Refugees Vulnerability Study Kakuma, Kenya Inception Report

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CONTENTS

ACRONYMS

AAHI	Action Africa Help International
CoO	Country of Origin
CSB	Corn Soya Blend
DFID	United Kingdom Department for International Development
DRA	Department of Refugee Affairs
DRC	Danish Refugee Council
DRC	Democratic Republic of Congo
FAO	United Nations Food and Agriculture Organization
FCS	Food Consumption Score
FDP	Food Distribution Point
FGDs	Focus Group Discussions
FSOM	Food Security and Outcome Monitoring
GFD	General Food Distribution
GIZ	Gesellschaft für Internationale Zusammenarbeit
GoK	Government of Kenya
HH	Household
HoH	Head of Household
HSNP	Hunger Safety Net Programme
IRC	International Rescue Committee
IOM	International Organization for Migration
JRS	Jesuit Refugee Services
KIHBS	Kenya Integrated Household and Budget Survey
LSMS	Living Standard and Measurement Surveys
LWF	Lutheran World Federation
NCCK	National Council of Churches of Kenya
NFIs	Non-Food Items
NGO	Non-governmental organization
NRC	Norwegian Refugee Council
PCA	Principal Component Analysis
RSD	Refugee Status Determination
SDC	Swiss Agency for Development and Cooperation
SGBV	Sexual and Gender Based Violence
ToC	Theory of Change
TSC	Technical Steering Committee
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees

USAID   United States Agency for International Development

WFP   World Food Programme

WVI   World Vision International

EXECUTIVE SUMMARY

This report presents the results of a scoping exercise in preparation for the first phase of an assessment into the vulnerability of refugees in Kakuma Camp, their livelihood opportunities and constraints, and the feasibility of targeting assistance to the most vulnerable households (HHs). Our understanding of vulnerability is in terms of poverty and food insecurity, in other words, people not having the ability to feed or provide for themselves in the absence of assistance or cuts in assistance. It will be assessed here primarily in terms of consumption expenditure.

The scoping exercise involved a desk review of relevant literature, stakeholder interviews, a focus group discussion with the food advisory committee, meetings with community block leaders, and visits to refugee households with a semi-structured interview. This provided the background to formulate a HH survey to capture consumption expenditure (vulnerability) and a range of data which may be used as proxies for this vulnerability, including livelihood opportunities, income sources, location within the camp, country of origin, length of stay, assets and demographics such as HHs headed by females or children, and HHs with disabled or sick members who require care. HHs are defined here as persons who both live and eat together. It is possible that HHs may have more than one ration card.

For the quantitative component of the assessment, it is envisioned that a sample total of 2,000 households will be needed. Since there are four sub-camps with a total number of 126 blocks, the sample households will be distributed equally per camp and then per block. Accordingly, 500 households will be selected per sub-camp and these 500 households will be further equally divided among the blocks in each sub-camp. A random walk sampling procedure will then be employed block by block to identify the sample households to be interviewed. Enumerators and interpreters will be trained in HH surveys (including interviewer conduct) and will complete the digitised questionnaire over a one week period. The survey will commence immediately following training and last four weeks. Quality control will be ensured through spot checks and back checks. Each sub-camp team will be headed by a camp coordinator and aided by an assistant (from the camp). The preliminary data analysis will focus on establishing a vulnerability profile for refugees across the camp by determining the heterogeneity in consumption expenditure and food insecurity across HHs, and the associations with HH variables which may act as proxies for vulnerability. It was planned that this would be presented mid-December 2015, but due to delays resulting from the budget approval, it may need to be deferred until January.

The second phase of the project will use the information from the HH survey and the scoping exercise to formulate and investigate different approaches to targeting. This will involve analysis of vulnerability against proxies for Proxy Means Testing and Categorical Targeting approaches; additional fieldwork on testing Community Based Targeting with community leaders; and the development of a decision-support tool that will assess the costs and benefits of different approaches. The final assessment report and the decision-support tool will be finalised at the end of February (though it may be delayed due to the postponement of the HH survey).

1. BACKGROUND

1.1 Kakuma refugee camp

Established in 1991 and with a population of nearly 182,000 (UNHCR, pers. comm.), Kakuma Refugee Camp is one of the largest refugee camps in the world and one of the longest-lasting humanitarian settlements in sub-Saharan Africa. Initially built by the United Nations High Commissioner for Refugees (UNHCR) and the World Food Programme (WFP) as one settlement, 1 km from Kakuma Town, it has now expanded to four settlement clusters called Kakuma Camp 1, 2, 3, and 4, with a new settlement planned near Lokichogio. This new settlement will have a common market and farming area for refugees and host communities, and will cover 15 km².

FIGURE 1: Kakuma Refugee Camp
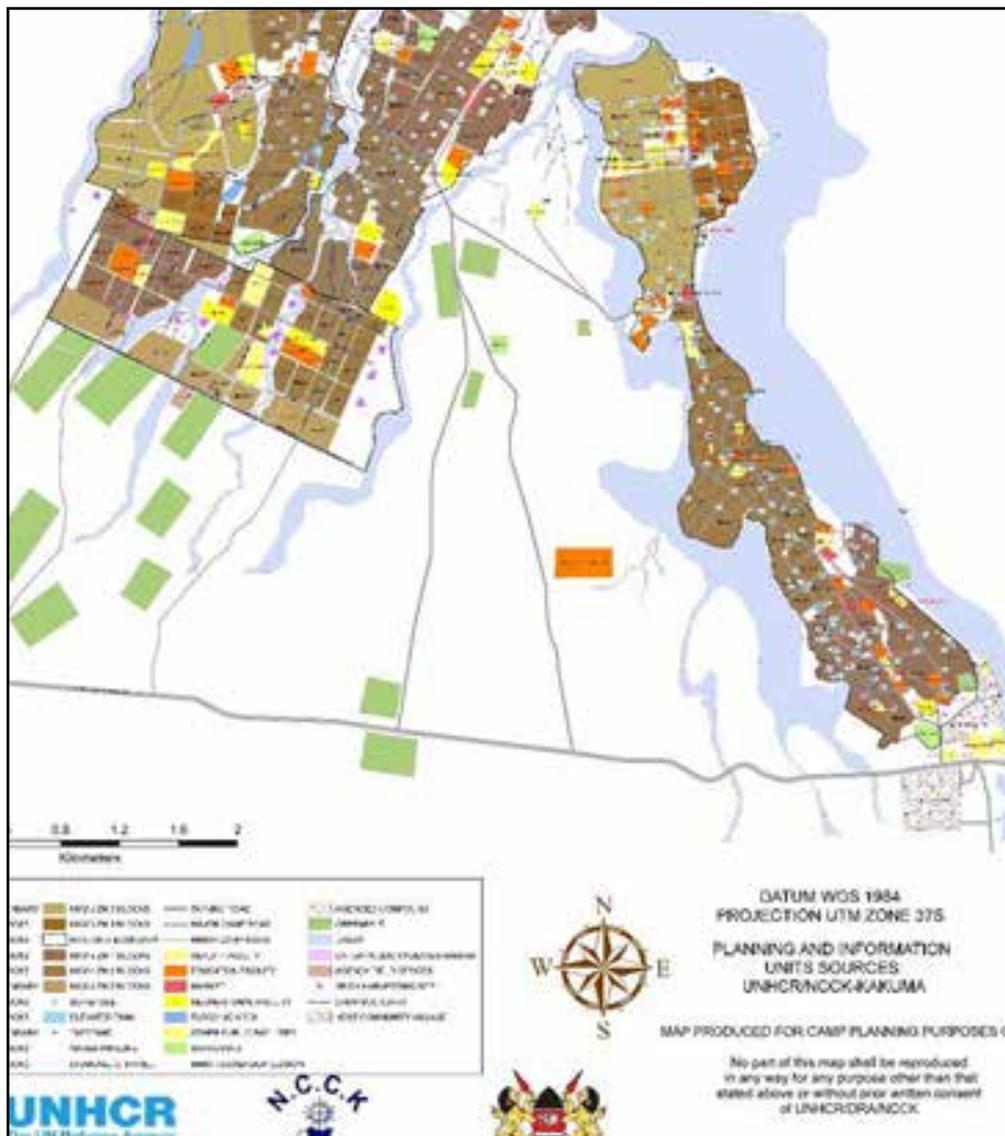
The camp population has risen rapidly from an estimated 30,000 in 2008, with most families spending an average of ten years as camp residents (Oka, 2014). Originally built for the Sudanese, it now also hosts Ethiopians, Rwandans, Burundians, Congolese, Eritreans, and Somalis. The camp is managed by UNHCR and the Camp Manager's Office of the Department for Refugee Affairs (DRA) of the Government of Kenya (GoK). The largest relief organisations at the camp are the WFP, providing relief food distribution; the International Rescue Committee (IRC), providing health services; the National Council of Churches of Kenya (NCCK), providing housing; the International Organization for Migration (IOM), providing resettlement; and Jesuit Refugee Services (JRS), providing education (Oka, 2014). Other organisations operating in the camp include: Action Africa Help International (AAHI), the Lutheran World Federation (LWF), the Norwegian Refugee Council (NRC), the Danish Refugee Council (DRC), World Vision International (WVI), Don Bosco, and Film Aid. These organisations provide a range of services to the refugees, including vocational training, psychosocial support and training. WFP provides a General Food Distribution (GFD) to all registered refugees consisting of 420g of cereal, 60g of pulses, 40g of Corn Soya Blend (CSB), 5g of salt, and 35g of vegetable oil per person per day. As of July 2015, food distribution occurs on a monthly basis (previously on a bi-monthly basis), normally between the first and sixth day of the month. UNHCR provides refugees with a range of non-food items (NFIs) as outlined in Table 1.

TABLE 1: NFIs Entitlements (Source: UNHCR)

Item	Distribution Frequncey
Tent	Upon arrival; subsequently build them a shelter
Long lasting insecticide treated nets	Replaceable or retreated every 3-5 years
Blankets	Annually
Sleeping Mats	Annually
Buckets and jerry cans	Every 6 months
Kitchen set	Every 2 years
Soap	Every month (250 grams per person)

1.2 Aims of the study

The last three years have seen a reduction in funding for the Kenyan refugee operation, in particular food aid, concomitant with increased global competition for funds. This trend is expected to continue. In addition, there is a common belief that after more than 20 years of displacement not all refugees have the same humanitarian assistance needs. In response to this, WFP alongside their partners, UNHCR, commissioned Kimetrica to determine the levels of socio-economic vulnerability of refugees in Kakuma Camp. Specifically, the aim of the study was to provide a comprehensive assessment improving the understanding of socio-economic vulnerability among refugee households (HHs), determining the socio-econom-

ic dynamics within the camps, and evaluating the feasibility and appropriateness of targeted assistance for refugees based on their actual needs and level of vulnerability.

The three broad objectives of this assessment are:

1. To investigate the livelihood opportunities and income sources available to the refugee population; their sustainability and constraints.

2. To describe the level and differences of socio-economic vulnerability in refugee HHs in Kakuma and to explore the appropriateness of delivering targeted assistance.

3. If targeting is appropriate, to describe the practical aspects of implementation that would need to be considered to ensure a fair, safe and successful approach.

1.3 Aims of the scoping exercise

The first phase of the study is a scoping exercise that aims to:

1. Collate and assimilate qualitative and contextual information from stakeholder interviews, focus group discussions, and semi-structured one-to-one interviews with refugees and observations in households on:

    • Vulnerability definitions and proxies

    • Wealth and poverty classifications

    • Livelihood opportunities and legal constraints

    • Targeted approaches to delivery of aid in refugee settings

    • Potential risks from targeting

    • Monitoring of targeting approaches

    • Government policies

2. Compile and analyse secondary quantitative data from UNHCR, WFP, and other partners (NGOs) working in the camps, and from the literature on the following:

    • Refugee registration and demographic data

    • Employment opportunities, income, and cash availability to refugees

    • Socio-economic status of refugee HHs

3. The above information will be used to formulate:

    • A refugee household questionnaire and sampling design which will permit direct inter-household comparisons of poverty, food insecurity, and vulnerability as well as providing detailed insight into livelihoods and income sources

    • The possible approaches that could be employed in targeting assistance

    • A detailed theory of change (ToC)

1.4 The deliverables

The work plan and main deliverables deadlines are outlined in Annex 1. For the purposes of this inception report, only the HH questionnaire, sampling design, and proposed data analysis framework will be provided here in preparation for the HH survey that is planned to start November 2015. The survey is expected to last four weeks, with the preliminary data analysis completed by mid-December 2015 for presentation to the Technical Steering Committee (TSC). This date may have to be deferred until January due to delays in budget approval.

A more detailed analysis of the data will then be prepared in addition to the ToC and further analysis of various targeting options. This will include field surveys on the performance of community-based targeting and the feasibility and acceptability of a range of approaches. These will be incorporated into the first draft assessment report at the end of January. The design of the decision-support tool will be finalised alongside the final assessment report by the end of February (it may be deferred to mid-March due to the postponement of the HH survey) when the results will be presented to the TSC.

2. METHODOLOGY

A mixed-method approach was used address the information requirements of this scoping exercise and to formulate the HH survey and sampling framework. Qualitative and contextual material from background reports, literature reviews, Government policies, stakeholder interviews, focus group discussions, and HH visits were combined with quantitative secondary data that were sourced through these processes and from direct consultation with UNHCR and their data registration team.

2.1 Qualitative and contextual information

To obtain qualitative data and contextual information on the various aspects of the study related to vulnerability, wealth indices, livelihood opportunities, approaches to targeting assistance, and associated risks we undertook a literature review and a range of interviews with key stakeholders and the refugee population.

2.1.1. LITERATURE REVIEW AND SOURCING OF GREY LITERATURE

An electronic literature search was undertaken using the multidisciplinary sites of Google Scholar and JSTOR. They were searched using the following keywords "refugee" and "vulnerability"; "refugee" and "targeting"; "Kakuma refugee camp"; "targeting" and "Kakuma"; "livelihoods" and "refugees"; "vulnerability", "targeting," and "refugee camps"; "poverty definition"; "poverty thresholds"; "poverty in refugee camps"; "wealth indices"; "wealth indicators", "wealth indices and refugees"; "household wealth indicators". A snowballing methodology was also employed to build up a larger body of evidence from primary studies and existing reviews by using bibliographic back-referencing and citation tracking.

