# Environmental and socio-economic impact of hosting refugees: A case study of villages around the Dzaleka refugee camp in Dowa district, Malawi

By

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around the Dzaleka refugee camp in Dowa district, Malawi

I declare that the above dissertation /thesis is my own work and that all the sources that I

have used or quoted have been indicated and acknowledged by means of complete

references.

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ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS OF HOSTING REFUGEES: A CASE STUDY OF VILLAGES AROUND THE DZALEKA REFUGEE CAMP IN DOWA DISTRICT, MALAWI.

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**Abstract** 

The opening of the refugee camp in Dowa by the Malawi Government, with support from UNHCR meant that the population of that area was increased abruptly. This led to an increase in socio- economic activities resulting into high demand of energy, food and other amenities from the natural environment. The impact of the refugees on the host community and their relationship was central in this research. The main aim of the study was to assess the environmental and socio-economic impacts for hosting refugees at the Dzaleka Refugee Camp in Dowa.

The study used both quantitative and qualitative methods in data collection. A structured questionnaire, focus group discussions and key informant interviews were used to collect data and analysed using the Statistical Package for the Social Sciences (SPSS) Version 16.0. In total, 237 household heads and 6 key informants were interviewed. In addition, 4 focus group discussions were conducted. Qualitative data, collected through focus group discussions helped in explaining and understanding the results from the questionnaire.

The most evident environmental impacts reported by respondents were: deforestation and firewood depletion; land degradation and water pollution. It is important to note that such environmental impacts can affect the long-term livelihood opportunities of both refugees and host population. The camp establishment has had socio-economic impacts regarded as positive by the majority of the respondents. Although most hosts still struggle to survive, the camp has created a larger market for generating income and better opportunities to provide basic needs such as food and water. The majority of host respondents use the refugee camp for providing livelihoods. Most respondents reported

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that refugees are regularly benefitting from privileged access to resources unavailable to the local host population. In this respect, refugees at Dzaleka were offered opportunities for education, literacy, vocational training, health and basic livelihood. The most reported negative social impacts are exposure to more conflicts and increased insecurity. Both of these impacts relate to the relationship between the host community and refugee population

#### **Key words**

Environmental impacts; social and economic impacts; sources of energy; deforestation; data collection techniques; harvesting of forestry products; host community; refugee population; primary activities for hosts and refugees; community conflicts; relations between hosts and refugees

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# **Dedication**

To my wife, daughter Patience and son Bright Jnr.

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#### **Abbreviations**

AIDS Acquired Immune Deficiency Syndrome

CPR Common Property Resources

DHO District Health Office

DOF Department of Forestry

DRC Democratic Republic of the Congo

ECD Early Childhood Development Centre

ESCOM Electricity Supply Corporation of Malawi

FAO Food and Agriculture Organization

FGD Focus Group Discussion

GoM Government of Malawi

HIV Human Immunodeficiency Virus

IDP Internally Displaced Persons

IGPRA Income Generation Projects for Refugee Areas

JRS Jesuit Refugee Services

KII Key Informant Interviews

MCP Malawi Congress Party

MRCS Malawi Red Cross Society

NGO Non-Governmental Organization

NRC Norwegian Refugee Council

NSO National Statistical Office

PRDO Participatory Rural Development Organization

RPA Rwanda Patriotic Army

RSD Refugee Status Determination

SPSS Statistical Package for Social Scientists

STD Sexually Transmitted Disease

TA Traditional Authority

UNEP United Nations Environmental Programme

UNHCR United Nations High Commissioner for Refugees

UNISA University of South Africa

WFP World Food Programme

#### **CHAPTER 1: INTRODUCTION**

#### 1.1 Background

The living world is used as a resource for food supply, energy, recreation, a major source of medicines and natural resources for industrial products. In this respect, the diversity of nature not only offers man a vast power of choice for his current needs and desires. It also enhances the role of nature as a source of solutions for the future needs and challenges of mankind. Today, however, human pressure on natural environments is greater than before in terms of magnitude and efficiency in disrupting nature and natural landscapes, most notably are intensive agriculture replacing traditional farming; mass tourism affecting mountains and coasts, the policies pursued in the industry, transport and energy sectors having a direct and damaging impact on the coasts, major rivers (dam construction and associated canal building) and mountain landscapes (main road networks) and the strong focus of forestry management on economic targets primarily causes the decline in biodiversity, soil erosion and other related effects. In most of the developing countries, forests are seen as a primary source of their livelihood. In many rural areas, forests and trees provide critical support to agricultural production, they provide food, fodder and fuel, and they provide means of earning cash income. Forests also provides a habitat for many animals, birds, insects and other forms of wildlife that are hunted and consumed, often as delicacies. While these forest foods rarely provide staples, they provide important supplements as well as seasonal and emergency substitutes when food supplies dwindle. Thus, both directly and indirectly forestry activities may have an impact on people's food security (FAO, 1989).

According to the Department of Forestry (DFO, 2014), Malawi has got a total forestry area of 8,076 square kilometers with 84 forest reserves. In the central region, where Dowa Hills and Kongwe Forest Reserve are located, there are 24 forest reserves with a total area of 2,507 square kilometers. Out of this, 374 square kilometers (15 %) is covered by the Forest Reserves mentioned above. In addition to that, it was reported that in 1972/73 and 1990/91 season; the central region experienced a lot of forest clearance. Estate farming has had negative impact since extensive tracts of land were given to individuals mainly for tobacco growing. With the opening of the Refugee camp in Dowa, the situation has been made worse in the region.

The Dzaleka Refugee camp was established in 1994 soon after the multiparty politics started in Malawi. The camp used to be one of the notorious prisons under the regime of one party era of the late Dr. Hastings Kamuzu Banda. During the MCP rule, from 1964 to 1994, the prison farm used to produce a lot of food crops like Maize, a staple food for the country, which was also shared to surrounding communities during the lean months of December to March every year which ensured household food security in all the villages around the camp. The camp is managed by the United Nations High Commissioner for Refugees (UNHCR) and the activities are overseen by the Malawi Red Cross society (MRCS). The activities being done involve recreational, food distributions, agriculture and HIV/AIDS programmes. The total area of the Dzaleka Refugee camp is 201 hectares and is close to Dowa Hills and Kongwe Forest reserves, which supply energy to the refugee camp and the surrounding villages (DOF, 2010).

The United Nations High Commissioner for Refugees (1979) Convention defines the term refugee as people who "owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion, is outside the country of his nationality, and is unable to or, owing to such fear, is unwilling to avail himself of the protection of that country...". Estimations by the Norwegian Refugee Council (NRC) from 2012 are confirming there to be approximately 42.5 million displaced people in the world. From these figures 16.1 million people recognized as refugees have crossed national borders for refuge. The remaining 26.4 million people are what are referred to as internally displaced persons (IDPs) as they are still within their country of origin (Norwegian Refugee Council 2012). There are uncertainties on the exact number of refugees and asylum seekers in the world as this is constantly changing. The amount nonetheless suggests that it is not likely that the refugee situation will disappear in the nearby future. Interactions between refugees and the communities hosting them are a reality when refugee camps are established. Understanding these relationships is of great importance for ensuring a sustainable and peaceful coexistence between them.

In Malawi, as of December, 2010 there were 11, 015 refugees and asylum seekers at the Dzaleka camp which constitutes 0.084% of the total population in Malawi. This figure has doubled in the last five years. Of the total refugee population 46.7% are female and the rest 53.5% are men. According to the UNHCR Malawi in 2005, there were 5,128 refugees from the democratic Republic of Congo (DRC), Somalia, Rwanda, Burundi, Sudan and Zimbabwe with a total of 1383 households.

The scale and suddenness of refugee flows can rapidly change a situation of relative abundance of natural resources to one of acute scarcity. Where the hosting environment is already under stress, as it is for instance in many arid regions of Africa and Asia, an influx of refugees can seriously threaten the integrity of local ecosystems, the economic activities dependent on them, and the welfare of local communities. Environmental impacts are only one of many factors that will influence and shape the relationship between the refugees and hosts: the combination of factors differs greatly in each refugee situation. Therefore the physical impacts of refugees or returnees on the environment can be immediate, visible and long lasting. Nowhere is this more critical than in relation to forested or heavily vegetated lands. During a humanitarian operation, land is often cleared of vegetation to make way for the physical infrastructure of a new camp or settlement. Urgently required building materials may be sourced from local forests or plantations, while wood is commonly cut or gathered for cooking, heating and – usually later in the operation – conversion to charcoal.

Although deforestation tends to be the most apparent negative environmental feature of refugee situations, other visible impacts may include soil erosion, loss of wildlife and non-timber products, and loss of biodiversity. Indoor and outdoor air pollution caused by the concentrated use of biomass fuels, depletion or contamination of aquifers, and an altered pattern of transmission of certain diseases tend to be less obvious impacts, but can nonetheless be a serious threat to refugee health. There are also a variety of indirect linkages between refugee well-being and the state of the local environment. If firewood becomes scarce, for example, refugees may turn to green wood that gives off harmful smoke and leads to acute respiratory infections. When water sources are over-used, refugees may turn to contaminated alternatives. If farmland is over-cultivated, then crop yields may decline, a particular concern in refugee settlements that are partly self-sufficient.

In addition, Livestock herders may have no option but to graze their animals in open forests or gather necessary forage from these regions. All of these activities, and more, have the potential of causing significant and lasting environmental and socio- economic impacts on a community and/or region. However, the impact that refugees may induce on their hosting environment will vary considerably from one situation to another. Among the main factors which will influence the type and scale of impact are: the number of refugees involved; duration of stay; housing arrangements – whether local settlement or camp establishment happens; fragility of the local ecosystem; carrying capacity of the allocated site; area of land allocated to refugees; general availability of forest resources; cooking practices used; types of building materials; kinds of food people consume; and planning, co-ordination and control of forest- related activities undertaken for and/or by the refugees.

Although the country has a lot of challenges, the most basic problem is poverty, which directly leads to the indiscriminate use of forest resources. One of the greatest constraints on forest management is the clash of interests between those working for sustainable forest management and those seeking immediate economic gains. Insufficient attention is paid to the social dimension in the preparation of management plans, although there has been significant progress in recent years (FAO, 2003). The national poverty rate is 50.7 percent indicating that almost half of the population is poor and 25 percent of the population is ultra-poor. That is, about one in every four people lives in dire poverty such that they cannot afford to meet the minimum standard for the daily-recommended food requirement. About 49 percent of the people in male-headed households and 57 percent of people in female-headed households are poor. Specifically, it is revealed that 55 percent of people in male-headed households in the rural areas are poor as compared to 63 percent of people who reside in female-headed. Nearly one in every five people in male and female headed households based in urban areas is poor compared to 2 in every four people being poor in rural areas (NSO, 2011). Low per capita income combined with a highly uneven income distribution leads to high poverty rates in Malawi. According to the Malawi Millennium Development Goals report of 2012, about 40% of all Malawians live on less than U\$ 1 per day. Though poverty has several consequences for forests, people in Malawi will continue to depend on forest resources but may not be able to invest in managing them sustainably (NSO, 2011).

#### 1.2 Research Problem

Human population growth exerts pressure on the environment. The opening of the refugee camp in Dowa by the Malawi Government, with support from UNHCR meant that the population of that area was increased abruptly. This led to an increase in social and economic activities resulting into high demand of energy, food and other amenities from the natural environment. Literature on issues relating to impacts of refugee camps on host communities has received equally limited attention. Maystad and Verwimp (2009:1-2) claims that knowledge and literature on these issues has not improved much since the analysis of Chambers from 1986. Responding to these claims is this research aiming at contributing to the gap in knowledge of the complexity of impacts on host communities by refugee camps, and how this further affects the relationship between hosts and refugees.

All these activities have a negative effect on the environment hence the study. Results from the research will form a basis for recommendations on the way the refugee would operate and how the refugees integrate with their Malawian counterparts, more especially in the efficient use of the scarce energy sources. In addition to that, the results would also assist the villages around the camp to realize how important natural resources are and the need to harness, protect and renew them to ensure the sustainability of the demand of the energy requirements within their areas.

The research explored how the refugee presence has affected the lives of the host community in terms of how they sustain their livelihoods. The research will provide valuable knowledge and understanding of the dynamics of how refugee camps impact communities hosting them and the relationship between the host community and refugee population.

# 1.3 Research Objectives

The main objective of the study was to assess the environmental and socio-economic impact for hosting refugees at the Dzaleka Refugee Camp in Dowa. The study's specific objectives are to:

- 1. Document the types of socio- economic activities which refugees and their hosts are involved in and their impact on the host community.
- 2. Identify patterns of energy consumption and reasons for choosing a particular type of fuel source.
- 3. Assess the income accrued from forest products as sources of energy.
- 4. Document factors responsible for the utilization of forest products.
- 5. Assess the relationship between refugees and their hosts.

# 1.4 Research Questions

In order to collect adequate data under this research, five research questions were developed based on the research objectives highlighted above and these are:

- 1. What types of socio- economic activities are refugees and their hosts involved in and what impacts do these activities have on the host community?
- 2. What is the pattern of energy consumption and reasons for the choosing a particular type of fuel source?
- 3. How much income do those who harvest forestry products get in a year?
- 4. How do the people who harvest forestry products utilize the products?
- 5. What is the relationship between refugees and their hosts?

#### **CHAPTER 2: LITERATURE REVIEW**

A literature review is important in the research process because it gives the reader an insight as to what is currently known regarding the topic of interest, helps in developing a broad conceptual context into which a research problem will fit and also in pointing out the research strategies, specific procedures, measuring instruments and statistical analyses that might be productive in pursuing the research problem (Burns & Grove 2005:93; Polit & Beck 2012:98-110). The literature review will provide literature on the research topic in addition to contextual information on the locations of the research.

#### 2.1 Refugee status in Malawi

Malawi has been both a producer and recipient of refugees from its neighbors in the last three decades. In the early 1960s and 1970s, followers of the Jehovah's Witness religion were forced to flee the country, mostly into Zambia after their religious beliefs clashed with the ruling Malawi Congress Party ideologies. Scores of people also left Malawi fleeing political persecution to neighboring countries during the same period of one party rule under the Malawi Congress Party. On the other hand, Malawi has been receiving refugees from Mozambique, initially during the struggle against Portuguese colonial rule, and hosted over one million Mozambican refugees between the 1980s and early 1990s when the Frelimo government and Renamo opposition movement were engaged in a highly destructive civil war. It is reported that over one million Mozambicans were in Malawi between 1989 and 1991, resulting in a situation where one of every six people in Malawi was a Mozambican refugee. This resulted in pressure over land and other resources. To minimize the pressure from its own people, the government placed restrictions on freedoms including on movement and economic activities (UNHCR, 2010).

The Government of Malawi is party to the 1951 Geneva Convention, with some provisos. GoM is also a signatory to the 1967 Protocol Relating to the Status of Refugees and the 1969 OAU Convention. Malawi generally offers a favorable protection environment for refugees: asylum seekers are permitted entry to the territory and are allowed to stay. However, recent developments indicate signs of fatigue and changing attitudes. Over the affecting, or involving, refugees in the country. Rising levels of xenophobia have been exacerbated by increased social and economic challenges following the recent devaluation of the local currency.

The Government of Malawi's restrictive policy on freedom of movement and the right to employment limits refugees' opportunities to earn a living. The influx of Mozambican refugees is believed to have forced Malawi to rush the process of ratifying the relevant international refugee instruments as well as drafting the Refugee Act, which came into force in 1989. After the successful repatriation of the Mozambican refugees Malawi continues to host other refugees, mainly from the Great Lakes region and the horn of Africa, and issues of refugee rights which were relevant during that period remain important (Mvula, 2010).

The DRC remains problematic, in that conflict is sporadic and security is unreliable. In 2005, a facilitated return to DRC began from Tanzania, however, elections held in 2006 produced a more conducive climate for return. A new phenomenon is the wave of asylum seekers from Somali and Ethiopia that have been arriving since June and are predominantly single men aged at 18-35 years. This pattern is also seen in neighboring countries such as Zimbabwe and Zambia. 190 refugees were resettled to third world countries in 2005 and the planning figure for 2006 is 400 (UNHCR, 2005).

Malawi initially had two refugee camps, namely Dzaleka and Luwani. The latter was however closed down in May 2007 without warning which cited security concerns triggered by asylum seekers from the horn of Africa who were suspected of human trafficking. The camp held 300 refugees at the time of its closure and the refugees were transferred to the Dzaleka camp. Notably, Dzaleka already held 5,000 refugees and the addition of the new refugees put a huge strain on the already limited resources at the camp. The primary school at the camp, for example, which also catered for locals, had its enrolment increase sharply from 1,200 to 1,900, prompting the authorities to introduce learning in shifts and hold classes in tents. Expectedly, the transfer also sapped medical resources at Dzaleka. UNHCR's Malawi office conceded that the transfer had created a situation that was very difficult to deal with. In November 2007, Malawi and UNHCR embarked on a registration exercise to take stock of all refugees in the country, 'a step considered by both to be critical in improving the protection, management and assistance to refugees and asylum seekers in the country (Mvula, 2010).

The Dzaleka camp is very small, congested and surrounded by local villages, and so there is insufficient access to agricultural land for most of the population. Although some have managed to engage in some small scale self-employment activities, the majority of refugees are completely reliant on food aid and other external assistance for their survival. UNHCR has registered an increase in cases of violence (Mvula, 2010).

At the close of 2009, Malawi had a registered population of 10, 716 persons of concern to UNHCR. Out of this number, 4,175 were recognized refugees while the remaining 6,541 were asylum seekers (both rejected and those awaiting the outcome of appeals). With the exception of 1,291, all were resident in the Dzaleka refugee camp, on the outskirts of Lilongwe, the capital city of Malawi (Crisp & Kiragu, 2010).

