INFLUENCE OF HUMANITARIAN LOGISTICS AND IMPLEMENTATION OF HUMANITARIAN AID PROJECTS IN NGOS BASED IN NAIROBI, KENYA

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ABSTRACT

Humanitarian crisis across the Globe continue to increase in frequency, complexity and size challenging the ability of Organizations in disaster relief to respond well during disasters. Some of the Countries experiencing humanitarian crises include Syria, Sudan, Central Africa Republic, Yemen, Somalia and Democratic Republic of Congo. In Kenya, humanitarian crises have occurred in the form of recurrent drought, floods, malnutrition and food security, disease outbreak; resource based inter-communal conflicts as well as terror attacks. The purpose of this study was to determine the extent to which humanitarian logistics influences implementation of humanitarian aid projects. Humanitarian logistics struggle with special circumstances including destabilized structures, lack of recognition, unpredictable demand and supply. The paradigm guiding the study was pragmatism and the study employed a cross sectional-survey design. The sample was drawn from organizations in disaster relief using both probability and non-probability sampling technique. Both primary and secondary data was utilized. Primary data was collected using self administered questionnaires, Key Informant Interview and Focus Group Discussions Guides. Questionnaires issued were 117 out of these 85 which is (72.6%) were returned for analysis. The data was analysed using both descriptive and inferential statistics. For descriptive analysis, mean, percentages and frequencies were used. For inferential analysis, correlations and regressions were used. For $p<0.05$, H_0 was rejected and H_1 accepted. For the strength of the relationships, r values were considered where: $+0.10< r <+0.29$; weak correlation $+0.30< r <+0.49$; moderate correlation $+0.5 < r <+1.0$; Strong correlation. Findings show a definite relationship between humanitarian logistics and implementation of humanitarian aid projects and concludes that it eases the logistical process and reduces delay in response during disasters. The study recommends investing in humanitarian logistics research and utilizing it as a strategy in implementation of humanitarian aid projects.

Keywords: Humanitarian Logistics, Private sector engagement, Implementation of Humanitarian Aid Projects, NGOs in disaster relief.

INTRODUCTION

Humanitarian Logistics is one of the core tasks in humanitarian aid projects implementation. This is because supplies need to be sourced, transported and delivered timely to the persons in distress. According to Kopczak and Thomas (2005) Humanitarian Logistics involves proper planning, implementing activities and proper control of cost and relief goods storage. Information from key stakeholders, well-functioning equipment and materials should be in place for purposes of alleviating suffering of the persons in distress. Benita, Beamon and Balcik (2008) asserted that at the onset of a disaster, whether natural or man-made, demand for humanitarian goods and services is unpredictable. It is not possible to know the time a disaster

will take place, at which location or the scale of damage it may cause (Benita, Beamon and Balcik, 2008). Also Kovacs and Spens (2011) argue that unlike in business environments these humanitarian operations are done in destabilized infrastructures and uncertain situations with the ultimate goal of saving lives in distress. Private Sector engagement in Humanitarian logistics has been instrumental in improving implementation of humanitarian aid projects locally and globally (Benedek, 2014). Several Researchers (Hoxtell, Norz, and Teicke, 2015) argue that there is a burgeoning of new technologies and fresh ideas in humanitarian aid which offer new perspectives in implementation of humanitarian aid projects. One such perspective is engaging the Private sector during disasters in order to support more persons in distress and respond to the overwhelming needs of emergencies. Even though the Private Sector has been playing a great role in humanitarian aid project implementation during disasters, they have hardly been recognized as key players in the Humanitarian sector. However recently this has been changing and private sector is getting more and more engaged. Zyck and Kent (2014) argue that these relationships between Humanitarian Organizations and the Private sectors can be both voluntary and collaborative, where participants agree to work together to achieve a common purpose. Bendell and Muphy (2010) argue that where there is mutual agreement partners share risk, benefits as well as responsibilities, therefore private sector teaming up with the humanitarian sector combines efforts and achieves humanitarian gains. These gains benefit persons in distress during disasters and therefore there is need to emphasize applying humanitarian technology when implementing humanitarian aid projects.

Research objective

To determine the extent to which humanitarian logistics influences the implementation of humanitarian aid projects

Research question

To what extent does humanitarian logistics influence implementation of humanitarian aid projects?

Research hypotheses

H_1 Humanitarian Logistics significantly influences the implementation of humanitarian aid projects

LITERATURE REVIEW

The study reviewed existing literature on humanitarian logistics and implementation of humanitarian aid projects.

Implementation of humanitarian aid projects

This study has critically examined the existing literature on the humanitarian logistics and implementation of humanitarian aid projects. Bryman (2015) asserts that literature review is an integral part in any research as it enables the researcher to gather more information about the topic under study. The literature on implementation of humanitarian aid projects exist in peer reviewed journals, grey literature, conference papers, organization reports and printed books. This literature has revealed that the humanitarian sector has been faced by increasing disasters and humanitarian needs over the years. Organizations in disaster relief have been struggling to achieve the required threshold in saving lives when implementing humanitarian aid projects and this has called for other actors including business partners in the private sector and governments to engage (UNOCHA, 2016). This study focuses on humanitarian logistics offered by the Private sector contributing to achieving implementation threshold by providing

better, quicker services and quality products. Project results are derived from cause and effect relationships, the changes can be output, outcome and impact. Notably the project changes can be positive or negative, intended or unintended. Similarly, humanitarian implementation starts with inputs, activities and finally outputs that culminate in each project outcome. Humanitarian logistics process plays a key role in the humanitarian implementation output depicting that it has the potential to bring about change in the way humanitarian projects are implemented, increasing coverage, timeliness and giving more appropriate support when disasters happen.

