management of the relief food aid thereby providing the required financial and material resources. The end results would be sufficient relief food aid to the beneficiaries. From the interview schedules, 43% of the respondents revealed that there are procurement plans in Turkana County in the management of relief food with half of them disagreeing that they always have a joint forum with other NGOs in the making of procurement plans as shown in Figure 4



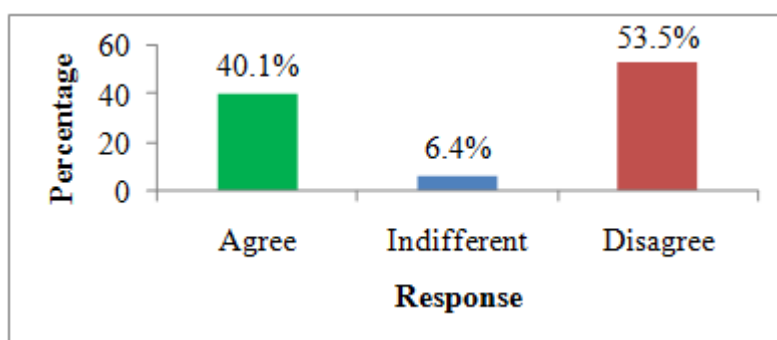
**Figure 4:** Joint Forum with other NGOs in Making Procurement Plans  
**Source:** Researcher (2016)



There was significant moderate association between procurement plans of interagency logistic planning and availability of financial and material resource with  $X^2(4, N=39) = 83.492, P=0.000$ . Donors are keen to study, analyze and interrogate procurement plans before releasing financial and material support to the NGOs in Turkana County. In cases where there are no robust procurement plans, donor may be reluctant to commit funds to procure funds not only for procurement of food aid but also non-food items and facilitation of need assessment which results to insufficient food aid in Turkana. However, the findings are indifferent from Pan American Health Organization (2001). According to Pan American Health Organization, there is need for procurements plans as the relief food comes from different sources, whether relief organizations acquire them directly, receive them as donations from the national and international community, or get them as loans. Each procurement method has its advantages and disadvantages. Whenever possible, however, the decision should be based on technical criteria and an unbiased assessment of the needs of the affected population.

### 3.3 Stocks and Stock Movements of Relief Food Aid

Relief food aids are usually located hundreds of miles away from the beneficiaries. The availability of stock and their movements ensures the benefiting communities are able to get relief food on time and in good condition and quality. From Figure 5, majority of the key informants revealed that there are always no sufficient food stocks in Turkana County as shown by 22(53.5%).



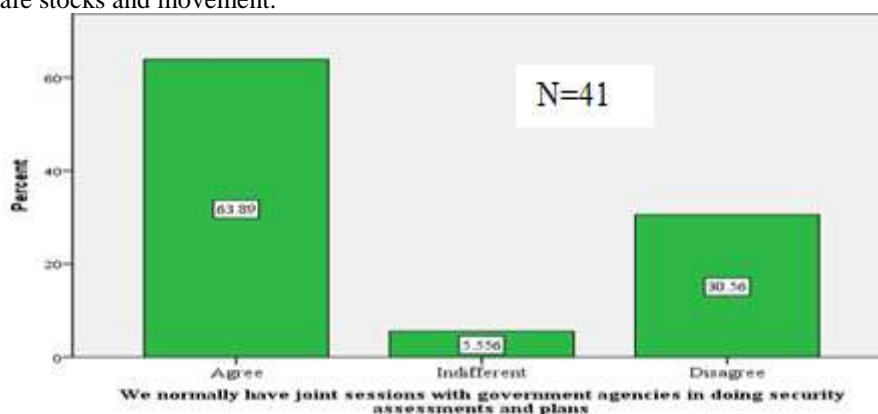
**Figure 5:** Availability of Relief Food Stocks in Turkana County

**Source:** Researcher (2016)

Stock and stock movement which determines the sufficiency of relief food aid to the beneficiaries is a factor of transport plans of interagency logistic planning which ensure food stock from sources reached the benefitting community on time and at the right quantities. Security issues may jeopardize the transportation of relief food as the personnel involved in transportation of food may be attacked or ambushed on transit thereby reducing quantity or delay in deliveries.