According to the submission of the Office of United Nations High Commissioner for Refugees (UNHCR) to the review of Malawi under the universal periodic review, as of March 2010, Malawi was hosting 5,285 refugees and 6,150 asylum seekers, whose asylum applications were pending a decision at either the first or second instance. Out of the total population of 11,435 individuals, 53.6% were male and 46.4% were female. As a matter of Malawi's policy, persons in need of international protection are only required to reside in the only designated refugee camp in the country such as Dzaleka, which is managed by the Ministry of Internal Affairs and Public Security. UNHCR supports the Government of Malawi, through the Commissioner of Refugees to protect and assist refugees. Since 2002, WFP has been providing food aid to the refugees in the country (WFP and UNHCR, 2010).

Since 2011 the operation has been faced with a high number of new arrivals from the DRC. As of 2012, there were over 15,000 refugees and asylum seekers in the country, mainly from the Great Lakes Region, Democratic Republic of the Congo (DRC), Rwanda and Burundi. Malawi is also a major transit route for migrants intending to reach South Africa, mainly young males from Somalia and Ethiopia. In order to reach Malawi and Mozambique, Somalis and Ethiopians must first pass through Kenya and Tanzania. Some of the Somalis are refugees who have stayed for some time in the refugee camps of Dadaab in north-east Kenya or taken up temporary residence amongst the large Somali community in Nairobi, where money can be raised to finance the rest of their journey (WFP and UNHCR, 2012).

The Ministry of Health, Malawi Red Cross Society, World Relief International and Jesuit Refugee Service are all implementing partners with funding from UNHCR to deliver services to refugees. Persons arriving in Malawi who wish to apply for refugee status are registered as asylum seekers. A Refugee Committee assesses their claims for refugee status. Refugee status determination (RSD) can take time and currently there is a backlog of some 1,000 claims (covering 3-4,000 individuals). Measures have been put in place to establish an Eligibility Unit within the Office of the Commissioner for Refugees and five eligibility officers have recently been hired so that the RSD process can be accelerated. Both refugees and asylum seekers are eligible for camp-based assistance, including food rations (UNHCR, 2013).

# 2.2 Impacts by Refugee activities on the host community

Refugees are settled in several possible ways, but there are two that are preferred: "self-settlement" or spontaneous settlement where they remain unregistered and depend on unofficial assistance from the community; and, "camp settlement" either voluntarily or relying on the support of the host government and relief agencies where they are registered and receive official assistance (Zetter, 1995, quoted in Jacobsen, 1997: 21). The impact of spontaneously settled refugees is different from those formally settled because their responses in the environment are different. Jacobsen (1997: 23-26) observes that camp settlement precipitates environmental problems, initially with "start-up" costs of bulldozing to clear land for the camp and thereby destroying the resources on site; the insatiable basic need of the camp population which depends on resources in the vicinity; the difficulty of satisfying the day-to-day operation of camps through the control of disease-carrying vectors (rats, mosquitoes and other parasites), using insecticides and pesticides that contaminate the soil and water for human beings and animals (Gurman, 1991, quoted in Jacobsen, 1997: 24); and water accessibility constrained by poorly planned supply sources.

One of the most frequently cited negative impacts in recent years, emphasized in particular by the host country governments, is environmental degradation and natural resource depletion. However, it is not only the host governments that claim that refugee camps cause environmental degradation: over the past several decades, there has also been a growing acceptance by the United Nations High Commissioner for Refugees (UNHCR) and other organizations working with refugees, as well as by independent researchers, that the presence of refugees often leads to environmental degradation and natural resource depletion both within and around the refugee settlements.

As written in the UNHCR manual entitled Key Principles for Decision Making: "Evidence shows that large-scale dislocation of people, characteristic of many recent refugee crises, can create adverse environmental impacts. The scale and suddenness of refugee flows can rapidly change a situation of relative abundance of local resources to one of acute scarcity (Engineering, 2005: 3)." Refugee populations have been an increasing realization that the negative environmental impacts associated with refugee situations must be better understood and dealt with. A number of points justify this, for example: it has become clear that refugee-related environmental impacts can have serious negative implications for the health and well-being of the local population, as well as that of the refugees (Black, 1994).

Poaching by refugees led to loss of biodiversity. In Tanzania, both refugees and profit-seekers poached game in the game reserves, selling game meat in the camps; in some reserves, nearly 30 per cent of the pre-refugee game population was poached (Whitaker, 1999). Game-poaching is probably a greater problem than imagined in many countries because refugees are usually settled in marginal, highly fragile areas only habited by wild game. In Guinea, deforestation destroyed the ecosystem, resulting in the loss of indigenous plant and animal species (UNEP, 2000). Where poachers target rare wildlife, as they did for the eastern plain gorilla (*Gorilla graueri graueri*) in the Kahuzi-Biega National Park, DRC, they decimated the animal population (Kasereka Bishikwabo, 200 quoted in Kalpers, 200: 9), including the roan antelope (*Hippotragus equinus*) and the eland (*Taurotragus oryx*) Williams and Ntayombya, 1999, quoted in Kalpers, 2001).

Arrival of refugees adversely impacts infrastructure and development resources. A case in point is western Tanzania where the refugee influx forced refugees to sleep in the classrooms of border-area schools, burning desks as firewood, filling the available latrines and overstretching local health facilities (Whitaker, 1999). As people in dire need of help which often arrives late, refugees help themselves to anything that would help their survival, even if precariously. The presence of refugees has been associated with an influx of diseases, as in western Tanzania where there were outbreaks of measles, high-fever malaria and intense dysentery as well as skin diseases like scabies and worms and sexually transmitted diseases (STDs) including HIV/AIDS after refugees arrived (Whitaker, 1999). However, such associations could be spurious, especially because the area had epidemics of these diseases before refugees moved in. Like all other migrants, refugees bear the blame about things for which they are hardly responsible.

Pollution is another environmental problem occasioned by displaced persons. Determined to subsist at any cost, displaced persons deliberately or inadvertently pollute surface water, giving rise to infectious diseases that threaten both human life and wildlife in the process (Kalpers, 2001).

Sometimes refugees bring positive changes to host communities, such as economic growth or the funding of various development projects by international aid organizations that have come to the area in response to the refugee emergency. However, the influx and presence of refugees has also been shown at times to have negative impacts on individuals within a hosting community, or even on the community as a whole. In light of this, it is important to investigate the impact of the presence of refugees on the hosting communities, but also to consider how these impacts have then influenced the overall relationship between the two groups. In particular, it is important to determine what might contribute to a contentious or even conflictual relationship. A better understanding of this can ultimately assist those working with refugees in other situations, to plan and implement projects that may lessen the likelihood of such conflict (Berry, 2008).

Refugees are often in constant contact with their hosts and in the process develop a strong modicum of co-existence in a variety of ways. In western Tanzania for example, refugees became a source of cheap agricultural labour for the villages thereby increasing the food base; their presence enhanced economic activity which provided new economic

opportunities; the increased value of trees gave rise to reforestation by the host local population; the formerly sleepy district headquarters became beehives of economic activity and local trade increased substantially; and the new economic impulse created employment opportunities for the local people (Whitaker, 1999). In agricultural settlements in northern Uganda, refugees and locals not only intermarried but also engaged in livestock and land negotiations (Hoerz, 1996, quoted in Jacobsen, 1997). Ethiopian and Eritrean refugees in Sudan had tremendous economic benefits for both themselves and their hosts (Harrel-Bond, 1986, quoted in Whitaker, 1999). These positive outcomes both for refugees and their hosts suggest that the presence of refugees in a host community is by no means retrogressive; invariably, it spurs socio-economic activities thereby benefiting both parties. These benefits are likely to be replicated in different host communities of refugees in sub-Saharan Africa, including Malawi, especially where there is ethnic affinity between refugees and the hosts, as is the case with ethnic groups divided by a common international border.

As the UNHCR, inter-governmental, non-governmental agencies and host governments endeavor to support and protect refugees, they have amassed useful information not only on the causes but also on the consequences of refugees in host communities. Virtually every analysis of environmental impact of displaced persons cites negative and positive impacts on flora and fauna, energy and heating sources, water bodies, soil quality, environmental sanitation and a variety of infrastructure among the most affected environmental issues. With the intervention of humanitarian agencies concerned with the plight of displaced persons, some observed negative impacts are eventually converted into positives, consequently benefiting the host communities as well (Oucho, 2007).

# 2.3 Conflicts between Host communities and Refugee Population

Conflicts are inevitable in a continent of enormous cultural, ethnic, religion and linguistic diversity that is beset with poverty. Some of the conflicts are a historical legacy of the way in which countries were divided creating artificial political boundaries that ignored ethnic, economic, social, cultural and ecological links and continuities. In the absence of resolving these conflicts amicably, they become persistent and lead to the civil strife and complete break up of society. The direct effects on forest include the displacement of large numbers of people with deforestation and resource degradation being serious problems in and around refugee camps (FAO, 2003).

In addition to these environmental problems, conflict often arises between the local indigenous groups and the environmental refugees. To start with, conflict arises as the new refugees compete for environmental resources in their new homeland (Black, 1994). In a world where resources such as food and water are already scarce, people are more likely to create conflict when their country's resources are being taken by individuals who are not from their country. Situations like this have occurred widely throughout sub-Saharan Africa, where scarce resources have forced individuals to migrate in search of available resources (Rowntree, Lewis, Price, & Wyckoff, 2009). Conflict often leads to the breakout of wars and mass killings as people fight over resources (Rowntree, Lewis, Price, & Wyckoff, 2009).

When refugee camps are constructed new relationships are also created between refugees and the communities hosting them. What is often experienced in such scenarios is that situations of tension and conflict between refugees and the host community prevails for different reasons. Refugee camps are also known as a possible area of recruitment and mobilizing for refugees forming political oppositions or executing attacks on their home government. Camps hosting refugees from neighboring countries are especially prone to such political aspects. Experiences with Rwandan Tutsi refugees hosted in Uganda, which in 1990 formed 20 the Rwandan Patriotic Army (RPA) and invaded northern Rwanda is one example (Lomo et al, 2001).

Jacobsen (2002) supports the arguments by Crisp (2003) that when refugees arrive in new communities there are likely risks of security problems of different nature both between refugees and with the host community. Such conflicts may vary over a broad spectrum including local crime and violence, clashes between refugees and the local community, organized crime, drug smuggling and human trafficking amongst others (Jacobsen 2002). Why these conflicts arise is mostly based on contextual conditions, but some areas are recognized as more prone to conflicts developing and escalating. Economic impacts are such an area; refugees can create problems for the host community in terms of putting more pressure on scarce economic resources. Nonetheless, economic impacts of refugee influx are often mixed as refugees can also bring with them resources or contribute to economic stimuli to the area (Jacobsen, 2002).

Access to common property resources (CPRs) and environmental impacts is another possible conflicting area where the worst effects occur during mass influx or mass return of refugees. As access to natural resources are often scarce in communities where refugee camps are established more pressure can be put on these resources due to the refugee influx and act as a trigger to conflict between the two parties (Martin 2005; Jacobsen 2002). This indicates a difference in environmental and security impacts between self-settled refugees and refugees' kept in camps where the former is more likely to adapt sustainable practices.

# 2.4 Environment and Refugees

As environmental refugees are created due to environmental conditions, some are internally displaced, while some are externally displaced (Myers, 2002). For those that are internally displaced, their transition is a little easier since they are staying within the same country. Therefore, they still function under the same federal government and must abide by the same rules. A cultural familiarity is present for these refugees, as they can at least hold on to the same nationality, even if their exact location has changed. For the externally displaced environmental refugees, the transition is more difficult. Not only must they leave their current place of residence, but they must also leave their country and possibly adapt to an entirely new way of life. Immediate problems arise in the places of refugees. As can be expected, environmental problems often arise as environmental refugees migrate. The amount of environmental impact that these refugees exert on the new location is affected by a couple of factors, namely the length of the refugees' stay on the land, the new living conditions that the refugees must adapt to, and the size of the refugee population (Black, 1994).

Three main environmental issues associated with Refugees include deforestation, land degradation, and water shortages and supply issues (Black, 1994). Not surprisingly, in reference to the earlier section on the causes of environmental refugees, these three issues also lead to their creation. One can expect to see a cyclical pattern as the environmental refugees migrate to new environments, environmental problems arise that result in the creation of more environmental refugees, causing more migration and more environmental damage. African forests are often more important for the environmental services they provide than for the wood and non-wood products they produce.

Their role in watershed protection and in arresting land degradation is particularly significant. Watershed degradation is affecting agriculture in most of the major river basins (FAO, 2003).

Fuel wood including charcoal accounted for about 91% of Africa's round wood production in 2000 (FAO, 2002). The share of wood fuel in worldwide round wood production has declined over time but in Africa the proportion of wood fuel has remained unchanged while in some countries it even increased (FAO, 2003).

Africa, particularly sub-Saharan Africa, is an extremely impoverished region, both in terms of the people and the environment. A correlation exists between these two factors where a poor environment helps increase the levels of poverty. In a region that is extremely prone to drought and food resource scarcity, the people constantly struggle to make ends meet (Brown, 2011). Sub-Saharan Africa is the fastest growing region in the world, and this increase in population is only going to make environmental problems worse (Rowntree, Lewis, Price, & Wyckoff, 2009). Recent data shows that in sub-Saharan Africa, 80 million people are under nourished due to environmental conditions, with about seven million people migrating in order to find food (Myers, 2002). Sub-Saharan Africa has become the main producer of environmental refugees because of reasons such as food scarcity and drought which force people to migrate and search elsewhere for resources and living shelters (Myers, 2002).

A key feature of African economic transition is the rapid growth of the informal sectors both in rural and urban areas. A number of studies have highlighted the "deagrarianization" of Africa, involving a shift from peasant agriculture to achieve a range of activities (Bryceson, 1999). Decreasing income from export crops and the increasing need for cash have caused this transition. Charcoal production, pit sawing, the transport of wood and wood products are some of the major informal sector activities that have grown rapidly. Many informal sector activities are considered illegal which can be a strong disincentive for any investment (FAO, 2003).

#### **CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY**

# 3.1 Study area

The study was conducted at the Dzaleka Refugee camp and in fifteen villages around the Refugee Camp, located in Dowa District. According to Population and Housing Census of 2008, Dowa District has a population of 558,470 people from a total of seven (7) Traditional Authorities (TA) plus the town of Dowa. The 2008 census recorded 45 villages that surround the camp with 4106 households and a total population of about 15,000 people. All these villages fall under Traditional Authorities Msakambewa and Mkukula. People living in these villages belong to the Chewa ethnic group and they speak Chichewa language. However at the time of mapping, the number of villages had doubled to almost 100 with over 10,000 households with 40,000 people (District Commissioner's Office, 2014).

The Dzaleka Refugee Camp which was opened in 1994 with 1350 refugees lies between latitude 12° 00′ and 12° 10′ and longitude 33° 30′ and 33° 40′. Its altitude ranges from 1,200m to 1,650m above sea level, covering an area of approximately 147.6 Km². The refugee camp is about 40Km from the capital city of Malawi, to the eastern side. The place is reachable by a tarmac road constructed recently. At the time of mapping, there were about 5200 households with 18,238 people. The camp is managed by UNHCR and the activities are overseen by Malawi Red Cross society (MRCS). The camp has over 100 employees from the eight organizations providing various services. These organizations are: United Nations High Commissioner for Refugees (UNHCR); World Food Programme (WFP); Malawi Red Cross Society (MRCS); Ministry of Home Affairs; Participatory Rural Development Organization (PRDO); Plan Malawi and Jesuit Refugee Services (JRS). The activities being done are recreational, food distributions, agriculture and HIV/AIDs programmes.

At the time of data collection in July 2014, there were over 18,000 refugees and asylum at the camp. As of December, 2010 there were 11, 015 refugees and asylum seekers which constitutes 0.084% of the total population in Malawi. According to table 3.1 below, of the total refugee population recorded, 46.7 % are female and the rest 53.3% are men (MRCS, 2010).

Table 3.1: Population of Refugees at the Dzaleka in 2010

YEAR	NATIONALITY	POPULATION		
		MALE	FEMALE	TOTAL
2010	Angola	1	0	1
	Burundi	1521	1285	2806
	Democratic Republic of	1943	1609	3552
	Congo			
	Ethiopia	17	2	19
	Kenya	1	1	2
	Rwanda	2334	2208	4542
	Sierra Leone	3	2	5
	Somalia	43	28	71
	Sudan	2	1	3
	Uganda	2	3	5
	Zambia	3	4	7
	Zimbabwe	2	0	2
	TOTAL	5872(53.3%)	5143(46.7%)	11015

Source: Malawi Red Cross, Monthly Report, December 2010.

By May 2005, there were 5,128 refugees from the democratic Republic of Congo (DRC), Somalia, Rwanda, Burundi, Sudan and Zimbabwe with a total of 1383 households. The details are given in the table 3.2 below:

Table 3.2: Population of Refugees at the Dzaleka Camp in 2005

YEAR	NATIONALITY	POPULATION			TOTAL
		MALE	FEMALE	TOTAL	HOUSEHOLDS
2005	SOMALIS	38	23	61	26
	CONGOLESE	722	581	1303	403
	BURUNDIS	604	508	1112	306
	RWANDIS	1337	1313	2650	646
	SUDANESE	0	1	1	1
	ZIMBABWEAN	1	0	1	1
	TOTAL	2702	2426	5128	1383

Source: Malawi Red Cross, Monthly Report, May 2005.

