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An Evaluation of the Shelter Used to Accommodate

# Refugees at Buduburam Camp

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#### **Abstract**

Since the end of the Second World War (1939-1945), the number of refugees continues to increase worldwide due to political crisis, civil wars, and human rights violations. Reports by the United Nations High Commissioner for Refugees (UNHCR) indicate that the number of displaced people keeps escalating and that since 2015 the number surpasses 1% of the world's population. This study conducted at the Buduburam Refugee Camp near Accra - Ghana, examined emergency shelters and the security situation at the camp in order to create prototype emergency shelters aimed at making secure and comfortable accommodation available to refugees in camps. Though the total number of refugees was 42,000, a sample of 300 respondents participated in the study. Structured questionnaire survey and observations were the tools employed for the study. The results of the study indicated that by architectural and international humanitarian standards, shelter, sanitary, and emergency conditions in the camp were very poor and required some level of improvement to make life comfortable, healthy and secure in the camp. However, per the views of majority of the respondents, life in the camp was generally secure, and that a good relationship existed between the refugees and the Ghanaian community. Notwithstanding, there was the need for improvement in the shelter, sanitary, and emergency facilities of the camp.

Keywords: Refugee; mass displaced; shelter; emergency.

#### 1. Introduction

Emergency shelters are often provided by organizations or governmental emergency management departments in response to natural disasters such as flood and earthquake, and man-made disasters such as genocides and wars. These organisations use tents, improvise existing structures for other purposes like churches or schools and/or temporary structures. In order for people not to live in unknown areas without guidance and security, the United Nations High Commissioner for Refugees (UNHCR) as well as several Non-Governmental Organisations (NGOs) provide camps to accommodate displaced persons. Refugee camps aim to meet basic human needs in a given period. According to the UNHCR, the average shelter size must be  $45\text{m}^2$  (480sq ft.) per person to provide accessibility in the camp. Within the area, other facilities such as an administration headquarters (which coordinates services and reception where refugees are registered), sleeping spaces like huts or existing local structures for dwellings with a 3.5m<sup>2</sup> of covered living area and a 2-metre spacing between shelters can be found. Within the sleeping spaces, each individual should be entitled to a 15m<sup>2</sup> plot size. Hygiene facilities such as washing areas and common toilets that can serve 50 persons should be sited about 50 metres away from the shelter and there should be a 6-metre distance between the hygiene areas of each gender. There should be a water collection point about 200 metres from the households (where each person is entitled to 20 litres of water), a health care provision for 20,000 persons, a food distribution centre, provision of security, schools and training centre for 500 persons, markets, shops, churches and other religious centres, cemeteries and solid waste disposal points. This study investigated the emergency shelter situation at the Buduburam Camp near Accra in order to create prototype shelters aimed at making secure and comfortable accommodation available to refugees in the Camp. This could also serve as emergency shelter prototype for refugee camps across Ghana and Africa. The specific objectives of the study were to 1) evaluate what has been done in order to meet the rising demands of the refugee shelters and security and their adequacy in terms of the requisite architectural standards, and 2) identify the social relationships that existed between the refugees and the Ghanaian community. The study was done at Buduburam in Accra. Buduburam is a refugee camp located 44 kilometres west of Accra, Ghana. The camp was opened by the United Nations High Commissioner for Refugees (UNHCR) in 1990. It is home to more than twelve thousand (12,000) refugees from Liberia who fled their country during the first Liberian civil war (1989-1996) and the second Liberian civil war (1999-2003), as well as refugees from Sierra Leone who escaped their civil war (1991-2001). [1] affirms that camp is led by Liberian and international non-profit organisations (NGOs) groups and volunteer organisations such as the Carolyn A. Miller Elementary School which provides free education to nearly 500 children in the camp.