#### 3.3.1 Effect of Security Assessment of Inter-agency Logistic Planning on Stock and Stock Movements.

From the interview carried out, majority of the respondents 63% (26) agreed that there have been joint sessions with the Government agencies in doing security assessments and plans, while 31% (13) disagreed and 6% (2) were indifferent as shown Figure 6. This revealed that, different government agencies have been able to carry out successful security assessment plans translating to better management of relief food in Turkana County thus ensuring safe stocks and movement.



**Figure 6:** Joint session with Government agencies in doing security assessment and plans.

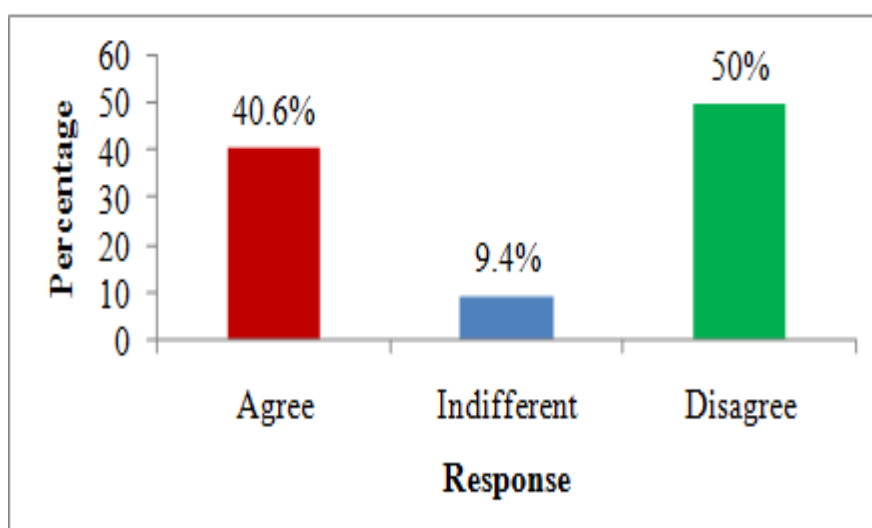
**Source:** Researcher (2016)

There was significant strong association between security assessment plans of interagency logistic planning and stock and stock movements with  $X^2(4, N=39) = 122.873, P=0.000$ . Security assessment in the management of relief food is vital to enhance stock and stock movement. In cases where the security of the personnel involvement in the movement of stock is threaten; there is possibility of looting of food aid in the transit or at the distributing centers which reduce the quantity resulting to insufficient quantities to the benefitting community. Further, there may be delays in the movement of relief food from warehousing in the ports which affect the quality of food aid leading to the benefitting community rejecting the food aid supplied to them. This indicated that for effective management of relief food, there is need for security assessment plans amongst agencies involved in relief food aid.

According to Sabala (2013), the Turkana region epitomizes the limited and weak governance institutions that continue to attract insecurity in pastoral areas as the government grapples to address the problem. Consequently, it is one of the armed pastoral communities' with little confidence in the ability of the government's security and administrative institutions to comprehensively address the widespread insecurities and vulnerabilities. This has led to acquisition of illicit small arms ostensibly for self and community protection and that of their animals which has in turn intensified to insecurity.

### **3.3.2 Effect of Transportation Plans on Stock and Stock Movements**

Transport plans are needed to move relief food and other commodities from source to the benefitting communities. Less than half 17(40.6%) of the respondents who were interviewed reveal that they always have a joint forum with other NGOs and government agencies in making commodity transport plans while half of them indicated they did not have such transportation plans as shown in Figure 7. Further, 7 (17.9%) of the interviewed respondents indicated they don't experience any transport-related hitches while 29(71.4%) disagreeing that they do not experience transport-related hitches.