The focus of UNHCR in 2005 was to promote repatriation of Rwandans in addition to the ongoing initiatives to empower refugees economically. The office also facilitated programmes to raise awareness of HIV/AIDS within the refugee community and to link up with the increasing number of national HIV/AIDS initiatives (UNHCR, 2005).

## 3.2 Sampling procedure for Interviews

The Probability-proportional-to-size (PPS) sampling was used. This is a two-stage sample design. A list of all villages with their population was collected from the District Commissioner, MRCS, UNCHR, government ministries of home affairs and agriculture. Villages were randomly selected using PPS, where size is the total number of people in each village. Once the villages had been selected, a list of households was randomly selected from each village. Households in all the selected villages were listed in alphabetical order. The respondents in the selected households were asked to participate in the study.

The sampling procedure was as follows:

- A list of villages around the camp and within a 5km radius from the two Traditional Authorities namely Msakambewa and Mkukula was established. In total, 30 villages were listed.
- 2. The size of each village around the camp was established, and numbered from one to 30.
- 3. Cumulative measure of size of all villages by size was calculated.
- 4. This was followed by calculating a sampling interval which was calculated by dividing the cumulative measure of size by the total number of villages for targeted respondents. The sampling interval was 36.
- 5. A random number was selected between one and the sampling interval, the village within which the cumulated measure of size this random number falls was selected as the first village.
- 6. Subsequent villages were chosen by adding the sampling interval to the number identified in step 5. This procedure was repeated for each village until the list was exhausted. Out of the thirty listed villages, fifteen were selected for the household interviews.
- 7. The second stage of sampling involved creating a sampling frame of the households from the selected villages which were randomly selected.

8. The sample size at a village was determined by probability proportional to size (PPS) approach where in this case the size was the number of targeted respondents at that particular village. Households were listed for each village and respondents were selected at random. If any selected eligible respondent was not available during the interview, at least three visits were made to cover the selected respondent within 48 hours. In case he/she was not available for interview within 48hours, these were replaced by selecting randomly another eligible respondent among those who were not previously selected.

This method has an advantage in that a list of households is constructed only for the selected villages and in addition interviewing costs are reduced because of clustering of households, (Byerlee *et. al.*, 1980).

The sampling in each sampled village was done in such a way that the sampling fraction (n/N) was greater or equal to 5%, (Boyd *et. al.*, 1984). Where, n is sampled households and N is total households in the area. Taking a sampling fraction of 5%, the number of households to be selected for questionnaire interviews was greater or equal to 205. The actual number of households per village in the study area (to determine number of households to be sampled) was obtained during the mapping of the area. From the fifteen selected villages, there were 1073 households out of which 159 households were selected for questionnaire interview and seventy eight households were selected for questionnaire interview at the refugee camp. This gave a total of 237 households.

# 3.3 Data collection techniques and Tools

Desk review was conducted in order to collect existing data. This secondary data was obtained by consulting relevant documents, both published and unpublished to form an overview and identified gaps in information. Additional data on the study area was obtained from Malawi Red Cross Society and UNHCR staff and Government extension officers. In addition, internet based literature search was done to get more information. Primary data was collected through oral interviews with selected households. The assessment tools were structured questionnaire for households and key informants and a focus group discussion guide for local leaders.

Before data collection started, four research assistants were recruited and employed to help with data collection. These research assistants were trained for three days and the training content for the interviewers included the following: purpose/rationale of the research; clarification of sampling frame and procedures, roles and responsibilities of interviewers; how to conduct interviews and FGDs; review of questionnaires for familiarization; recording of answers; translation of questionnaires into the local language (specifically Chichewa), and back translation into English; identification and interpretation of key words to ensure consistency; ethical issues; data quality; review of study logistics; and research ethics.

### 3.3.1 Quantitative Data Collection

One structured questionnaire was developed and administered to selected households around the refugee camp and the forest reserves. The questionnaire focused on forestry products which both the refugees and communities around the camp collect, produce and sell as a source of energy, the effects of utilizing these forestry products on the environment, an estimate of amounts collected, consumed, sold and their seasonality. Information was also collected on factors influencing production and consumption of these forestry products as energy sources, income gained after selling forestry products and how it was utilized; livestock and assets which the households own and how they acquired them; crop production, land holding sizes and whether there were any improvements on the land they own.

The questionnaire was administered in face to face interviews after obtaining consent from the respondents. All these interviews were conducted in a secure, quiet and private place with no interferences from the public and ensured the confidentiality of the respondent. The study instruments were pre-tested in a non-study area in order to assess the clarity of the questions, the precision of the translation and the coded responses (in the case of questionnaires). At the selected households, the interviewers explained the purpose of the study and invited the head of the household to participate by completing an administered structured interview.

Each participant was asked to give his or her consent to participate in the study. Once consent was given, the enumerators continued with the interview. In addition to the details of the survey, interviewers elaborated on the issues of anonymity of the process and confidentiality of the results to each potential participant. There were no personal identifiers, such as names, addresses or phone numbers collected during this survey. Each interview lasted for 60 minutes. After the interview has been completed, each enumerator read through the questionnaire to check for errors and unclear responses. Any errors were corrected before enumerators left the house of the respondent.

#### 3.3.2 Qualitative Data Collection

This qualitative assessment was conducted in the same area as a follow up to the quantitative assessment. Qualitative data was collected from participants using key informants and focus group discussions. In total, six key informants and four focus group discussions were conducted. This data helped in explaining and understanding the results from the questionnaire. Key informant interviews and focus group discussions yielded a lot of valuable information about the activities the different segments of the population in the area do practice and impact on the environment.

#### 3.3.2.1 Key Informant Interviews

Organizations working with the refugees and the community at large in environment were consulted and any available information was obtained. These organizations were government departments, non -governmental organizations, other networks or associations. These organizations were helpful in identifying key informants to participate in the Key Informant Interviews. Key informants (KI) are individuals who provided significant insight into the study topic. Each organization was asked to identify one person who has stayed in Dowa for over 3 years and was aware of the situation at the Dzaleka camp. Following this selection by each department, appointments were made with the selected individuals. On the day of the interview, each KI signed a consent form and the interview began. Six key informant interviews were conducted and each lasted approximately sixty minutes. Out of the six KI, four were men and two were women. The list of the KI is listed in annex 4.

# **3.3.2.2** Focus Group Discussions

The team which conducted focus group discussion was composed of a facilitator and two note takers who followed a predetermined interview checklist to direct discussions among groups comprised of six to twelve people. The study team selected respondents in liaison with community leaders. The first point was to identify the site where to conduct the discussions. Only sites which were private, safe, secure and away from the public were chosen.

This was followed by identifying influential leaders who were committee members, local leaders, non-governmental organization, gatekeepers, and heads of institution in case of those in employment or chiefs for the local community, including refugees. Once identified, they were briefed on the objective of the survey and asked for their participation. If the leaders identified were eligible and interested in participating, they were taken to an agreed private location for consent formalities. Once the consent procedures were completed, the facilitator started the discussions. Facilitators were accompanied by note takers who were responsible for taking notes during the discussions. Four focus group discussions were conducted, two (2) comprised of females and the other two (2) comprised of men. In total, 37 leaders comprised of 19 women and 18 men participated in all four discussions. A focus group discussion checklist was developed and used for discussions with community leaders. Focus group discussion topics include: community leaders' perception of the status of refugees in the community; their perception of the problems related to environment management in support for refugees; their involvement in managing the environment. All tools (questionnaires and discussion checklist) were translated into Chichewa. Call backs were done where necessary.

# 3.4 Data Quality Assurance

To ensure the quality of data, the following steps were observed:

- The questionnaire was translated into Chichewa, the local language used for the data collection. To verify the accuracy of the translation into Chichewa, the questionnaires were translated back into English.
- Data collectors were well trained.
- The study coordinator was responsible with methodological aspects of the study.

- At the end of each interview, the interviewers quickly checked the questionnaires for completeness before leaving the household.
- At the end of each working day, the study coordinator checked the completed questionnaires for completeness, accuracy and consistency. Errors in any questionnaires were discussed with the interviewers to avoid the same errors in the future.

# 3.5 Data Management

The following steps were employed to ensure that data was stored safely: all data was kept confidential and stored in a secure place under lock and key, accessible only to the lead Investigator; Hard copies of data collection forms were stored in a locked cabinet in Lilongwe; Data was backed up electronically every two days. A Logbook for questionnaires received against questionnaires expected and date received was maintained.

Each day, the interviewers stored all completed interviews in a secure and locked filing cabinet access to which was limited to the study coordinator. At the end of each interview, data collected was submitted to the study coordinator for checking. Data entry screens were developed using SPSS. A program to run simple frequencies to detect inconsistencies, coding errors, and missing values was prepared and run regularly to detect data entry errors. Errors were corrected by comparing the data in the questionnaires with those in the dataset. The data collected through structured questionnaire was coded to facilitate data entry in the computer. Data analysis was conducted using the Statistical Package for Social Sciences (SPSS) computer program. Descriptive statistics such as percentages and frequencies were determined. Qualitative data collected from focus group discussions was transcribed by the teams at the end of each day. The note takers compared their notes after transcription. The data was analyzed using the content analysis method by developing major themes from the data. Following this analysis, data was sorted and summarized according to different themes and sub-issues using the format of the checklists which was used during FGDs. The analysis plan included integration of the results from both the quantitative and qualitative assessment.

#### 3.6 Ethical Considerations

Participation of all respondents in the study was strictly voluntary. The following measures were taken to ensure the respect, dignity and freedom of each individual participating: appropriate training of data collectors; keeping questionnaires in a secure and locked location; no information was released to the public; conducting interviews in a private place; obtaining oral informed consent from participants; no names and contact information were collected; taking care in the handling and processing of questionnaires and electronic data sets and no information that could harm any participant was released at any time during the survey.

During the field staff training, confidentiality was emphasized and trainees cautioned against discussing their interviews with anyone, even team members. Each respondent was asked to consent to participate in the survey and was given an opportunity to ask questions in case they were not clear on the survey objectives and benefits. In addition, interviewers also explained the benefits of participating in the study to both the individual, as well as the community at large. Respondents were given an option to refuse to answer any questions.

This agrees with observations made by Bryman (2008:118) who discusses four main areas of ethics in relation to research. The first ethical consideration is concerned with ensuring research participants against any harm during or after the research. The second ethical consideration is concerned with the consensus of subjects to participate in the research (Bryman 2008). Informants should be aware of the purpose and content of the research in addition be able to skip certain questions of the interview if they for different reasons do not want to answer. The third and fourth ethical area is about the invasion of privacy and deceptions in relation to the research (Bryman 2008).

To ensure that the methodology and the procedures set forth in the proposal followed international standards and were in accordance with the rules and regulations of UNISA, the proposal was submitted to the ethics board of the University for approval. This was done before any field work started. The approval letter from UNISA is attached as annex 5. Locally, permission to undertake the study was also sought from the Dowa District Commissioner, the administrative overseer of the District. Permission to interview agriculture and forestry department staff was obtained from the District Agriculture Development Officer while Group Village Headmen and Village Headmen were asked to authorize the study at village level. Implementation of the activities only started once approvals were received from the UNISA ethics board, the District Commissioner, Head of Government Departments, camp leaders and Village Heads.

#### **CHAPTER 4: RESULTS**

This chapter presents the findings related to the research objectives which includes findings from the host community and refugee population of Dzaleka. Finally perspectives from external actors working at the Dzaleka Camp and other organizations working in the District, with issues related to the host community and refugee camp will be presented as well.

## 4.1 Household Demography

A total of 237 households were interviewed in all the fifteen selected villages and the Dzaleka Refugee camp. Out of these, 67% were Malawians and 33% were refugees. More Malawian households were interviewed because they form the largest population around the camp compared to other nationalities, who are refugees.

In addition, out of the sampled households for other nationalities also known as refugees, 59% Congolese, 17% Burundese, 14% Rwandese and 10 % Somalians were interviewed as shown in figure 4.1 below. As for the refugees at the camp, it shows that the population of the Congolese was highest followed by Burundese and then Rwandese while Somalians were fewer in number. See figure 4.1 for details.

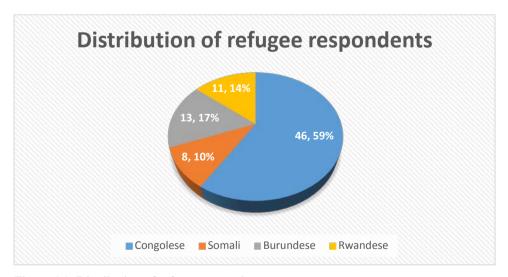


Figure 4.1: Distribution of refugee respondents

In addition, out of 237 respondents, 80% were men which comprised of 136 Malawians and 54 refugees. The rest of the respondents about 20% were female, which included 23 Malawians and 24 refugees. This shows that there were more male headed households than female headed households in both the camp and surrounding villages. This is the case because the area follows a patrilineal type of marriage system. On the other hand, our key informants reported that the number of refugee male headed household is high because mostly are males who run away to far places like Malawi while female headed households prefer to stay in the refugee camps within their countries.

As shown in figure 4.2 below, out of those interviewed, 137 Malawians and 51 Refugees were married, 15 Malawians and 12 Refugees were widowed, three Malawian and five Refugees were separated, four Malawians and one refugee were divorced while six refugee respondents were single. The number of household members ranged from one to thirteen, with an average of 7 members per household. This shows that the population for the area is very high and will continue to rise. This increase in population will increase demand for resources such as fuel wood. This observation was both for the hosts and refugee families. It was therefore concluded that both groups, the refugees and their hosts have very large families due to extended family and inadequate use of modern family planning methods. However, about forty seven households (20%) had six members in their households, which was below average.

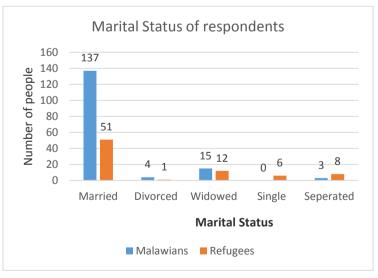
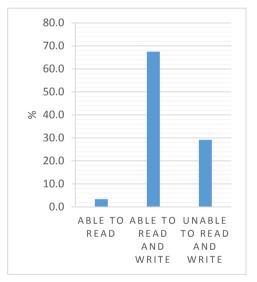


Figure 4.2: Marital status of respondents

According to figure 4.3a below, in terms of education levels, most of the participants(67.5%) reported to be have reached primary and secondary levels. As shown in figure 4.3b, one hundred and four Malawian and fifty six refugee respondents were literate and write while fifty two Malawians and senteen refugees were not. In terms of gender, 145 men were able to read and write while only 23 women were educated.

From our analysis, it shows that there were more Malawians who were literate compared to the refugees. On the other hand, the analysis also shows that there was a big portion of Malawians who were literate compared to their counterparts. This shows that there is need to provide better education services to Malawians to reduce the gap of those who are not able to read and write.



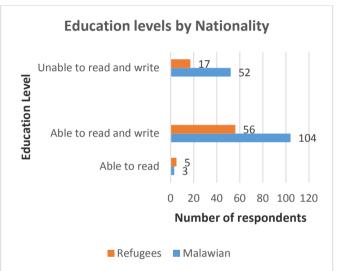


Figure 4.3a: Education levels of all respondents

Figure 4.3b: Education levels by Nationality

At the time of data collection, there were a total of 18,238 refugees and asylum seekers showing a 66% increase since December, 2010. According to UNHCR, the population has been on the rise because Malawi is a peaceful country and most refugees feel safe in the country. In addition, conflicts in the refugees' country of origins continue which has kept the number of refugees rising at the camp. For details see table 4.1 below.

Table 4.1: Population of Refugees at the Dzaleka Camp in 2014

YEAR	NATIONALITY	POPULATION		
		MALE	FEMALE	TOTAL
2014	Angola	2	0	2
	Brazil	1	1	2
	Burundi	2,480	2,224	4704
	Democratic Republic of Congo	4974	4266	9240
	Ethiopia	23	0	23
	Kenya	1	0	1
	Rwanda	2,057	2135	4,192
	Somalia	35	28	63
	Sudan	4	0	4
	Tanzania	0	1	1
	Zambia	3	3	6
	TOTAL	9,580	8658	18,238

Source: UNHCR, Camp Administrator's' Office (2014)

### 4.2 Social and economic activities

In this section, all activities which the hosts and refugee community at Dzaleka are engaged in are described in detail. From our findings, as presented in figure 4.4, 118 Malawian households reported that their primary activity is agriculture. In addition, crop sales were the most important source of income (57%) for most of the households who participated in the study. Most of the households reported that they rely on maize, tobacco, pigeon peas, cotton, cassava, vegetables and sweet potatoes.

Once these crops are produced, they are sold at the market established at the camp and sometimes sold to the capital city, especially for high value crops like tobacco and vegetables. It should be noted that over 80% of the Malawi population are smallholder farmers and agriculture forms their main source of food and income.

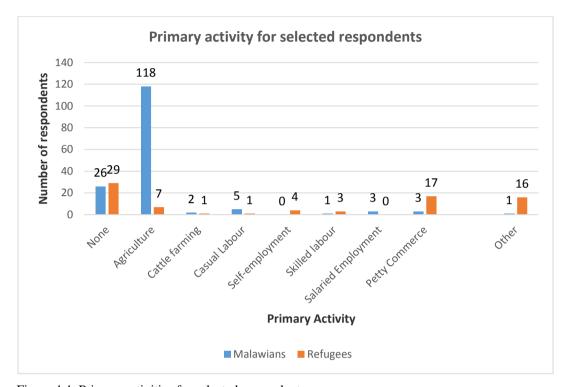


Figure 4.4: Primary activities for selected respondents

However, a large proportion of the refugees (n=29) were not involved in any activity and about 17 refugee households were involved in petty commerce.