In Kenya there are several disasters including drought, famine, floods to name a few as mentioned by Zyke and Kent (2014) just like other countries Kenya is a recipient of aid money to address humanitarian needs. The Vision 2030 is Kenya's blue print that aims to transform the economy to become globally competitive and prosperous by offering quality life to its citizens. The Second Mid Term Plan of vision 2030 has laid down implementation frameworks requirements for effective aid to be achieved. It is important to address disasters because they have the ability to destabilize economies hindering development. There have been immense challenges in responding to disasters resulting to hundreds of victims dying and there is a need for improvement in the way humanitarian aid projects are implemented when a disaster happens and this study suggests emphasis on applying humanitarian logistics. Drifmeyer and Liewellyn (2014) study on 'towards more effective humanitarian assistance' determined that the influence of one experience, education and training in humanitarian assistance is key to determining what is considered effective. Proper tools and techniques when delivering aid are also integral to better implementation of humanitarian aid projects. Engaging the private sector that is rich in expertise and knowledge also contributes to improving response during disasters. It is important that implementation can be measured and be verified by different stakeholders including those receiving aid and this is often done using international standards outlined in the Sphere project as argued by Hilhorst (2002). Implementation of humanitarian aid projects is critical during sudden onset disasters.

The concept of private sector engagement
Humanitarian logistics is one of the expertises sought from the Private sector Companies and little research has been done on the same. Most information exists in grey literature, opinion pieces and NGO reviews and reports. Globally there have been disasters requiring attention from both the humanitarian and private sector due to their magnitude and frequency that overwhelm Organizations in disaster relief (Binder and Witte, 2007). Nagurey (2012) argues that the Tsunami disaster in 2004 and the Haiti earthquake in 2010 benefitted from engagement by the private sector companies who were heavily involved in helping the persons in distress with water, food, shelter and even tracing the victim's locations. Businesses are now getting involved in developing innovation social enterprise models as identified by (Zyke and Kent, 2014). The trend has continued; in 2014 Ebola Outbreak Ebola Private Sector Mobilization Group (EPSMG) group was formed in West Africa to support the victims and in 2011 in the Japan triple disaster the case was similar. In Kenya during drought in 2011 Kenyans 4 Kenya Initiative by Local communication companies and social media engaged in raising funds to support drought victims. Also there have been efforts by UN OCHA, World Economic Forum, UNPACT, Business initiatives to bring together private sector companies in disaster relief and the effort has been fruitful as we have more and more engagement by the private sector in humanitarian work even though their involvement has been short term or adhoc. The concept of private sector engagement in humanitarian logistics seems to be getting more embraced in humanitarian sector and may be the way forward in the future humanitarian work.

Humanitarian logistics and implementation of humanitarian aid projects

Humanitarian Logistics as defined by Thomas and Kopczak (2005) is the process of planning, implementing, controlling cost effective flow and storage of relief goods and materials for purpose of alleviating the suffering of persons in distress. It encompasses a range of activities including, planning, preparedness, procurement, transportation, tracking and tracing as well as warehousing. Unlike business environment, humanitarian logistics struggle with destabilized environment such as destruction of infrastructure, illegal road blocks and checkpoints among others (Kovac and Spens, 2011). Since most disasters are unpredictable so are demands for supplies, timing, location and scale of disaster (Benita, Beamon and Balcik, 2008). Humanitarian logistics is one of the key activities that take place during onset of a disaster, according to sphere standards immediately after a disaster takes place people in distress need healthcare, food, water, shelter and other life supporting basic needs. Akhtar, Marr and Garnevska (2012) argue that due to lack of means of transportation and expertise in moving relief in a timely manner, more often than not Organizations in disaster relief involve the private sector to deliver goods and services. As argued by Walton, May and Haselkorn (2011) good coordination between those requesting for relief goods and logistics teams feeling of being in control can make logistics process faster. Intrinsically humanitarian logistics contains need for speed in-order to save lives (Kovacs and Spens, 2009; Russel, 2005). NGOs in disaster relief therefore always seek to strike a balance between speed and cost in their supply chain (Thomas, 2004). However, some scholars like Murray and Clarke (2008) emphasize on immediate, appropriate in terms of need, well organized, timely and effective implementation. According to Wood (1995) speed is universally valued, based on the premise that victims in distress cannot wait and humanitarian aid projects must be implemented as soon as possible.