**Figure 7:** Joint Forum with other NGOs and Government Agencies in Making Commodity Transport Plans  
**Source:** Researcher (2016)

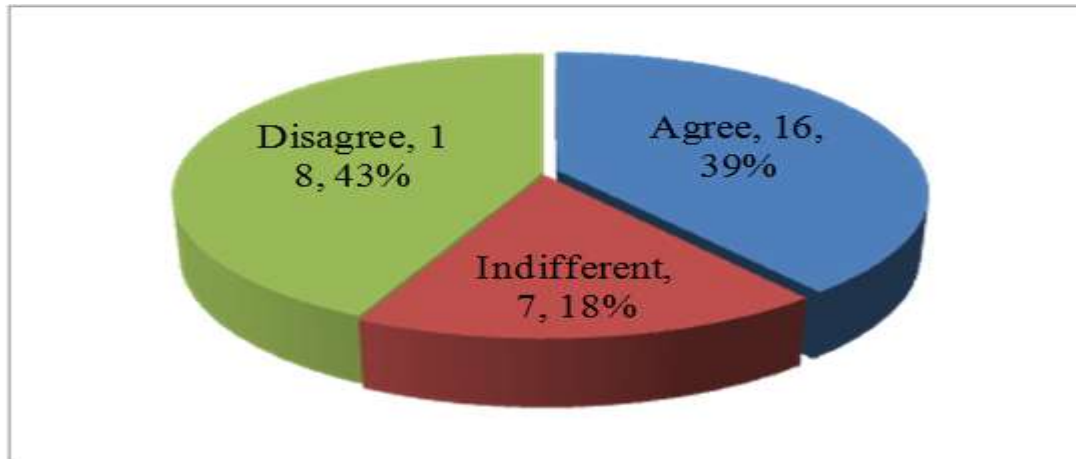
There was moderate significant association between transport plans of interagency logistic planning and stock and stock movements with  $X^2(4, N=39) = 78.931, P=0.000$ . This was evident as 81% of household respondents revealed that they depend on the relief food aid. However,

any hitches experienced during the transportation of relief food, personnel or other commodities would results to wastage of food as they may take long time to reach destination thereby jeopardizing relief food management.

### **3.3.3 Effects of Warehousing Plans of Inter-agency Logistic on Stock and Stock Movements of Relief Food.**

Warehousing plans facilitate stock storage and stock movement from source to the benefitting community. During the interview session, 11 16(39%) of the respondents indicated that there was interagency logistic planning through warehousing plans in Turkana County.

Less than half of the respondents 18(43%) did not reveal any warehousing plans as shown in Figure 8