According to figure 4.5a below, most of the Malawian and Refugee households (51%) were not involved in any secondary activity. Only half of the respondents were involved in secondary activity.

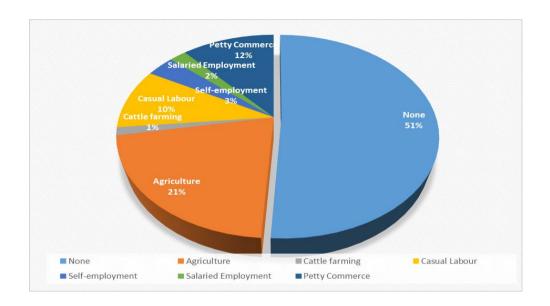


Figure 4.5a: Se.condary activities for all selected respondents

According to figure 4.5b, the most reported secondary activity for both Malawian and refugee households was petty commerce. About twenty two of the Malawian respondents reported that they were also involved in petty commerce and casual labour as a source of income. This shows that apart from the main activity which was agriculture, most of the families were also involved in other activities to generate more money. Those involved in casual labour reported that they are mostly employed by refugees to construct shelters and toilets once refugees arrive at the camp.

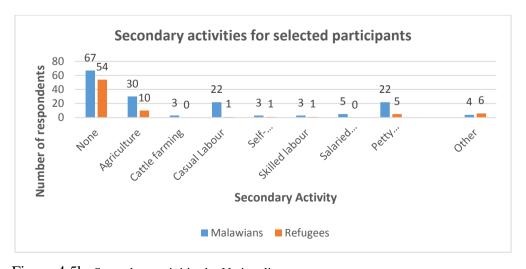


Figure 4.5b: Secondary activities by Nationality

According to our analysis as presented in table 4.2 below, all interviewed refugee households reported that they benefitted from food distribution from the government and other agencies. The majority of these households (98%) received food rations for the entire period of 12 months while 2% only received food for a few months because they had just arrived and registered at the camp. About 96% of the Malawian households never benefitted from any food distribution because being hosts, Government and other agencies believed that there was no need to provide food to them. About 4% of the Malawian households staying in villages around the camp benefitted from some food aid programmes. These households benefitted from the food distribution programmes for a few months to address specific problems such as malnutrition and orphanhood related problems.

**Table 4.2: Food Distribution** 

	Number of		Number of	Percent
	Malawian		Refugee	
Food Distribution	Households	Percent	Households	
Yes, all 12 months	2	1.2	77	98.7
Yes, few months	4	2.5	1	1.3
No	153	96.2	0	0
Total	159	100.0	78	100

Findings shows that all the 78 households which reported to have received food for the entire 12 months, were refugees. The refugees received food rations provided by WFP through two organisations namely MRCS and PRDO. Each individual received the following monthly ration.

Box 1: Monthly Individual Food Rations and Non Food Items for a refugee.

Maize = 13.5 kilograms;

Legumes/Pulses= 1.5 kilograms;

Corn Soy Blend = 1.5 kilograms

Cooking oil = 750mls

Soap= 2 tablets

One of the most often reported jobs by respondents are carrying food rations for refugees. Refugees receive food rations twice a month at two food distribution centers in the camp. The amount of food distributed to refugees is calculated based on their family size and is supposed to last for around two weeks. This is a large market for locals as the amount of food refugees receive too much to carry for one person to their homes in the camp.

Therefore it is a common practice to see many locals lined up outside food distribution centers on distribution days which create lots of competition between locals for carrying these food rations to refugee homes in exchange for some of the food or money.

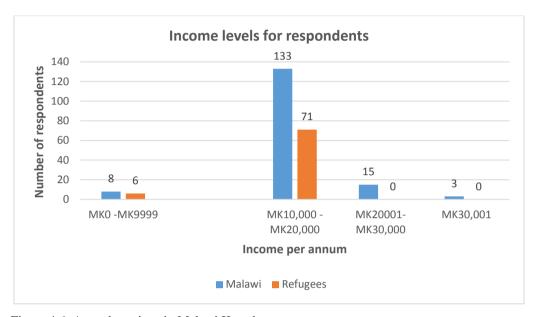


Figure 4.6: Annual earnings in Malawi Kwacha

According to figure 4.6 above, the majority of the households(n=204) interviewed reported that their annual income levels were between MK10,000 and MK20,000 per annum. Eight Malawians and six refugee households said that their income levels were below MK10, 000 per annum and fifteen Malawian households reported that their income levels were between MK20, 000 and 30,000. During the focus group discussions, the households reported increased levels of income since the arrival of refugees in the area due to the increased demand for food and other basic necessities. In addition, households attributed this to the efforts of the government farm input subsidy programme as some farmers were able to increase their production and sell their crops within the camp area. Some households(30%) also reported that they have joined several organisations where they are provided with different pieces of advice, techical services and loans to improve their livelihoods. These groups are: village and savings and Loan, farmer associations, natural resource management, religious groups just to name a few.

# 4.3 Patterns of energy consumption

This section will describe the pattern of energy consumption and reasons for choice. As shown in table 4.3 below, the majority of the Malawian households (98%) reported that they use fuel wood as their primary source of energy. Some of the reasons as reported by the respondents were that fuel wood is cheap, locally found and most of the household can afford it. Other households who have access to the forest reported that they use this source of energy because it is free. A good number of the Refugee households, about 37 and 33 of those interviewed reported that they use charcoal and fuel wood respectively as their source of energy. This charcoal also comes from the forest reserves. Very few households in the area, about 1.2% of Malawian and 8.9% of Refugee households use electricity despite having the supply from the Electricity Supply Commission of Malawi (ESCOM) in some areas. Most of the households said that they do not use electricity because it expensive and most of them cannot afford it. In addition, some villages which are far away from the main road have no on grid Escom electricity.

Table 4.3: Type of energy

Type of Energy	Number of Malawian Households	%	Number of Refugee Households	%
Electricity	2	1.2	7	8.9
Charcoal	1	0.7	37	47.4
Fuel Wood	156	98.1	33	42.3
Other-Crop residues	0	0	1	1.4
Total	159	100.0	78	100

This brings up the issue of alternative source of energy for households in the study area. From the analysis it shows that alternatives sources of energy are limited and expensive for most of the households as only 10% were using electricity. There were no other alternative sources of energy available in the areas. It is necessary for the government to support the communities around the camp to diversify their energy use as the population of the refugees continues to grow there-by increasing demand for energy.

This confirms what Scarlott (1965) who observed and demonstrated that diversification of energy use and the accompanying rise in demand and then elaborates on a possible future of solar energy utilization and nuclear fusion as a source of energy. Our analysis also shows that the households and community around the Dzaleka refugee camp will continue to exploit the forestry reserves for their survival due to the absence of alternative sources.

In 2003 FAO reported that fuel wood including charcoal accounted for about 91% of Africa's round wood production. The share of wood fuel worldwide round wood production has declined over time but in Africa the proportion of wood fuel has remained unchanged and in some countries even increased.

Table 4.4: Source of energy used by households

Nationality	Nearby Forestry Reserve	From Escom	Village woodlot	Other-Own farm/woodlot
Malawians	16	2	57	84
Other Nations( Refugees)	70	7	0	1
Totals	86	9	57	85

According to table 4.4, the majority of the respondents (n=86) reported that they rely on the use of fuel wood, from the nearby forest reserve while another 85 households, including eighty four Malawian households reported that the source of their fuel wood is their own woodlots and farms while fifty seven Malawian households get their wood from the village woodlot. From this analysis, it shows that members around the camp will continue to rely on the use of fuel wood for their domestic activities due to poverty and demand from refugees. During focus group discussions with local leaders in the area it was said that, "As long as refugees continue living at the Dzaleka camp, forest products will continue being harvested at an alarming rate." One respondent added, "There is high demand from refugees and because the population of the refugees is increasing, the demand is also increasing." "Therefore people just go to the reserve and get some fuel wood and sell to the camp."

However, the majority of the respondents from the Dzalaka camp reported that they were not to blame because they buy from local people who go to the forest reserve. Our findings also agree with UNEP findings. According to three detailed reports written on environmental degradation in the refugee affected areas in Tanzania, the close proximity of the camps to the forest reserves has been a key contributing factor to environmental degradation. These studies show that both refugees and locals continue to encroach upon the forest reserves, primarily to collect firewood or wood for construction, or to clear areas for cultivation (UNEP, 2005; Relief, 2003; Western, 1997).

The analysis also agrees with the observation made by Ordway(1965) who advances his 'theory of link of growth' based on two premises namely: (1) that levels of human living are constantly rising with mounting use of natural resources and (2) despite technological progress, we are spending more resource capital each year than is created. The theory follows: if this cycle continues long enough, basic resources will come into such short supply that rising costs will make their use in additional production unprofitable, industrial expansion will cease and we shall have reached the limit of growth.

Table 4.5: People who supply energy sources

	Local People to			
Nationality	other households	Refugees	Self	Other
Malawians	17	1	141	0
Other Nations(	63	5	8	3
Refugees)				
Totals	80	6	149	3

In general, even in acknowledging that the local communities contribute to environmental degradation, reports on the subject emphasize the significant role that the refugees' presence has had on creating new, and exacerbating existing, environmental problems. During focus groups meetings, respondents were asked to mention any environmental problems affecting them or their villages. No reference was made in this question to refugees, yet many of the participants referred to refugees as being the cause for degradation. This is shown in table 4.5 above, that most of the fuel wood is supplied by local people to other households in the community, including refugees.

A total of seventeen Malawian and sixty three Refugee households reported that local people were involved in either harvesting or sourcing fuel wood or selling to other households. It was also observed and reported by hosts that there are some refugees who are involved in the direct harvesting of the forestry products. Upon visiting their homes, it was noted that these refugees were better off as they had a variety of businesses, cars and employed a lot of Malawians who support them. These refugees use Malawians as middle men and sell most of their forestry products in the capital city. This confirms with the observation by the Deputy District Forestry Officer, Department of Forestry who said, "The department of forestry in Dowa is concerned that our two forest reserves namely Kongwe and Dowa Hills are at threat because of the presence of refugees at Dzaleka. About 200 men and women enter the reserves daily to harvest wood and poles to sell to refugees. An estimated 110 cubic metres of firewood is harvested every week and 75% of this is sold to the refugees at Dzaleka. One cubic metre is sold at MK10, 500 (about 30 USD)".

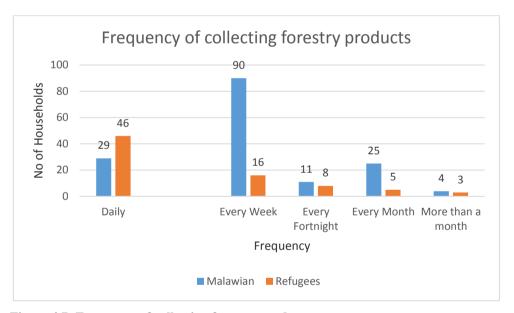


Figure 4.7: Frequency of collecting forestry products.

In terms of the frequency of collecting forestry products, according to figure 4.7, regardless of where a particular source of energy is, ninety Malawian and sixteen Refugee respondents reported that they collect their fuel wood on a weekly basis while forty six Refugee and twenty nine Malawians reported that they collect their fuelwood daily because it is purely used for domestic purposes. There were other households who reported that they only collect forestry products every month (n=30) and fortnight (n=19) because they only sell the products.

Once they are finished they go back to the reserve to harvest more. This creates one of the biggest environmental issues where refugees are given a shelter in a particular country, just like at Dzaleka. Food rations are provided to refugees every two weeks which are calculated based on their family size. This has also created a large market for locals as the amount of food refugees received is too much carry for one person to their homes in the camp. Therefore it is a common practice to see many locals lined up outside food distribution centers on distribution days. These situations create lots of competition among the locals for carrying these rations in exchange for some of the food or money. These situations may often seem very chaotic as food is distributed for the entire camp population in only few days at these locations. In addition to the food distribution centers being crowded with refugees collecting their rations it is also a main market for locals to try and get employed by refugees.

# 4.4 Income accruing from forest products

The study also found out that the alternative livelihood approach before the refugee presence was collecting wild fruits from far away and growing vegetables or other items to sell at markets. The camp has undoubtedly created a larger market for pursuing different kinds of livelihood approach (selling firewood, charcoal and other items) in addition to other business and income generating opportunities. The respondents mentioned three products which are harvested from the forest reserves. These are: wild fruits, charcoal and firewood. From the study, it was found that 36 respondents reported that they have direct access to the forest reserves while the rest reported to have been indirect beneficiaries. The focus will concentrate on the households who have direct access to the reserves and sell products once harvested to get some money.

**Table 4.6: Period of harvesting forestry products** 

Duration	No. of Malawian Respondents	%	No. of Refugee Respondents	%
0-2 years	1	3	0	0
3-9 years	9	30	4	67
10-19 years	11	37	2	33
20 years +	9	30	0	0
Total	30	100	6	100

In terms of time as shown in Table 4.6, the majority of the respondents (37% Malawian and 33% Refugee respondents) reported that they had been in the business of harvesting forestry products for over 10 years, 30% of Malawian and 67% of the Refugee respondents had been harvesting forestry products for over 3 years. This shows that a number of households rely on forestry products for their livelihood. With the growing population at the Dzaleka camp, the demand for energy sources is so high such that it will be difficult to halt the harvesting of the forestry products.

Table 4.7: Average price of Firewood

Average of firewood	No. of Malawian Respondents	%	No. of Refugee Respondents	%
MK 0 -2000/ head lot	2	1	0	0
MK 2000- MK4000/head lot	28	18	6	8
Domestic Use	129	81	72	92
Total	159		78	

According to table 4.7, 18 % of the Malawian and 8% of the Refugee respondents reported that they harvest and sell one cubic meter of firewood between MK2000 and MK4000. The majority of the respondents reported that the firewood they collect is used for domestic use only. The analysis shows that overall the number of people who harvest and sell firewood as a business is large enough to destroy the forest reserves. Our findings also revealed that the management of the forestry reserve is very difficult with the presence of the refugees. According to the District Forestry Officer, due to illegal harvests of forestry products, they have increased the number of patrols made including the number of staff involved in patrols. This has led to an increase in the budget for the management of the forestry reserves.

**Table 4.8: Income from Forestry Products** 

Earnings from FP	No. of Malawian Respondents	0/0	No. of Refugee Respondents	%
1001-5000MK	0	0	0	0
5001-10,000MK	7	4.4	0	0
Above 10,000MK	23	14.5	6	7.7
Do not earn any money	129	81.1	72	92.3
Totals	159	100	78	100

In general, most of those who collect and sell forestry products earn over MK10,000 per annum while the rest earn between MK5,000 -10,000. Mostly these products are supplied to the camp and towns which are close to the camp.

Sometimes refugees bring positive changes to host communities, such as economic growth or the funding of various development projects by international aid organizations that have come to the area in response to the refugee emergency. With the coming of refugees, most respondents reported that there has been an influx of non-governmental organizations which support the settling of refugees. In addition, the government and other agencies have provided services like education, health, trade which have benefitted Malawians as well. Malawians were able to get medical treatment when sick and children were able to access better education because additional schools have been built in the area.

# 4.5 Factors responsible for the utilization of forest products.

This section tries to explore why some people around the camp were utilizing the forestry products collected from two forest reserves close to the camp. All respondents were asked to provide reasons for harvesting and utilizing the forestry products. According to table 4.9 below, ninety percent of the Malawian respondents reported that local villagers and people around the reserves extract forestry products because of the demand from refugees. Most of these respondents said that demand went up upon the arrival of refugees in the area.

The majority of the Refugees (77%) and Malawian (10%) respondents reported that they harvest forestry products due to high levels of poverty in the area. During the focus group discussions, most respondents reported that before refugees came into the area in the 1990's, the area had a lot of trees and the charcoal business was almost non existence. However, this is not the case now. In addition, both groups reported that most refugees are not given any permits to use the forest. They normally go to the forest at night and early in the morning. However, the District Forestry Officer reported that their department was in the process of engaging with chiefs so that they co-manage the forest with local people in order to save the forests.

**Table 4.9: Reasons for extracting Forestry Products** 

Reasons for extracting forestry products	No. of Malawian Respondents	%	No. of Refugee Respondents	%
Poverty	16	10	60	76.9
Demand from Refugees	143	90	0	0
No other productive activity	0	0	4	5.2
Do Not Know	0	0	14	17.9
Total	159	100	78	100

Of those who harvest forestry products, 27 Malawian respondents reported that the money is used to buy food, one reported that they use it for agricultural inputs and two use it for other household uses. Six Refugee respondents reported that they use the money for household use and agricultural inputs. For details refer to table 4.10 below.

The households buy this food from the camp once the refugees receive their rations from UNHCR. Most of the respondents from the host community reported that with the coming of refugees in the area, most of the basic items were becoming scarce. This has increased the demand of goods and services in the area and has led to increased prices which most of the hosts cannot afford.

The respondents also reported that it was easy for the refugees to cope because they get free rations, money and services which they may need at any time. Our findings agree with what Chambers (1986) found out that likely cost and benefits for hosts in a refugee-hosting situation are into three groups of hosts; surplus famers, subsistence farmers and labors with negligible or no land. Further on Chambers offers five dimensions of analysis of the cost benefit relationship which is accordingly dependent upon food/land, labor/wages, services, common property resources (CPRs) and economic development. In early stages of refugee influx it is likely that before imported food aid assistance is fully implemented that depletion of local food supplies will drive up food prices. The outcome for the ones selling food such as surplus farmers would likely be positive, while negative for the ones who are depending on buying food supplies such as subsistence farmers and landless labourers.