# 1.1. Mass Displacement Since World War II

Mass displacement started during the second world war (1939-1945) which resulted in 60 million displaced people including 12 million Germans. 11.6 million people were also displaced in the Syria war (2011- present); as at 2014, 1.5 million people had defected to other countries for safe haven. Wars have wreaked a lot of havoc an caused numerous people to be displaced over time. The Israeli-Palestinian conflict (since 1948) for example has resulted in creating 5.1 million Palestinian refugees across some 60 camps in the middle east, also 1 to 5 million person were forced to escape and become refuges in other countries during The Korean War (1950-1953), the Iraq war (2003-present) has also led to the displacement of 4 million persons. Other notable examples

include the Vietnam War which ended in 1975; by the end of the two-decade war, more than 3million people were estimated displaced, The Yugoslavia conflict (1991-1995) resulted in the displacement of 2.7 million persons, the Afghan conflict (since 1979) has caused 2.6 million Afghans to become refugees, The Rwanda genocide in 1994 caused more than 2 million people to flee from the country and per the UNHCR's account 1,5 million people were displaced. Somalia War (since 1991) has seen multiple waves of displacement over the years, at the end of 2014 it was the third highest source of refugees in the world with 1.1 million persons. Central African Republic War in December 2013 resulted in about a million people leaving their homes and by the end of 2014, there were about 412,000 refugees and 438,000 internally displaced people. The first Sudanese civil war between 1955 and 1972 forced hundreds of thousands to escape. Democratic Republic of Congo (1996-1998) has had two wars since 1996, which had led to the creation of 516,800 refugees by the end of 2014 [2] and [3] stated that the Myanmar (2012) violence which erupted in Rakhine State resulted in around 140,000 people being displaced. At the end of 2014, the UNHCR had estimated that refugees originating from Myanmar totalled 479,000, making it the seventh-largest source country. It also includes genocide, terrorism, violation of human rights, civil wars and conflict manipulated by political leaders and also caused by religions and ethnic groups.

#### 1.2. Settlement of the Mass Displaced People

The displaced people who are forced to escape by leaving their home for the sake of survival are victims of physical attack, sexual assault, abduction and disease. Families are deprived of life's essentials, in particular shelter, food, medicine, education, community and face marginalization between countries, discrimination by other ethnic and religious groups and poverty [4]. Internally Displaced people still live in tent camps, railways wagons, mud brick houses and public buildings such as former schools [2,3] also mention that many of the IDP are left without employment, land, property restitution or permanent shelter. Action must be taken to support IDP's resettlement by considering sustainability and although the displacement crisis is global, some regions of the world are more affected than others. The worst is in Africa, which has nearly half of the world's 12 million IDPs and 3 million refugees, mostly located in Sudan, the Democratic Republic of Congo (DRC) and Somalia. Immigration has many foundations; social and economic instabilities due to crises and conflicts caused by political leaders, religious groups and ethnic groups. The formation of migrant networks, however, is probably the most imperative. Networks build into the migration process a self-perpetuating momentum that leads to its growth over time, in spite of fluctuating wage differentials, recessions, and increasingly restrictive immigration policies in developed countries. Today, Europe has become a region of immigration and it draws immigrants from a variety of third world countries [5]. Over the past century, not just conflict but development projects, environmental disasters and state-mandated settlement of nomads have driven people from their homes. The extreme violence threats, torture, kidnappings, murder are always targeted in refugee camps, in many cases, they are restricting access and tensions are running high between IDP and locals. In a March 2007 assessment, the International Organization for Migration determined that less than 1% of the IDPs are living in camps, due to their location in the harsh desert climate and the lack of services. With almost no health care, little electricity, minimal sanitation facilities and bare supplies of food and water, the desolate camps are "the last resort". The camps are usually set up and supplied by the Ministry of Displacement and Migration, and sometimes by local religious parties. Occasionally, it is local councils that get camps operational with assistance from the ministry.

The provision of relief and protection by local religious organizations can reinforce sectarianism by creating dependency on sectarian affiliations. Sectarianism thrives when the state is unable to provide security and basic services and the gap is then filled by sect-based organizations. Most of these camps are temporary affairs, they are often open for just a few weeks or months until residents find better accommodation. Some are spontaneous sites created by IDP in large buildings or schools, and house very small numbers ranging from 30 to 100 families. Where protection is available, local police provide it. IDP increasingly report harassment and violence by locals threatened by the influx of IDP and the resulting pressure on resources and services. IDP can register with the Ministry of Trade and receive rations, but many have faced serious obstacles transferring their registration to other locales according to [6].