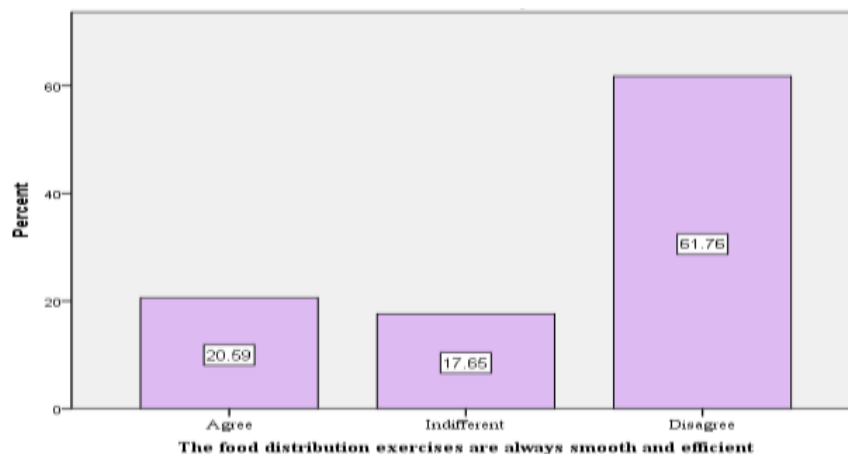


**Figure 8:** Warehousing Plans  
**Source:** Researcher (2016)

Pearson Chi-square of association revealed a significant moderate association between warehousing plans of interagency logistic planning and stock and stock movements with  $X^2(4, N=39) = 75.372, P=0.000$ , Cramer's  $V=0.448$ . From the findings, there is low 16(39%) in interagency logistic planning in term of warehousing in Turkana food relief management. This may hinder distribution of relief food from source to intend beneficiaries as lack of enough space for storage may lead to wastages thereby jeopardizing efforts of relief food management in Turkana County. There may be food at source but due to lack of enough storage facilities in the Turkana County, it would be difficult to reach those who are in need of relief food. Shipment cannot be done without the assurance of storage space at warehousing. There is need for collaboration amongst different agencies to provide space so as to enable swift movement of relief food to Turkana County. According to Pan American Health Organization (2001), relief food must be stored until they can be distributed or used. It is not simply a matter of finding a warehouse large enough to accommodate the shipments, but an organized system must be in place to keep track of the type and quantity of supplies and their location in the warehouse, including reserve stockpiles for future needs. The entire storage process is of crucial importance for protecting emergency supplies until they can be handed over to their recipients. Organizing a warehouse so that it functions correctly means complying with current standards for protecting the quality and security of the products shipped to the benefitting community.

### 3.4 Distribution of Relief Food

After relief food aid has reached the benefiting community, distribution is another function of interagency logistic planning to ensure the food reaches household door step. In most cases, transporting agency may not be the distribution agency. This calls for a need to ensure proper and transparent distribution of relief food. Many distribution points are usually schools, administrative unit headquarters, refugee camps or health centers. The result of relief food distribution is as shown in Figure 9.



**Figure 9:** Relief Food Distribution Exercise in Turkana County.  
**Source:** Researcher (2016)



From Figure 9, only 8(20.59%) of the respondents revealed that the distributions of relief food exercise are always smooth and efficient. However, 25(61.76%) revealed that the exercise was not always smooth and efficient. Distributions of relief food depend on the security assessment of interagency logistic planning. A community which is secured would facilitate the ease distribution of food although corruption and political patronage would be a challenge.

#### **3.4.1 Effects of Transport Plans of Inter-agency Logistic Planning on the Distribution of Relief Food.**

After relief food has reached the benefitting community, transporting to distribution point may be a task for another agency or it may be done jointly by all agencies. If transport plans are transparent and reliable, sufficient food aid in good condition would reach the beneficiaries at the right time and this would translate to saving of lives.

In fact one of the head teachers during the interview schedule stated that: It comes a time when government i.e. national or County should use their vehicle from ministry like roads especially those tippers to transport food aid to my school. There is enough space where people can queue as they take their portion instead of locating distribution centers faraway. (FGD II, 2015).

It is clear that transport plans are need in transporting relief food from agency stores to location where community can easily access without walking for long distance. If robust transport plans are in place, distribution of relief food becomes manageable by the agencies. Pearson Chi-square of association revealed a significant moderate association between transportation plans of interagency logistic planning and distribution of relief food aid in Turkana County with  $X^2(4, N=39) = 78.762, P=0.000$ .

Transport plans affects timeliness and acceptability of relief food management. It has been revealed that food aids are not located in the beneficiaries' community and they must be transported from warehousing through roads to reach Turkana County. Further, transport plans of the relief food agencies would determine the distribution of relief food. Delays in transportation plans would result to loss of lives thereby having negative impact on the effective if relief food aid. Similarly, delay may result to reduction of quality of relief food which would further result to the rejection of food by the benefitting community.