Table 4.10: Utilization of resources earned from Forestry Products.

Utilization of money	No. of Malawian Respondents	%	No. of Refugee Respondents	%
Buy food	27	17	0	0
Household use	2	1.3	4	5.1
Agricultural inputs	1	0.6	2	0.6
Do not	129	81.1	72	92.3
Total	159	100	78	100

However, the majority of households (70%) believe that the business of harvesting forestry products has an effect on the environment while 27% reported that harvesting of forestry products has no effect on the environment. Some of the effects they mentioned were a shortage of rainfall in the area, flooding during heavy rains as the water falls on bare ground, scarcity of fuel wood since it was becoming difficult to get wood for domestic use. In addition, the respondents also reported that the price for fuel wood has gone up in recent times due to a high demand from refugees.

Changes in terms of providing livelihoods have been experienced although the scale and significance varies. The majority of the respondents reported that they have experienced small changes. The most reported change in providing livelihood is that the refugee camp has created a larger market for them to sell items such as firewood, charcoal and others. In addition the camp presence has created new job opportunities for hosts.

The creation of a new market and job opportunities improved their situation to some extent in terms of improving livelihoods. For example respondents from Lirambwe and MengweVillage emphasize that "instead of walking long distances searching for food we can now go to the camp and look for work". The majority of the respondents are still facing great challenges in their daily lives and struggle to provide livelihoods for their families.

#### **CHAPTER 5: ANALYSIS OF IMPACTS**

The findings in this chapter are discussed and analyzed in light of the theoretical framework and concern research questions on how the Dzaleka refugee camp has impacted the host community. This analysis will focus on the economic, environmental and social impacts of hosting refugees. The second part will analyze and further discuss how situations of conflict and coexistences take place in the relationship and how to promote the latter.

As reported by World Bank (1997), the highest refugee concentrations are in some of the poorest countries in the world. A large number of such migrations are into Least Developed Countries (LDCs) like Malawi. The presence of refugees compounds the already prevailing economic, environmental, social and, at times, political difficulties in these countries. Often such countries are confronted with a combination of all four of these factors which usually has a substantial impact. The presence of refugees, and demands on the already severely strained economy, services and infrastructure add to the extreme hardship affecting the local populations. In many instances, refugees become an added impediment to, or risk jeopardizing, the development efforts of the host country. Their negative aspects may be felt long after a refugee problem is solved; for example, the damage to the environment is a process and does not end with the repatriation of refugees. While the international emergency aid in response to such an emergency does have positive effects on the host society, this hardly compensates for the negative consequences of such large concentrations of refugees.

Several impacts have been experienced by the host communities around the Dzaleka Refugee camp since the refugee influx in 1994. Some of these impacts have been more significant and more reported than others. During the study, each respondent was asked to highlight at least two positive and negative impacts brought about by hosting refugees at the Dzaleka refugee camp. Below in figure 5.1 are the positive impacts mentioned by 159 Malawian respondents. During the study, respondents and key informants gave an overview of impacts experienced by host communities in the Dowa District.

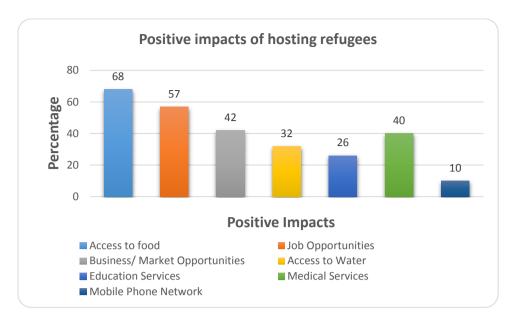


Figure 5.1: Positive impacts of hosting refugees.

The most mentioned positive impacts are: access to food and water, business and job opportunities, education and health services and availability of mobile network services. Some of the negative impacts reported by respondents are: an increase in prices of goods and services, deforestation, pollution, conflicts and increased insecurity. These impacts were grouped into three categories i.e. economic, social and environment.

# **5.1** Economic Impacts

Refugees have a major economic effect on the host country. The extent to which refugees add to the economy is relative to how much they take from it, is one of the most contested issues surrounding asylum policy. It is frequently thought that refugees are of little economic value and make initial demands upon arrival at the host government ultimately at the taxpayer's expense. The economic impacts that refugees have on the host communities around the Dzalaka Refugee camp are explained below. As shown in figure 5.1, increased access to food, business opportunities, medical services and job opportunities are some of the most reported impacts by the host community. The respondents describe these new opportunities as positive impacts of the refugee influx. Hosts have experienced more opportunities to generate income and provide livelihood through trading with refugees in the camp or working for them in exchange for food or money. This has been the most significant change in terms of their livelihood approach for many of the host respondents.

The camp has become the new town and business center of the Dowa District where food, water and business opportunities are found. Employment opportunities for hosts in the camp have been a significant livelihood resource which results in refugees employing hosts to do small jobs for them. These jobs might not be ideal or well paid, but they create livelihood opportunities for the host community.

The presence of refugees, as a focus of attention, has attracted development agencies to the areas. While infrastructure is developed in the initial stage primarily to facilitate the work of host governments, UNHCR and its implementing partners served as a catalyst to 'open up' the area to development efforts that would otherwise never reach this area.

Large-scale and protracted refugee influxes can have macro-economic impacts on the host country. Some of these impacts are associated with increased but uncompensated public expenditures related to the care and maintenance of the refugee population. A report concerning the impact of refugees on the national public expenditure in Malawi during the 1990s concluded that significant direct and indirect expenditure related to refugees affected the scale of the governments capital investment in the social and infrastructure sectors. Direct and indirect costs of refugee influxes on public expenditure were estimated at US\$ 9.4 million for 1988 and U\$ 8.4 million for 1989 (GoM et al, 1990). As a result, a UNHCR emergency assistance program was developed to ensure that development projects served the needs of both the displaced and nationals in the refugee hosting areas (Zetter, 1995). This program included a substantial expansion of hospitals, clinics, road networks, and water supply, as well as reforestation plans to alleviate the environmental degradation of fuel wood reserves.

In terms of access to food and water the refugees are in an advantageous position over most hosts. Indirect access to food and water has nevertheless been experienced by many through new market and job opportunities located in the camp. The camp establishment has had economic impacts regarded as positive by the majority of the respondents. Although most hosts still struggle to survive, the camp has created a larger market for generating income and better opportunities to provide basic needs such as food and water. The majority of host respondents use the refugee camp for providing livelihoods. Similar findings are also identified in the empirical research by Maystadt and Verwimp from camps in Tanzania (2009).

The creation of new common marketplaces within refugee camps where there is external food aid in Dzaleka much in line with the experiences from Maystadt and Verwimp (2009). In recent decades, several studies have focused on the impact of refugees on the local economies of hosting countries (Chambers 1986; Whitaker 1999; Alix-Garcia 2007). In Tanzania, an assessment was undertaken of the impact of Rwandan refugees on local agricultural prices between 1993 and 1998 (Alix-Garcia, 2007). The study found a significant increase in the prices of some agricultural goods (e.g., cooking bananas, beans and milk) and a decrease in the price of aid-delivered goods (e.g., maize). As a result, many Tanzanian farmers who produced a surplus benefited from an increased demand for their agricultural products in local markets. Anecdotal evidence suggested that on average, farmers doubled the size of their cultivated land and their production of bananas and beans during 1993-1996 (Whitaker, 2002). The increase in the size of the local markets also boosted business and trade activities conducted by both hosts and refugees. At the same time, welfare indicators such as electricity, televisions, and refrigerators increased in host population households near refugee camps (Whitaker, 2002).

The other positive contribution is that refugees can use their skills and knowledge towards the benefit of local people. For example well-educated refugees living at the camp can work at schools which does indeed contribute to the Malawi economy. According to JRS, who provide education services, reported that out of 62(M=45; F=17) primary school teachers employed by them, 21(M=16; F=5) teachers are refugees which represent 34%. As for secondary school, out of a total of 21(M=16; F=5) teachers, 4(M= 3; F=1) are refugees. In addition, JRS also employ over 20 volunteers who support children in the nursery school and ECD Centre. Under the DHO, whose mandate is to provide health services, with support from UNHCR, 2 nurse/midwife technicians, 2 medical assistants and about 7 Health Surveillance Assistants are working at the health facility. The facility was constructed by UNHCR and handed over to the Malawi government but continues to provide financial and human resources including the procurement of drugs. The facility also has a good ambulance in case of referrals and emergencies around the community. The last positive contribution is associated with refugee's access to transnational resources provided by other refugees or co-nationals living abroad, which includes social networking.

According to the World Development Report (2011), experiences in countries such as Malawi, Tanzania, Kenya, and Zambia have shown that when refugees have been able to access land or common property resources, their productive capacities tend to increase significantly. Correspondingly, in such cases, the burden of refugee presence on host communities and assistance providers tend to decrease as well.

On the other hand, there were some negative contributions brought about by refugees as reported by the host community. First, when refugees arrived, the demand for food and other commodities increased, which led to price rises in the host state's market. The rise of prices affected the local citizens because their income levels remained the same. In the case of Dzaleka, one of the reasons for the price hike that we see today occurred because of the increasing number of refugees entering the country daily due to conflicts in their own countries.

The presence of a large refugee population at Dzaleka also means a strain on the local administration of the Dowa District Council as they divert considerable resources and manpower from the pressing demands of their own development to the urgent task of keeping refugees alive, alleviating their sufferings and ensuring the security of the whole community. While the host government generally has demonstrated a willingness to bear many of these costs, they are understandably reluctant to pay, as a price for giving asylum, the cost of additional infrastructure that may be needed to accommodate refugees.

The local government expects, at the very least, that the international community help compensate for the costs incurred in providing asylum for the refugees. The government is not fully prepared to reallocate its previous development funds to programmes designed for, or required because of, large numbers of refugees on their land. This agrees with a World Bank-sponsored study of uncompensated public expenditures arising from the refugee presence in Malawi which recommended an emergency assistance programme in 1990-91 of up to \$ 25 million. According to a systematic analysis of public expenditures, this was the amount, after the deduction of international aid provided through UNHCR, invested in refugee related government assistance and administration during the preceding two years. Other refugee hosting countries could cite comparable experiences as well.

### **5.2** Environmental Impacts

The environmental impact of refugees on the host countries is also evident. From our findings it shows that the presence of large numbers of refugees has been associated with environmental impacts on land, water, natural resources, and slum growth. The initial arrival phase of refugee influxes did not bring many impacts. However as years go by, the population of refuges at Dzaleka started rising and this has been accompanied by severe environmental impacts because when people move into and through an area, they compete and struggle to secure their immediate needs. This has been the case at the Dzaleka refugee camp.

The most evident environmental impacts reported by respondents were: deforestation and firewood depletion; land degradation and water pollution. The forest reserves have been depleted and trees cut down carelessly for fuelwood, charcoal production and poles for construction. Usually, refugees hire Malawian to illegally harvest the products and sell them. In some instances, refugees go on their own to the reserves to collect products. This has reduced the number of tree species in the reserve. It is important to note that such environmental impacts can affect the long-term livelihood opportunities of both refugees and the host population. This agrees with what Black (1994) who stated that the three main environmental issues associated with Refugees include deforestation, land degradation, and water shortages and supply issues. In addition, UNHCR also reported that one of the most frequently cited negative impacts in recent years, emphasized in particular by the host country governments, is environmental degradation and natural resource depletion. However, it is not only the host governments that claim that refugee camps cause environmental degradation: over the past several decades, there has also been a growing acceptance by the United Nations High Commissioner for Refugees (UNHCR) and other organizations working with refugees, as well as by independent researchers, that the presence of refugees often leads to environmental degradation and natural resource depletion both within and around the refugee settlements. Examples of the devastating impact of large refugee populations on the eco-systems and on the infrastructure of host countries can be found in the experiences of the Islamic Republics of Iran and Pakistan in hosting Afghan refugees.

For instance, in Pakistan, over two million refugees contributed to accelerated wear and tear of roads and canals, and a significant increase in the consumption of fuel and fodder resources. Wood resources were further depleted as tented camps were converted into villages and the need for roofing timber put even more pressure on woodland resources. Many families brought livestock which grazed near camps, adding to the perennial problems of over-grazing and the consequential acceleration in soil erosion. Fuel and fodder removal also posed a serious threat to the capacity of the environment to renew its groundwater resources.

Our findings during the study were not different from what other researchers found out in similar studies. Most of the respondents reported that apart from deforestation which is caused by the influx of refugees into the area, there is also a lot of land degradation caused by soil erosion due to the non-adherence of good crop and agricultural extension advice by government workers. Most of the Malawian respondents reported that some refugees grow crops and do not follow good agricultural practices such as cultivating across the slope. These increases run off and cause soil erosion which has led to land degradation. Once the land is degraded the refugees move on and sublease another fertile garden.

The other environmental concern which has come about with the refugees was that of pollution. Most of the respondents reported that refugees who sublease land from their Malawian counterparts, grow a lot of high value crops especially horticultural crops such as paprika, onions, cabbage, spinach, tomatoes and Irish potatoes. During the rainy season when disease incidences and pests are common the refugees use a lot of chemicals to minimize damage and kill the pests. Most of the refugees do this without the permission of extension workers. This practice pollutes the land and water. In addition, during the rainy season, these chemicals are washed down stream into rivers and may have an effect on the aquatic resources available in rivers and Lake Malawi in the long run.

### 5.3 Social Impacts

The third major way that refugees affect their host country is socially. The refugee presence in hosting countries has potential social impacts on the ethnic balance of hosting areas, social conflict and delivering of social services. Furthermore, in refugee-affected and hosting areas, there may be inequalities between refugees and non-refugees that give rise to social tension.

Most respondents reported that refugees are regularly benefitting from privileged access to resources unavailable to the local host population. In this respect, refugees at Dzaleka are offered opportunities for education, literacy, vocational training, health and basic livelihood. These benefits that refugees acquire from the host government are considered to be negative contributors in the eyes of local citizens, because in their view refugees receive better social services than they do. The perception was that these services could have been available to them if refugees were not in the area.

Improved access to health services is the fourth most reported positive impact by the host community respondents (Figure 8). Free medical services at a health facility in the camp provided by government through UNHCR have become available to the host community. Services at this facility in the camp are free of charge in contrast to the private clinics at Dowa Boma. The camp clinic is being used by the host community for medical needs and is reported as positive by almost half (40%) of the host respondents. The impact of medical services also contributes to the economy of the country as the hosts receive free medical treatment. The facility is well maintained, has adequate stocks of medicines and the staff is also very good. There are some refugees who are clinicians, nurses/ midwives and HSA working the catchment area of the facility

Educational opportunities in the camp have gradually become available free of charge for the host community and is reported as a positive impact by some of the respondents (Figure 8). This development suggests that education opportunities will continue to become more significant for the host community. Respondents reported that there is both a primary and secondary school where children from the host community are able to further their education. In addition to that there is a pre-school and a junior primary school built and donated by the Japanese Government right in the camp.

According to JRS, the facilities are used by both Malawians and refugees. However, the proportion of the Malawian pupils is low. For example, at the time of the study, out of a total enrollment of 264 children in the pre-school, only 4 were Malawians which represents about 2%. As for the primary schools, out of a total enrollment of 5,065 pupils, 380 were Malawians representing about 8%. Lastly, there were 214 Malawian students at the community day secondary school against a total enrollment of 780. The key informants attributed this low enrollment by Malawians to a very hostile environment at the institutions as the refugees population harass their Malawian counterparts. Secondly, the parents who support the management of the schools have that mentality that the schools belong to refugees and as such they unanimously agreed that the enrollment for Malawian students should not be over 15%. One of the key informants said, "During the 2013/14 schools calendar, 39% of the pupils and students were Malawians and at one of the PTA meetings most refugees questioned why the Malawian students were on the higher side. The teachers explained that the schools were in the host communities and there were no primary schools close by, hence the increase. After a lengthy discussion, JRS bowed to the Refugees demand to reduce the enrollment figures for Malawian students to around 10-15%".

The most reported negative social impacts are exposure to more conflicts and increased insecurity. Both of these impacts relate to the relationship between the host community and refugee population. Large conflicts involving entire communities were reported to be more common some years ago, but individual conflicts between hosts and refugees were still reported as frequent and negatively affecting the lives of many hosts. The reality is that more insecurity and conflict situations have been experienced at Dzaleka after the refugee presence and had a significant negative impact on the host community. During the focus group discussions, some respondents reported that cases of armed robbery were on the rise due to the introduction of the refugees. One member said, "This armed robbery has also affected other surrounding areas such as Mponela, trading centre in Dowa and Lilongwe City. These refugees go out to steal and come to hide in the camp."

One other negative contribution is that some social problems such as gender-based dominance and/or violence often increase when the host visits the camp to sell their products, work for the refugees and during beer drinking. Normally these are women who want to earn some money. During the focus group discussions with the hosts, most of the participants reported that because most of the refugees are coming from war torn countries, where violence was the order of the day, the refugees are not afraid to engage themselves in violent acts. The participants also reported that some Refugees harass fellow refugees, especially women; fights amongst themselves and steal from each other within the camp.