Theoretical Framework

This study is based on the logistics theory

Logistics theory

Logistics is as old as organized warfare it originates from the Greek word Logos and has evolved considerable over time. Some of the changes such as new methods of transportation or new ways of obtaining supplies have influenced logistics directly. It is a branch of science that has to do with procuring, maintaining and transporting materials, personnel or facilities. Ideal logistics has the right item in the right quantity at the right time, at the right place and at the right price. Wassenhove (2006) argues that in humanitarian logistics speed is given preference over cost as persons in distress cannot wait. Humanitarian Logistics lack of time presents a challenge since logistics relies in large measure upon anticipation and planning to overcome the physical constraints posed by the mass of its commodities and the distance over which they have to be delivered. Humanitarian logistics is further complicated by potential destroyed infrastructure yet there is pressure to save person in distress. Humanitarian Logistics aims to prioritize needs of persons in distress and hence respond within the shortest time possible in order to save lives. The resources must be utilized efficiently even though speed is of more essence than cost of goods (Wassenhove, 2006). Humanitarian Logistics is committed to mitigating the suffering of vulnerable people to the greatest extent possible (Thomas and Kopczak, 2005). This research is anchored on this theoretical framework which comprises of management of different functions and processes in humanitarian logistics.

Conceptual Framework

The study was guided by the conceptual framework shown in Figure 1 The conceptual Framework demonstrates the inter-relationship between the dependent, independent and

moderating variables under study. The interactions of these variables were further explored and tested to find conclusions of the study.
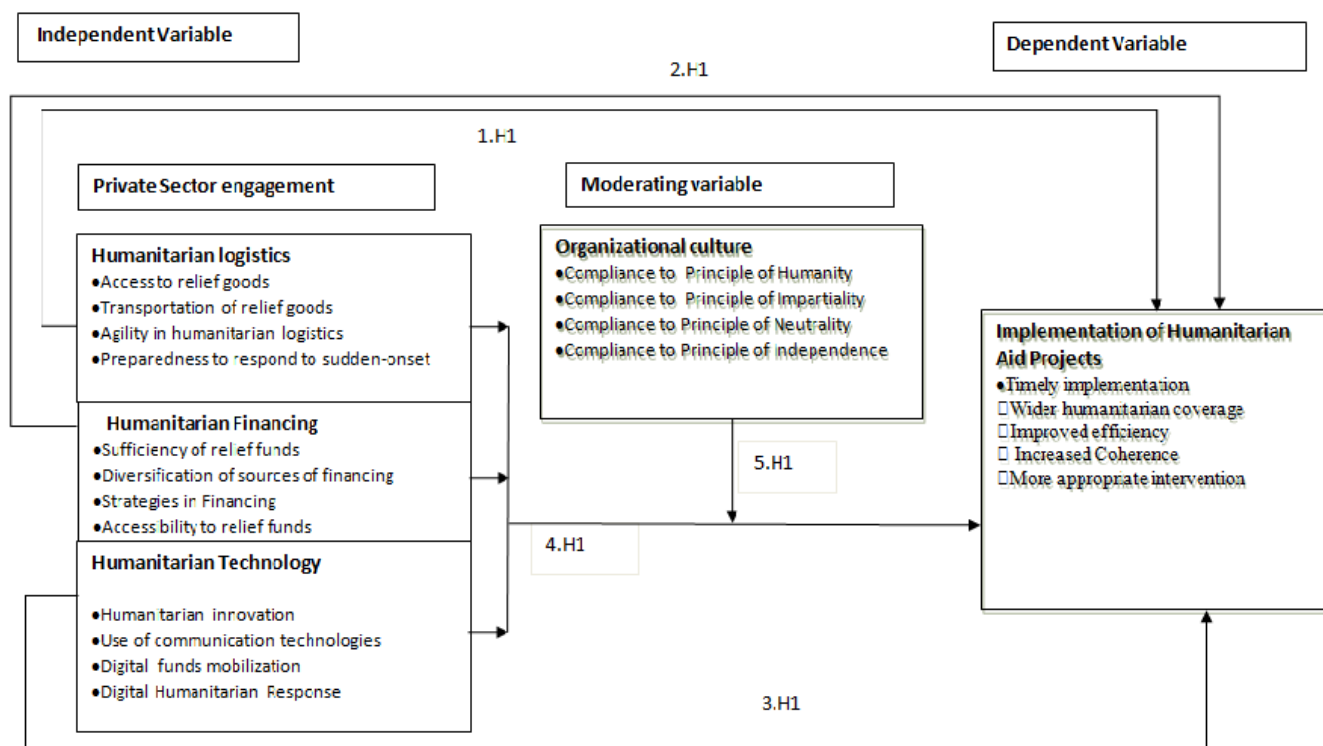

Figure 1: Conceptual Framework on humanitarian logistics and implementation of humanitarian aid projects

RESEARCH METHODOLOGY

This study employed a cross-sectional survey research design. This design was appropriate as it allows the researcher to collect data at one point in time as opposed to longitudinal design. The sample was 117 respondents from NGOs in disaster relief. The sample was selected using both probability and non-probability sampling and only those organizations that had engagement in humanitarian aid projects were selected to participate in the study. The study used Self Administered Questionnaires, Key Informant Interviews and Focus Group Discussions. The data was analysed using SPSS soft ware. Quantitative data was analysed using inferential statistics regressions and correlation and descriptive statistics mean percentage and frequencies while qualitative data was analysed using content analysis using the study thematic areas.