Key journals that were sourced included: the Journal of Refugee Studies, Food Policy, Social Sciences and Medicine, Disasters, The Lancet, Urban Anthropology and Studies of Cultural Systems and World Economic Development, and American Anthropologist.

Key agencies were also contacted for any relevant background reports. These included WFP, UNHCR, the World Bank, the United States Agency for International Development (USAID), the Swiss Agency for Development and Cooperation (SDC), the Hunger Safety Net Programme (HSNP), and the United Nations Food and Agriculture Organization (FAO). During the stakeholder interviews only one additional document was sourced from UNHCR on a vulnerability assessment of Syrian refugees conducted in Lebanon in 2013 (UNHCR, 2013a).

2.1.2. STAKEHOLDER INTERVIEWS

Stakeholder interviews were held with the UN, key partners, non-governmental organisations (NGOs), and the Kenyan Government working in Kakuma. A generalised checklist was developed and supplemented by key points to be raised with specific stakeholders. For example, the DRA was specifically questioned on the legal aspects related to livelihood opportunities for refugees, and NGOs working in the region were asked about any targeting approaches they had been involved with, and any previous vulnerability studies they had undertaken. The aim was to obtain not only opinions on the vulnerability of refugees and the feasibility of a targeting approach, but to also use these interviews to collect possible secondary quantitative data which will be discussed in more detail in section 2.2. The list of

interviews undertaken, the checklist, and a summary of the major findings are given in Annex 2. This also provides the brief messaging developed by WFP and UNHCR to introduce the study to all the stakeholders interviewed.

2.1.3. FGDS AND SEMI-STRUCTURED INTERVIEWS WITH REFUGEES

Refugees were also questioned both through semi-structured interviews with informants at their homes, and through a Focus Group Discussion (FGD) with the Food Advisory Committee (FAC) at the Food Distribution Point (FDP)[1] in Kakuma 3. The FAC members are volunteers that are elected by the community in their relevant sub-camp. In order to minimise any conflicts that may arise with the proposed HH survey, the terms "vulnerability" and "the possible use of this data in developing a targeted approach to delivering aid" were avoided in both the FGDs and the HH visits. However, the interviews followed a series of questions that explored information on livelihood and income opportunities. In the FGD, these questions were fairly broad and also indirectly explored how one could identify HHs in need. The interviews at the household level were more detailed and supplemented by observation on possible wealth and asset indices. The procedures, FGD checklist, and HH semi-structured interview templates are given in Annex 3 alongside a brief summary of the composition of the FGD and HH sample. All members of the FACs were given the opportunity to participate and the FGD represented a broad range of age groups, ethnic groups, and both males and females. Similarly, a wide range of HH types were visited.

2.2. Secondary quantitative data and analysis

Quantitative secondary data was sourced directly from UNHCR and through data sources identified in the stakeholder interviews and literature review. The requested UNHCR data included the number of HHs by different HH types that may be indicative of "vulnerable" (including for example, female headed HHs, child-headed HHs, HH size 1, HHs with a Head of Household (HoH) from a certain Country of Origin (CoO), and new arrivals). This data is presented in Annex 4 and was to be used, firstly, to provide contextual information on the characteristics of the HHs in the camp, secondly as a basis to estimate the minimal sample size required to capture these possible vulnerable HHs, and thirdly as a basis for establishing the sampling strategy.

A World Bank socio-economic survey (World Bank, 2015) is currently ongoing in Kakuma Camp and the surrounding host community. Findings are expected in early 2016. The HSNP responded with reports containing secondary data (Merttens et al., 2013), but they only collected information on the local Turkana, not refugees. Similarly, the Kenya Integrated Household and Budget Survey (KIHBS) socio-economic data from the 2005 survey in Turkana was downloaded but found to exclude displaced populations (KNBS, 2004), and was therefore not relevant to the refugee population. However, the SDC did provide us with a report including secondary data from a market survey in 2012 that investigated income and livelihoods in the refugee populations (Ochieng, 2013), the results of which are presented in section 3.2.2.

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1   In total, there are three FDPs: FDP 1 covers Kakuma 1, FDP 3 covers Kakuma 2 and 3 and FDP 4 covers Kakuma 4. There is a FAC for every FDP.

3. RESULTS

3.1. Qualitative and contextual information

The results from the literature search, stakeholder interviews and refugee interviews are presented under the following key areas.

3.1.1. VULNERABILITY DEFINITIONS AND PROXIES

Vulnerability can be defined in many ways depending on the context. From a livelihoods perspective, 'vulnerability' tends to be defined as the lack of ability to cope with stress or shocks (Schafer, 2002). In this context, the primary external shocks are changes in assistance provided, including non-food and food as a result of funding constraints.

Humanitarian assistance programmes often classify HHs or individuals into vulnerability groups. UNHCR has a standard list of vulnerable HH types which focuses on protection issues and includes the following categories: children at risk, people living with a disability, separated families, older people at risk, people with serious medical conditions, refugees exposed to sexual and gender based violence (SGBV), single parents, people with specific legal and physical protection needs, victims of torture, unaccompanied or separated children, and women at risk. The distribution and numbers of these groups across Kakuma Camp are summarised in Annex 4.

In a similar way, population groups that can be particularly vulnerable can be defined as the physiologically vulnerable (malnourished and sick, pregnant and lactating women, young children, and the elderly), the socially vulnerable (female-headed households, unaccompanied minors, and the disabled), the economically vulnerable, and the politically vulnerable (internally displaced and refugees in general) (Jaspars and Young, 1995).

Some studies have attempted to categorise the vulnerability characteristics of refugee HHs into socio-economic groups based on the key community defined socio-economic characteristics (source of income, livestock holdings, housing conditions, number of earners) (Islam, 2014). The researchers showed that people perceived 'vulnerability' as sufferings from adverse conditions such as 'lack or limited ability to work due to physical disability or chronic illness, lack of earner in the family', or 'lack of work opportunity', or 'irregular and limited income compared to size of the dependents', 'lack of literacy skills and earning skills', 'lack of money to buy food'. All these features were thought to push an individual or household towards negative socio-economic well-being. The most vulnerable HHs/people in the eyes of the communities are: households with a large number of dependents but limited income; abandoned women without male earner but with high burden of many young children; elderly people unable to work and with no support from family members; physically disabled / or chronically ill people without ability to work; widow or divorced women without any male earner, and people with torn or dirty cloths without work. The researchers also used Principal Component Analysis (PCA) and cluster analysis to construct vulnerability groups based on three poverty variables: per capita annual income, per capita asset, and per capita annual non-food expenditure. They found that the mean annual per capita expenditure of the better-off group was almost two to four times as large as the mean per capita expenditure of the poor and the extremely poor groups. Food was the most widely purchased item across the sampled households (74 percent) of annual expenditure.

Other researchers have used multi-sectoral vulnerability criteria, dividing vulnerability between different sectors. For instance, in Lebanon, Syrian refugees were classified into the following categories of vulnerability: severe, high, medium, and low based on weightings in eight sectors (shelter, health, NFIs, WASH, education, food security, protection, and economy). Using this classification, 68 percent of HHs were identified as sufficiently vulnerable to warrant continued food and non-food assistance (UNHCR, 2013a).

The stakeholder interviews with agencies working in Kakuma Camp highlighted a number of demographically distinct household types that could be considered as being socio-economically vulnerable. These included: households that have had limited opportunity to support themselves because they have not been in the camp for long (new arrivals); a female or child-headed household with limited work opportunities; households with disabled, older, or sick persons that require additional care; small households where the food ration does not go far (although HH size 1 composed of young working age males do not fall into this category); victims of SGBV and households with more than nine members. The FAC suggested that orphaned children being cared for by grandmothers or foster parents, and widowed females were those most in need. During the HH visits, one single female from Burundi who had been in the camp for 20 years was concerned for the future of her three children if they had to go to a foster home: "If I die, today, tomorrow, no-one is here to look after my children ... no-one looks after fostered children, no-one washes their clothes, gives them food or encourages them to go to school. I do not want them to be fostered here."

A summary of the key demographically defined vulnerable groups that may be used as proxies for 'true vulnerability' in terms of 'food insecurity and poverty' are summarised in Table 1. These only include those for which information can be collected and exclude groups such as victims of SGBV as these already receive special protection and status. It was recognised from the HH visits that there may be important confounding factors that result in considerable heterogeneity in vulnerability within a particular group of HHs and caution against over-generalisation of the relative vulnerability of specific population groups. Some of these are also noted in Table 2 and will be considered in the data analysis plan.

For example, a female headed HH may not be vulnerable if there are other working adults in the HH. One such HH visited in Kakuma 1 was headed by the grandmother, looking after her eight grandchildren. Two of the children were working (one for FilmAid earning 5,000 Ksh per month and one as a teacher at a camp school run by LWF earning 6,500 Ksh per month), enabling them to send some of the other children to a private school in Kakuma town. In this situation, even though the HH type falls into a traditionally defined vulnerable group, because of the livelihood opportunities of other HH members, this HH was not vulnerable in terms of poverty or food insecurity. In a similar way, a HH size 1 may not be vulnerable if the individual is a young male who can find work. During the visit to Kakuma 4, many of the businesses were being run by young males who had saved money by working as boda-boda drivers or as agricultural workers for the Don Bosco farm.

Another confounder in defining vulnerable groups based on HH categories from the UNHCR registration is that some HHs have more than two ration cards because they are not registered as one HH but two. For example, in Kakuma 1 a HH was visited where a male Congolese had one ration card (HH size 1) but lived with his wife and child who had another ration card. He had arrived in 2007, and then married in the camp and had a baby boy. Another example was found in Kakuma 4, where a male from South Sudan had recently joined the camp to be with his wife and four children. He was on a ration card for HH size 1 and she was a female-headed HH with her four children.

TABLE 2: Demographically Defined Vulnerable Groups Which May Act as Proxies for Poverty, Food Insecurity and Social-Economic Vulnerability

Variable	Possible Confounder	Rationale
New arrival	Sub-camp location Relatives in the camp	New arrivals have had less time to find ways to support themselves, and are housed in Kakuma 4 which has limited access to livelihood opportunities. However, if they move into another camp or have relatives in the camp these constraints may not be faced.
HH size 1	Number of other ration cards in the HH Age and sex of HH size 1	HHs size 1 are suggested to suffer most from the food ration as food for one does not last as long as food for many. However, if they live together with their family (another ration card), are a young male who can access work as a boda-boda driver, or an incentive then these constraints may not be faced.
Female headed HH	Number of adults in HH and on other ration cards living in HH Number of dependents	Some female headed HHs on the ration card may be living with another ration card holder such as a husband or could have other HH members who are working. If they have no dependents then they are also able to work.
Child headed HH	Relative in the camp Another ration card living with the HH	Child headed HHs may be supported by other HHs.
HH with a disabled, sick or elderly member	Number of other adult HH members Realtives in the camp	While having a disabled, sick, or elderly family member that requires care is an indicator of vulnerability, having a large number of adult HH members or a support group can improve access to income.

The notion of new arrivals being more vulnerable than those who have been living there for a long time was also challenged by a woman who had been living in the camp for 15 years. When she recently asked UNHCR for help in fixing her house it was denied based on the fact that since she had been living in the camp for so long she should not still be receiving help. Her appeal was "is it our fault that we have been living here so long?".

Having support from friends and relatives both inside and outside the camp will also heavily impact the true vulnerability of these demographically defined groups, as will livelihood opportunities. In 2014, UNHCR estimates that 4,913 refugees were resettled from Kenya, and some household units undoubtedly benefit from remittance income from family who have been resettled or have managed to find employment outside the area. Clearly HHs with

members who are able to gain employment (see section 3.1.4) are likely to have higher incomes and, consequently, improved food security status.

It is also important to acknowledge that there are temporal and spatial aspects to vulnerability whereby people can move in and out of food insecurity and poverty when, for example, they change their employment status. Refugees with proximity to services or livelihood opportunities may be less vulnerable to those further away and a HH's vulnerability may be multidimensional as they may fall into many different vulnerability groups (Khogali et al., 2015).

Vulnerability is assessed here in terms of food insecurity and poverty with a highly vulnerable HH being one that would not be able to feed itself in the absence of the food ration or cuts in the food ration.

3.1.2. POVERTY AND FOOD INSECURITY CLASSIFICATIONS

While there are clear links between poverty and vulnerability – those who are poor tend to be less able to cope with stresses and shocks – it is not only the poor who are vulnerable. For instance, those who lack power are unable to safeguard their basic political, economic, and social rights and may find it difficult to protect themselves from violence (Schafer, 2002).

However, for the purposes of this study, the focus will be on poverty and food insecurity as the markers for socio-economic vulnerability.

The World Bank calculates a 'poverty line' below which people are considered to be poor. Poverty lines vary from country to country depending on relative prices, societal norms and values, and political factors. Extreme poverty lines define a state in which households are not able to meet basic needs for survival, are chronically hungry, unable to access healthcare, lack the amenities of safe drinking water and sanitation, cannot afford education for some or all of their children, and perhaps lack rudimentary shelter and basic articles of clothing (Sachs, 2005).

For several years, the internationally accepted poverty line was $1 a day at 2005 purchasing power parity. This was then revised in 2009 to $1.25 a day at 2005 purchasing power parity (Ravallion et al., 2008). Poverty is normally defined in terms of some survival criteria, such as the amount of income necessary to acquire a minimum food calorie intake, a minimum basket of consumption goods, or a level of individual welfare or utility needed to live a basic life (Wagle, 2002).

Measuring poverty in the context of refugee camps presents some complexities. For example, many items are provided for free (e.g. schooling, housing, part of the food basket, and health services) and the value of these goods and services needs to be imputed. Moreover, there are complexities in defining a poverty line in cash terms as markets are distorted with extremely inflated prices for some goods and deflated prices for other. Methods for adjusting for distorted prices and free transfers are well documented in the literature.

For the purposes of this study the focus will be on measuring expenditure. These are key variables in the Living Standard and Measurement Surveys (LSMS) which is the global standard for poverty measurement. The Kenya Integrated Household Budget Survey (KIHBS) largely conforms to the LSMS standards and was last undertaken in 2004/05. A new round is planned to start in 2015. It is proposed to use the LSMS format and standards to collect consumption and expenditure patterns of food and NFIs for the HH survey in Kakuma to ensure that international standards are adhered to and that the resulting data will be amenable to robust poverty, food security, and vulnerability measurement. Unfortunately, although a 2005/06 survey was undertaken in Turkana district, persons living in refugee camps were excluded (KNBS, 2004), so the quantitative data on socio-economic status is only relevant to

the host community, and as such is not presented in the secondary data analysis section.