In addition, very few respondents from the host community have experienced direct assistance by humanitarian organizations. The majority of host respondents state that they feel marginalized and unequally treated by the UNHCR and NGOs who are only supporting refugees. UNHCR's "overall mandate is to provide international protection and humanitarian assistance to refugees and persons of concern while working to find durable solutions to their situation" (UNHCR 2006). Rightfully the UNHCR may not be obligated to provide humanitarian aid to the host community as this is rather the responsibility of the Malawi government. Nonetheless, political policies by UNHCR and its implementing partners (various NGOs) to provide assistance almost exclusively to refugees are impacting host-refugee relations. Chambers (2.1.1 p, 15-18) also claims that economic development in refugee hosting areas depends on official policies and interventions by the hosting country. Experiences of host community respondents describe government interventions as minimal.

While it is recognized that there are some "positive" aspects to the impact of a refugee influx on the economic life of a host community and country, the large-scale presence of refugees invariably constitutes a heavy burden for Malawi and the Dowa District to be specific.

#### CHAPTER 6: RELATIONSHIP BETWEEN HOSTS AND REFUGEES

In this chapter, an analysis of the relations between the hosts and refugees will be provided. Both groups provided their views on the nature of the relations which exist between them. Later in the chapter, two types of conflicts will be discussed as reported by the respondents. The nature of community conflicts is what the respondents describe as a conflict between communities rather than only few individuals. Individual conflicts are the kind of conflicts described by respondents as individual incidents including fewer individuals rather than whole communities.

### 6.1 Relations between host and refugees

The majority of the host respondents described the relationship between the host community and refugee population as bad. Figure 6.1 shows how the respondents described their relationship with the refugee community. 58% of the respondents described their relationship as bad, while 28% described it as good, 10% as hostile and 4% very cordial.

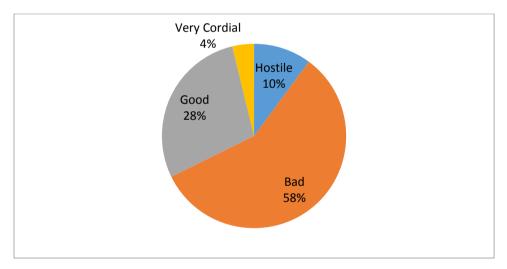


Figure 6.1: Type of relationship between hosts and refugees as perceived by the Hosts.

The respondents who described their relationship as bad elaborate that the relationship is featured by conflicting and sour relations which results in violent interactions between the two groups in most cases. Many of these respondents argue that they live in fear of being assaulted by people from the camp. The respondents who characterized their relationship with the host community as good argue that the relationship is featured by uncertainty. They have experienced both situations of conflict and relations without problems.

Some of the respondents in this group stated that their personal relationship was cordial at the present time and had improved over the years, though sporadic conflict situations between hosts and refugees were still taking place. Four percent of the respondents describe their relationship with the host community as very cordial. The respondents in this group stated that they either had no specific relations to people from the camp or only interacted with them at marketplaces, schools and in their homes when working for them. This group also reported that some have created friendships and inter married.

In general, the majority of the refugee respondents described the relationship with the host community as good. According to figure 6.2 below it shows that 55 of the respondents described their relationship as good, while 14 described it as bad and 10 as very cordial. No refugee reported that there were some hostilities. The respondents in this group stated that they interact with the host without any serious problems at marketplaces, health facilities, schools and social gatherings like weddings.

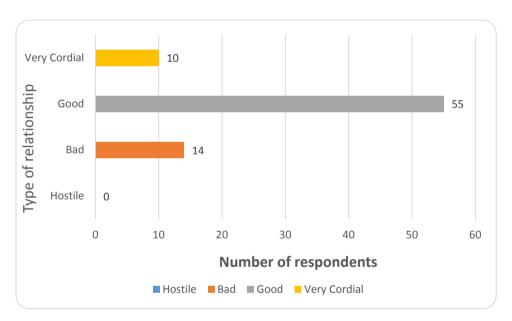


Figure 6.2: Type of relationship between hosts and refugees as perceived by Refugees.

Both groups also reported that the main areas where refugee respondents meet and interact with people from the host community are inside the camp and the market place. The other areas mentioned were at water collection points, food distribution centers and when hosts were selling items such as firewood and charcoal or looking for work inside the camp. Interactions outside the camp were also reported by some.

This was usually when refugees were not provided with enough firewood and needed to move outside the camp to fetch wood on their own. For the same purposes as within the host community findings are conflict experiences divided between those of community and individual levels. The majority of the refugee respondents reported that they have experienced or knew about conflicts between host and refugees. Conflict situations between hosts and refugees are frequent and mostly take place within the camp according to the respondents.

## 6.2 Community conflicts

Conflicts described as including large numbers of participants from the host and refugee community is mentioned by 11 respondents. Community conflicts were most frequent in the years between 1998 and 2003 when the camp had just been opened. Several of the respondents identify food issues as a common source behind these community conflicts. They further argue that hosts have the wrong perception and think that refugees are wealthy in terms of food and money. Some of the respondents argued that large conflicts were more frequent in the early days of the camp when the majority of refugees were of Sudanese origin who are perceived to be violent. According to the respondents in the IRIN humanitarian news and analysis (2003) reported on the escalating conflicts between hosts and refugees in Tanzania. Estimations suggests that 30,000 Sudanese refugees had to be displaced from their homes in the camp due to conflicts with Turkana hosts, 11 people were reportedly killed during this conflict. This confirms our findings in the study that there will always be conflicts between refugees and hosts.

### 6.3 Individual conflicts

Individual conflicts between host and refugees were reported by the majority of respondents. Although not all respondents had been directly subjected to such conflicts, they confirmed that individual conflicts between hosts and refugees were frequent. The nature of these conflicts includes robberies, assaults, rape and violent attacks using weapons. These individual conflicts are mostly reported to take place within the refugee camp according to the respondents. The most central areas of conflict were at refugees' home, water collection points, food distribution centers and at the market inside the camp.

The most reported situation by the respondents is when the hosts were doing some work or other businesses in the camp during the day. Many conflicts also start at water collection points in the camp according to one respondent.

A common scenario is that hosts try to use boreholes located in the camp. Sometimes refugees are refused by hosts to collect firewood outside the camp and conflicts may start from this. Refugees are sometimes "forced" to move outside the camp to collect firewood when not provided enough according to the Malawian respondents.

Several of the respondents also complained over the handling of crimes reported to the local police unit. The refugee respondents argue that the local police always favor hosts over refugees. Arguments for this are that local police are from the same tribe as the host community and therefore favor them over refugees in disputes. Crisp (2003) states that conflicts between hosts and refugees are most likely to take place within camps as this often is the main area of resources and services. Further, Jacobsen (2002) argues that economic impacts are a common cause for such conflicts, mainly through refugees putting more pressure on already scarce economic resources. The camp opportunities have created the rather limited economy that most hosts depend on. One might argue that the refugee camp has improved an almost non-existent economy in the host community. On the other hand the economic differences between hosts and refugees in term of availability of food and water are so significant that they often result in conflicts. Refugees also benefit from hosts through buying firewood and other items in addition to employing hosts to work for them. The socio-economic impacts that are benefitting both communities in different ways are not significant enough to provide sustainable livelihoods for the host community. Despite the positive potential of social relations through trading, the social impacts of the relationship often result in conflicts. The economic imbalance in terms of food and water accessibility has become an obstacle to coexistence in the relationship.

#### **CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS**

#### 7.1 Conclusions

Countries that host refugees for protracted periods can experience long-term socioeconomic, environmental, political and security impacts. While the impacts of a refugee
presence on a country like Malawi are complex and context-specific, they are not necessarily
only negative. The economic impacts of refugee presence on neighboring countries have
been both negative (e.g. uncompensated public expenditure and burden on the economic
infrastructure) and positive (e.g. stimulated local economies by increasing the size of local
markets and reducing commodity prices). The positive contributions that refugees can make
to the economy of host countries should be viewed in terms of winners and losers among
both refugees and host populations. Therefore, impacts by refugee camps on host
communities are complex and may be both positive and negative. A good host-refugee
relation cannot be underestimated and it is crucial for the international refugee protection
regime to provide protection for refugees. The hosts experiences of camp impacts is also
affecting and shaping their relationship with the refugee population. Negative
experiences from the camp presence will promote conflicts in the relationship, while
positive experiences are likely to promote coexistence between hosts and refugees.

The community around the Dzaleka Refugee camp has experienced several impacts during its 20 years of hosting refugees. Limited livelihood opportunities around the Dzalaka camp area have caused the hosts to approach the camp in search for food, employment and water through negotiating with refugees. Hosts feels marginalized by the great majority of humanitarian support provided to refugees while they themselves are also struggling. These factors have contributed to grievances and frustrations by hosts that further has led to increased tension and conflicts between them and refugees. Collaborations between hosts and refugees have been very limited.

The notable positive impacts have been of a socio-economic nature. Social services such as health and education have improved and become more available for hosts. Business opportunities in the camp have created a larger market for hosts to sell and trade of different items such as firewood and charcoal with refugees in exchange for food or money. Employment opportunities through doing small jobs for refugees have also contributed to the host economy. Mixed schools inside the camp have become an important arena for integration.

Nevertheless, these same areas and impacts were also promoting conflicts in the relationship. The limited capacity and economy of both groups leads to regular disputes through trading. The main sources promoting coexistence between hosts and refugees through socio-economic impacts and humanitarian initiatives are nonetheless found less significant than sources creating conflict in the relationship.

Most negative impacts have been related to the environment and social relationship between the hosts and refugees. Most of the respondents reported that apart from deforestation which is caused by the influx of refugees into the area, there was a lot of land degradation caused by soil erosion due to the non -adherence of agricultural extension services offered by government workers. Most of the Malawian respondents reported that some refugees rent land to grow crops and they do not follow good agricultural practices such as cultivation across the slope. This increases run off and causes soil erosion which has led to land degradation. Once the land is degraded the refugees move on and sublease another fertile garden. The other environmental concern which has come about with the refugees was that of water pollution due to the use of agro-chemicals. Most of the respondents reported that refugees who sublease land from their Malawian counterparts, grow a lot of high value crops especially horticultural crops such as paprika, onions, cabbage, spinach, tomatoes and irish potatoes. During the rainy season, they use a lot of pesticides to control pests. Interactions with refugees have for different reasons led to more insecurity and conflicts at Dzaleka. Conflicts between hosts and refugees are the most reported negative impact on the lives of many hosts and refugees.

The heavy price that Malawi has to pay in providing asylum to refugees is now widely recognized. The rhetoric of international solidarity, however, is not always matched by support in addressing the negative impacts highlighted above, that these refugee movements have on the country. The obvious and desired approach is to prevent refugee situations from arising in the first place. When these do occur and asylum has been generously extended by a host country, it is the responsibility of the international community to mitigate, to the extent possible, the negative impact of such inflows and to redress damage caused as a consequence.

Such action must recognize that the impact and legacy of hosting large numbers of refugees sets new and unforeseen challenges that have to be met largely by developmental, not emergency assistance, yet rarely fit within development aid cycles. For this reason, as well as to safeguard the institution of asylum, the support to host countries must be additional. Such a response would be a tangible expression of solidarity and burden-sharing aimed at alleviating the burden borne by States that have received large numbers of refugees, in particular developing countries with limited resources.

The social impacts of refugees between refugees and non-refugees can be reduced by initiating development projects targeting both refugees and the host communities. The environmental impact of refugees can also be alleviated through a combination of dispersed refugee settlement and targeted area development interventions. Some impacts associated with the presence of refugees can be mitigated by a comprehensive framework to secure stability and development through sustainable solutions for displaced people.

#### 7.2 Recommendations

The research presents the following recommendations. These recommendations are intended for those working at the Dzalaka refugee camp and host community. The recommendations are based on the findings and analysis of this research and how to improve on issues faced by both the refugees and hosts. The following are the recommendations:

Development assistance should target both refugees and their hosts: In this regard, experiences in countries such as Zambia, Tanzania, Pakistan, and Lebanon suggest that development assistance that targets both refugees and their hosts in the areas affected by displacement is an effective approach in mitigating the negative impacts of a long-term refugee presence and to build on the positive contributions of refugees to host communities. Such development programs can improve the daily lives of the displaced and their hosts during the displacement period and perhaps also prepare refugees to find sustainable solutions to displacement. One of the alternative solutions is to embark on income generating activities for both hosts and refugees. A good example is the **Income** Generating Projects for Refugee Areas (IGPRA). By the early 1980s more than three million Afghan refugees had entered Pakistan to escape the war in their homeland. Most of them settled outside cities or in rural areas near the border. A project called IGPRA was introduced. The main goals of IGPRA were: (i) to create jobs and income, mainly for Afghan refugees but also for the local poor through labor-intensive projects; (ii) to repair some of the physical damage that the refugees and their livestock had caused to infrastructure and the environment; and (iii) to create lasting assets for the host country, including irrigation and flood control works. An evaluation report conducted by the World Bank shows that IGPRA"s achievements are impressive in terms of the substantial range of infrastructure assets and the employment opportunities created for refugees and some individuals in host communities. IGPRA provided an estimated 11% of the employment needed by the refugee labor force and improved the skills of Afghan workers. IGPRA I and II also provided formal training in forestry management. Furthermore, the project created sustainable assets for local populations and the host country (World Bank, 2001).

Key factors in IGPRA"s success included the cultural affinity between Afghan refugees and their hosts as well as the government's policy on refugee employment. Activities implemented by this project, would apply to the area of Dzaleka where there are very few livelihood activities and the people continue to harvest forestry products.

The other recommendation is to embark on afforestation programmes in order to plant more trees in the two forest reserves and establish more village woodlots, including some at the camp. UNHCR are mandated to oversee refugees worldwide and **should put more emphasis on these environmental management projects** in order to prevent environmental degradation, rather than worry about dealing with the consequences of the degradation in the future. An influx of thousands of people into one area will inevitably create environmental problems, particularly when both the refugees and host population depend on natural resources for their daily survival. UNHCR in collaboration with the Forestry Department should train refugees and communities around the camp in tree nursery management, woodlot management and seed collection so that they raise their own seedlings. Once these seedlings are raised, they should be used to establish woodlots within the camp and in villages around the camp. In addition, these seedlings could be used to dress the bare hills. Communities should be encouraged to collect tree seeds and keep them for future use.

In terms of agricultural production, I would recommend that the Ministry of Agriculture and other stakeholders should encourage both refugees and the hosts to practice mixed farming or intercropping and agro-forestry. The intercropping of the cereals and legumes would help in replenishing the fertility of the soil there-by increasing the production of crops. The agroforestry will serve many purposes for example to increase the soil fertility and provide wood for cooking and making of shelters. This will enrich the soil thereby increasing crop production, fodder for livestock and wood for cooking. Using agroforestry techniques, will make some poles available to be used in construction of shelters. This will reduce the encroachment of forestry reserves by both refugees and the hosts in search for poles for construction.

The other recommendation is to introduce the making and utilization of modern stoves called "Chitetezo Mbaula" which use less firewood. The Ministry of Natural resources with support from other organizations would support communities around the camp and refugees. This would be done by training groups of women both the villages around and in the camp on how to make and use the stoves. In turn, these women would sell these stoves to various households. In addition, the women would also take this an income generating activity and would able to support their families as well. This would greatly reduce wood and charcoal consumption at the household level in the area.