#### **3.4.2 Effects of Security Assessment of Inter-agency Logistic Planning on the Distribution of Relief Food.**

In distribution of relief food aid, security is paramount as some people may take advantage of insecurity in Turkana County to loot the relief food aid. During the FGD, one of the women in women group indicated that:

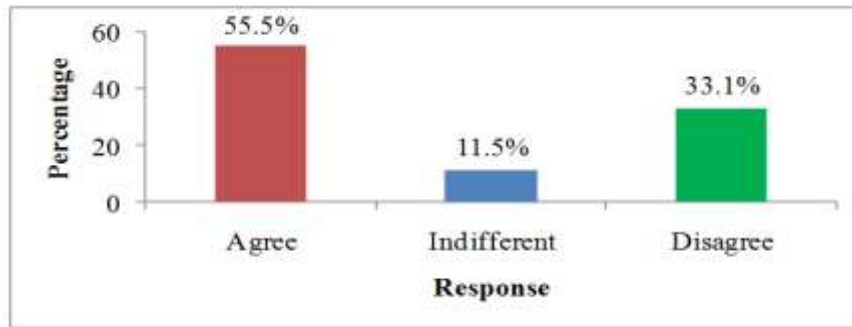
There are some cases whereby bandit and warrior would attack us at distribution point. Since majority of us are usually women and few men who are unarmed, we run away leaving the relief food, the attackers would then descend on the food which they later sell to buy guns (FGD II, 2015).

This indicates that security assessment plans is vital for successful distribution of relief food. Pearson Chi-square of association revealed a significant moderate association between security assessment plans of interagency logistic planning and distribution of relief food aid in Turkana County with  $X^2(4, N=39) = 96.361, P=0.000$ . Distribution of food affects timeliness of food aid delivery to the benefitting communities hence saving of lives. Lack of joint security assessments by the agencies involved in relief food may result to delay. The effects of bandits and livestock rustling due to insecurity in Turkana may result to theft of relief food resulting to insufficient quantities to the benefitting communities. This indicates that, security affects distribution which in turn affects delivery and sufficiency of relief food aid.

As noted by Pan American Health Organization (2001), when working in unfamiliar places with a lot of security threat, it is difficult for an organization to distribute supplies properly and fairly in the short time available without security assessments. In some cases, the operative functions of an organization do not include handling direct distribution. In these circumstances, it is important to find a local, trustworthy counterpart that knows the population, security issues and the place, and can handle distribution perfectly, hence their involvement in the logistic planning.

### **3.5 Monitoring and Evaluation of Relief Food Projects**

Monitoring and evaluation of relief food project is one of the main factors that explain efficient management of the relief food. It enables donors to be informed of their financial contribution in the relief food project and that it is utilized as required. During monitoring and evaluation process, security assessment plans and transportation plans of interagency logistic are required so as to reach the beneficiaries household and distribution points. The key informant were required to state if there is an efficient monitoring and evaluation mechanism in measuring impacts of the relief food. The results are as shown in Figure 10



**Figure 10:** Monitoring and Evaluation of Relief Food Projects

**Source:** Researcher (2016)

From Figure 10 majority of the key informant 23(55.5%) agree that there was an efficient monitoring and evaluation mechanism in measuring impacts of the relief food. Only 16(33.1%) of them disagreed that in the management of relief food, there was an efficient monitoring and evaluation mechanism in measuring impacts of the relief food by the agencies.