FINDINGS AND DISCUSSIONS

Background information of respondents

The study sought general information about the respondents as it was important to know the characteristics of the players in provision of humanitarian aid services. This includes; geographic scope of operation, duration of engagement, humanitarian private sector and mode of collaboration. The results are presented in Table 1.1

Table 1.1 Background characteristics of respondents

Categories of background information	frequency	Cumulative frequency	Percentage (%)
Geographic scope of operation			
International	58	58	68.2
Regional	18	76	21.2
National	9	85	10.6
Total	**85**		**100**
Duration of engagement in the humanitarian sector			
0-5 years	6	6	7.1
6-10 years	23	29	27.1
11-15 years	13	42	15.3
16 years and above	43	85	50.6
Total	**85**		**100**
Humanitarian private sector collaboration			
Yes	69	69	81.2
No	16	85	18.8
Total	**85**		**100**
Mode of collaboration			
Long term partnership	15	15	17.6
Implementing partner	18	33	21.2
Short term partnership	23	56	27.1
Adhoc partnership	29	85	34.1
Total	**85**		**100**

On geographic scope the study findings clearly show that majority of the NGOs in disaster relief engaging in humanitarian activities are mainly international organizations constituting of 58 (68.2%) while 18 (21.2%) were operating regionally and 9(10.6%) were operating nationally. This shows that they have experience and exposure to implementation of humanitarian aid projects that have been applied in other countries and have the ability to translate the same experience when implementing humanitarian aid projects in Kenya. On the duration of operation in the humanitarian sector findings indicate that 43 (56.6%) have been engaged for more than 16 years. While 23 (27.1%) have operated for 6-10 years and 13 (15.3%) have been in operation for 11-15 years and 6 (7.1%) have been in operation for 0-5 years. With statistics showing that 50.65% of the respondents have been in the industry for more than 16 years clearly indicating that majority targeted players in the sector understand the nature of disasters in Kenya at large, and know the best way to offer assistance given their years of operation in the country.

On humanitarian private sector collaboration, study findings indicate that 81.2% of the humanitarian organizations in Nairobi agree to the fact that humanitarian-private sector collaboration has a huge effect on the implementation of humanitarian aid projects in NGOs within Nairobi. A paltry 16 (18.8%) on the other hand were of the view that humanitarian aid has greatly had not done much to influence implementation of humanitarian aid projects during onset of disasters in the country. These findings seem to confirm the initial assertion by the

study that humanitarian-private sector collaboration had a significant influence on the implementation of humanitarian aid projects during disaster management. It also concurs with Leach et. al (1994); Mc Quid (2000) in their argument that no actor has all the required capacity to respond to the ever increasing disasters in size and frequency in Kenya; resource constraints as well as different ideologies always exist in the same space and need to be well managed. On the mode of collaboration the study findings clearly show that 15(17.6%) have long term partnership, 18 (21.2%) collaborate as implementing partners, 23 (27.1%) collaborate on short term partnership while 29 (34.1%) collaborate in adhoc partnerships. This indicates that majority of the private humanitarian NGO-private partnerships and collaborations are done on temporary need basis with short term and adhoc collaborations combined taking 52 (61.2%) of the mode of collaboration. This implies that the NGO's only partner with private entities in addressing a certain humanitarian disaster, after which partnerships are quickly dissolved. In 2016 OCHA and KEPSA also observed that such collaborations were more often adhoc and one off donations.

Implementation of Humanitarian Aid Project

Implementation of humanitarian aid projects is the dependent variable in the study therefore the study sought the opinion of the respondents on their level of agreement or disagreement with the statements on a Likert scale of 1-5 where 1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree. The results are presented in Table 1.2

Table 1.2 Implementation of Humanitarian Aid Projects

Statements	1	2	3	4	5	Mean	SD
a. Our organization implements humanitarian aid projects on time	2; 2(2.35%)	14(16.47%)	11(2.94%)	42(49.41%)	16(18.82%)	3.59	0.817
b. Laxity by our organizations in responding to disasters can result to loss of lives of persons in distress	1(1.2%)	14(16.5%)	14(16.5%)	43(50.6%)	13(15.3%)	3.73	1.005
c. Our Organization ensure wider geographical coverage of disaster site to ensure most persons in distress get help	4(4.7%)	13 (15.3%)	10(11.76%)	42(49.41%)	16(18.82%)	3.65	0.972
d. Humanitarian aid reach persons in distress without any access difficulties to the disaster site	3 (4%)	17 (20%)	9 (10.6%)	42 (49.4%)	17 (20%)	3.41	1.080
e. Humanitarian aid projects implementation is not efficient	5(5.9%)	6 (7.1%)	12(14.12%)	50 (58.8%)	12(14.12%)	3.27	1.159
f. Efficient implementation puts persons in distress at the core of disaster response	4(4.7%)	8 (9.4%)	10 (11.8%)	51 (60%)	12(14.12%)	3.73	0.822
g. Private sector and Non-Governmental Humanitarian Organizations share common goals	8%)	9 (10.59%)	15(17.65%)	50(58.82%)	12(14.12%)	3.22	0.993
h. Policies and Principles of Non-Governmental Humanitarian Organizations and Private	2(2.35%)	28(32.94%)	13(15.29%)	33(38.82%)	9 (10.59%)	3.40	0.928

sector Companies are dissimilar							
i. Humanitarian aid projects implemented do not meet the priority needs of persons in distress	1(1.18%)	20(23.53%)	8 (9.41%)	46(54.12%)	10(11.76%)	3.93	1.078
j. Ownership of Humanitarian Aid Projects by persons in distress lead to provision of appropriate support	2(2.35%)	20(34.12%)	14(16.47%)	34(40%)	6 (7.06%)	3.44	0.970
Composite Mean and Standard Deviation						**3.447**	**0.3718**