Reference [7] makes the provocative observation that displacement as a result of US and Iraqi forces is "assessed as a short-term phenomenon, while so-called sectarian-induced displacement is viewed as a long-term trend". The contemporary tactics of the US and Israel—walls, barriers, barbed wire, checkpoints, closures and curfews are used for security. UNHCR's mandate is to coordinate international action to provide protection and relief and to safeguard refugees. People recognized as refugees are also eligible for UNHCR's help in seeking "durable solutions" to their displacement: repatriation if the home country is safe, asylum in the host country or resettlement in a third country if not. UNHCR is providing some assistance to the few displaced people. UN and NGO's publications consistently report that Iraqis will not go to camps, and UNHCR states that it is opposed to setting up camps because they are costly and can become permanent. But camps also make refugees visible. Camps, in this way, are small spaces of the nation in exile. They may congregate in certain areas, but, unlike camps, their spaces are not set off from the larger society. While the refugees are forming "little Baghdads," these do not yet resemble camps where social worlds can be recreated and lived daily yet radically transformed in the process. While international refugee law was always geared toward protecting state sovereignty, a more restrictive, state-centric global consensus to prevent refugee movements has emerged as states close their borders. New spatial devices for containing the displaced arose in the 1990s: safe havens, safe corridors and preventive zones. The concept of preventive protection was replaced by the even more minimalist concept of preventive assistance. Safe havens have a mixed record, at best. They can provide temporary shelter, the displaced are thought of less in terms of their rights under international law or in humanitarian terms, and more as a matter of security, that "black hole" in which things "collapse and disappear. Once objects of concern and assistance, refugees are now coded as potential criminals and terrorists who may sow instability." In coding the displaced as potential subversives. Yet if security were the issue, refugees, who are repeatedly vetted and screened before being admitted, are hardly the logical groups for terrorists to hide among. While water metaphors for the potential impact of mass displacement—waves, flows, floods, tides, inundations, seas of people—can be difficult to avoid. In them, refugees would have neither international protection nor an international body accountable to them. The goal of a catch basin is to prevent cross-border movement. Humanitarian spaces have all but disappeared because of the ambient violence and the widespread sense that humanitarian organizations have lost their proclaimed neutrality. During the 1990s, UNHCR gradually began to provide assistance to displaced people who had not crossed borders, as states were increasingly unwilling to shoulder the burden of caring for them and pushed for more restrictions on who could claim refugee status. The international community to provide aid to these governments to help them cope [8].

#### 2. Literature Review

An emergency shelter is any facility that is provided for the primary purpose of providing the needs of the homeless in general (shelter, food, etc.) or for specific population of the homeless which does not require occupants or occupancy agreements. It is also a place for people to live temporarily when they cannot live in their previous residence, similar to homeless shelters. The main difference is that an emergency shelter typically specializes in people fleeing a specific type of situation, such as natural or man- made disasters, domestic violence, or victims of sexual abuse. A minor difference is that people staying in emergency shelters are more likely to stay all day, except for work, school, or errands, while homeless shelters usually expect people to stay elsewhere during the day, returning only to sleep or eat. Emergency shelters sometimes facilitate support groups, and/or provide meals [8].

#### 2.1. Emergency Shelter Prototype

Shelter in place allows residents to maintain their support network of friends and family. Emergency shelters are made for temporary use, and there are methods that allow for quick construction, easy transport and minimum waste. According to [9], modular emergency shelter system includes a sleeping and storage module having a rectangular box-like structure with curved interior sidewalls extending to an opposing end defining a separate storage area. The box-like structure is preferably fabricated of molded plastic filled with fire resistant and sound dampening foam, and is watertight to keep out rain and facilitate hosing out after use. Preferably the module includes electronic locking doors operable from inside or outside the module.