The HH visits and semi-structured interviews identified the key expenditures in addition to food that constitute the major monthly consumption and spending patterns of refugee HHs. These are summarised in Table 3 and include payments for electricity to power lights and charge mobile phones; transport for the food and wood ration; travel to the other camps to access markets and services; and, for those wealthier HHs, private school fees and business rental sites.

Poverty and food insecurity (vulnerability) will be measured by evaluating consumption expenditure patterns in the households.

TABLE 3: Main Consumption Expenture items for the Refugee Population

Item	Explanation
Food (in addition to WFP ration)	Broken down into key groups: cereals, vegetables, meat, milk, eggs, oil, salt, sugar, etc..
Electricity	A line can cost between 500-1500 Ksh per month.
Transport	For food ration, to work (most of the NGOs are near Kakuma town), and travelling between camps to access markets or services. A boda-boda from Kakuma 4 to Kakuma town can cost at least 150 Ksh.
Mobile phone charging	Phones can be charged at shops for 10 Ksh.
Soap and detergent	Essential for washing themselves, clothes, and cooking utensils.

3.1.3. WEALTH INDICATORS AND ASSETS

The KIHBS also provides information on wealth indicators based on housing, water and energy use, wealth assets such as ownership of luxury goods, and income from employment, business, agriculture, livestock, and credit. The applicability of these to the Kakuma Camp setting were evaluated through the HH visits which included both a semi-structured interview and observation. Some indicators such as ownership of land, and income sources such as agriculture were shown to be inappropriate to this setting. However, a range of key wealth indicators that could be used were identified and are summarised in Table 4.

TABLE 4: Key Wealth Assets

Item	Explanation
Bicycle	Transport enabling access and income
Generator	Power source enabling access and income
Solar panel	Power source and luxury good
Solar light	Power source
TV	Luxury good
Satellite dish	Luxury good
Chicken and ducks	Food and income source. A chicken can cost 400 Ksh. A duck can cost 800-900 Ksh.

Key wealth assets included a bicycle (important for moving between camps and transporting goods including the food ration and firewood), a generator (an important source of electricity and potential income), and luxury items such as a TV and a satellite dish. The expenditure data in Table 2 can also act as wealth indicators since HHs paying for children to go to private school in Kakuma or paying rent for their shops indicate that they have a source of income.

In September 2013, there was a detailed analysis of the Food Security Outcome Monitoring (FSOM) data for Dadaab and Kakuma refugee camps which attempted to profile vulnerable households and looked at differences in asset ownership, purchasing power, and expenditures across the sub-camps (WFP, 2013). Since the data were collected in 2013, Kakuma 4 sub-camp was not included in the analysis as it had not yet been opened. Overall, the assessment found that only 62 percent of households had acceptable food consumption levels, almost 20 percent had poor food consumption, and 32 percent of households were food insecure. Length of stay in the camp seemed to have an effect on food security, with households who had arrived within the last year being more food insecure. Moreover, due to an increase in prices, purchasing power of refugees had been significantly reduced since the previous FSOM exercise in May 2013. Households spent 57 percent of their expenditure on food and 11 percent on household items, including clothing. The highest asset ownership was found in Kakuma 1, with households owning more radios and TVs, and having more electricity. However, Kakuma 1 did have slightly less mobile phones than Kakuma 3. Overall, those with a higher food consumption score (FCS) owned more assets. For example, 70 percent of those with an acceptable FCS had a mobile phone, compared with only 52 percent of those with a low FCS. The corresponding figures for households owning a generator were 39 percent and 3 percent respectively. The data collected in the FSOM September 2013 exercise did not find any distinct patterns that could be used for targeting assistance.

3.1.4. INCOME AND LIVELIHOOD OPPORTUNITIES

It is evident that refugees' ability to engage in livelihood activities influences their capacity to provide for themselves and plays a major role in determining their level of poverty. Levels of education, vocational skills, and social ties would all be expected to affect refugees' ability to engage in livelihood activities.

According to Chambers and Conway (1991), a livelihood comprises the capabilities, assets, and activities required for a means of living. A sustainable livelihood allows households to cope with and to recover from stress and shocks, and to maintain or enhance their capabilities and assets to provide sustainable livelihood opportunities for the next generation (de Vriese, 2006). A sustainable livelihood is often tied up with the notion of self-reliance; the social and economic ability to meet essential needs (including food, water, shelter, personal safety, health, and education) in a sustainable manner and with dignity (de Vriese, 2006). The United Kingdom Department for International Development (DFID) sustainable livelihoods framework attempts to capture these issues in the notion of 'livelihood outcomes', that is, the goals that people are trying to achieve through their livelihood pursuits. They include 'more income' as one of the potential livelihood outcomes, along with 'increased well-being', 'reduced vulnerability', 'improved food security', and 'more sustainable use of natural resource base' (DFID, 1999). To fully capture livelihood opportunities, consideration also needs to be given to understanding livelihood resources (what people have, variously referred to as stocks and stores, assets, and capital) and livelihood strategies (what people do e.g. agriculture, wage labour, migration) (Schafer, 2002).

Livelihood opportunities are strongly influenced by the external environment. In the case of refugees their displaced nature frequently means that they have limited assets and capabilities to undertake livelihood opportunities. These opportunities can be further constrained by legal barriers restricting their work in formal sectors of the economy (covered in Section 3.1.5).

Research inside Kakuma and Dadaab refugee camps (Jamal, 2000) has highlighted that refugees have limited freedom of movement, difficulty getting permission to work, no access to land for agricultural production, and no access to the credit or saving sector. Essentially, the refugees are confined to the camp areas. Further research by Horst (2001) on the situation of Somali refugees in Dadaab, showed that the search for a livelihood is mainly complicated by two factors. First, being forced into the 'informal sector' because their economic activities are considered illegal, and second, the location of the camp in an ecologically marginal area where there are limited natural resources. These two factors are equally applicable to Kakuma. In addition to these, due consideration should also be given to language differences, lack of skills, lack of tools or start-capital, and xenophobia towards refugees as constraints to the job market.

The refugees' relations with the host community can also impact their ability to engage in alternative livelihood opportunities, especially in cases of competing access to local resources (UNHCR, 2013b). This is particularly relevant in Kakuma where the host community is in direct competition with the refugee population for scarce resources such as firewood and land for grazing their animals. This has caused tensions especially since the Turkana have few livelihood opportunities themselves, and, due to their socio-economic insecurity, are often targeted for food assistance and cash transfers. The HSNP2 for example, is an unconditional cash transfer programme that aims to reduce poverty in four counties of northern Kenya, including Turkana. The pilot phase took place from 2009 to 2012 and the second phase was launched in 2013 (Merttens et al., 2013).

The stakeholder interviews in Kakuma revealed that some NGOs target both the refugee and host communities, aiming to reduce these disparities. WVI has been providing targeted food assistance to the Turkana since 2000; FilmAid provides training in film production and journalism to both refugee and Turkana youths; Gesellschaft für Internationale Zusammenarbeit (GIZ) is providing equal assistance to host and refugee communities to improve their health, food security and conflict resolution; and FAO recently started a project that strengthens linkages between the refugee and host community with the aim of improving incomes, food security, and nutrition.

A recent review of livelihood opportunities in four refugee settings - Chad, Bangladesh, Ethiopia, and Rwanda - found that refugees had limited access to the labour market. Most incomes came from unskilled day labour and the selling of NFI and food rations (UNHCR, 2013b). It was also shown that livelihood or income-earning opportunities varied significantly across camps, by sex and by ethnicity within camps. Women heads of household, who generally had high dependency ratios and child-rearing responsibilities, were particularly hampered by lack of sustainable livelihood opportunities and exposed to risks when forced to leave camps to look for income sources. In all four contexts, many households headed by women engaged in precarious short-term activities such as fuel wood collection, and transactional and survival sex (UNHCR, 2013b).

As part of their livelihood strategy, refugees often engage in petty trading, such as buying and selling goods (eg. firewood, charcoal, vegetables, prepared food, cigarettes, and sweets) or in providing services (eg. hairdressing, mechanics, food preparation, construction, telephone booths, language tutoring or interpreting, and money transfers). The types of livelihood opportunities highlighted by stakeholders in Kakuma included: working for small businesses (hairdressers, barbers, bakeries, restaurants, carpenters, tailors, electricians), handicraft production, selling goods, providing transport with motorcycles ("boda-bodas") or taxis (although this is less widespread), and, to a minor extent, engaging in agricultural production, although this is complicated by the harsh climatic conditions and the unavailability of sufficient water (especially in Kakuma 4). Unlike other refugee camps where agriculture and livestock rearing can be a major livelihood (UNHCR/WFP, 2012), the restrictions on livestock ownership and the scarcity of water limit this activity in Kakuma.

A significant proportion of refugees (estimated at about 20 percent of the entire camp population) own businesses themselves, but this seems to be mostly limited to Somali refugees. Some refugees also receive remittances from relatives that have resettled abroad. Although we have no exact figures for Kakuma, experiences from other refugee camps in Ethiopia, for example, have shown that a third of HHs receive remittances from relatives overseas (Sutter et al., 2011).

While encouraging agricultural production can promote self-sufficiency and local integration (Betts, 2004), this is particularly difficult in the Kakuma refugee camp and affects certain groups more than others (i.e. South Sudanese). A few of the households interviewed reported that, despite repeated attempts at growing vegetables in their gardens, it was not feasible due to the unavailability of water. However, plans are underway to enable both the refugee and host communities to engage in agricultural activities in the new camp in Kalobeyi through the use of a large communal farm.

A HH survey of Syrian refugees in Lebanon (UNHCR, 2013a) found that 57 percent relied on employment as a first livelihood source and nearly 30 percent of the households relied on some type of assistance as their main livelihood source. Interestingly, recently registered households relied more on various sources of cash, whereas households registered for

longer periods of time relied more on assistance. However, skilled work as main livelihood source was significantly more common among those who had been registered for a longer period of time.

An evaluation of HHs in refugee camps in Bangladesh found that child labour was an important source of income (Nielson et al., 2012). However, from the stakeholder interviews and other research done in Kakuma, child labour does not appear to be significant source of income here.

The stakeholder interviews, FGD, and the HH semi-structured interviews identified the main sources of income for refugees (Table 5) and the range of important skills and social and physical networks that enhance livelihood opportunities (Table 6).

TABLE 5: Main Sources of Income in Kakuma

Item	Explanation
Transfers from relatives outside the camp	Some HHs have relatives that have been resettled abroad and others have funds sent from those still in the home countries. These can be used to start a business or buy large items such as a generator.
Cash from relatives or friends inside the camp	Some HHs have help from friends and relatives inside the camp.
Incentive income	Some refugees work for the NGOs with wages ranging from 200-600 Ksh per day for support at the FDP, up to 9,000 Ksh per month for the high end paying NGOs.
Income from employment in the camp	Refugees can be hired to work as boda-boda drivers, to work as waitresses in the bars/hotels, though reported wages can be low (150 Ksh/day).
Income from business/shop in the camp	Refugees can also own their own business or shop offering services such as hairdressing or electrical repairs or goods such as mobile phones, building materials, and food.
Credit	Shops often offer credit to customers so that they can access food and NFIs.
Petty trading or unskilled labour	Small amounts of cash from carrying water to fixing shoes to selling tea and snacks.
Cashing-in the food ration	Reported to be done to diversify diets or pay to transport the food, although some HHs cash in just to have cash not the food ration.

Stakeholder interviews revealed that the most common form of generating additional income for refugees is to engage in 'incentive work'. Almost all the NGOs present in Kakuma employ refugees, either on a casual basis or full-time. People who regularly engage in incentive work are relatively well off, as they earn between 5,000 Ksh and 6,000 Ksh a month. Based on their level of education and their experience, refugees can be employed in a wide range of jobs, from manual labour and cleaners to more specialised professions (teachers, health workers, project supervisors). The main constraint to accessing this source of income, as well as the training courses offered by organisations working in the camp, is the inability to read and write in English. Although most organisations employ local translators to expand their outreach, this remains a significant barrier for vocational training courses and affects newly arrived refugees more than other groups.

TABLE 6: Skills and Networks That Enhance Livelihood Opportunities for Refugees in Kakuma

Category	Item	Explanation
Skills and experience	English	Many employment and vocational training courses are limited to refugees who can speak English.
	Trade and vocational trading	Having a trade such as a driver or a hairdresser opens up employment opportunities. Many refugees come to the camp with only farming experience and no land to farm.
Social network	Relatives in the camp	Can provide support and job opportunities.
	Relatives settled abroad	Can provide financial support.
Physical network	Sub-camp and location of HH from Kakuma 1	Kakuma 1 and 2 provide more livelihood opportunities. Kakuma 4 is particularly challenging for any agricultural-related activities, as water is scarcer.

In the FGD it was reported that only a few refugees either arrive with money or have money sent to them from relatives abroad to set up a business. Instead, most refugees rely on the food ration. A male contributor from South Sudan noted that only 20 percent of the community have a small business, the rest "spend their time waiting for the next food ration". The stakeholder interviews reinforced the fact that refugees also frequently sell part of their ration to generate additional income although the introduction of vouchers may diminish this activity. Although it has been suggested that refugees in Kakuma cash-in 10 percent of their ration, this may be much higher as seen in other camps where between a fifth and a third of the ration can be sold (Sutter et al., 2011; 2012).

The costs of setting up a business can be high. Renting a shop can be expensive. One HH visited in Kakuma 3 stated that they had to stop their electrical repair shop because the rent was too high. In Kakuma 4, the youths who had established small shops from working as boda-boda drivers or agricultural workers said it cost them 85,000-95,000 Ksh to establish their businesses. In a visit to a Ugandan HH in Kakuma 1 the wife had been on a Don Bosco dress-making course and had on loan a sewing machine which would need to be returned. She wanted to set up a tailoring service, but the cost to purchase a new sewing machine would be 10,000 Ksh (between 5,000 and 7,000 Ksh for a second hand one). In the FGDs,

leaders recommended that 6,000 Ksh could help a women start up a small business; anything less than that "would be eaten".