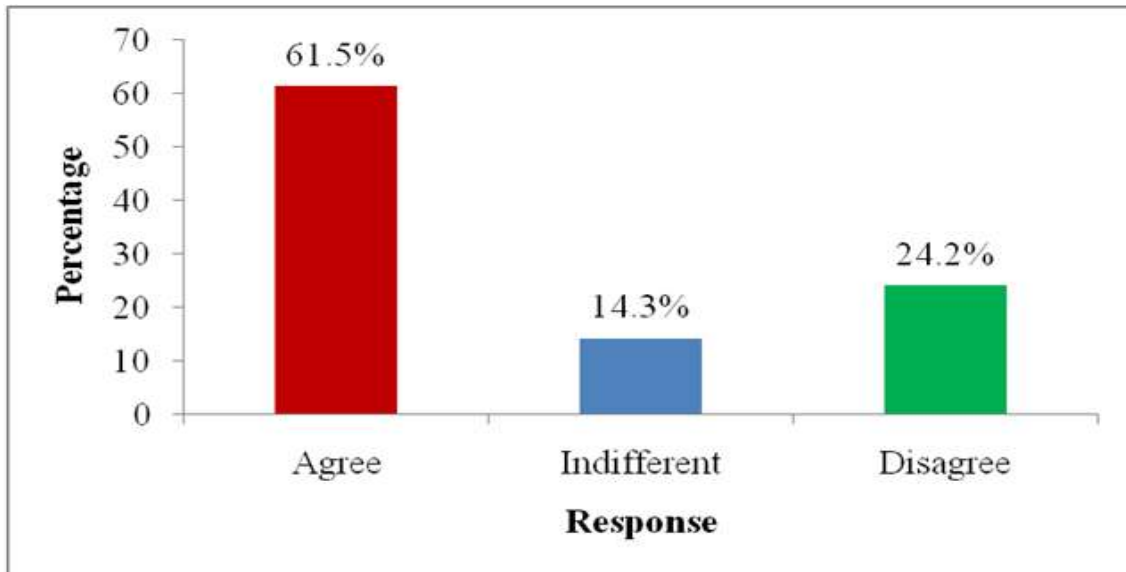
### **3.5.1 Effects of Security Assessment of Inter-agency Logistic Planning in Monitoring and Evaluation of Relief Food**

For effective monitoring and evaluation of relief food, there must be security of the personnel tasked to carry out that function. In some cases, monitoring involve moving from one household to another and some household may be hostile to such individual leading to personal injuries. Also in cases where there is insecurity concern in the community, the movement is hampered leading to ineffective monitoring and evaluation of relief food. Pearson Chi-square of association revealed a significant moderate association between security assessment plans of interagency logistic planning and monitoring and evaluation of relief food aid in Turkana County with  $X^2(4, N=39) = 80.084, P=0.000$ .

Monitoring and evaluation is vital donor for donor to make follow up for their donation into procurement of food aid and to ascertain the impact of the program that is supported. However, in cases where there is insecurity, the movement of personnel is hampered leading to delays in reporting to the donor agencies and countries. This leads to delay in disbursement of financial resources resulting in denying the benefitting communities food aid. Similarly, some donor may be reluctant to disburse full amount to purchase food aid and this would result to insufficient food aid to the community. Delays and disruption of monitoring and evaluation due to insecurity also may result to benefitting community rejecting the donated food as no need assessment was done after the previous donations.

### **3.6 Information Management in the Management of Relief Food.**

Information is vital in the relief food management as it reveals what kind of relief food is needed by the community. With lack of information technology, local leaders and politicians may spread false information about relief food leading to total rejection during distribution. Also information about beneficiaries is useful in nutrition level so that right quantities of nutrients are delivered to the household. The availability of information is a product of collaborative needs assessments. This would lead to acceptability of relief food aid by the community and supply of the right quantity to the household. The respondents were required to state if there is efficient flow of information related to timely operations and needs of the beneficiaries. The results are as shown in Figure 11