#### 2.2. Types of Emergency Shelter

A shelter is defined as a habitable covered living space, below some of the types of shelters provided in case of emergency. They include Earthen Shelters, Eco-Shield, Shipping Container Shelters, Shigern Ban's Paper Tubes, Plastic Sheeting and Carter Williamson's Emergency Shelters. Earthen Shelters are made from adobe. Compressed-earth blocks and sandbag shelters offer the possibility of permanent and even beautiful housing in an emergency situation. They are made from dirt and mostly cheap. The drawbacks with this shelter are that it requires know-how and time to build [9,10] discuss and interrelate such earth shelter design concepts as passive solar heating, day lighting, and hazard protection for all regions and climates, at the same time evaluating shelter performance in terms of comfort and habitability, cooling and heating effectiveness, and levels of protection. In addition, they present the proper use of various construction and waterproofing techniques in relation to climate, characteristics of the site, and other regional factors [10]. The ECO-shield shelter is made from fiber-reinforced thermoplastic that ships flat and assembles easily with unskilled labor in 15 minutes. It weathers well, is energy efficient and could become permanent housing. Ecoshield as an emergency shelter that can be assembled in a few hours after being delivered to nearly anywhere in the world. The shelter uses the same design components as the ecoscape houses unlike some other temporary shelters [4]. Recycled Shipping Containers were used for the mass-produced emergency shelter designed by Future shack. The home is fitted with solar panels, water tanks, access ramp and lighting fixtures. Containers are poorly insulated and can become ovens in the sun, especially in hot climates. The double roof in Godsell's design tries to offset that and shade the living space.

Plus, the shelter sets up in uneven terrain with telescoping legs to level it. Tornado storm shelter is an 8 foot by 20 foot by 8-foot standard steel overseas container with one 3-foot wide door in the rear. The container is converted into a completely self-contained shelter building and affordable. The shelter is designed so that it can be used as a living space [10]. Shigeru Ban's paper tubes: Ban has designed homes with complex geometries from paper tubes, and he has also designed simpler emergency shelters and oversaw their deployment in disaster relief camps worldwide. The reinforced tube is secured with one end of the paper tube to provide shelter with reinforced ground- engaging end. The tubes are telescoped over a plant and an upper end of a plant, enclosed within the shelter [5]. Plastic sheeting: They are the simplest emergency shelter designs, on building an emergency shelter from sticks, plastic sheets and shoelaces. Plastic shelter is pre-cut in desired patterns and are secured to each other by spaced members. Fluid are placed in the space between the films to foam up and erect the films into a shelter. The foam then preferably hardens, although it may remain not hard [4] Carter Williamson's emergency shelter has capacity for eight to 10 people on two floors, the pieces ship flat and two people can assemble it in one day. One of the interesting aspects of the design is that you can build it from found materials. For example, the firm's rendering of a finished version shows a road sign as one of the wall panels [9].

#### 2.3. Shelter of Mass Displaced Person

All displaced people need some form of shelter. Whatever the type of shelter which is found, provided or built, it needs to answer multiple needs: protection from the elements, physical security, safety, comfort, emotional security, some mitigation of risk and unease, and even, as time passes, some semblance of home and community. Emergency shelter help to evacuate the deal with the immediate impacts of displacement [8].

# • Africa

In Africa, United Nations High Commissioner for Refugee (UNHCR) ensure that the displaced have a safe environments and reduce deforestation in refugee hosting areas, improve camp security and provide lighting in public spaces. They provide Shelter materials such as plastic sheeting and matting that can be used to make a simple shelter and cash grants to the most vulnerable. Shelter is one of the most basic things people need when forced to flee their homes, it is a first and foremost a home. Having a roof over their heads also provides displaced people hope and emotional security and comfort. United Nations High Commissioner for Refugee (UNHCR) supports wherever possible more durable construction, using traditional building materials. Rehabilitation of communal shelters or construction of new homes is carried out with provision for materials and cash needed to re-build houses under self-help schemes [11].

#### Ghana

The United Nations High Commissioner for Refugee (UNHCR) branch office in Accra assists Ghana refugee board which has the overall responsibility for refugee management in Ghana to provide protection and assistance to urban refugees by sharing plastic tents and semi-permanent transitional shelters [12].

#### • Buduburam Refugee Camp

Located in 44kilometer in the west of Accra, Ghana. Opened by the United Nations High Commissioner for Refugee (UNHCR) in 1990, the camp is home to more than 12,000 refugees who fled their country during the first and second Liberian civil war in addition to refugees from Sierra Leone who also escaped from the ravages of their civil war. Initially, the United Nations High Commissioner for Refugee (UNHCR) provided the settlement's residents with individual aid and relief. Although the United Nations High Commissioner for Refugee (UNHCR) limits its personal aid efforts in the settlement to unaccompanied minors, the elderly and disabled. The organisation does sponsor infrastructure work within the community, funding projects such as construction and education [12].