A research project in Kakuma Camp in 1998 found that most businesses were established from external income from relatives overseas, though a small number were set-up from raising funds from selling the food ration. The chairman of the Sudanese community's Traders' Committee in Kakuma Camp claimed to have started up in business in 1995 by selling a portion of his food ration. He then got a loan of about 6,000 Ksh from Don Bosco, an Italian missionary organization. In 1998, he was one of the leading traders in the Sudanese market (de Montclos and Kagwanja, 2000).

Youth that have arrived in the camp at a very young age and have grown up there also face a particular set of challenges. While they are able to access education in the camp, very often they are made vulnerable by the fact that they cannot access higher education, cannot leave the camp, and thus do not have the same opportunities as Kenyan youths with a similar education level. They also suffer from an identity problem. In the words of an Ethiopian refugee interviewed, "they are neither Kenyan nor Ethiopian" and they have very few options. Youths were also considered to be a vulnerable group by several stakeholders interviewed, as they are idle and they easily engage in illegal or criminal activity. This was reiterated in the FGD. There was a clear message to "focus on the youth" in developing livelihoods in the community. As an Ethiopian woman pointed out "they are many and idle".

Each community in the camp has its own patterns of trade. Kakuma's Ethiopian market is dynamic. In 1998 it had more than 120 stalls, video clubs, hardware stores, and a post office (de Montclos and Kagwanja, 2000). The Somalis also became shop owners and businessmen. They tended to organise themselves into cooperatives with several families sharing the same stall, which is less common among the Ethiopian community. The current situation in the camp still demonstrates marked trade patterns by CoO. The latest being the boda-boda transport services that have been established primarily by the Sudanese and the Congolese.

As raised in other evaluations of livelihood opportunities in refugee settings (Nielson et al., 2012), kinship and community support are important factors that enable refugees to cope.

3.1.5. LEGAL CONSTRAINTS TO LIVELIHOOD OPPORTUNITIES

It is common for an informal economy to develop within refugee camps to fill in the gaps left by relief efforts. As noted in Oka (2011), in Kenya the informal economy (jua kali: literally "fierce sun") refers to "... all small-scale activities that are normally semi-organized and unregulated, and use simple labour-intensive technology... undertaken by artisans, traders and operators in work-sites such as open yards, market stalls, undeveloped plots, residential houses and street pavements... not registered with the Register of Companies, they may or may not have licenses from local authorities for carrying out a variety of businesses". According to Oka (2011), although the informal economy can account for up to 95 percent of consumption of goods and services and provides a similar percentage of employment and sustenance in refugee camps, it is often neglected since some policies of humanitarian aid ban or strictly control commercial activity by refugees.

Research has shown that many refugees cannot establish or maintain their livelihoods because they cannot exercise the rights to which they are entitled under international human rights, humanitarian law, and/or refugee law (Jacobsen, 2002). Often refugees suffer from the absence of civil, social, and economic rights including freedom of movement and residence, freedom of speech and assembly, fair trial, property rights, the right to engage in

wage labour, self-employment and the conclusion of valid contracts, access to school education, access to credit, and protection against physical and sexual abuse, harassment, unlawful detention, and deportation.

The 2006 Refugee Act governs all aspects related to refugees in Kenya. Clause 16, Rights and Duties of Refugees in Kenya, stipulates that all refugees are entitled to the rights and obligations contained in the international conventions to which Kenya is party. No mention is made of refugees' livelihood activities, but "Subject to this Act, every refugee and member of his family in Kenya shall, in respect of wage-earning employment, be subject to the same restrictions as are imposed on persons who are not citizens of Kenya" (Republic of Kenya, 2006). Interviews with DRA representatives in Nairobi and Kakuma refugee camp revealed that a more comprehensive law is in the process of being drafted. Currently, refugees in urban settlements can request a 'Class M' work permit with the support of the DRA, which prepares a recommendation letter to be submitted with the work permit application. Processing of the work permit normally takes between a few weeks to a month. Refugees in Kakuma. however, cannot apply for work permits, only for alien cards (identification document) and business licences where applicable. These can cost between 1,000 Ksh and 5,000 Ksh. Refugees are not subject to taxation and can only travel for business purposes with a 'movement pass', which allows them to exit the camps for a maximum of 30 days.

Many of the refugees are pastoralists and a natural livelihood for them would be animal husbandry, yet to graze animals outside the confines of the camp is forbidden (Jamal, 2000). While this would be desirable, it is highly unlikely that this ban will be lifted, particularly in Turkana where most members of the host community are herders and resources are already scarce.

3.1.6. TARGETING APPROACHES TO DELIVERY OF AID IN REFUGEE SETTINGS

Targeting has been defined as ensuring that assistance reaches people who need it, when and where they need it, in an appropriate form, in appropriate quantities and through effective modalities, ensuring that it does not flow to people who do not need it (Barrett and Maxwell, 2005).

The resource pipeline for refugee operations is prone to funding delays and breaks. If the overall resources are inadequate to meet the basic consumption requirements of the entire camp population, the key policy question is whether to reduce allocations to everyone (spreading limited resources more thinly), reduce the ration for specific groups, or reduce the numbers of people receiving assistance by focusing on those whose consumption of food and other basic commodities is most likely to fall short of minimum needs. If the second and third (targeted) approaches are taken, then the key question is how to classify households.

Since it is prohibitively costly to measure actual HH consumption levels, we need to find a classification method that relies on consumption proxies that can be observed cheaply and accurately and provide an efficient predictor of consumption outcomes. This study will therefore focus on collecting and analysing potential proxies based on what we already know about probable determinants of food insecurity and poverty in the camp setting.

There are five main approaches to targeting which are summarised in Table 7. Depending on the specific context, a combination of targeting methods may be considered to maximise targeting efficiency and minimise errors. Potential beneficiaries may be assessed based on a single criterion or a range of criteria ranked based on importance. The targeting accuracy (sometimes referred to as targeting efficiency) of each method will be assessed using data

collected by this study. Statistical techniques will determine which proxies (or combination or proxies) best predict consumption outcomes, and hence provide the least error prone basis for selection of target groups.

TABLE 7: Summary of the Main Approaches to Targeting

Targeting Method	Description	Optimal Conditions and Risks
Categorical	Resources are provided to a specific category of individuals such as people belonging to vulnerable groups Includes geographical targeting and requires knowledge of the geographical distribution of the incidence, depth or severity of poverty.	Requires knowledge of the demographic distribution of poverty. Works well only when high concentrations of poverty do exist: the method is efficient, has low leakage and is administratively inexpensive. Results also depend on the geographic unit of choice (community, municipality, region, etc.): the smaller the unit the more efficient the targeting and the lower the leakage (Legovini, 1999).
Community-Based Targeting (CBT)	Beneficiaries are selected by community members, usually community elders or specifically elected relief committees, with specific beneficiary selection criteria (Maxwell et al., 2011). Agencies can request the communities to target based on their criteria and/or set a limit on the proportion that can be targeted (Jaspars and Shoham, 1999).	Might not work when the community members and the humanitarian relief agencies have different views of who the vulnerable within the community really are, and when community representatives are under pressure to favour groups that have greater lobbying power. Risk of excluding minorities that are not sufficiently represented (Jaspars and Shoham, 1999).
Self-targerting	It is left to the discretion of the individual whether to participate or not (Maxwell et al., 2011). Characterized by the use of disincentives to program participation in the form of work requirements, waiting time, and lower product quality, so as to only attract individuals in need.	Examples include low-wage workfare programs, queuing for health provision, and lower quality public schooling. Self-targeting is inexpensive to administer, and has low leakage because only left-tail individuals are willing to incur the cost of participating (Legovini, 1999). Level of targeting efficiency is unclear and depends on the specific context.

Targeting Method	Description	Optimal Conditions and Risks
Direct means testing	Provide benefits to households with income below an established threshold.	Applicable when income is mainly formal sector and accurate records are available for verification. Higher administrative costs than either categorical or self-selecting mechanisms due to collection and verification of household income information. May be subject to gaming schemes (e.g. lying and fraud) that tend to increase leakage. Stigma may negatively affect take-up rates (Legovini, 1999).
Proxy Means Targeting (PMT)	Bases access to program benefits on easy-to-collect household or individual characteristics that correlate with welfare (in this case consumption) and can proxy for income.	Data is collected on both income and potential indicators on a sample of the population. Indicators are selected and their relative importance established through statistical analysis or calibration. The indicators, weighted appropriately, are then used across the population to predict whether an individual or a household qualifies as poor (Legovini, 1999). Cheaper and more easily verifiable than means testing but also less target efficient.

It is important to recognise that there will be no single targeting method that can be applied to all situations, and that the selection of the targeting method will have to be based on an analysis of vulnerability and the feasibility of reaching vulnerable groups within that particular context (Jaspars and Shoham, 1999). Targeting vulnerable households on the basis of socio-economic criteria is extremely difficult because it is expensive to evaluate these characteristics and respondents have a strong incentive to falsify information during a targeting exercise. There are only certain situations where this can be done successfully. Jaspars and Shoham (1999) highlight four criteria for success: (1) stable, conflict situations; (2) relatively large wealth differentials across the community; (3) targeting a large proportion of the community; and (4) undertaking community-based targeting with reliable community representatives.

Moreover, it will be important to carefully consider the risk of community backlash if targeting were to be adopted. Both the stakeholder interviews and the FGD carried out in Kakuma revealed that this is likely to occur. Targeting assistance in a refugee camp can lead to feelings of exclusion, and as a participant of the FGD reported, "we are all refugees". Active involvement of refugees in the targeting approach, transparent communication, and the use of a complaints mechanism could mitigate this risk by allowing refugees to raise concerns on possible unethical targeting mechanisms.

3.1.7. TARGETING EXPERIENCES

Jaspars and Shoham (1999) reviewed three case studies of community-based targeting for food distribution systems in Turkana (Kenya), Bahr-el-Ghazal (South Sudan), and Tanzania (Singida and Dodoma). The setting and the proportion of the population targeted were shown to have marked effects on the success of the approach. For example, in Tanzania where the population were farmers affected by droughts and pests, the approach worked well because it was applied to a stable village setting (not in a crisis situation) with a high percentage targeted (60 percent) and strong participation with NGO and extension staff. In contrast, in South Sudan where the population was in a protracted conflict situation, the committee was found to favour their own kind and in fact exclude many vulnerable groups such as displaced individuals and orphans. It was also observed that even the 'targeted' women identified by WFP were later seen to carry the food to a designated site for redistribution by local chiefs. In Turkana, there was strong involvement with the agency (Oxfam) and the committee successfully identified and targeted the poorest in this community of pastoralists. However, problems arose because the population felt the targeting was unfair. Nearly everyone was destitute and the differences in wealth were marginal, but only 30 percent of the population were targeted. Out of a sense of fairness beneficiaries felt obliged to share their food with those who had not been targeted.

In Turkana, the HSNP has targeted the host community by providing unconditional cash transfers with the aim of reducing poverty. During the pilot phase of the programme (2009-2012), approximately 60,000 households were targeted using the following criteria: a) CBT to selected HHs most in need of cash transfers, up to a maximum of 50 percent of all HHs, b) dependency ratio: HHs were selected if the dependency ratio exceeded a specified number, and c) social pension according to which any individual above 55 years of age was eligible for cash transfers. Using these criteria, a single HH could receive multiple transfers (Merttens et al., 2013). HSNP also used geographic targeting, as it focused on counties where 85 percent of the population fell below the national poverty line at the time of the 2005 KIHBS survey, namely Mandera, Marsabit, Turkana, and Wajir. An evaluation of the HSNP targeting mechanisms found that CBT was the most effective method used for identifying the poorest households and recommended its adoption for Phase 2 of the programme. The evaluation also stressed the importance of providing enough advance warning of the targeting process, using an effective complaint and grievance mechanism, and sufficiently monitoring the process to avoid capture by local elites (Hurrell and Sabates-Wheeler, 2011). To avoid elite capture it was suggested that CBT could be complemented with a simple PMT-type mechanism that would screen out relatively better-off households and thereby reduce inclusion errors.

The Turkana community has also been targeted by WFP/WVI and FAO. These organisations have used CBT to provide the host community with food aid and poultry. Vulnerable groups are identified by community leaders and are then confirmed through a verification exercise with the whole community. The success of these targeting approaches is attributed to the high community involvement and the availability of a complaints and response mechanism related to the targeting process itself.

In refugee settings, there have been a number of targeting approaches. For example, in 2008, cash assistance from UNHCR was provided to 38,234 Iraqis in Syria (or approximately 11,300 households since 2007) and 18,074 Iraqis in Jordan (Doocy et al., 2011). In Syria these were targeted at female headed households, unaccompanied minors, presence of a disabled household member, adults age 60+ not accompanied by an adult male of working age, and families individually assessed to be in need of financial assistance. A household

survey showed that this approach had been successful in reaching female headed house-holds (Doocy et al., 2011). The survey also found that in Jordan households receiving cash assistance were most likely to be in the lower half of the economic spectrum and have six or more household members.

In eastern Sudan (Islam, 2014) food aid was being targeted to HHs with a single parent without a physically able adult male of 18-59 years and to HHs with disabled or chronically ill members. These criteria focused on the household's demographic composition and phys-ical well-being, failing to include major elements of vulnerability such as the household's socio-economic capability, asset holdings, and coping capacity that could have a significant bearing on the household's food security.

In Kakuma refugee camp, UNHCR targets NFIs to people with disabilities and individuals with protection problems. This targeting approach is not based on socio-economic criteria and is normally adopted in the case of funding constraints. It is also reported that NFIs are often targeted to female headed HHs. WFP, on the other hand, is planning to adopt a target-ed approach for ration cuts starting in November 2015 in both Kakuma and Dadaab refugee camps. This will involve providing full rations to HH sizes 1-3, 80 percent of the ration to HH sizes 4-7, and only 70 percent of the ration to larger HHs.

Stakeholder interviews in Kakuma revealed that most organisations do not target assistance to refugees based on socio-economic status; rather, their activities and support focus on specific groups, such as youth, survivors of SGBV, or new arrivals. The process of selecting beneficiaries is carried out through incentive staff and community leaders in the camp in addition to a referral system that exists among all the organisations working in the camp.

3.1.8. POTENTIAL ERRORS OF TARGETING

Adopting a targeted approach can generate two types of errors: proxy errors, related to the choice of proxies (in this case consumption), and classification errors, related to the mecha-nisms used to implement the targeting.