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## **APPENDICES**

## **Appendix 1: Structured Household Questionnaire**

IDENTIFICATION				
District: Dowa	Village Code( data entry)			
Traditional Authority Msakambewa1; Mkukula2	Village Name			
Household number	Date of interview  D M Y			
Name of Respondent:				
Name of Enumerator:				
Name of Supervisor:	Checked:			
Basic Household information	Codes			
Result	Complete			
Literacy level of Head of HH	Able to read			
Marital Status	Married       1         Divorced       2         Widowed       3         Single       4         Separated       5			
Nationality	Malawian			
TOTAL NUMBER OF PEOPLE IN THE HOUSEHOLI				

A1	A2	A3	A4	A5	A6	A7	A8
ID	Name of Household members	Relationship to Head of HH	Sex	Age	Mother status	Father status	Primary and Secondary Activity
		H Head	Male 1 Female 2		Mother in HH1 Mother alive, not in same HH2 Mother dead3	Father in HH1 Father alive, not in same HH2 Father dead3	None
1.							1 <sup>st</sup> 2 nd
2.							1 <sup>st</sup> 2 nd
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							

## Section B: Household Livelihoods

N°	QUESTIONS	ANSWERS	SKIP TO
	What were the two most important source of	Livestock raising1	
	income in the last 12 months?	Crop sales2	
		Formal employment	
		Charcoal sales4	
		Firewood sales	
D4		Skilled trade/Artisan6	
B1		Agricultural casual labour	
		Non Agricultural casual labour8	
		Subsistence farming9	
		Beer brewing10 Medium/Large Business11	
		Other12	
		(Specify)	
	Has your household benefited from any food	Yes, all 12 months1	
B2	aid/distribution during the last 12 months?	Yes, few months2	
	ala, distribution during the last 12 months:	No3	<b>→</b> B 6
	Which of the following types of food aid have	Refugee1	2 2 0
	you received?	Pregnant/Lactating Women2	
		Malnutrition3	
	CIRCLE ALL THAT APPLY	Orphans4	
В3		Chronically III5	
		Food For Work6	
		Other: 7	
		(Specify)	
	For how many months during the last twelve		
B4	months has your household received food		
	aid?	Net refuses	
	What is the reason for your household not to	Not refugee	
	receive food?	Not eligible	
		Wasn't present at time of enrollment 3 Do not need	
B5		Do not know	
		No food aid in this community6	
		Other 7 (Specify)	
- DC	Are any of your HH members part of a	Yes 1	
В6	community organization or association?	No2	→ C1
	Which organizations is your household a	Farmers Association / Coops1	
	member of?	Livestock Association2	
		Savings Group/Club3	
	CIRCLE ALL THAT APPLY	Irrigation/Water Mgmt. Group4	
В7		Natural Resource Management Group 5	
5,		Health and nutrition groups6	
		Religious / faith groups7	
		-	
		Other8	
<u> </u>	Hannanah maanan da cara ka ka ka ka 2	(Specify)	
В8	How much money do you earn in a year?	MK	
	İ		1

## **SECTION C: ENERGY**

NO	QUESTION	ANSWER	SKIP TO
	232011011	Electricity1	
	What are your sources of energy?	Charcoal2	
	Tribut and your observed of one gy.	Fuel wood3	
C1		Cow dung4	
		Coal5	
		Other(Specify)6	
	Where does it come from?	Nearby forestry reserve1	
		From Escom2	
C2		Own livestock3	
		Village woodlot4	
		Other(Specify)5	
	Who supplies them to you?	Company1	
		Local people2	
C3		Refugees3	
CS		Self4	
		Other(Specify)5	
	How often	Daily1	
		Every week2	
C4		Every fortnight3	
		Every month4	
		More than a month5	
	How do you utilize your choice of energy?	Domestic use1	
		Business2	
C5		Trade3	
		Tobacco processing4	
		Other5	
C6	Do you have access to the forest reserve?	Yes1	
	1		<b>3 6</b> 4 <b>6</b>
		No2	→ C 16
		Free1	→ C 16
<b>C7</b>	If yes, how?	Free1 Get permission2	→ C 16
<b>C7</b>		Free	→ C 16
<b>C7</b>		Free	→ C 16
<b>C7</b>	If yes, how?	Free	→ C 16
	If yes, how?  Who goes into the forestry to produce or	Free	→ C 16
C7	If yes, how?	Free.       1         Get permission.       2         Pay fees.       3         Other (specify).       4         Mother.       1         Father.       2         Children.       3	→ C 16
	If yes, how?  Who goes into the forestry to produce or	Free.       1         Get permission.       2         Pay fees.       3         Other (specify).       4         Mother.       1         Father.       2         Children.       3         Employee.       4	→ C 16
	If yes, how?  Who goes into the forestry to produce or	Free.       1         Get permission       2         Pay fees.       3         Other (specify)       4         Mother.       1         Father.       2         Children.       3         Employee.       4         Other (specify)       5	→ C 16
	If yes, how?  Who goes into the forestry to produce or collect the products for sale?	Free.       1         Get permission       2         Pay fees.       3         Other (specify)       4         Mother.       1         Father.       2         Children.       3         Employee.       4         Other (specify)       5         Every day.       1	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products?	Free.       1         Get permission       2         Pay fees.       3         Other (specify)       4         Mother.       1         Father.       2         Children.       3         Employee.       4         Other (specify)       5         Every day.       1         Every week.       2	→ C 16
	If yes, how?  Who goes into the forestry to produce or collect the products for sale?	Free.       1         Get permission       2         Pay fees.       3         Other (specify)       4         Mother.       1         Father.       2         Children.       3         Employee.       4         Other (specify)       5         Every day.       1         Every week.       2         Twice a month.       3	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products?	Free.       1         Get permission       2         Pay fees.       3         Other (specify)       4         Mother.       1         Father.       2         Children       3         Employee.       4         Other (specify)       5         Every day.       1         Every week       2         Twice a month       3         Every month       4	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products?  LIST ALL	Free.       1         Get permission       2         Pay fees.       3         Other (specify)       4         Mother.       1         Father.       2         Children.       3         Employee.       4         Other (specify).       5         Every day.       1         Every week.       2         Twice a month.       3         Every month.       4         Other (Specify).       5	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products?	Free.       1         Get permission       2         Pay fees       3         Other (specify)       4         Mother       1         Father       2         Children       3         Employee       4         Other (specify)       5         Every day       1         Every week       2         Twice a month       3         Every month       4         Other (Specify)       5         Wild fruits       1	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products?  LIST ALL	Free       1         Get permission       2         Pay fees       3         Other (specify)       4         Mother       1         Father       2         Children       3         Employee       4         Other (specify)       5         Every day       1         Every week       2         Twice a month       3         Every month       4         Other (Specify)       5         Wild fruits       1         Charcoal       2	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products?  LIST ALL	Free       1         Get permission       2         Pay fees       3         Other (specify)       4         Mother       1         Father       2         Children       3         Employee       4         Other (specify)       5         Every day       1         Every week       2         Twice a month       3         Every month       4         Other (Specify)       5         Wild fruits       1         Charcoal       2         Firewood       3	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products?  LIST ALL	Free.       1         Get permission       2         Pay fees       3         Other (specify)       4         Mother       1         Father       2         Children       3         Employee       4         Other (specify)       5         Every day       1         Every week       2         Twice a month       3         Every month       4         Other (Specify)       5         Wild fruits       1         Charcoal       2         Firewood       3         Bamboos       4	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products? LIST ALL  What do you get from the forest reserve?	Free.       1         Get permission       2         Pay fees.       3         Other (specify)       4         Mother.       1         Father.       2         Children.       3         Employee.       4         Other (specify)       5         Every day.       1         Every week       2         Twice a month.       3         Every month.       4         Other (Specify)       5         Wild fruits.       1         Charcoal.       2         Firewood.       3         Bamboos.       4         Other.       5	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products? LIST ALL  What do you get from the forest reserve?  At what price, do you sell a unit of each	Free         1           Get permission         2           Pay fees         3           Other (specify)         4           Mother         1           Father         2           Children         3           Employee         4           Other (specify)         5           Every day         1           Every week         2           Twice a month         3           Every month         4           Other (Specify)         5           Wild fruits         1           Charcoal         2           Firewood         3           Bamboos         4           Other         5           Wild fruits MK         1	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products? LIST ALL  What do you get from the forest reserve?	Free       1         Get permission       2         Pay fees       3         Other (specify)       4         Mother       1         Father       2         Children       3         Employee       4         Other (specify)       5         Every day       1         Every week       2         Twice a month       3         Every month       4         Other (Specify)       5         Wild fruits       1         Charcoal       2         Firewood       3         Bamboos       4         Other       5         Wild fruits MK       1         Charcoal MK       2	→ C 16
C8	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products? LIST ALL  What do you get from the forest reserve?  At what price, do you sell a unit of each	Free.       1         Get permission       2         Pay fees.       3         Other (specify)       4         Mother.       1         Father.       2         Children.       3         Employee.       4         Other (specify).       5         Every day.       1         Every week.       2         Twice a month.       3         Every month.       4         Other (Specify).       5         Wild fruits.       1         Charcoal.       2         Firewood.       3         Bamboos.       4         Other.       5         Wild fruits MK.       1         Charcoal MK.       2         Firewood MK.       3	→ C 16
C9	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products? LIST ALL  What do you get from the forest reserve?  At what price, do you sell a unit of each	Free       1         Get permission       2         Pay fees       3         Other (specify)       4         Mother       1         Father       2         Children       3         Employee       4         Other (specify)       5         Every day       1         Every week       2         Twice a month       3         Every month       4         Other (Specify)       5         Wild fruits       1         Charcoal       2         Firewood       3         Bamboos       4         Other       5         Wild fruits MK       1         Charcoal MK       2         Firewood MK       3         Bamboos MK       4	→ C 16
C9	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products? LIST ALL  What do you get from the forest reserve?  At what price, do you sell a unit of each	Free.       1         Get permission       2         Pay fees.       3         Other (specify)       4         Mother.       1         Father.       2         Children.       3         Employee.       4         Other (specify).       5         Every day.       1         Every week.       2         Twice a month.       3         Every month.       4         Other (Specify).       5         Wild fruits.       1         Charcoal.       2         Firewood.       3         Bamboos.       4         Other.       5         Wild fruits MK.       1         Charcoal MK.       2         Firewood MK.       3	→ C 16
C9	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products? LIST ALL  What do you get from the forest reserve?  At what price, do you sell a unit of each product?	Free       1         Get permission       2         Pay fees       3         Other (specify)       4         Mother       1         Father       2         Children       3         Employee       4         Other (specify)       5         Every day       1         Every week       2         Twice a month       3         Every month       4         Other (Specify)       5         Wild fruits       1         Charcoal       2         Firewood       3         Bamboos       4         Other       5         Wild fruits MK       1         Charcoal MK       2         Firewood MK       3         Bamboos MK       4         Other.MK       5	→ C 16
C9 C10	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products? LIST ALL  What do you get from the forest reserve?  At what price, do you sell a unit of each product?  How much do you make in a year for each	Free       1         Get permission       2         Pay fees       3         Other (specify)       4         Mother       1         Father       2         Children       3         Employee       4         Other (specify)       5         Every day       1         Every week       2         Twice a month       3         Every month       4         Other (Specify)       5         Wild fruits       1         Charcoal       2         Firewood       3         Bamboos       4         Other       5         Wild fruits MK       1         Charcoal MK       2         Firewood MK       3         Bamboos MK       4         Other.MK       5          Wild fruits MK       1         Wild fruits MK       5	→ C 16
C9	If yes, how?  Who goes into the forestry to produce or collect the products for sale?  How often do people collect forest products? LIST ALL  What do you get from the forest reserve?  At what price, do you sell a unit of each product?	Free       1         Get permission       2         Pay fees       3         Other (specify)       4         Mother       1         Father       2         Children       3         Employee       4         Other (specify)       5         Every day       1         Every week       2         Twice a month       3         Every month       4         Other (Specify)       5         Wild fruits       1         Charcoal       2         Firewood       3         Bamboos       4         Other       5         Wild fruits MK       1         Charcoal MK       2         Firewood MK       3         Bamboos MK       4         Other.MK       5	→ C 16

		Bamboos MK4	
		Other.MK5	
		Wild fruits KGS1	
	How much do you harvest on average in a	Charcoal BAGS2	
C13	month?	Firewood Bundles3	
		Bamboos Bundles4	
		Other5	
		Days	
C14	How long have you been harvesting products	Months	
	from the forest?	Years	
		Buy food 1	
	How is the money realized from the products	Buy livestock	
C15	utilized?	Household use 3	
		Agricultural inputs 4	
		Seedlings and afforestation 5 Medical services 6	
		Other 7	
	Are there people in this community you know	Other	
C16	that extract forestry products from the Forest	Yes1	
	Reserve?	No	→ C 23
	Who are these people?	Refugees1	
		Local people2	
C47		Government staff3	
C17		Chiefs4	
		Self5	
		Other (specify)6	
		Poverty1	
	Why do you think these people started this	Demand from Refugees2	
C18	business of collecting Forestry products?	Nothing to do3	
		Other (specify)4	
	Is there any effect on the environment by	Yes1	
C19	doing this type of business to the surrounding	No2	→ C 23
	villages?		
	What are these effects? LIST ALL		
C20			
		Refugees1	
	Who is affected most?	Local people2	
		Government staff3	
C21		Chiefs4	
		No one5	
		Other (specify)6	
	What is being done to mitigate the impact of		
	What is being done to mitigate the impact of these effects? <b>LIST ALL</b>		
C22	HIESE CHECKS: LIST ALL		
\ \frac{\frac{1}{2}}{2}			
	Are there any other alternative sources of	Yes1	
000	· · · · · · · · · · · · · · · · · · ·		
C23	energy?	No2	→ C 24

	What are these? LIST ALL		
004	What are those. Eler NEE		
C24			
C23	Are these available in the area?	Yes1	
		No2	
	Do local people participate in the	Yes1	→ C 25
C24	management of the protected areas such as	No2	→ C 26
	Forest reserves in Dowa?		
C25	If YES, what is your/ their role?		
	KNO 1 0		
C26	If NO, why?		
	What is your role in the management of the		
	environment in general?		
C27			
	Do you participate in the National Tree	Yes1	
C28	planting exercise?	No2	
	Do you have a village Natural Resource	Yes1	
C29	Management Committee?	No	
	Do you have a village woodlot?	Yes1	
C30	Do you have a village woodlot?	No2	
	Have big in the consequent ( Have A agree)		
C31	How big is the woodlot (Ha, Acres)	Yes	→ C 33
		1102	7 0 33
	Why did you establish this woodlot?		
C32			
	Do you receive forestry extension services?	Yes1	
C33		No	<b>→</b> D1
	From where?		
	Trom whore:	Government1	
004		NGO2	
C34		UNHCR3	
		Other4	
C35	Are you satisfied with the service being	Yes1	→ C37
	provided?	No2	
	If NO, why?		
C36			
C37	What can be done to improve on the service?		
	I .		i

## Section D: Land resources and Crop Production

N°	QUESTIONS	ANSWERS	SKIP TO
D4	Do you cultivate or grow any crops?	Vac	
D1		Yes1 No2	<b>→</b> E1
	Do you cultivate on your own land?	Yes1	
D2		No2	→ D 4
	How did you acquire that piece of land?	Given by the chief1	
<b>D</b> 0		Inherited from parents2 Leased land	
D3		Bought from a friend4	
		Other5	
	How did you get that land you are cultivating?	Borrowed from a friend1	→ D 5
D4		Rent	
D4			
D5	Did you pay anything for the land?	Yes1 No	<b>→</b> D 7
53			
D6	If rented, what was the payment per acre?	MK	
	How many acres do you cultivate?		
D7	Tiow many acres do you cultivate:		
		ACRES	
	How many acres did you cultivate in 2013-14	7.5.1.2	
D8	season?	ACRES L L L	
<b>D</b> 0	1 HECTARE = 2.5 ACRES		
	Mha did as a sat salti ata all as an lando	IF D8 EQUAL TO D7, GO TO D10  Not enough labour1	
	Why did you not cultivate all your land?	Not enough seed2	
	CIRCLE ALL THAT APPLY	Not enough other input3	
D9		Not enough water4 Left fallow land5	
		Rented out6	
		Other7	
	Did you use any agricultural techniques to	Yes1	
D10	improve your land in 2013-14 season?	No2	→ D 12
	If yes, Which techniques did you use?	Agroforestry1	
		Crop rotation2	
		Reduced Tillage3 Compost manure4	
D11		Intercropping5	
		Improved Fallow6 Water harvesting7	
		Other8	
	If no, why did you not use the improved	No Need1	
	If no, why did you not use the improved technologies?	Non availability of Extension Services2	
D12		Not my land3	
		I don't know4   Other5	

Type of crop	Area planted	Cash Crop1	Production	Crop sales	Already	Kept for future
D 13	(acres)	Food Crop2	(MT)	< 25%1	Consumed	use
	D 14	D 15	2013-14	25 –50%2	< 25%1	< 25%1
			D 16	51 – 75 %3	25 –50%2	25 –50%2
				> 75 % 4	51 - 75 %.3	51 – 75 %3
				Nothing5	> 75 %4	> 75 %4
				D17	Nothing5	Nothing5
					D 18	D19

	Was your production above, average or	Above average1	→ D 22
D20	below average?	Average2	
		Below average3	
	If below average, what are the reasons,	Inadequate land1	
	which have contributed to low production?		
		Poor soils 3	
		Not enough labour4	
D21		Lack of seeds5	
DZI		Lack of input/Fertilizer6	
		No draught power7	
		Non availability of extension services8	
		Other 9	
		(Specify)	
		Food aid1	
	Besides your own production, what are	Gift from family and relatives 2	
	the other sources of food for your	Market purchases3	
D22	household?	Lease of land4	
		Hunting and gathering wild food 5	
	CIRCLE ALL THAT APPLY	Other 6	
		(Specify)	

**Section E: Livestock and main Assets** 

N°	QUESTIONS  Section E: Livestock and main Assets	ANSWERS	SKIP TO
E1		Yes 1	
<u> </u>	Do you own any livestock?	No2	<b>→</b> E 7
		Draught cattle1	
	Which type of Livestock?	Cattle2	
		Shoats3 Donkey/horses4	
E2		Poultry5	
		Pigs6	
		Rabbit7	
		Other8	
		Draught cattle1	
	How many?	Cattle2	
		Shoats3	
E3		Donkey/horses4	
ES		Poultry5   Pigs6	
		Rabbit7	
		Other8	
			<u>                                      </u>
		Crop sales1	
	How did you acquire the livestock?	Charcoal2	
E4		Firewood sales3	
		Others(Specify)4	
		Draught cattle	
	In the last 12 months how many were sold?	Cattle	
	,	Shoats	
E5		Donkey/horses	
LJ		Poultry	
		Pigs	
		Rabbit	
		Other  Normal daily expenses1	
	What are the reasons for sale?	To fill Household food Shortage2	
		School fees	
		Health/ Medical emergency4	
E6		Other emergencies5	
		Social events6	
		Normal herd maintenance7	
		Threat to herd8 Loan repayment9	
		Other (specify)10	
	What are the effects on the environment if people		
E7	keeping animals?		
	How can you minimize these effects?		
E8			
		Hoe1	
	What assets do you have? CIRCLE ALL THAT	Bicycle	
	APPLY	Motorbike	
		Plough4	
E9		Radio 5	
		York chain6	
		Treadle Pump7	
		Axe8	
		Ox or donkey cart9	

N°	QUESTIONS	ANSWERS	SKIP TO
		Car10	
		Cell11	
		Iron12	
		Television13	
		DVD/Video Machine14	
		Stove (any type e.g. paraffin or	
		Electrical15	
		Refrigerator (Solar, paraffin or	
		electric)16	
		Hoe1	
	How many?	Bicycle2	
	Write number on the spaces provided.	Motorbike	
		Plough4	
		Radio 5	
		York chain6	
		Treadle Pump7	
		Axe8	
E10		Ox or donkey cart9	
		Car10	
		Cell11	
		Iron12	
		Television	
		DVD/Video Machine14	
		Stove (any type e.g. paraffin or Electrical15	
		Refrigerator (Solar, paraffin or	
		electric)16	

#### **Section F: Socio-Economic**

N°	QUESTIONS	ANSWERS	SKIP TO
F1	Has there been any loss of ancestral sites, forest reserves or any other sites/ activities due to relocation of other nationalities to Dzaleka?	Yes	<b>→</b> F 3
F2	If yes, what sites/activities were affected?		
F3	Was there any resistance by the hosts due to the relocation of other nationalities?	Yes	→ F 6
F4	How did the hosts show the resistance?		
F5	What did you do to overcome such challenges	1 2 3	
F6	What were the concerns of the hosts/ local communities?	Introduce a new culture	

N°	QUESTIONS	ANSWERS	SKIP TO
F7	What are the social services which were not there and have come about because of relocation of other Nationalities?		
F8	How has the community benefitted from such social services? One by one		
F9	Apart from staying at the camp, do other nationalities participate in any community development work?	Yes	→ F11
F10	If yes, in which activities have been participating. List at least three activities.		
F11	What economic activities do you do which are beneficial to the community? List three(3)		
F12	Do these activities have any negative effects on the environment?	Yes	→ F 15
F13	If yes, what are these effects? List all		
F14	What have you done to resolve / mitigate the impact of these activities?		
F15	What are the economic activities which have come about because of relocation of other Nationalities?		
F16	How do these benefit the community? Three reasons?		
F17	Are Malawians employed by other nationalities?	Yes	→ END
F18	On which type of activities' are local members employed on? List all		
F18	How much do the local people earn per month?	Voc	<b>→</b> E24
F19	Is this a good development in the area?	Yes	→ F21 → F20
F20	If NO, why?		
F21	If YES, why?		