#### 2.4. Locations of Mass Displaced Person

An unprecedented 68.5 million people around the world have been forced to flee from home among them are nearly 25.4 million refugees, over half of whom are under the age of 18. There are also an estimated 10 million stateless people who have been denied a nationality and access to basic rights such as education, healthcare, employment and freedom of movement. In the world nearly one person is forcibly displaced every two second as a result of conflict [11].

#### • Africa

Africa's biggest refugee camps have become home to thousands of displaced persons who have turned to them to seek solace, shelter and some semblance of comfort after having been forced to flee their homes due to political strife, conflict, persecutions, economic strain as well as natural disasters. With largest refugee populations coming from different countries such as Dadaab, Kenya (250,000), Kakuma, Kenya (184,550), Hagadera, Kenya (105,998), Dagahaley, Kenya (87,223), Ifo, Kenya (84,089), Yida, South Sudan (70,331), Katumba, Tanzania (66,416), Mishamo, Tanzania (62,000) and Pugnido, Ethiopia (62,000) [11].

#### Ghana Recent Refugees Camps

Ghana host six refugee camps where one of them has a cessation in 2011 which is Buduburam camp where the five others are: Krisan refugee camp, which is also home to Sudanese refugees who began arriving in Ghana from late 2004 and a mixed range of other nationalities, including Congolese (DRC and Congo Brazzaville), Rwandans, Chadians and Ivorians. As with all camps in Ghana, the Krisan Settlement is managed by the National Disaster Management Organization (NADMO) staff seconded to Ghana Refugee Board. The Ampian refugee camp, refugee Camp was established on 19th March 2011 and it is located in the Ellembelle District of the Western Region of Ghana. It was the first of three camps established to shelter displaced Ivorians fleeing the hostilities following the November 2010 presidential elections. Greater Accra refugee camp, the Government of Ghana considers the urban area a legitimate protection space where refugees can live and work; thus refugees are not restricted to the camps. Currently, the urban refugees and asylum seekers live in the Accra metropolitan area and surrounding areas. There is no refugee camp within the Accra metropolitan area. These refugees and

asylum seekers come from countries such as Sudan, Togo and Ivory Coast, Benin, Cameroon, Congo, Somalia, Syria. The Ivorians are the biggest population in the urban areas due to the Ivorian influx in 2011. Egyeikrom refugee Camp was opened by Government of Ghana and the UNHCR on July 20, 2011 to serve as one of the camps hosting Ivorian refugees in Ghana. As with all camps in Ghana, the Egyeikrom Camp is managed by the National Disaster Management Organization (NADMO) staff seconded to the Ghana Refugee Board.

Fetentaa Camp was established by the Government of Ghana and the UNHCR in June 2011 to serve as one of the camps hosting Ivorian refugees in Ghana. As with all refugee camps in Ghana, the Fetentaa Camp is managed by the National Disaster Management Organization (NADMO) staff seconded to the Ghana Refugee Board [12].

### 2.5. Emergency Shelter Policies Based On International Humanitarian Organisation

Emergency shelter needs are best met by using the same materials or shelter as would be normally used by the refugees or the local population. Only if adequate quantities cannot be quickly obtained locally should emergency shelter material be brought into the country. The simplest structures, and labour-intensive building methods, are preferable. Materials should be environmentally friendly and obtained in a sustainable manner. That said, plastic sheeting has become the most important shelter component in many relief operations often in combination with rigid materials, as they offer flexibility and can be used in a variety of ways in both urban and rural settings. Regardless of the type of emergency shelter used the following principles generally apply:

- Shelters must provide protection from the elements, space to live and store belongings, privacy and emotional security.
- Blankets, mats, and tarpaulin must be provided as needed. 20
- Refugee shelter should be culturally and socially appropriate and familiar where possible.
- Suitable local materials are best, if available.
- Shelter must be suitable for variance in the seasons.
- Wherever possible, persons of concern should be empowered to build their own shelter, with the necessary organizational and material support.

This will help to ensure that the shelter will meet their particular needs, promote a sense of ownership and self-reliance, and reduces costs and construction time considerably[11]. Each type of emergency shelter has advantages and disadvantages depending on the context in which it is used. Consider the following points when deciding on the emergency shelter or combination of shelter types to be used in any given response.