n=85

The findings in Table 1.2 show On 'our organization implements humanitarian projects on time' 2 (2.35%) Strongly Disagree, 14 (16.47%) Disagree, 11(2.94%) were Neutral, 42 (49.41%) Agreed and 16 (18.82%) Strongly Agreed. This line item had a mean score of 3.59 and a standard deviation of 0.817 which is above the composite mean of 3.447 and standard deviation of 0.3718. This implies that the respondents are more certain and therefore agree more with the assertion in this data item than they would for aggregated data items. On 'laxity by our organization in responding to disasters can result in loss of lives of persons in distress' 1 (1.2%) Strongly Disagree, 14 (16.5%) Disagree, 14 (16.5%) were neutral, 43 (50.6%) Agreed and 13 (15.3%) Strongly Agreed. This line item had a mean score of 3.73 and standard deviation of 1.005 which is above the composite mean and standard deviation. This implies that the statement has positive influence on implementation of humanitarian aid projects. This assertion concurs with an observation by Delgado et al., (2013) which argues that the first five minutes of a disaster are critical to the survival of the victims, and that delayed humanitarian response exposes victims to more pain and trauma, and in some cases deaths that could have been avoided. The statement 'our organization ensure wider geographical coverage of disaster site to ensure most persons in distress get help' 4(4.7%) Strongly Disagreed, 13 (15.3%) Disagreed, 10 (11.76%) were neutral, 42 (49.41%) Agreed and 16 (18.82%) Strongly Agreed. This statement has a mean score of 3.65 and standard deviation of 0.972 which is higher than the composite mean and standard deviation. This implies that the line statement has positive influence on implementation of humanitarian aid projects. According to the National Disaster Response Plan, a plain wide area with close proximity to the disaster site should always be selected as an assembly point, to ease the evacuation and victim rescue process (NDOC, 2009).

Fourth statement 'humanitarian aid reach persons in distress without any access difficulties to the site' 3 (4%) Strongly Disagreed, 17 (20%) Disagreed, 9 (10.6) were neutral, 42 (49.4%) Agreed and 17 (20%) Strongly Agreed. This line item has a mean score of 3.41 and a standard deviation of 1.080 which is equal to the composite mean and above the composite standard deviation of 0.3718. We can therefore conclude that this statement has positive influence on the implementation of humanitarian aid projects. The above data item assertion has been greatly addressed following rigorous disaster management awareness programs, which resulted in civic education on responding to disasters. On the fifth statement 'Humanitarian aid projects implementation is not efficient' 5 (5.9%) Strongly Disagreed, 6 (7.1%) Disagreed, 12 (14.12%) were neutral, 50 (58.8%) Agreed and 12 (14.12%) Strongly agreed. This line item has a mean score of 3.27 which is below the composite mean and standard deviation of 1.159 which is above the composite standard deviation. This shows that the respondents are less certain in agreeing with the assertion in this data item and therefore agree less with this statement than they would for aggregated data items. A higher standard deviation than the composite standard deviation implies that there were more widespread responses with figures below the composite

mean. On 'efficient implementation puts persons in distress at the core of disaster response' 4(4.7%) Strongly Disagreed, 8(9.4%) Disagreed, 10 (11.8%) were neutral, 51 (60%) Agreed and 12 (14.12%) Strongly agreed. The mean score of this line item is 3.73 and standard deviation is 0.822 which is above the composite mean and standard deviation. This implies majority of the respondents were in agreement with the assertion made in regard to implementation of humanitarian aid projects.

On the sixth statement 'Private sector and Non-Governmental Humanitarian Organizations share common goals' 1 (1.18%) Strongly Disagreed, 9 (10.59%) Disagreed, 15 (17.65%) were neutral, 50 (58.82%) Agreed and 12 (14.12%) Strongly Agreed. This line item had the least mean of 3.22 which is lower than the composite mean and standard deviation of 0.993 which is higher than the composite standard deviation. This shows that even though respondents agreed that private sector and humanitarian NGOs share common goals, majority were less certain on the influence of shared common goal on the implementation of humanitarian aid projects. Line item on 'Policies and principles of Non-Governmental Humanitarian Organizations and Private sector companies are dissimilar' 2 (2.35%) Strongly Disagreed, 28 (32.94%) Disagreed, 13 (15.29%) Agreed and 9 (10.59%) Strongly Agreed. This line item has a mean score of 3.40 which is equal to composite mean and standard deviation of 0.928 which is above the composite standard deviation of 0.3718. This implies that there was unanimity among respondents in agreement with the assertion made in regard to the influence of NGOs and private sector principles and policies on implementation of humanitarian aid projects, even though the responses were widely, hence a higher standard deviation.