Thank the respondent and end interview.

# **Appendix 2: Key Informant Questionnaire**

IDENTIFICATION					
District Name	Village Code				
Traditional Authority	Village Name				
Household number	Date of interview D	M Y			
Name of Respondent:	Name of Respondent:				
Name of Enumerator:					
Name of Supervisor:		Checked:			

Basic Household information	Codes
Result  Literacy level of Respondent	Complete       1         Did not reply       2         Partially replied       3         Others       4         Able to read       1         Able to write       2         Able to read and write       3         Unable to read or write       4
Marital Status	Married       1         Divorced       2         Widowed       3         Single       4         Separated       5
Nationality	Malawian

## Section A. Demographic Background of KI

A1	A2	A3	A4	A5	A6
	Position in the Community			How long have you leaved in the community	Primary Activity
ID		Sex	Age	·	, ,
	Chief GVH VH Extension worker Teacher Social Worker Other( Specify)	Male 1 Female 2		Less than 1 year	None       1         Agriculture       2         Cattle Farming       3         Casual Labor       4         Self-employed       5         Skilled labor       6         Salaried employment       7         Petty Commerce       8
					Other
					None       1         Agriculture       2         Cattle Farming       3         Casual Labor       4         Self-employed       5         Skilled labor       6         Salaried employment       7         Petty Commerce       8         Other       9

## Section B: Household Livelihoods

N°	QUESTIONS	ANSWERS	SKIP TO
	What were the two most important source of	Livestock raising1	
	income for most households in the last 12	Crop sales2	
	months?	Formal employment3	
		Charcoal sales4	
		Firewood sales5	
		Skilled trade/Artisan6	
B1		Agricultural casual labour7	
		Non Agricultural casual labour8	
		Subsistence farming9	
		Beer brewing10	
		Medium/Large Business11	
		Other 12	
		(Specify)	
	Have household in this area benefited from	Yes, all 12 months1	
B2	any food aid/distribution during the last 12	Yes, few months2	
	months?	No3	
	Which of the following types of food aid have	Refugee1	
	they received?	Pregnant/Lactating Women2	
		Malnutrition3	
	CIRCLE ALL THAT APPLY	Orphans4	
B3		Chronically III5	
		FFW6	
		Other: 7	
		(Specify)	
	For how many months during the last twelve		
B4	months have these household received food		
	aid?		
	What is the reason for some household not to	Not refugee1	
	receive food?	Not eligible2	
		Wasn't present at time of enrollment 3	
B5		Do not need4	
		Do not know 5	
		No food aid in this community6	
		Other7	
		(Specify)	
В6	Do members of this community belong to any	Yes 1	_
	organization or association?	No2	→ C1
	To which organizations are they member of?	Farmers Association / Coops1	
		Livestock Association2	
	CIRCLE ALL THAT APPLY	Savings Group/Club3	
		Irrigation/Water Mgmt. Group4	
B7		Natural Resource Management Group 5	
		Health and nutrition groups6	
		Religious / faith groups7	
		-	
		Other8	
		(Specify)	

## **SECTION C: ENERGY**

Most is the common sources of energy?				
What is the common sources of energy?	NO NO	QUESTION	ANSWER	SKIP TO
Fuel wood				
Cow dung		What is the common sources of energy?		
Cow dung	C1			
Other(Specify)   6   Nearby foresty reserve   1   From Escom   2   Own livestock   3   Village woodlot   4   Other(Specify)   5   Own livestock   3   Village woodlot   4   Other(Specify)   5   Own livestock   3   Own livesto	٠.			
Where does it come from?				
From Escom				
C2		Where does it come from?	Nearby forestry reserve1	
Who supplies them to this community?				
Who supplies them to this community?	C2			
C3  Who supplies them to this community?  Company				
Coal people.			Other(Specify)5	
Coal people.		Who supplies them to this community?	Company1	
Refugees				
How often   Daily	Ca			
How often	CS			
Every week			Other(Specify)5	
Every week				
Every fortnight	Ī	How often		
How does the community members utilize your choice of energy?				
How does the community members utilize your choice of energy?	C4		Every fortnight3	
How does the community members utilize your choice of energy?			Every month4	
Susiness   2   1   1   1   2   2   1   2   2   1   2   2			More than a month5	
Susiness   2		How does the community members utilize	Domestic use1	
Trade				
Tobacco processing	C5	, , , , , , , , , , , , , , , , , , , ,		
C6   Does the community access to the forest reserve?   Yes				
Teserve?   No				
Teserve?   No	CC	Doos the community access to the forest	Voc	
Free	Co			
C7		TOSCIVE:		
Pay fees		If yes, how?		
C8   Who goes into the forestry to produce or collect the products for sale?	<b>C7</b>			
C8   Who goes into the forestry to produce or collect the products for sale?				
C8   Who goes into the forestry to produce or collect the products for sale?			Mothor	
Collect the products for sale?		Who goes into the forestry to produce or		
Employee				
C9	C8	collect the products for sale!		
How often do people collect forest products?   Every day				
How often do people collect forest products?   Every week			Carior (Specify)	
C9         LIST ALL         Twice a month.         3           Every month.         4         Other (Specify).         5           What do people get from the forest reserve?         Wild fruits.         1           Charcoal.         2         Firewood.         3           Bamboos.         4         Other.         5           At what price, do people sell a unit of each product?         Wild fruits.         1           Charcoal.         2         Firewood.         3           Bamboos.         4				
Every month	_			
Other (Specify)   5	C9	LIST ALL		
What do people get from the forest reserve?   Wild fruits.			1	
C10   Charcoal		What do poople got from the forest records		
C10       Firewood		what do people get from the forest reserve?		
Bamboos	C10			
C11         Other         5           At what price, do people sell a unit of each product?         Wild fruits         1           Charcoal         2           Firewood         3           Bamboos         4	0.0			
At what price, do people sell a unit of each product?  C11  At what price, do people sell a unit of each product?  Charcoal				
C11         Charcoal		At what price, do people sell a unit of each		
Bamboos4	ı			
	C11			
Other5				
			Other5	

C12	How much do people make in a year for each product?  How much do people harvest on average in a month?	Wild fruits       1         Charcoal       2         Firewood       3         Bamboos       4         Other( Specify)       5         Wild fruits       1         Charcoal       2         Firewood       3         Bamboos       4         Other( Specify)       5	
C14	How long have people been harvesting products from the forest?		
C15	How is the money utilized?	Buy food       1         Buy livestock       2         Household use       3         Agricultural inputs       4         Seedlings and afforestation       5         Medical services       6         Other       7	
C16	Why did community members start this business of collecting Forestry products?	Poverty	
C17	Is there any effect on this type of business being done in the surrounding villages?	Yes	GO TO DI
C18	What are these effects? LIST ALL		
C19	Who is affected most?	Refugees       1         Local people       2         Government staff       3         Chiefs       4         No one       5         Other (specify)       6	
C20	What is being done to mitigate the impact of those effects? <b>LIST ALL</b>		
C21	Are there any alternative sources of energy?	Yes	GO TO D1
C22	What are these? LIST ALL		
C23	Are these available in the area?	Yes	

## Section D: Land resources and Crop Production

N°	QUESTIONS	ANSWERS	SKIP TO
D1	How do most community members acquire land?	Given by the chief	
D2	Do they pay anything for the land?	Yes1 No2	GO TO D5
D3	If yes, what is the payment?		
D4	On average, how many acres do each household have?	ACRES ACRES	
D5	Do people cultivate all land in one season?  1 HECTARE = 2.5 ACRES	ACRES IF D4 EQUAL TO D5, GO TO D7	
D6	If not, Why? CIRCLE ALL THAT APPLY	Not enough labour       1         Not enough seed       2         Not enough other input       3         Not enough water       4         Left fallow land       5         Rented out       6         Other       7         (SPECIFY)	
D7	Do people use any agricultural techniques to improve their land?	Yes	GO TO E1
D8	If yes, Which techniques do they use?	Agroforestry	
D9	If no, why?	No Need	

#### **Section E: Livestock and main Assets**

N°	Ction E: Livestock and main Assets  QUESTIONS	ANSWERS	SKIP TO
	2020110110	Yes 1	J
E1	Do people own any livestock?	No	<b>→</b> E7
		Draught cattle1	
	Which type of Livestock?	Cattle2	
	ург эт 2ээгээ	Shoats3	
<b>5</b> 0		Donkey/horses4	
E2		Poultry5	
		Pigs6	
		Rabbit7	
		Other8	
		Draught cattle1	
	How many on average?	Cattle2	
		Shoats3	
		Donkey/horses4	
E3		Poultry5	
		Pigs6	
		Rabbit7	
		Other8	
		Crop sales1	
E4	How do people acquire the livestock?	Charcoal2	
		Firewood sales3	
		Others(Specify)4	
		Yes1	
E5	In the last 12 months, did they sale any	No2	
	livestock?		
		Normal daily expenses1	
	What were the reasons for sale?	To fill Household food Shortage2	
		School fees3	
		Health/ Medical emergency4	
E6		Other emergencies5	
		Social events	
		Normal herd maintenance	
		Threat to herd	
		Loan repayment9	
		Other (specify)	
	What is the most common in your	Bicycle	
	community? At least three(3)	Motorbike	
	community. At loads till co(o)	Plough4	
		Radio5	
		York chain	
		Treadle Pump7	
		Axe8	
E7		Ox or donkey cart9	
		Car10	
		Cell11	
		Iron12	
		Television13	
		DVD/Video Machine14	
		Stove (paraffin or Electrical15	
		u	

#### **Appendix 3: Focus Group Discussion guide**

#### SECTION I: BACKGROUND CHARACTERISTICS

1.1 Summary age group and sex of FGD participants

AGE GROUP	NUMBER OF MALES	NUMBER OF FEMALES
<18 years		
18-24 years		
24+ years		

1.2 Summary highest level of school attended

HIGHEST LEVEL OF SCHOOL ATTENDED	NUMBER
None	
Primary	
Secondary	
Tertiary	
No Response	

1.3 Summary religion and tribe belong to

TRIBE PARTICIPANTS BELONG TO	NUMBER	RELIGION OF PARTICIPANTS	NUMBER
Chewa		Christian	
Lomwe		Muslim	
Sena		Buddhist	
Mang'anya		Hindu	
Yao		Traditional	
Ngoni		No Religion	
Tumbuka		No Response	
Nkhonde			
Tonga			
Don't Know			
No Response			

## Areas of focus

(1) Activities the communities, both locals and refugees are engaged in which have a bearing on the environment.
(2) List and discuss key activities which have negatively affected the environment and their consequences due the coming of the refugees.
(3) Community leaders' perception of the status of refugees in the community.
(4) Are there any issues with hosting refugees? What are the issues and suggested solutions?
(5) their perception of the problems related to environment management in support of refugees;
(6) the benefits of hosting refugees in their community?
(7) What the community could do to manage the environment.

**Appendix 4: List of Key Informants Interviewed** 

NAME	ORGANISATION	POSITION	CONTACT
UNHCR	Mr OM Nyasulu	Camp Administrator	0888772515
Ministry of Health	Ms Chimwemwe	Nurse Technician	0995415172
(Dzaleka Health	Duwa		
Centre)			
JRS	Ms Jean Shaba	Education	0881855062
		Coordinator	
PRDO	Ms Ronnia	Project Officer	
Ministry of	Mr T Mhone	Land Resources	0888875283
Agriculture		Conservation	
		Officer	
Ministry of Natural	Mr John Masanda	Assistant District	0991797264
Resources and		Forestry Officer	
Environment			

#### **Appendix 5: Ethical clearance from UNISA**



Ref. Nr.: 2014/CAES/040

To:

Student: E Kavalo Student nr: 48197408

Supervisor: Prof L Maliwichi

**Department of Environmental Sciences** 

College of Agriculture and Environmental Sciences

Dear Prof Maliwichi and Mr Kavalo

Request for Ethical approval for the following research project:

Environmental and socio-economic impact of hosting refugees: A case study of villages around

Dzaleka refugee camp in Dowa District, Malawi

The application for ethical clearance in respect of the above mentioned research has been reviewed by the Research Ethics Review Committee of the College of Agriculture and Environmental Sciences, Unisa. Ethics clearance for the above mentioned project (Ref. Nr.: 2014/CAES/040) approved after careful consideration of all documentation submitted to the CAES Ethics committee. Approval is given for the duration of the research project.

Please be advised that should any part of the research methodology change in any way as outlined in the Ethics application (Ref. Nr.: 2014/CAES/040), it is the responsibility of the researcher to inform the CAES Ethics committee. In this instance a memo should be submitted to the Ethics Committee in which the changes are identified and fully explained.

The Ethics Committee wishes you all the best with this research undertaking.

Kind regards,

Prof E Kempen,

**CAES Ethics Review Committee Chair** 

MG"E

# Appendix 6: Permission from the District Commissioner to conduct a study in Dowa District



The District Commissioner DOWA District Council P/Bag I Dowa

Dear Sir,

The state of

Arwa House, 3<sup>rd</sup> Floor P.O. Box 30455 Lilongwe 3, Malawi Telephone: +265 1 775 106/774 378 Mobile: +265 888 875 283 24 December 2013



#### RE: REQUEST FOR STUDY APPROVAL

I write to seek your permission to carry out a study entitled "The environmental and socio-economic impact of hosting Refugees: A case study of villages around Dzaleka Refugee camp" as part of fulfilling my Master of Science Degree in Environmental Management with UNISA. The main objective of the study is to assess the environmental and socio-economic impact for hosting refugees at Dzaleka Refugee Camp in Dowa. The study will be conducted in and villages around Dzaleka Refugee Camp, located in your District.

A structured questionnaire, a focus group discussion checklist will be used to collect data. This will be administered to selected households around the refugee camp and the forest reserves. The questionnaire and the checklist will focus on forestry products which both the refugees and communities around the camp collect, produce and sell as a source of energy, the effects of utilizing these forestry products on the environment. About 205 household interviews and four focus group discussions will be conducted, two (2) for female and the other two (2) will comprise of men.

The discussions will be conducted in a quiet and secure place. Participation of all respondents in the study will be strictly voluntary. Respondents will be informed of the confidentiality of their responses. Each respondent will be asked to consent to participate in the survey and will be given an opportunity to ask questions in case they are not clear on the survey objectives and benefits. There will be no harm to all

#### Appendix 7: Permission from the Camp Administrator to conduct a study at Dzaleka Refugee Camp



PO Box 392 UNISA 0003 Republic of South Africa

The Camp Administrator, Dzaleka Refugee Camp Dowa Malawi

Dear Sir,

Yours sincerely,

RE: The environmental and socio-economic impact of hosting refugees: A case study of villages around Dzaleka Refugee Camp in Dowa, Malawi.

I write to seek your permission to carry out the above mentioned study at Dzaleka Refugee camp as part of fulfilling my graduate studies with the University of South Africa. The main objective of the study is to assess the environmental and socio-economic impact of hosting refugees in Dowa. The study will be conducted in and villages around Dzaleka Refugee Camp.

In the camp, we would like to interview 52 household heads using a structured questionnaire. In addition, we will also interview the camp administrator or his representative as a key informant plus one focus group discussions comprising of 4 men and 4 women.

The interviews and discussions will be conducted in a quiet place and will be confidential. Participation is voluntary and consent will be obtained before participation. There will be no monetary benefits for participants in this study.

The results from the study will form a basis for future recommendations on the way the refugee would operate and how the refugees integrate with their Malawian counterparts, more especially in the efficient use of the scarce natural and energy sources.

To whom it May concern

Please allow My Kavalo and
this enumerators to Conduct
Study Dyterviews within Eddie Kavalo Tel: (265) 099 2 700 801 E-mail: bkavalo@yahoo.co.uk University of South Africa, RO Box 30 Junisa 0003
SECRETARY FOR INTERNALURISA 0003
AFTIRS AND PUBLO
SECURITY AND
COMMISSIONER FOR REFUGEES 1 2 JUN 2014