#### 3. Methodology

The study employed the descriptive research design to achieve its aim and objectives. Also, the case study approach was used to survey and describe the shelter and emergency phenomenon of the Buduburam Refugee Camp near Accra. As defined by [13] a case study is, "an experimental enquiry that examines a modern phenomenon within its real-life context, especially when the borders between phenomenon and context are not obviously evident and it relies on multiple sources of evidence." Also, the quantitative data collection and

analysis approach which allowed the researcher to use a structured questionnaire survey as well as statistical or numerical analysis [14] was adopted. The population of the study was all refugees living in the Budumburam refugee Camp near Accra of which a sample of 300 was chosen to participate in the study. The simple random probability sampling technique was used to select the 300 respondents at the camp. This technique used gave each resident of the camp equal chance to be selected to participate in the study. Both primary and secondary data were needed to complete the study. The primary data was collected by the researcher through structured questionnaires and observations in order to specifically address the research problem and achieve the stated objectives of the study. The first section of the questionnaire was designed to collect data relating to the sociodemographic characteristics of the respondents, while the second part was designed and used to collect data about the shelter and security situation of the camp per the observations and views of the respondents. The data was analyzed using SPSS version 21 [16,17,18] confirmed that analysis involves the computation of frequencies, percentages, and mean and standard deviations.

#### 4. Results and Discussion

# Socio-demographic Features of Respondents

The socio-demographic features of the respondents included gender, age, marital status and religion. The frequency and percentage distributions of these features are summarized in the Table 1 below:

**Table 1:** Socio-demographic features (N=300)

	Frequency	Percentage
Gender:		
Male	123	41.0
Female	177	59.0
Age:		
16-19	74	24.7
20-30	161	53.7
31-50	52	17.3
60+	13	4.3
Marital Status:		
Married	117	39.0
Single	183	61.0
Respondents religion:		
Christian	279	93.0
Islam	21	7.0
Total	300	100

Source: Researcher's field data, 2019

As illustrated in Table 1, the majority (59.0%) of the respondents were females. The gender distribution of the

respondents confirms that there were more females than males in the camp. The respondents between age range 20 and 30 (53.7%) were the majority. Close to them were age 16 to 19 at 24.7% of the total respondents. The 60+ age group was the least. This implies that majority of the refugees in the camp were youthful and energetic. The majority (61.0%) of the respondents were single. Similarly, the majority (93.0%) of the respondents were Christians as against 7.0% who were Muslims.

#### Shelter

Findings relating to shelter at the camp included the type of accommodation, number of bedrooms, type of occupancy, number of occupants per room and rent per month.

**Table 2:** Features of accommodation in the camp (N=300)

	Frequency	Percentage
Type of accommodation:	- •	-
House	119	39.1
Apartment	167	55.6
Tent	14	4.7
Number of bedrooms:		
1	74	24.7
2	161	53.7
4	52	17.3
4+	13	4.3
Type of occupancy:		
Owner	237	79.0
Rent	63	21.0
Number of occupants per room:		
3	35	11.7
4	182	60.7
4+	83	27.7
Rent per month:		
Gh¢ 20.00	75	25.0
Gh¢ 25.00	104	34.7
Gh¢ 30.00	121	40.3

Source: Researcher's field data, 2019

As shown in Table 2, refugees in the camp lived in one of three types of accommodation namely house, apartment, and tent. Majority (55.6%) of the respondents lived in an apartment as against 39.1% who lived in a house. Only a few (4.7%) lived in a tent. The number of bedrooms in the houses ranged from a minimum of 1 to a maximum of 4+, and it was discovered majority (53.7%) of the respondents had or lived in 2-bedroom houses. Houses with more than 4 bedrooms were the least as only 4.3% of the respondents lived in 4+ bedroom houses. It is noteworthy that as high as 79.0% of the respondents were owners of the accommodation they occupied as

against 21.0% whose accommodation were a rented place. Also, as shown in the Table, each accommodation structure or house in the camp was occupied by at least 3 persons per room. Responses to the question of number of occupants per room show that at least 4 persons per room was the most common in the camp as indicated by 60.7% being majority of the respondents. Finally, the findings relating to accommodation showed that the least amount charged or paid by respondents as rent per month was Gh¢ 20.00. Further, it was discovered that majority (40.3%) of the respondents charged or paid a rent of Gh¢ 30.00 per month. Figure 1 to 4 below show reveal the type and state of accommodation structures in the camp. It was observed that the height of these structures was 1m500 with two fenestrations which were one window (see Figure 4) and one door especially for single room shelter (see Figure 3).