On the statement 'Humanitarian aid projects implemented do not meet the priority needs of persons in distress' 1(1.18%) Strongly Disagreed, 20 (23.53%) Disagreed, 8 (9.41%) were neutral, 46 (54.12%) Agreed and 10 (11.76%) Strongly Agreed. This line item had a mean score of 3.93 and standard deviation of 1.078 which is above the composite mean and standard deviation. This implies that majority of the respondents were in agreement that most humanitarian projects do not meet the needs of disaster victims. Lastly on 'Ownership of humanitarian aid projects by persons in distress lead to provision of appropriate support' 2 (2.35%) Strongly Disagreed, 20 (34.12%) Disagreed, 14 (16.47%) were neutral, 34 (40%) Agreed and 6 (7.06%) Strongly Agreed. This line item had a mean score of 3.44 and standard deviation of 0.970 which is above the composite mean and standard deviation. This implies that the respondents are more certain and therefore agree more with the assertion that involving local people in implementation of humanitarian projects makes them feel more supported in times of distress, than they agree with aggregated data items. This in line with Leach et.al., (1994) in emphasizing that there should be genuine participation of local community that has been affected by the disaster. Interviews and Focus Group Discussions were conducted to triangulate the results from the questionnaires and there was a similar observation. The issue of implementation of humanitarian aid information was important to the persons in distress. In terms of timelines and appropriateness of the response one of the respondents said;

> *'Sometimes the NGOs are late but the companies are able to help us with water and food which save our lives.' FGD participant*

This support from the private sector companies prevent further suffering by the persons affected by disasters.

Humanitarian logistics and implementation of humanitarian aid projects

In analyzing the extent to which the humanitarian logistics influence implementation of humanitarian aid projects, the study carried out the following tests and findings given as explained in Table 4.3. The study sought to establish the frequencies and percentages for each

data item response on the Likert Scale of 1-5 where: 1= Strongly Disagree, 2= Disagree, 3=Neutral, 4=Strongly Agree and 5=Strongly Agree. The study also assessed the data item mean against the group mean, with the findings as tabulated in Table 1.3

Table 1.3 Humanitarian Logistics and Implementation of Humanitarian Aid Projects

Statements	1	2	3	4	5	Mean	SD
a. Procurement is carried out using available financial credit to ensure access to relief goods on time	3(3.53%)	35(41.18%)	13(15.29%)	24(28.24%)	10(11.76%)	)4	149
b. Relief donations reach persons in distress quicker to save lives	9(10.59%)	41(48.24%)	18(21.18%)	10(11.76%)	7(8.24%)	)6	78
c. There is always means of transport (vehicles, charter aircrafts etc) to transport relief goods	2(2.35%)	30(35.29%)	16(18.82%)	31(36.47%)	6(7.06%)	11	047
d. Correct Relief goods are delivered to the persons in distress on time	1(1.18%)	15(17.65%)	17 (20%)	48(56.47%)	4 (4.71%)	46	88
e. Our Humanitarian Logistics allow for real time tracking of relief consignments to disaster sites	10(11.76%)	29(34.12%)	6(7.06%)	34(40%)	6 (7.06%)	32	026
f. Our humanitarian logistics enable delivery of uncertain large scale demand of relief goods during disasters	3(3.53%)	17 (20%)	6(7.06%)	52(61.18%)	7 (8.24%)	51	019
g. Our Humanitarian logistics facilitates quick response to unplanned humanitarian need in-order to save lives	2(2.35%)	21(24.71%)	20(11.76%)	44(51.76%)	8 (9.41%)	41	038
h. It is possible to respond to sudden change in need by persons in distress during a disaster	1(1.18%)	14(16.47%)	11(12.94%)	55(64.71%)	5(5.88%)	55	866
i. Our Organization has pre-disaster logistical procedures and activities to enable quicker response (tasks, procurement, staff etc).	2(2.35%)	17(20%)	11(12.94%)	48(56.47%)	7 (8.24%)	48	983
j. There are available written contingency plans and procedures to respond to disasters	11(12.94%)	14(16.47%)	13(15.29%)	39(45.88%)	8 (9.41%)	51	874
Composite Mean and Standard deviation						**3.415**	**0.48896**

n=85

On the first statement 'procurement is carried is carried out using available financial credit to ensure access to relief goods on time' 3 (3.53%) Strongly Disagreed, 35 (41.18%) Disagreed, 13 (15.29%) were neutral, 24 (28.24%) Agreed and 10 (11.76%) Strongly Agreed. This line item has a mean score of 3.04 which is below composite mean of 3.415 and standard deviation of 1.149 which is above composite standard deviation of 0.48896. This implies that the respondents are less certain and about the procurement process and therefore agree less with the assertion that procurement is carried using available credit finances. On 'Relief donation reach persons in distress quicker to save lives' 9(10.59%) Strongly Disagreed, 41(48.24%) Disagreed, 18(21.18%) were neutral, 10 (11.76%) Agreed and 7(8.24%) Strongly Agreed. This line item has a mean score of 2.96 which is lower than the composite mean of 3.415 and standard deviation of 0.78 which is higher than the composite standard deviation. This implies that majority of the respondents disagreed with the assertions made about relief donations reaching people in distress quicker, thereby showing that the assertion made does not hold for humanitarian aid projects in Nairobi and that there could be delay to helping the persons in distress.