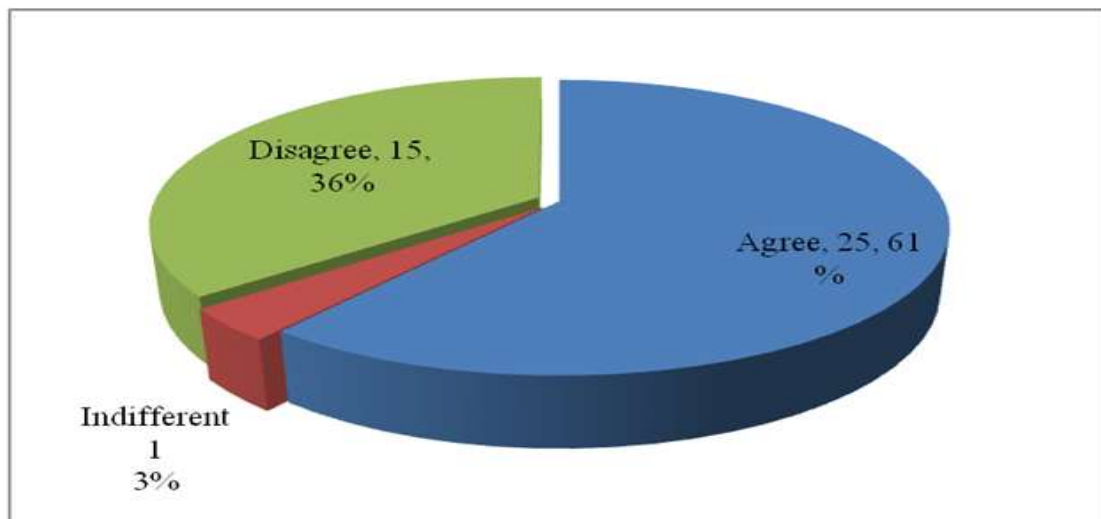
**Figure 11:** Information Management in the Management of Relief Food

**Source:** Researcher (2016)

Figure 11 revealed that 25(61.5%) of the key informants agreed that there was efficient flow of information related to timely operations and needs of the beneficiaries. However, less than half of the respondents 10(24.2%) disagreed that flow of information was efficient. As a result of this disagreement of more than half of the respondents who were involved in the interview, the study analysed the association of collaborative need assessment of interagency logistic planning on the information management in the management of relief food

### 3.6.1 Effect Collaborative Needs Assessments in the Information Management of Relief Food.

Collaborative need assessment involves having a joint needs assessment with NGOs and government agencies so as to get the information needed like malnutrition level of the relief recipients. The results revealed that 15(60.7%) of the interviewed respondents agreed that they had joint needs assessment with NGOs and government while only one of them had indifferent opinion as shown in Figure 12. This shows that in Turkana County, there is collaborative need assessment by the NGOs and government agencies which enhance information management in the management of the relief food.



**Figure 12:** Joint Needs Assessment with NGOs and Government Agencies

**Source:** Researcher (2016)

Pearson Chi-square of association revealed a significant moderate association between collaborative need assessment of interagency logistic planning and information management of relief food aid in Turkana County with  $X^2(4, N=39) = 96.287, P=0.000$ . As more need assessment is made as part of interagency logistic

planning, more information becomes available which is used for the management of relief food in Turkana County. Information management which can be gained joint need assessment amongst the agencies collaborating is vital in determining the quantity of the food aid need in Turkana County. The county been food insecure and uphold their culture, there is need for agencies to get information about the type food that is acceptable by the Turkana County and the nutritional requirement for mother and children. Majority of the respondents 25(61%) indicated there was collaborative need assessment which resulted to the acceptability of the food donated to the benefitting community in Turkana County. However, in cases where there is such collaboration and the information the NGO possess does not reflect the need of the community, there would be wastage in terms of procurement, warehousing and transport.

#### **IV. CONCLUSION AND RECOMMENDATION**

The research unearthed that there are multiple players involved in the management of relief food in Turkana. The finding revealed that interagency logistic planning has a significant moderate effect on the management of relief food in Turkana County due to acceptability, community involvement, method of distribution and condition of food aid. However, there is varying degree of effect of interagency agency logistic planning on management issues with that of security assessment plans having strong effect in the management of relief food as compared external networks, procurement plans, transportation plans, warehousing plans and collaborative needs assessments. The study recommends that all relief organizations should come together to contribute their resources in order to realize the inter-agency logistical planning, which is more expensive, but very efficient system of management. They should also ensure that there is a merged interest which is common to all, to avoid conflicts. This will ensure sufficiency of food aid to all beneficiaries.

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