Figure 1: Refugees man-made

**Figure 2:** single room shelter

Shelter with clay and cement.

(**Source:** field survey)

(Source: Field Survey)



Figure 3: One door for single room

Figure 4: One window for single room

(Source: Field Survey, 2019) (Source: Field Survey, 2019)



Figure 5: Plastic shelter donated by UNHCR

(Source: United nations High Commissioner for Refugees UNHCR)

#### Perceptions about Conditions of Accommodation in the Camp

The perceptions of the respondents concerning the conditions of their accommodation in the camp were sought. On a scale of 1 to 5 with 1 representing 'strongly disagree' and 5 being 'strongly agree', the respondents were asked to indicate their perceptions about the conditions of the roof, door, window, walls and temperature of their accommodation. Table 2 presents descriptive statistics of their responses.

**Table 3:** Perceptions about the conditions of accommodation

		Minim	Maximu		
	N	um	m	Mean	Std. Deviation
The roof is in very good condition	30	1	4	3.21	1.512
	0				
Walls are in very good condition	30	1	4	2.20	.342
	0				
Windows are in very good condition	30	1	4	1.43	.512
	0				
Doors are in very good condition	30	1	4	1.21	.668
	0				
Rooms are well ventilated	30	1	4	1.01	.099
	0				
Valid N (listwise)	30				
	0				

(Source: Researcher's data, 2019)

As shown in Table 3 above, all the mean scores were less than the rater 4 which represented 'agree' on the scale. This means that, majority of the respondents did not agree that the walls, windows, and ventilations of their accommodation structures were in very good conditions for humans. The only exception was respondents' perceptions about their roofs which had a mean score of 3.21 which is greater than the rater 3 representing uncertain on the scale. This means that majority of the respondents agreed that that the roof of their accommodation was in very good condition.

#### Sanitary in the Camp

Questions about sanitary and maintenance situation in the camp were also asked. On a scale of 1 to 5 with 1 representing 'strongly disagree' and 5 being 'strongly agree', the respondents were asked to indicate their views about sanitary and maintenance in the camp. Table 3 presents descriptive statistics of their responses.

As shown in Table 3, majority of the respondents agreed that access fees to public sanitary facilities within the camp were moderate. This is indicated by the mean score of 3.82 which is greater than the rater 3 on the scale given. However, the mean score of 1.51 means that majority of the respondents disagreed that public sanitary facilities in the camp were of high quality. In other words, the sanitary facilities in the camp were of poor quality. Similarly, the mean value of 1.21 shows that majority of the respondents disagreed that there was proper

maintenance of sanitary facilities in the camp.

Table 3: Views about sanitary and maintenance in the camp

		Minim	Maximu		Std.
	N	um	m	Mean	Deviation
Access fees to public sanitary facilities	30	1	4	3.82	.634
are moderate	0				
Public sanitary facilities in the camp	30	1	3	1.51	.542
are of high quality	0				
There is proper maintenance of sanitary	30	1	3	1.21	.512
facilities in the camp	0				
Valid N (listwise)	30				
	0				

(Source: Researcher's data, 2019)

# Security and Emergency Situations of the Camp

Security and emergency situations of the camp were also examined through the views of the respondents. On a scale of 1 to 5 with 1 representing 'strongly disagree' and 5 being 'strongly agree', the respondents were asked to indicate rate security and emergency control in the camp. Table 4 below presents the descriptive statistics of their responses:

Table 4: Views about security and emergency situation in the camp

		Minim	Maximu	Me	
	N	um	m	an	Std. Deviation
There is need for more improvement in the					
security and emergency situation of the camp					
	30	1	5	4.43	1.416
	0				
Life in the camp is generally secure	30	1	4	3.73	.634
	0				
Several needed security measures are in place	30	1	4	3.51	.542
	0				
There are proper evacuation plans towards	30	1	3	1.21	.512
emergency situations in the camp	0				
Valid N (listwise)	30				
	0				

(Source: Researcher's data, 2019)

As shown in Table 4, majority of the respondents strongly agreed that there was need for more improvement in the security and emergency situation of the camp. This is indicated by the mean value of 4.43 which is greater

than the rater 4 which represents 'agree' on the scale given. Similarly, the mean values of 3.73 and 3.51 which are greater than the rater 3 indicate that majority of the respondents respectively agreed that life in the camp was generally secure, and that several needed security measures were in place. However, the mean value of 1.21 clearly shows that majority of the respondents disagreed that there was proper evacuation plans towards emergency in the camp.