On 'there is always means of transport to transport relief goods' 2(2.35%) Strongly Disagreed, 30(35.29%) Disagreed, 16(18.82%) were neutral, 31 (36.47%) Agreed and 6(7.06%) Strongly Agreed. This line item had a mean score of 3.11 which is lower than the composite mean and a deviation of 1.047 which is higher than the composite mean. This implies that even though majority of the respondents agreed with the assertions made about transporting relief goods for people in distress, their agreements were not as strong as those made about the aggregate logistics department for humanitarian aid projects in NGOs in Nairobi. Statement on 'correct relief goods are delivered to the persons in distress on time' 1(1.18%) Strongly Disagreed, 15 (17.65%) Disagreed, 17 (20%) were neutral, 48 (56.47%) Agreed and 4 (4.71%) Strongly Agreed. This line item had a mean score of 3.46 and standard deviation of 0.88 which is above the composite mean of 3.415 and standard deviation of 0.48896. This implies that majority of the respondents agreed with the assertion relief goods are delivered to people in distress on time, even though the agreements was not as strong for the aggregate logistics department for humanitarian aid projects in Nairobi. On 'our humanitarian logistics allow for real time tracking of relief consignments to disaster sites' 10(11.76%) Strongly Disagreed, 29 (34.12%) Disagreed, 6(7.06%) were neutral, 34(40%) Agreed and 16 (7.07) Strongly Agreed. The mean score of this line item is 3.32 and standard deviation is 1.026. This implies that the respondents agree with the assertions made about real time tracking of relief goods to disaster sites during implementation of humanitarian aid projects in Nairobi. On 'our humanitarian logistics enable delivery of uncertain large scale demand of relief goods during disasters' 20 (23.53%) disagreed while 59(69.41%) Agreed and 6(7.06%) were neutral. The mean score of this line item is 3.51 and standard deviation is 1.019 which is higher than the composite mean of 3.415 and standard deviation of 0.48896. This implies that majority of the respondents agreed with the assertions made with regard to the extent to which the private sector engagement in humanitarian logistics influence implementation of humanitarian aid projects.

Statement g-Our humanitarian logistics facilitates quick response to unplanned humanitarian need in order to save lives' 23 (27.06%) disagreed and other respondents 52(61.18%) agreed while 20 (11.76%) were neutral. The mean score of this line item was 3.41 and standard deviation of 1.038 which is higher than composite mean and standard deviation. This implies than majority of the respondents agree with the assertion made. This funding is in line with Walton, May and Haselkorn (2011) who argued that Humanitarian logistics offer faster movement of relief goods to disaster sites. On the statement' it is possible to respond to sudden change in need by persons in distress during a disasters' 15(17.65%) disagreed while 60 (70.59)

agreed and 11(12.94%) were neutral. This line item had a mean score of 3.55 and standard deviation of 0.866 which is higher than the composite mean and standard deviation. This implies that majority of the respondents were in agreement with the statement. Statement (i) Our organization has pre-disaster logistical procedures and activities to enable quicker response' 19(22.35%) disagreed while 55(64.71%) which is more than half of the respondents agreed. This line item has a mean score of 3.48 and standard deviation of 0.983 which is higher than the composite mean and standard deviation. Implying that the statement has a positive influence and should be maintained in private sector engagement in humanitarian logistics. Last statement (j) 25(29.41%) strongly disagreed or disagreed while 47(55.29%) agreed or strongly agreed with the assertion humanitarian logistics influence implementation of humanitarian aid projects. The mean score of this line item was 3.61 and standard deviation was 0.874 which is higher than the composite mean and standard deviation. This implies that there is positive influence on the assertion made. Information gathered from Key Informant Interviews and Focus Group Discussions confirmed that Private sector often has better facilities of transportation and they are able to deliver goods quicker. This is because they have better transport networks. Some argued that despite the potential to make an impact, Humanitarian logistics has not been tapped well by Humanitarian Organizations to benefit fully from the services. There is need to harmonize these services for persons in distress to benefit. The Focus Group Discussions data revealed that sometimes access is a challenge as the roads are closed during conflicts and there is heavy police presence that makes it difficult for NGOs to access the persons in distress. One of the respondents said

> *"if the roads are closed we also cannot go to the shops to buy food, even if we have money, so humanitarian logistics is only possible if the roads will be open"*. FGD participant

This demonstrates the complexity of humanitarianism on the ground and that there must be ways and mechanisms to ensure that persons in needs receive the appropriate relief goods they need.

Inferential Statistics

The inferential statistics in this section covered correlations analysis, regression analysis of humanitarian logistics and implementation of humanitarian aid projects and hypothesis tests.

Correlation Analysis of humanitarian logistics and implementation of humanitarian aid projects

Correlation analysis is useful in testing the relationship strength between given variables. The values of correlation coefficient varies between -1 and 1 with values close to one suggesting perfect correlation. On the other hand, a correlation coefficient close to zero suggests absence of correlation. In this study, Pearson correlation coefficient was used to examine the relationship between implementation of humanitarian aid projects and explanatory variables. Correlation analysis was employed to establish the nature and the degree of the interaction between humanitarian logistics and implementation of humanitarian aid projects. The results obtained were as shown in Table 1.4

Table 1.4 Correlation Matrix for Humanitarian Logistics

		Implementation of humanitarian aid projects	Humanitarian Logistics
Implementation of Humanitarian aid projects	Pearson Correlation	1	0.490
	Sig. (2-tailed)		0.013
	n	85	85
Humanitarian Logistics	Pearson Correlation	0.490	1
	Sig. (2-tailed)	0.013	
	n	85	85

The results in Table 1.4 indicate that there exists a weakly significantly positive relationship between humanitarian logistics and implementation of humanitarian aid projects, with a correlation coefficient of 0.490. The relationship is statistically significant since the p-value is 0.013, which is below the statistically accepted significance level of 0.05.