Proxy errors affect the whole targeting process. If proxies are not efficient predictors of con-sumption outcomes, the whole targeting process will be based on incorrect determinants of food insecurity and poverty in the camp setting.

Targeting assistance also involves classification errors. Since no approach to identifying vulnerable or poor households will be 100 percent reliable, there will be inclusion errors (targeting of non-poor persons) and exclusion errors (identifying poor persons as non-poor and denying them access to aid). The question is how to minimise these errors and what constitutes acceptable levels of errors. Errors of inclusion are sometimes expressed as leakage rates (proportion of poor households identified as non-poor) and exclusion errors can be expressed as under-coverage rates (proportion of non-poor households identified as poor) (Coady et al., 2004). The level of targeting errors will affect whether to target and what method to use.

Cornia and Stewart (1993) investigated how development programmes can address and minimise these two types of errors. They found that, as inclusion errors are reduced through targeting, exclusion errors tend to increase. While inclusion errors imply additional expendi-tures, the costs associated with exclusion errors are of a different and more serious nature, as they include both the immediate welfare loss and the foregone future income as a result of malnutrition and poverty among the excluded groups. Inclusion and exclusion errors are normally low in programmes where the target population has some easily verifiable charac-

teristics (such as geographic location, age, gender, consumption patterns) that are distinct from those of the non-target population. However, this scenario is not common, and in most cases it is difficult to identify distinct characteristics between the target and non-target population. As such, efforts to reduce inclusion errors tend to increase exclusion errors.

Finding the right balance between exclusion errors (which can be life-threatening) and inclusion errors (which are potentially disruptive or wasteful) is complex; reducing these errors normally increases costs (Besley and Kanbur, 1990).

One can somewhat reduce the risk of exclusion by instigating an appeals process or fast-tracked reassessment for borderline cases, and, given that vulnerability status may change with time, a periodic re-assessment. Additional processes for minimising this risk include monitoring using blind randomized visits and revalidation of vulnerability scores (Khogali et al., 2015). In the context of Kakuma refugee camp, this could be done through the use of the FAC and/or block leaders.

Targeting errors can also arise with the use of CBT, depending on whether the community is equitable or dominated by elite capture. Even though the premise of CBT relies on decisions made by local leaders, these same leaders may encourage redistribution of food once the agencies involved have left (Jaspars and Shoham, 1999). These observations were made in village settings during the targeting of food aid, though the site in South Sudan also contained displaced persons. However, the ability of the community representatives to initiate redistribution of aid in a refugee camp is likely to be small, unless the redistribution is to pay off debts or occurs within the extended family or clan. A more real risk in a refugee setting is that community representatives may not prioritise the most vulnerable. For instance in South Sudan, local representatives were shown to first target the resident population, then the largest and most powerful clans within the resident population, and then others that were seen to "belong" (Jaspars and Shahom, 1999). Those excluded were female headed households not taken in by their husband's family, lone elderly people, and unaccompanied minors - in fact those that would be, by most definitions, the most vulnerable.

3.2. Quantitative data and analysis

3.2.1. REFUGEE REGISTRATION AND DEMOGRAPHIC DATA

As of 9 September 2015 a total of 55,055 HHs and 181,723 individuals were registered at Kakuma Camp. UNHCR provided detailed demographic statistics on these HHs across the four sub-camps, which are detailed in Annex 5. The largest camps in terms of population size are Kakuma 1 and 3, which together host 75 percent of the HHs in the camp.

Overall, 47 percent of HHs are headed by a female. This pattern was similar across all camps. The percentage of HHs headed by children or the elderly, or with a disabled or an elderly family member were low (2-10 percent), and were generally similar across sub-camps. Similarly, there was no obvious clustering of HHs with a single member, though it is important to note that these represent a significant percentage of all HHs (43 percent).

A significant percentage (42 percent overall) of HHs had a head who had arrived recently (since 2012). In this instance there was evidence of clustering by camp, with 96 percent of HHs being headed by a new arrival in Kakuma 4, and 40 percent in Kakuma 3. This is to be

expected given the evolution of the sub-camps, though the occurrence of some new arrivals heading households in Kakuma 1 and 2 supports anecdotal evidence that newly arrived refugees with relatives in other camps can be located close to them.

The main CoO for the HoHs are South Sudan (43 percent) and Somalia (31 percent), followed by Sudan (8 percent), Ethiopia (6 percent), Democratic Republic of Congo (DRC) (5 percent), Burundi (4 percent), Uganda (1 percent), and Rwanda (<1 percent). Although the percentage representation of these groups are low, the number of HHs can run into a few thousand given the large size of the camp. There are some clustering of CoO HHs by sub-camp with South Sudan making up 76 percent of HHs in Kakuma 4, the majority of Ethiopians (63 percent) being located in Kakuma 1, and the majority of Sudanese (57 percent) being located in Kakuma 3.

Within sub-camps there are clear clustering of HHs from different CoOs. Certain areas of the sub-camps are referred to as the Ugandan sector or the Ethiopian community. The administrative unit of the sub-camps are zones and these are divided into blocks. These blocks can be visualised on the standard administrative map and were available as variables for each HH in the UNHCR registration database. Unfortunately, there were some inconsistencies in the reported number of blocks from these two systems. As such we undertook a field evaluation of these units that is given in Annex 5, alongside the sampling strategy to be used in the HH survey.

3.2.2. EMPLOYMENT OPPORTUNITIES, INCOME AND CASH AVAILABILITY TO REFUGEES

An evaluation of vulnerability and HH proxies in refugees in Eastern Sudan determined that the mean per capita annual income from unskilled labour (38 percent) and small businesses (23 percent) constituted more than three-fifths (61 percent) of annual income of sample households across the socio-economic groups in the camps. Loans were available with shopkeepers being the most common source (46 percent), followed by UNHCR microfinance implementing partners (40 percent). The majority of sampled households that had taken loans in last five years used the loan for food (55 percent), followed by small trade, handicrafts, farming and livestock production (28 percent), health issues (11 percent), and consumer durable assets (such as furniture, TVs) (6 percent) (Islam, 2014).

Over a period of five seasons between 2008 and 2011, Professor Oka undertook a series of interviews with traders, retailers, and refugees in Kakuma camp to try and establish the sources and availability of cash for refugees (Oka, 2011; 2014). Although this work is now more than seven years old and the exact cash values may no longer be applicable to the population, the relative amounts may be relevant to this study. To summarise, Oka determined that cash used by refugees come from three sources: 1) remittances (from North America, Europe, Arabian Peninsula–Gulf, South Asia) through banks and mobile phone currency transfers (56 percent); 2) employment in the commercial sectors (as sales agents, clerks, accountants) or the relief agencies (as guards or clerks) (19 percent); and 3) sale of relief packages into the black market (25 percent). The research showed that refugees who receive remittances or are employed comprise 70-80 percent of camp populations and tend to sell up to 90 percent of their relief packages. The 20-30 percent of the relief-dependent refugees with no other source of cash were found to sell between 40-50 percent of their relief food. The study also found that credit was often available to refugees from retailers, the amount being determined by their ability to pay. For example, refugees who receive remittances or are employed may maintain monthly credit balances 10-15 times higher than those

dependent on the sale of relief packages. The wages offered to refugees working for aid organizations can be five times lower than that provided by retail shops.

Recent wage data for Kakuma incentives is available. For example, WVI employ more than 200 incentives (refugees) to help in the food distribution process in Kakuma 3 and 4. The daily rates paid are low with ushers, food security officers, and cleaners receiving 200 Ksh, scoopers and loaders 230 Ksh, and clerks 350 Ksh (Guyatt, 2015). Additional wage rates were retrieved during the stakeholder interviews. Casual labour is normally paid between 200 Ksh (for assisting in the food distribution cycle) and 600 Ksh per day (NCCK pays this rate to loaders and manual labourers involved in the construction of shelters). NGOs also employ refugees on a monthly basis. The minimum salary is around 3,700 Ksh for cleaners and 4,500 Ksh for refugees employed as cooks. Roles that require a greater level of responsibility, such as centre supervisors for JRS or counterpart managers who supervise projects for IRC, are paid 5,700 Ksh and up to 9,000 Ksh respectively. At AAHI, the monthly wages range between 6,000 Ksh for community development workers and agricultural extension workers and 7,500 Ksh for supervisors.

During a HH visit to a male from DRC he reported only being paid 100 Ksh per day to work as a patient attendant at a health facility. This motivated him to set up his own small business fixing sandals where he makes 10/20 Ksh per repair. His general complaint was that apart from the Red Cross and Refugee United who pay 13,000 Ksh per month, the NGOs only pay refugees 4-5,000 Ksh. He had also heard that refugees in Dadaab get paid more than those in Kakuma.

A market assessment on income and employment undertaken in 2012, interviewed 139 refugee households in Kakuma sub-camps 1-3 and 167 households from the host community in Kakuma town (Ochieng, 2013). The main results are summarised in the Table 8. The data suggest that refugees in Kakuma do engage in livelihoods, with the main source of income for 80 percent being in employment or in business. Average monthly incomes and expenditures also suggested that refugee households had cash at their disposable, though the responses were not cross-checked by itemising major sources or expenditure items. The surveys also suggested that 39 percent of refugee households were able to save some of their incomes, though the amounts saved were low for most households, with 16 percent of those saving able to save > 5,000 Ksh a month.

TABLE 8: Summary of the Main Findings on Refugee and Host Community Incomes in Kakuma (Ochieng, 2013)

		Refugee Population	Host Community
Average monthly income (ksh)	<5,000	53%	46%
	5,000=15,000	40%	28%
	>15,000	4%	19%
	none	3%	7%
Average montly expenditure (Ksh)	<5,001	88%	63%
	5,001-10,000	11%	11%
	>10,000	1%	26%
Main source of income	Livestock trade	0%	4%
	Foreign remittance	8%	<1%
	Hand-outs	0%	5%
	Sale of firewood/charcoal	2%	19%
	Employment	43%	17%
	Casual labour	6%	39%
	Transport (boda-boda)	5%	1%
	Entrepreneurship (business)	36%	14%

4. DISCUSSION AND KEY DELIVERABLES

4.1. The sampling strategy

The sampling strategy (see Annex 5) was designed based on the UNHCR registration data and the field evaluation by the survey management team. A total of 2,000 HHs will be sampled (500 in each of the four sub-camps). This will capture the major heterogeneities in HH characteristics and enable a vulnerability profile of consumption and expenditure patterns across the camps to be established. Within the sub-camps, the blocks will be used as the sampling unit so the number of HHs sampled per block will depend on the number of blocks in that sub-camp. Sampling by blocks will ensure geographical spread and facilitate in-the-field sampling given that blocks tend to be composed of similar CoOs and are governed by community block leaders.

4.2. The household questionnaire

The questionnaire for the HH survey has been developed (see Annex 6) to capture the vulnerability profile in terms of consumption expenditure across all four sub-camps in Kakuma, and the possible proxies for these in terms of wealth assets, incomes, demographics, and livelihood opportunities.

While trying to be as inclusive as possible in capturing all these variables, the questionnaire was designed to be short to minimise the survey fatigue expressed by HHs. There are many HH surveys in the camps with FSOM just finished, the World Bank socio-economic survey and a UNHCR/DRC/AAHI market analysis survey ongoing, and the nutrition survey due to start in November. Furthermore, acknowledging the problems noted by other researchers that it can be difficult to get the "truth" about sources of income and livelihood opportunities in refugee camps as they often want to portray themselves as being vulnerable (Horst, 2001), the questionnaire has been designed to capture many wealth indicators based on observations, and to ask directly about specific expenditures and incomes rather than general queries.

The unit of the survey is the HH, not the individual. Acknowledging that one HH may have more than one ration card, a HH is defined here as a family unit living regularly eating together with a shared ration card or cards.

4.3. Data analysis plan

The main variables to be determined from the HH survey are outlined in Annex 7. The set of vulnerability indicators in terms of consumption expenditure to be calculated include the mean monthly consumption expenditure and proportion of HHs who are solely dependent on the ration for food, and measures of food insecurity such as the FCS.

Variability in these outcomes will be assessed with respect to wealth assets, income, CoO, demographic statistics (e.g. HH with a disabled or sick member, child or female headed HH), location of HH, length of stay in the camp, livelihood opportunities such as speaking English and relatives in the camps, and other proxies which can be calculated from the HH

data such as dependency ratio (nonwage earners and persons needing care / potential wage-earners and caregivers) and crowding index (number HH members per room).

The sensitivity and specificity of particular proxies in capturing the most socio-economically vulnerable populations as determined by consumption expenditure will be established. This analysis will be done on single characteristics and multiple characteristics taking into account the possible confounding variables noted in Table 1.

4.4. Targeting approaches and deliverable tools

The information from the scoping exercise on the possible approaches to targeting and the implications of these will feed into the development of a ToC and a decision support model. This is currently under development and will be finalised in the second phase of this project in early 2016.

Based on an analysis of the accuracy of the different targeting options, the tool will evaluate the costs and benefits of different approaches with a particular focus on the impact on the worst off refugees. For different resourcing scenarios, the tool will estimate the costs, likely impact, and risks to determine whether a blanket approach (with reduced rations for everyone) or a targeted approach is preferable and, if targeting is preferred, which modalities can be used. It is unlikely that any single method will be preferable against all the different criteria, but at least the tool will clearly demonstrate the tradeoffs so that evidence-based decisions can be made.

The model will build on work undertaken by Kimetrica for the World Bank and Government of Kenya Social Protection Sector Review (2012). Simulation models were used on similar entail HH survey datasets to explore the potential costs and poverty impacts of different targeting approaches.

A major policy question is whether investing in alternative livelihoods would allow a significant number of refugees to be weaned off assistance. If so, longer term investments in livelihood support may lead to an overall reduction in the costs of assistance. The tool will also simulate the costs and benefits of these interventions.

As part of this evaluation, the FACs and the community block leaders will be assessed in terms of their possible role in community-based targeting. The feedback from the first FGD with FAC suggested that they would not want to be involved in targeting aid. However, this needs to be explored in more detail and in relation to the results of the HH survey. The evaluation of CBT will involve two processes. First, FGDs with the FAC, block leaders, and refugee HHs to establish the feasibility and acceptability of this approach, and, second, a test of the effectiveness of community leader ranking of HHs against specific criteria validated by the HH survey data. Initial findings from visits in the four sub-camps suggest that block leaders should be able to identify households which rely solely on WFP food assistance and which have no other sources of income. However, given that block leaders were recently elected (August 2015), we anticipate that some of them will not be entirely familiar with the food security levels of all households residing in their blocks, and that former block leaders may also need to be involved. Based on the preliminary results emerging from the HH survey, these evaluations will take place in early 2016. The formal testing of CBT will involve comparing the rankings of a sub-sample of HHs from the survey with rankings made by community leaders.