#### Relationship between Refugees and Citizens in the Community

The second main objective of the study was to find out the relationship that existed between the refugees and Ghanaians in the community. Thus, the respondents were asked to state their views about the citizens' interactions with them, the Ghanaian attitude in general towards foreigners, and how much access they had to welfare services in the community. Table 5 below presents descriptive statistics of their views based on a scale of 1 to 5 with 5 representing 'strongly agreed':

**Table 5:** Views about relationship between citizens and refugees of the camp

		Minim	Maximu		
	N	um	m	Mean	Std. Deviation
Most citizens in the community interact	30	1	5	3.73	1.534
well with refugees of the camp	0				
Ghanaians are generally hospitable to	30	1	5	3.37	1.342
foreigners	0				
Refugees have access to welfare	30	1	5	3.21	1.312
services in the community	0				
Valid N (listwise)	30				
	0				

(Source: Researcher's data, 2019)

Table 5 shows that majority of the respondents agreed that a good relationship existed between them and the Ghanaians in the community. The mean values of 3.73, 3.37, and 3.21 which are all greater than the rater 4 on the given scale respectively show that, majority of the respondents agreed that most citizens or Ghanaians in the community interacted well with refugees of the camp, Ghanaians were generally hospitable to foreigners, and that refugees had access to welfare services in the community.

#### The Need for Improved Emergency Shelter Prototype

The views of the respondents as well as the observations made by the researcher show that there is need for improvements in the emergency shelters within the camp to help improve shelter and life in the Buduburam Refugee Camp. This improved emergency shelter prototype must have features including sleeping and storage spaces which are fire resistant, sound dampening foam and watertight to keep out rain water. As [13] observed, a community needs more than just a physical environment, it needs a common spirit that perpetuates its beliefs.

However, the forces of globalization and technology are pushing people apart making them more self-oriented [15]. This underscores the need for very good environment, shelter as well as good human relationship and care. Improved physical environment as well as improved shelter will go a long way to enhance life at the camp to the benefit of both the refugees and the Ghanaian community accommodates them [8].

#### 5. Summary of findings and Conclusion

### **Summary of findings**

There was limited diversity in the sample because the men in the community work all day and return after dusk so the researcher was not able to get them. If this part of the population had been reached, it would have given a much deeper understanding of the subjects of the study.

#### Conclusion

The study was conducted at the Buduburam Refugee Camp near Accra, to examine the state of emergency shelters at the camp in order to create a prototype emergency shelter aimed at making secure and comfortable accommodation available to refugees in the camp. This shelter could also serve as an emergency shelter prototype for refugee camps across Ghana and Africa. The data was collected through questionnaire survey and observation of shelters in the camp. The analysis of these shelters revealed that shelter, sanitary, and emergency situations in the camp were very poor and required some improvements to make life comfortable, healthy and secure in the camp. However, per the views of majority of the respondents, though there was need for more improvement in the security and emergency conditions of the camp, life in the camp was generally secure, and that several needed security measures were in place. Regarding social relationships, it was discovered that a good relationship existed between the refugees and the Ghanaians in the community. The results confirmed the general belief that Ghanaians are hospitable to foreigners. However, not all the findings of the study can be generalized to shelter, security and emergency situations and relationships of all refugee camps in Ghana since it was limited to only the Budumbura camp near Accra. Thus, further studies are necessary to make more valid generalizations and conclusions.

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#### 6. Recommendation

The fact that the study was not carried out in a recent refugee's camp and the lack of case study of individual shelters limited the outcome of the study and so more should be done to study those refugees' camps and their shelters. Above all, a comparative study between the recent refugee camps and recent normal housing in Ghana will be useful in this field and will further inform the authorities on the needs of better shelters for the refugees. A deeper study of individual elements for example how public spaces, or sanitary of a neighbourhood enhances refugees camps in Ghana may be helpful to further analyse the quality of the improved emergency shelter in Ghanaian refugee camps.