Regression Analysis of Humanitarian Logistics and implementation of humanitarian aid projects
The study assessed the relationship between humanitarian logistics and Implementation of Humanitarian aid project and obtained the model specification results as presented in Table.1.5

Table 1.5 Model Specification for Humanitarian Logistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.799[a]	0.798	0.798	0.0132489

a. Predictors: (Constant), Humanitarian Logistics.

b. Dependent Variable: Implementation of Humanitarian Aid projects

The study found that humanitarian logistics has a high correlation index of 0.799 against implementation of aid projects in organizations in disaster relief. This is an indication that there is a defined relationship between the implementation of aid projects and humanitarian logistics. Humanitarian logistics was also observed to have very high coefficient of determination of 0.798 against implementation of aid projects, an indication that it has the ability to explain 79.8% of the changes in aid project implementation. This is an indication of a very high ability of the humanitarian logistics affecting implementation of humanitarian aid project implementation, with only 20.2% of the outcomes not explained by the model.
The regression analysis was carried out and the following outcomes presented in table 1.6 were observed.

Table 1.6 Humanitarian Logistics Regression Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	4.525	3.524		-2.703	0.012
	Humanitarian Logistics	0.677	0.062	0.618	1.084	0.000

a. Dependent Variable: Implementation of Humanitarian Aid Projects

The regression model constant was observed to be positive, an indication that humanitarian logistics and aid project implementation are positively correlated. At the 95% confidence level presumed in the study, humanitarian logistics has a p-value 0.013 which is less than 0.05 (p<0.05), indicating that the variable is statistically significant and has the ability to be used in the study. The variable was used in the study model, and provided the following regression model:

$$Y = 4.525 + 0.677X_1$$

The regression outcome indicates that humanitarian logistics has a significantly positive influence on the implementation of aid projects in Kenya. Given that the p-value (0.013) is below 0.05, we reject the null hypothesis in favour of the alternative, and conclude that humanitarian logistics has a statistically significant influence on the implementation of humanitarian aid projects.

Test of Hypothesis
In order to address the first objective of the study, Hypothesis one was tested and findings given as explained below.
H_0: Humanitarian logistics does not significantly influence the implementation of Humanitarian aid projects.
H_1: Humanitarian logistics significantly influences the implementation of Humanitarian aid projects.
At a 95% confidence level presumed in the study, humanitarian logistics had a p-value (sig.) of less than 0.05 (p<0.05), indicating that the variable is statistically significant and has the ability to be used in the study. Given that the p-value (0.013) is below 0.05, we reject the null hypothesis in favour of the alternative, and conclude that humanitarian logistics has a statistically significant influence on the implementation of humanitarian aid projects.

CONCLUSION AND RECOMMENDATIONS

Humanitarian Logistics is a hot topic in the humanitarian sector as it is a critical process during implementation of humanitarian aid projects. Globally humanitarian logistics is important during natural disasters such as earthquakes, floods, tsunami, and hurricanes as well as during man-made disasters such as ethnic clashes, internal conflicts and international conflicts causing deaths and displacements. In Kenya, humanitarian logistics is equally important as Kenya experiences periodic ethnic clashes, floods, famine and terror attacks that if not attended can cause deaths and displacements. The aim of this objective was to determine whether humanitarian logistics influence implementation of humanitarian aid projects managed by organizations in disaster relief in Kenya. The study determined that humanitarian logistics eases transportation to disaster sites and improve access to relief goods as it is possible to plan for huge supplies to save lives when a disaster happens. This means more timely delivery of relief goods and ability to cover wider geographical locations as there are existing plans. As such humanitarian logistics is a critical process in implementation of humanitarian aid projects without which relief goods could be delayed causing deaths of persons in distress.

The study recommends enhancing humanitarian logistics as a strategy in implementation of humanitarian aid projects. This study determined that when humanitarian logistics was applied there was improvement in implementation of humanitarian aid projects in areas of timeliness of delivery, ability to cover wider geographic space as well as efficiency. This study therefore recommends that organizations in disaster relief communicate the strategic advantage of applying humanitarian logistics in their humanitarian activities. Perhaps it is time for the humanitarian sector to also focus more on outsourcing humanitarian logistics services from the

private sector in order to improve their response during disasters. Also, more often than not organizations in disaster relief lack means of transportation such as vehicles and fleet management expertise that is critical during disasters. This study also determined that it is becoming increasingly difficult to ignore the contribution of the humanitarian logistics in sudden onset disasters. More so, few academic institutions focus on training in humanitarian logistics and this study recommends that more teaching in the subject is considered by academic institutions. The study also recommends investing in humanitarian research; from the empirical study reviewed it is clear that very few academic institutions invest in humanitarian research. Most studies in the humanitarian logistics have been carried out in small numbers by universities, organizations and a few research institutions. Also, few institutions offer skills in humanitarian logistics. This study shows that if more research is done on humanitarianism then there will be better preparedness and response to disasters in Kenya. Perhaps it is time to focus more on humanitarian research in academic institutions and also invest more money for the same.

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