4.5. Livelihood opportunities

The major livelihood opportunities available to refugees in Kakuma include incentive work, working for small businesses including restaurants, providing transport with motorcycles, selling food and other goods as traders or petty trading, external funds from relatives overseas, and reselling of the food ration.

Based on initial findings from the FGD, HH and stakeholder interviews, the language barrier seems to be the first and major constraint for refugees trying to engage in employment with NGOs. While a few NGOs provide adult literacy courses, these interventions operate at a small scale and should be expanded to enable refugees (especially new arrivals) to access vocational training courses and thus allowing them to expand their livelihoods.

Additionally, the lack of access to credit and start-up capital for setting up businesses is a major constraint for refugees. While some NGOs working in the camp facilitate the formation of savings groups and provide some start-up capital at no interest, this type of support should be expanded and made readily available to all refugees. As a participant in the FGD explained, "if you just give small amounts of cash it will just be eaten".

Access to livelihood opportunities is affected by location and is therefore also related to year of arrival in the camp. New arrivals are normally allocated shelter in Kakuma 4. While some NGOs have activities focusing specifically on categories living in this sub-camp (i.e. the NRC works with youth), Kakuma 4 (and Kakuma 3) provide fewer livelihood opportunities than the other camps. For this reason, young adults often migrate to Kakuma 1 or 2 where businesses are already established and the markets are thriving. Most vocational training courses offered by NGOs take place in Kakuma 1 and 2, which are geographically distant from Kakuma 4. It can take more than an hour to walk and costs a minimum of 150 Ksh by boda-boda. The distance between Kakuma 4 and the other camps also affect women's ability to join savings groups, attend vocational training courses (for example in tailoring), and take advantage of the psychosocial support provided by many organisations, especially if they are single mothers and have no other family members to support them. Furthermore, compared to Kakuma 1 and 2, which are in close proximity to the river, access to water in Kakuma 4 is more erratic, thus diminishing the possibility of engaging in agricultural activities.

Finally, the ability to engage in livelihood opportunities is limited by the legal framework. Currently, refugees in Kakuma can only apply for business licences,; they cannot have a work permit (incentive work with the UN or other NGOs does not require one). Their freedom of movement outside the camp is also limited. They must apply for a movement pass (which is limited to a maximum of 30 days) if they require travel to other cities within Kenya. Additionally , refugees are not legally allowed to engage in animal husbandry, as existing natural resources are scarce and this would create tensions with the host community.

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TABLE 9: Workplan with Main Deliverables (Will be Delayed by at Least 2 Weeks Due to the HH Survey Postponement)

Activities / Deliverables	Oct 1	Oct 2	Oct 3	Oct 4	Nov 1	Nov 2	Nov 3	Nov 4	Dec 1	Dec 2	Dec 3	Dec 4	Dec 5	Jan 1	Jan 2	Jan 3	Jan 4	Feb 1	Feb 2	Feb 3	Feb 4
1 – PREPARATION AND DESIGN PHASE																					
Submission of inception report and HH questionnaire	X	X																			
Finalization of HH questionnaire	X																				
Recruitment of enumerators and interpreters	X		X																		
Digitalization of questionnaire	X																				
Pre-testing of questionnaire		X																			
Development of enumerator training manual and survey management manual	X	X																			
2 – FIELD WORK																					
Training of enumerators and interpreters (Kakuma)			X																		
Data collection				X	X	X	X														
3 – DATA ANALYSIS AND REPORTING																					
Data cleaning					X	X	X														
Data analysis								X	X												
Preliminary report										X	X										
Presentation of preliminary results												X									
Further data analysis and assessment														X	X						
Theory of Change															X						
FGD and CBT testing (Kakuma)																		X	X		
Design of targeting decision support tool																		X	X	X	
Draft assessment report																				X	
Final report and presentation																					X

ANNEX 2: STAKEHOLDER INTERVIEWS

Stakeholders interviewed

A total of 21 stakeholder interviews were conducted over a three week period (Table 10).

TABLE 10: Details of the Stakeholder Interviews Undertaken

Name	Position	Date of Interview	Contact
Felix Okech	WFP Programme Policy Officer	01/09/15	felix.okech@wfp.org
Yvonne Forsen	WFP Head of VAM and Nutrition	01/09/15	yvonne.forsen@wfp.org
Geoffrey Wafula	DRA	08/09/15	gwafula.dra@gmail.com
Moses Muroki	DRA	08/09/15	mosesmuroki@gmail.com
Katie Ogwang	UNHCR Kakuma	14/09/15	ogwangk@unhcr.org
Winstan Otieno	UNHCR Data Management Team, Kakuma	14/09/15	otlenow@unhcr.org
Nagwan Sollman	UNHCR Data Management Team, Kakuma	14/09/15	soliman@unhcr.org
Honorine Sommet-Lange	UNHCR Head of Sub-Office Kakuma	14/09/15	sommet@unhcr.org
Bernard Olekipuri	DRA Kakuma	15/09/15	
John Kaissa	LWF Kakuma	15/09/15	john-kaissa@lwfkenya.org
Fred Otieno	LWF Kakuma	15/09/15	fred-otieno@lwfkenya.org
William Losengli	LWF Kakuma	15/09/15	william-losengei@lwfkenya.org
Fred Magumba	NRC Kakuma	15/09/15	fred.magumba@nrc.no
Lilian Ndinda and colleagues	IRC Kakuma	15/09/15	lilian.ndinda@rescue.org
Father Augustine	Don Bosco	16/09/15	kharmutiago@gmail.com
Caroline Jeptoo	JRS	16/09/15	kakuma.safehaven@jrs.net
Samuel Mwangi Gacheru	WVI	16/09/15	samuel_mwangi@wvi.org
Julia Vasconcelos	WFP	16/09/15	julia.vasconcelos@wfp.org
Eliaf Mwehia	DRC	17/09/15	e.mwehia@drckenya.org
Wilson Kinywa	NCCK	17/09/15	wkinywa@ncck.org
Rafael Nyabala	NCCK	17/09/15	rogutu@ncck.org
Robert Alela Matara	AAHI	17/09/15	ralela@actionafricahelp.org
Perpetua Angima	Film Aid	17/09/15	pangima@filmaid.org
Maina Kibata	FAO	17/09/15	Maina.Kibata@fao.org
Bjoern Euler	GIZ	18/09/15	bjoern.euler@giz.de

Stakeholder checklist

The general format of the interview was guided by the following checklist:

Vulnerability and wealth

- Key determinants of vulnerability and food security in the camps.

- Type of risks refugees face and the means they have to cope with them.

- Discussion of most vulnerable groups in Kakuma.

- Discussion of possible wealth or poverty classifications or indicators that could be used to identify vulnerable HHs.

- Any relevant studies or surveys on wealth or vulnerability.

Livelihoods

- Discussion on what livelihoods refugees engage in. Are these limited to certain groups in the camps? Are they sustainable? Which are precarious and prone to climate, market, or political risk? How can they be expanded?

- Discussion on activities which are on-going to strengthen or support livelihoods.

- Legal or technical constraints of supporting livelihoods.

- Legal framework currently in place regarding refugees engaging in work - laws in place and being reviewed.

- Other sources of incomes for refugee HHs.

- What activities are on-going support or constrain these incomes (e.g. closure of money-transferring agencies)?

- What wages are being paid? For incentives? Retail work? Skilled and unskilled?

- Any relevant studies or surveys on livelihoods or income?

Targeting

- Possible approaches to and experience in (if any) targeting – identifying households, delivering aid, type of aid that can be targeted, and how to monitor.

- Possible implications for targeting based on a vulnerability profile: cost, benefits, and potential risks? (How could these risks be mitigated?)

- Extent to which community knowledge can be used to inform targeting.

- Based on your knowledge, have any agencies or NGOs in Kakuma targeted assistance? What is the approach? Have they been evaluated? Problems encountered?

- Discussion on any relevant studies or surveys on targeting.

The checklist was slightly modified based on the interviewee's expertise and any emerging topics of interest during the discussion.

WFP / UNHCR messaging

WFP and UNHCR developed a messaging to introduce the vulnerability study in Kakuma and was used as the form of introduction in the stakeholder interviews.

UNHCR and WFP, with the support of donors and partners, will carry out a Household Vulnerability Study in Kakuma in the month of October this year.

WHY?

UNHCR, WFP, and other agencies offering services in the refugee operations are increasingly facing a reduction in funding. This directly affects the support offered (e.g. food ration cuts and lack of required "non- food items"). We would like to understand how refugee households in Kakuma are impacted from this situation, and which households are the most vulnerable. It is essential that the most vulnerable households are not becoming more vulnerable. Therefore, it is crucial to understand the conditions that keep them vulnerable. The overall aim is to ensure that the most vulnerable receive the assistance they require for a healthy life.

HOW?

Some 2,000 households in the four sub camps will be interviewed based on random sampling, meaning that every household in the camps has the same chance of being selected. A questionnaire will be used, asking the same questions to all selected households.

BY WHOM?

30 enumerators from Kakuma will be trained to interview the households by a consultancy firm called Kimetrica.

Summary findings from the stakeholder interviews

Findings from the stakeholder interviews in Nairobi and Kakuma refugee camp are summarized below according to the main headings of the document.

Vulnerable groups:

1. Commonly cited vulnerable groups:

    • HH size 1, excluding young working age males who are more likely to be hired for incentive work and who can more easily find alternative sources of income

    • Female headed households

    • Child headed households

    • Disabled or chronically sick people (and their families)

- Elderly people

- Women that are victims of SGBV

- New arrivals

- Households with more than 9 members (cited as vulnerable by one NGO)

2. Factors affecting the extent of a HH's vulnerability:

- HH size

- Sharing of the ration card with people who are not part of the same HH (can lead to conflicts and the consequent misappropriation of other people's rations)

- Families split across more than 1 ration card (a household may divide itself into more units as smaller households receive more NFIs, or family members may arrive at different times and be registered on different ration cards)

- Arrival date of refugees, with newly arrived refugees being more vulnerable

- Ability of the household members to work and their skills

Main livelihood opportunities and other sources of income:

- All stakeholders interviewed agreed that refugees in Kakuma have additional sources of income and have access to other livelihood opportunities in addition to the food assistance they receive from the UN agencies and other NGOs on the ground. However, data is not available on the proportion of the refugee population that has access to these.

- Some refugees receive remittances from relatives that have resettled abroad, normally in the US. Data was not available on the exact percentage of the refugee population that has this kind of support, but one stakeholder mentioned that $80,000 USD is transferred into the camp every day, though the source of this information was not given.

- Many refugees are employed by humanitarian agencies in "incentive work". This seems to be the main source of additional income for refugees, although language seems to be the main constraint, especially for new arrivals. Of the stakeholders interviewed in Kakuma, the following reported employing refugees as incentive workers: LWF, NRC, IRC, Don Bosco, JRS, World Vision, DRC, NCCK, AAHI, Film Aid, and GIZ, as well as UNHCR. Incentive workers can either be employed on a daily basis for supporting the food distribution cycle (WVI) or as manual labourers helping in the construction of shelters (NCCK); or on a monthly basis, for example as cooks within individual organisations or as community mobilizers depending on their skills. Wages for the former type of employment range between 200 and 600 Ksh per day whereas the latter are between 4,500 Ksh (for cooks) to 8,500 Ksh (for supervisors). The majority of incentive workers receive between 5,000-6,000 Ksh per month. Refugees with backgrounds in education or medicine are also employed as teachers or interpreters or as nurses and doctors in the health centres across the camp.

- A small proportion of refugees are able to engage in businesses or own shops. This livelihood opportunity is very profitable but seems to be limited to Somali refugees. None of the stakeholders interviewed were able to identify the exact proportion of refugees that own businesses, but the DRA in Kakuma estimated it to be between 20 and 25 percent of the entire camp population.

- The main livelihood opportunities cited by the stakeholders interviewed include: businesses (hairdressers, barbers, bakeries, restaurants, carpenters, tailors, electricians), handicraft production, selling of vegetables, providing transport with motorcycles ("boda-bodas") or taxis (although this is less widespread), and, to a minor extent, engaging in agricultural production, although this is more difficult due to the climate and the unavailability of sufficient water (especially in Kakuma 4). The new camp in Kalobeyi will provide opportunities to both the refugee and host communities to engage in agriculture.

- Refugees can sell part of their ration to generate additional income.

- Livelihood opportunities within the camp are affected by some legal constraints. While refugees can apply for an alien card (which enables them to open bank accounts for example), they are not allowed to have a work permit in Kakuma (this is different from refugees in urban settlements) and cannot travel outside of the camp, unless they first apply for a travel permit that is limited to a maximum of 30 days. Refugees must apply for a business licence to the County Government (which costs between 1,000-5,000 Ksh) and be compliant with health regulations if they want to open a business.

- The ability to engage in other livelihood opportunities is also affected by other factors and depends on the sub-camp. Kakuma 1 and 2 provide the highest number of livelihood opportunities given that refugees have been there for many years and businesses are well established. This is one of the main causes for the movement of smaller households (size 1) from Kakuma 3 and 4 to Kakuma 1. Most vocational courses offered by NGOs require the ability to speak and write English, which is a significant barrier for some refugees, particularly new arrivals. Except for chickens, refugees are not allowed to keep livestock in the camp, restricting this livelihood avenue.

Experiences of targeting:

- Interviews with stakeholders in Kakuma revealed that targeting assistance based on socio-economic criteria is not common practice. Most NGOs and organisations present in Kakuma refugee camp offer vocational training (such as Don Bosco) in a range of trades and provide psychosocial support to refugees (such as IRC and JRS). These organizations target beneficiaries by focusing on specific groups, such as youth, survivors of SGBV, or new arrivals. This is done through incentive staff and community leaders in the camp and through a referral system that exists among all the organisations working in the camp. Several organizations also assist the refugee population by setting up savings groups and providing start-up capital for businesses. Beneficiaries of these projects are selected through a competitive process: advertisements are posted around the camps, refugees organise themselves into groups of five and submit a business proposal, the proposals are evaluated by the organisation and savings groups are then set up.

- WFP is planning to adopt a targeted approach for ration cuts starting in November in both Kakuma and Dadaab refugee camps. This will involve providing full rations to HH size 1-3, 80 percent of the ration to HH size 4-7, and 70 percent of the ration to larger households .

- In Kakuma, UNHCR targets NFIs to people with disabilities and individuals with protection problems. This targeting approach is not based on socio-economic criteria and is normally adopted in the case of funding constraints. It is also reported that NFIs are often targeted to female-headed HHs.

- Both WVI and FAO have used community-based targeting for providing food aid and poultry to the host community in Turkana. Vulnerable people are identified by community leaders and a verification meeting then takes place to ensure community support. WVI also uses a complaints and response mechanism related to the targeting process. A verification exercise takes place at the end of the project to monitor the targeting process.

- One possible targeting approach suggested by stakeholders was self-targeting as a first stage (coupled with a good communication strategy clarifying that refugees would retain their refugee status if they were to give up their food ration), followed by community-based targeting using block and zonal leaders, with a community verification meeting.

- Some of the risks associated with targeting included community backlash and the exclusion of minority groups that are not sufficiently represented at the block and zonal leadership levels (this can be mitigated through the use of a complaints mechanism).

ANNEX 3: FGD AND SEMI-STRUCTURED HH INTERVIEWS

Focus-group discussion (FGD)

A FGD was held with the four food advisory committees in the camp. The committee discussed here comprises representatives of the major ethnic groups and community leaders. Although ideally one would prefer to set a limit on the minimum and maximum number in the FGD and the equal participation of male and females in the group, it was decided to invite the entire committee for this FGD without selecting individual members. The FGDs proposed after the HH survey to address the feasibility of any targeting approach, set size limits on the number of participants, and opt for equal representation of both sexes and a range of ages.

The FGD aimed to last 80 minutes and was used to explore livelihood and income opportunities and constraints. An interpreter was used who translated into Kiswahili and Arabic. For those only speaking other languages, other participants translated for them.

The format of FGD was as follows:

- Handout passed around to be completed on: sub-camp, zone and block, age, sex, country of origin, years in the camp, and numbers of people in their household.

- Brief introduction on the purpose of this discussion as follows:

We have asked you to come today as we would like your input into a discussion on livelihood and income opportunities in the camp. As nominated leaders of your community we feel that you are in an ideal position to provide information on these important issues. We appreciate you coming today and we will limit the discussion to 80 minutes to avoid taking up too much of your time.The following key questions were presented to the group. A maximum of 20 minutes was to be spent on any one question. For each response, the respondent was asked for country of origin and years in the camp.

- How do members of your community obtain cash to buy the things they need? (Prompt with jobs, businesses, credit, transfer from relatives etc.). Probe for information on types of employment and wages obtained.

- What are the problems faced in obtaining cash from these sources? (Prompt with getting trader licences, having to pay bribes, blocks on money transfers, etc.) and how can these be overcome?

- Are there certain groups of your community that find it harder J10

- Livelihoods or other sources? (Prompt with new arrivals not yet established, households which need to care for the disabled, the elderly, and children and cannot work, etc.). Why is this and what can be done?

- As a community leader would you be able to identify these households easily and how would you do this? (Prompt with using a criteria such as female headed households or you just know who are most in need, establishing a committee for the purpose, etc.).

In total, 23 refugees participated in the FGD. The participants were comprised of 15 males (65 percent), 11 Somalis (49 percent), and representatives from Sudan, South Sudan, DRC, Uganda, Burundi, Ethiopia, and all four sub-camps. The FGD covered all ages (20-72 years), a range of HH sizes (1-14), and a range of years in the camps (1-24 years).

The key findings were as follows:

- A few refugees come with money or receive cash from relatives to start up a business, but most (80 percent) depend on food aid.

- There used to be a loan system to help start up a business, but this needs to sufficient otherwise it will "just be eaten". A minimum start up would be 6,000 Ksh.

- Since many refugees only know how to farm their livelihood opportunities are limited, and since water is in short supply the expansion of market gardening as a livelihood is problematic.

- The focus should be on training up the youth and providing them with livelihood opportunities.

- The youths are many and idle. They need something to do to stop them getting into drugs and alcohol because they are bored, and becoming aggressive and fighting because they are frustrated.

- The distribution of food has to be uniform as all are refugees and are entitled to this.

- Any targeting will cause chaos.

- There are so few who do not need aid, that it is better just to give it to everyone.

Household visits with semi-structured interviews and observation

A minimum of four households were visited in each sub-camp. The aim was to cover a range of household types varying in structure (female-headed, child-headed, household size 1, households with many members, etc.) and arrival details (country of origin and time since arrival). Interpreters were used, with such individuals being chosen to reflect the main ethnic groups in each sub-camp while covering the whole range within the camp.

The interview aimed to identify appropriate questions for the HH questionnaire in particular in relation to wealth and asset indicators. The selected household was given a brief introduction on the purpose of the study. The introduction stated that, "We are preparing to do a survey in the camps on livelihood and income opportunities. In order to make sure we ask questions that are relevant to this community we are first visiting and interviewing a few households. Are you willing to help us prepare for this larger survey by answering a few questions? It should not take longer than 20 minutes." We then asked to sign a household summary form as an indication of consent. The interview was semi-structured but a template was provided (see below).

Semi-structured interview format

Section 1. HH details

Sub-camp		Zone	Block number		HH Number	
GPS location	Longitude		Latitude			
Position in HH of respondent			Age (years) and sex			
Languages spoken			Years spent in school or educational achievement			
What year did you arrive in the camp?						
What is your country of origin?						
How many people live in this household? Details.						
Do you have other family or relatives in the camp? Details. Do they help support you?						
Do you have other family or relatives in Kenya or elsewhere? Details. Do they help support you?						
Is anyone in the HH disabled? or sick ? Unable to work? Details.						
Does your household have a ration card?				Yes		No
Has the HH received the GFD food, in the last month (4 weeks)? If Not, why?						
Are you (respondent) the one who collected food, at the site? If Not, who collects food?						
Has the HH received a voucher in the last month (4 weeks)? If Not, why?						
Has the HH received any NFIs as gifts from agencies? Details on what they were - did they use or sell on? Were they what they needed?						
Observations. Including how many persons you see in the compound (ages etc.)						

Section 2. Housing

How many dwelling units does the household have? List types of rooms and which are habitable e.g. excl. bathrooms and store-rooms
Where does everyone sleep? Details on who by room. Especially children.
What are the walls of the main dwelling made of?
What is the roof of the main dwelling made of?
Does the household share the compound with other households? Details.
Where is the cooking done? What is the primary type of appliance used for cooking? Ask to view.
What is your main water source/supply?
Is the toilet facility located within the main dwelling? If not where? Ask to view.
Is the dwelling fenced? With what?
Observation of housing and facilities.

Section 3. Wealth and assets

Electricity. Does the HH have electricity? If yes what is the main source? Others sources for power and light? Check for solar panels.					
Livestock. Does the HH own any livestock? What are they? Where are they kept? Observe compound.					
Does the HH own a TV?	Yes	No	Does the HH own a radio?	Yes	No
Does the HH own a bicycle?	Yes	No	Does the HH own a motorbike?	Yes	No
Does the HH own a generator?	Yes	No	Does the HH own a mobile phone? How many?	Yes	No
Observation on any other assets e.g. a fridge, car, other durables (sofa, chairs etc...)					
Food and food storage. What do you normally eat for each meal (breakfast, lunch, supper)? Where is food (cooked and uncooked) stored? Ask to view. What is available?					
Own food production. Do they have access to land? Do they grow any food? Ask to view. What is available?					

Section 4. Livelihood and income

Schooling. List school-aged children. How many go to school? If not, why? (Separate for girls and boys.)
Work. List adults and young people. Who are not present? Where are they? Who has employment even if temporary? Details. Who do they work for? Where? Wages?
Skills: Is there any skill worker in the family (carpenter, mechanic, etc.?)
Other income. Selling livestock? Or goods produced? Remittances from relatives?
Other observations and notes of livelihoods and income from the discussions

A total of 24 HHs were visited (see Table 11). They covered a range of HH types including female headed, male headed, HH size 1, new arrivals, HHs with elderly or disabled family members, and the main CoOs (Somalia, South Sudan, Sudan, Ethiopia, DRC, Uganda, and Rwanda).

Table 11: Description of the HH Visits with the Semi-Structured Interview

Number	Sub-Camp	CoO	Years in Camp	HH Size	HH Type
1	K1	Burundi	20	4	Female headed with 3 small children
2	K1	Burundi	10	10	Female headed but with working grandchildren
3	K1	DRC	8	1	Male HH size 1 but lives with wife and child
4	K1	Uganda	12	8	Male headed
5	K1	Ethiopia	10	6	Male headed with disabled child
6	K1	Ethiopia	24	3	Disabled headed HH with 2 children
7	K1	Ethiopia	6	4	Female headed with 3 children
8	K1	Somalia	5	2	Female headed with 1 adult son
9	K1	Somalia	7	5	Male headed
10	K1	Somalia	3	7	Female headed with 5 children
11	K2	Ethiopia	2	8	Female headed with 4 children
12	K2	Somalia	5	11	Male headed with 9 children
13	K2	Ethiopia	6	3	Female headed with 2 children
14	K2	Somalia	14	10	Male headed with 8 children
15	K3	Sudan	9	9	Male headed with 7 children and HH size 1 elderly lives with them
16	K3	Sudan	8	9	Male headed with 7 children
17	K3	South Sudan	1	9	Female headed with 8 children (2 fostered)
18	K3	South Sudan	1	7	Female headed (20 years old) with her 6 siblings
19	K3	DRC	5	3	Female lives with husband but on different ration card
20	K3	Rwanda	7	4	Male headed with 2 children
21	K4	South Sudan	1	5	Female headed but husband also on ration card
22	K4	Sudan	2	1	Male single HH (24 years old)
23	K4	Sudan	3	1	Male single HH (29 years old)
24	K4	Sudan	2	1	Male single HH (26 years old)

ANNEX 4: UNHCR DEMOGRAPHIC DATA FROM REGISTRATION DATABASE

The registration of refugees is jointly administered by UNHCR and the DRA, with the GoK taking the lead. As a first step, refugees register with the DRA who undertake a basic screening to ensure they are civilians (this is distinct from the Refugee Status Determination (RSD) process). Under the current legal framework, an asylum seeker has up to 30 days to apply for refugee status after entering the country. Once refugees have registered with the DRA, they register with UNHCR. The process entails an interview through which UNHCR collects biodata (including name, age, nationality, CoO, family size, and education level) for all HH members. In addition, UNHCR also captures information on "vulnerable groups" (child at risk, people with disability, family unity, older person at risk, pregnant or lactating women, people with serious medical conditions, victims of SGBV, single parents, people with specific legal and protection needs, victims of torture, unaccompanied or separated children, and women at risk). Refugees are then assigned a shelter. Information in the database is updated once families move or to include new-borns; however, this revision is currently done on a voluntary basis and is therefore not systematic. To ensure the database is up to date, UNHCR is planning to do a verification exercise by the end of the year.

A request was made for information on key HH characteristics by sub-camp. These are included below in the following Tables (12-15).

As of 9 September 2015 a total of 55,055 HHs and 181,723 individuals were registered at Kakuma Camp. Of these, 76 HHs and 1,300 individuals have missing data on their sub-camp location and were given as "Others".

TABLE 12: The Number of HHs and Residents in the Different Sub-Camps in Kakuma

	Kakuma 1	Kakuma 2	Kakuma 3	Kakuma 4	Others	Total
Number of HHs	23,226	7,526	18,053	6174	76	55,055
Percentage distribution of HHs across the sub-camps	42.2	13.7	32.8	11.2		
Number of individuals	69,212	23,416	23,416	23,231	1,300	181,723
Average HH size	3.0	3.1	3.6	3.8		3.3

Table 13: The Percentage of Different HHs Types by Sub-Camp

	Kakuma 1	Kakuma 2	Kakuma 3	Kakuma 4	Total
Female headed HHs	47.8	40.1	44.3	56.1	46.5
Child headed HHs	6.7	5.9	8.2	11.3	7.6
Elderly headed HHs	3.4	2.9	2.6	1.9	2.9
HHs with a disabled member	6.9	7.2	6.4	3.8	6.5
HHs with an elderly member	8.2	7.1	7.2	8.5	7.8
HHs with a single member	47.8	47.1	39.1	29.9	42.9
HH with a HoH recently arriving (since 2013)	14.6	19.7	39.7	95.6	32.7
HH with a HoH recently arriving (since 2014)	10.9	4.8	20.7	93.8	22.6

Table 14: The Number and Percentage Distribution of the Main CoO Headed HHs in the Different Sub-Camps in Kakuma

CoO1	Kakuma 1	Kakuma 2	Kakuma 3	Kakuma 4	Total 2
Burundi	470 (2%)	465 (6%)	1,080 (6%)	412 (7%)	2,427 (4%)
DRC	880 (3%	618 (8%)	1,061 (6%)	351 (6%)	2,913 (5%)
Ethiopia	21,62 (9%)	563 (8%)	657 (4%)	71 (1%)	3,459 (6%)
Rwanda	94 (0.4%)	35 (0.5%)	73 (0.4%)	21 (0.3%)	223 (0.4%)
Somalia	7,560 (33%)	3,832 (50%)	5,749 (32%)	98 (2%)	17,274 (31%)
South Sudan	10,805 (47%)	1,481 (20%)	6,729 (37%)	4,686 (76%)	23,729 (43%)
Sudan	952 (4%)	468 (6%)	2,485 (14%)	460 (8%)	4,368 (8%)
Uganda	208 (1%)	53 (1%)	197 (1%)	70 (1%)	528 (1%)

Table 15: The Number of Vulnerable Individuals Classified by the UNHCR Vulnerability Groups Across the Four Sub-Camps

UNHCR Vulnerable Group	Kakuma 1	Kakuma 2	Kakuma 3	Kakuma 4	Total 3
Child at risk	181	35	161	12	389
Disability	1,046	352	785	141	2,334
Family unity	30	7	7	0	44
Older person at risk	437	114	269	63	891
Pregnant or lactating	4	9	53	0	67
Serious medical condition	511	165	325	26	1,029
SGBV	187	85	190	35	501
Single parent	548	227	746	312	1,837
Specific legal and physical protection needs	162	28	137	1	334
Torture	67	17	30	11	126
Unaccompanied or separated child	7,173	2,498	8,281	3,253	21,338
Woman at risk	435	116	332	93	981

ANNEX 5: SAMPLING STRATEGY

Minimum sample size

The aim of the household survey is to assess the socio-economic vulnerability profile of the refugees across Kakuma. This will involve analysis of indicators such as the proportion with HHs that rely solely on WFP food ration.

Our preliminary sample size of 1,150 households in the technical proposal was based on wealth proxies from the Turkana population and the probable need to conduct a stratified random sample based on the ethnic and national origin of the refugees, because this was assumed to be one of the key determinants of their integration into the camp and broader livelihood systems.

Information from the scoping exercise has now allowed us to better understand the key determinants of integration into the camp, broader livelihood systems and access to incomes, the diversity of wealth proxies across the refugee population and the sub-camps, and other key groups that may act as proxies for vulnerability such as child-headed HHs and HHs with a disabled person.

It was assumed that access to the UNHCR data registration database would allow us to predict the number of different HH types that would be sampled under different sampling scenarios thereby ensuring that a sufficient number of each group would be sampled.

It was clear that at the first level of sampling should be at the sub-camp. Each sub-camp is distinct in its refugee profile and access to income and livelihood opportunities. In each sub-camp we need to choose a sample size that would give us confidence in any proportion estimate reflecting socio-economic status. Based on the standard formula[2], this would require 400 HHs in each sub-camp (totalling 1,600 HH over the entire camp).

Based on a random sample of 400 in each sub-camp we calculated the expected number of different HH types that would be sampled (based on the UNHCR database) that would all satisfy the minimum sample size of 400 for the estimation of an proportion (see Table 16) (rounded down for ease of viewing):

- 610 HH arriving since 2014 (new arrivals)

- 750 female headed HHs

- 660 HH size 1

- 520 Somali HoH

- 670 South Sudanese HoH

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2   The minimum sample size required to have 95 percent confidence in the estimation of a proportion has the standard formula: $n = (Z^2 \times P(1 - P))/e^2$ where Z = value from standard normal distribution corresponding to desired confidence level (Z=1.96 for 95 percent CI); P is expected true proportion and e is desired precision (half desired CI width) (here assumed to be 0.05). In order to attain 95 percent confidence in any proportion one needs a sample size of 386 (equivalent to the worst case scenario of a true prevalence of 0.5), decreasing to 289 for true proportions <=0.25 and >=0.75, and 196 for proportions <=0.15 and >=0.85.

Table 16: Predicted Number of HHs That Will be Surveyed by Different HH Type

	Sample 300/ sub-camp	Sample 400/ sub-camp	Sample 500/ sub-camp
Female headed HHs	565	757	978
Child headed HHs	96	144	188
Elderly headed HHs	32	35	44
HHs with a disabled member	73	138	169
HHs with an elderly member	93	238	302
HHs with more than 5 children	197	252	324
HH size 1	492	664	810
HH with a HoH recently arriving (since 2013)	509	783	1,044
HH with a HoH recently arriving (since 2014)	391	614	857
HH with a HoH recently arriving (since 2015)	79	122	166
HoH CoO Burundi	63	76	86
HoH CoO DRC	71	95	104
HoH CoO Ethiopia	65	80	95
HoH CoO Rwanda	5	5	6
HoH CoO Somalia	350	522	555
HoH CoO South Sudan	538	679	966
HoH CoO Sudan	95	126	166
HoH CoO Uganda	11	12	16
HoH CoO for a minority group (not SS or Somalia)	312	399	481

It is important to note here that these HH types are not mutually exclusive, i.e. a HH may be female headed and Somali so that the sum of the numbers above could be greater than 1,600.

However, there remain other Country of Origin HoHs and vulnerable groups that would fall short of the 400 minimum sample size. Two strategies were proposed to overcome this issue:

- To undertake a multi-stage sampling approach such that within each sub-camp we randomly select HHs in each block. Since HHs of the same CoO tend to live together in the same blocks this would allow us to cover these minority groups and at the same time also get a good geographical spread in HHs across the sub-camp.

- To sample an additional 100 HHs in each sub-camp to try and capture more of the minority vulnerable groups. From Table 15, 500 HHs per camp (total sample size of 2,000) would capture 188 child-headed HHs, 166 HoH CoO Sudan, 166 HHs arriving this year and 169 HHs with an elderly member that would provide statistical confidence in very high true proportions.

Sampling approach

The initial plan was to randomly sample from the UNHCR database. However, under field testing the database was found to have major limitations. Firstly, HHs listed in a given block could not be located in the field, usually because they had moved and the database had not been updated. Secondly, the database contained many blocks that did not exist in the field, most probably as data entry errors. As a result it was decided to implement the random sampling directly in the field.

The four sub-camps are located adjacent to one another and divided into zones. There are 12 zones across the entire camp. The zones are further divided into blocks with a total of 126 blocks. The distribution of the zones and blocks by sub-camp are given in Table 16. The sub-camps and the blocks will be the primary and secondary sampling units, respectively.

A total of 2,000 HHs will be selected (500 per sub-camp) for the Household Survey. The 500 households will be equally divided among the blocks of each camp as shown in Table 17, such that 12 HHs will be sampled per block in Kakuma 1, 26 in Kakuma 2, 13 in Kakuma 3, and 19 in Kakuma 4.

Table 17: Distribution of Sampled Households per Sub-Camp and Block

Sub-Camp	Blocks	Sample allocated per sub-camp	Sample allocated per block
Kakuma 1	42	500	12
Kakuma 2	19	500	26
Kakuma 3	39	500	13
Kakuma 4	26	500	19
Total	126	2,000	

A random walk sampling procedure will employed to identify the HHs to be interviewed in each block. The selection of the households will be carried out by Kimetrica Coordinators (one per camp) using the following approach:

- The Coordinator, assisted by the Block leader, will identify the borders of the delineated block.

- With the help of the Block leader, the Coordinator will locate the geographic centre of the block.

- The Coordinator will then spin a pen to decide which direction they will move to select the households to be included in the study.

- The first household in the direction of the tip of the pen will be the first sampled household.

- The second household will be the 'n'th one where the sampling interval 'n' is determined by dividing the total number of households in the block by the number of households allocated to the block.

- The selection process will continue until the desired sample number for the block is attained.

- For each selected household, some basic information will be gathered including the GPS location, the name of the head of the household and a convenient time to interview the household.

- The Coordinator will then assign the selected households to each of the enumerators working under him or her.

- During the assignment, the Coordinator will need to assign sampled households to the right enumerator based on languages spoken. If there are no enumerators speaking the language of the selected household, the relevant interpreter will be assigned.

- A combination of interpreters speaking the main languages of the camp (Somali, Arabic, Oromo, Amharic, Anyuak, Kiswahili, Bajuni, Dinka, Nuer, Kizigua, Acholi, and Maimai) will be trained together with enumerators during the week of 19 October.

Section 1. HH details

101. Name of Interviewer	102. Date of interview (dd.mm.yy)
103. Sub-camp	104. Zone
105. Block	106. Unique HH ID
107a. Longitude	107b. Latitude
108. Name of household head	109. Gender of HoH (1= male and 2= female)
110. Name of interviewee	111. Relationship to HoH (refer to code)
112. What year did you arrive in the camp?	113. Did you transfer from Dadaab? (1=yes and 0=no)
114. What is your Country of Origin (CoO)? (refer to code)	115. What is your ethnic group?
116. What is your main language?	117. Main livelihood activity before arriving in the camp? (refer to code)
118. How many ration cards do you have in your HH?	119. How many people are there in your HH?
120. Do you have friends or relatives inside the camp living in another HH? (1=yes and 0=no)	121. Do you have friends or relatives that have been resettled in the US or Europe? (1=yes and 0=no)
122. Do you have friends or relatives outside the camp in Kenya (Nairobi, Dadaab, etc.)? (1=yes and 0=no)	122b. If yes, where do they reside? 1. Dadaab 2. Nairobi 3. other specify
123. Is anyone in this HH suffering from a chronic disease or medical condition? (1=yes and 0=no)	124. How many other HHs live in this compound?

CoO	CODE	Relationship to HoH	CODE	Relationship to HoH	CODE	Marital status	CODE	Livelihood activity	CODE
Somalia	1	Head	1	Other relative	9	Married, single spouse	1	Farming	1
South Sudan	2	Wife or husband	2	Adopted/foster/step-child	10	Married, more than one spouse	2	Fishing	2
Sudan	3	Son or daughter	3	Not related	11	Single	3	Livestock rearing	3
Ethiopia	4	Son-in-law or daughter-in-law	4			Widowed	4	Business	4
Burundi	5	Grand child	5			Separated	5	Teacher	5
DRC	6	Parent	6			Divorced	6	Skilled labour	6
Other (specify)	7	Parent-in-law	7			Never married	7	Unskilled labour	7
		Brother or sister	8			Unknown (missing)	8	Other (specify)	8

Section 2. HH roster and activities (note for enumerators: ask to view biometrics form/s)

201. Ration card number (code as 1,2,3)	202. Name (Respondent first)	203. Age (completed years)	204. Sex (1= male and 2= female)	205. Relation to HoH (refer to code)	206. Marital Status (for ages 10 and above) (refer to code)	207. Disabled (1=yes and 0=no)	208. Resident in the HH this last week (1=yes and 0=no)	209. Attends school (1=yes and 0=no)	210. If yes, please specify (1=attends school in the camp and 2=Attends private school)	211. Speaks English (1=yes and 0=no)	212. Completed vocational training course (refer to code)	213. Trade / Skill (refer to code)

Vocational Training	CODE	Trade / Skill	CODE	Trade / Skill	CODE
None	1	None	1	Community Counselor	13
Carpentry	2	Carpenter	2	Teacher	14
Welding	3	Builder	3	Doctor	15
Motor-mechanics	4	Barber / Hairdresser	4	Interpreter	16
Tailoring	5	Tailor	5	Artisan	17
Plumbing	6	Mechanic	6	Farmer	18
Electrical	7	Electrician	7	Pastoralist	19
Masonry	8	Plumber	8	Fisher	20
Dress-making	9	Shopkeeper	9	Other (specify)	21
Secretarial courses	10	Driver (boda boda)	10		
Computer courses	11	Welder	11		
English literature	12	Community health officer	12		
Not applicable	13				

Section 3. Housing and wealth indicators

(Note for enumerators: ask to be shown around compound and dwellings – observe for yourself and then confirm with questions)

3.1 Housing

3.1.01. Was this the original dwelling you were allocated? (1=yes and 0=no)		3.1.01b. If No, specify reason for moving. (refer to code)	
3.1.02. How many dwelling units (huts) does the household have?		3.1.03. How many habitable rooms does the household occupy? (excl. bath-rooms, store-rooms)	
3.1.04. Does the HH have a separate store-room? (1=yes and 0=no)		3.1.05. Does the HH have a separate kitchen? (enclosed) (1=yes and 0=no)	
3.1.06. How many bedrooms does the HH have?		3.1.07. How many free-standing beds does the HH have?	
3.1.08. How many mattresses/mats on the floor for sleeping do they have?		3.1.09. How many traditional or make-shift beds do they have?	
3.1.10. What are the walls of the main dwelling made of? (refer to code)		3.1.11. What is the condition of the walls? (Rank 1-3) (observation only)	
3.1.12. What is the roof of the main dwelling made of? (refer to code)		3.1.13. What is the condition of the roof? (Rank 1-3) (observation only)	
3.1.14. Is the compound fenced? (observation only) (1=yes and 0=no)		3.114b. If yes, what is it fenced with? (refer to code) (observation only)	
3.1.15. What is the condition of the fencing? (Rank 1-3)		3.1.16. Do they have a gate to the compound? (observation only)	
3.1.17. What is the gate made of? (observation only) (refer to code)		3.1.18. Can the gate be locked? (1=yes and 0=no)	
3.1.19. Do they have a latrine? (1=yes and 0=no)		3.1.20. What is the condition of the latrine? (Rank 1-3) (observation only)	
3.1.21. Do they have a separate washing/bathroom area? (1=yes and 0=no)		3.1.22. Do they have any plastic flooring in the bedrooms/living area? (1=yes and 0=no)	
3.1.23. Do they have any curtains dividing the rooms? (observation only) (1=yes and 0=no)		3.1.24. What is the general condition of the huts and compound? (incl cleanli-ness) (observe only) (Rank 1-3)	
3.1.25. Do you grow any vegetables? (1=yes and 0=no)		3.1.25b. If yes, do you sell them? (1=yes and 0=no)	

Note: Ranking 1= poor, 2 = average, 3 = good

Main materials	CODE	Main materials	CODE	Main materials	CODE	Reason for moving	CODE
Mud plastered on grass/straw	1	Corrugated sheets	4	Bush/sticks	7	Moved sub-camp	1
Mud bricks	2	Plastic sheeting	5	Wood	8	Joined another HH	2
Mud bricks and plastered with mud	3	Stone/concrete	6	Other	9	House became available in same sub-camp	3
						Other	4

3.2 Electricity and assets

3.2.01. Does the HH have electricity? (1=yes and 0=no)	
3.2.01b. What is the household main source of electricity? (refer to code)	
3.2.02. What is the household main source of light at night? (refer to code)	
3.2.03. What is the household main cooking appliance? (refer to code)	

3.2.04. Does the HH own any chickens or ducks? (1=yes and 0=no)		3.2.04b. If yes, how many in total?	
3.2.05. Does the HH own a mobile phone? (1=yes and 0=no)		3.2.05b. If yes, how many?	
3.2.06. Does the HH own a TV? (1=yes and 0=no)		3.2.06b. If yes, how much did you pay for this? (write 0 if a gift)	
3.2.07. Does the HH own a bicycle? (1=yes and 0=no)		3.2.07b. If yes, how much did you pay for this? (write 0 if a gift)	
3.2.08. Does the HH own a generator? (1=yes and 0=no)		3.2.08b. If yes, how much did you pay for this? (write 0 if a gift)	
3.2.09. Does the HH own solar panels? (1=yes and 0=no)		3.2.09b. If yes, how much did you pay for this? (write 0 if a gift)	
3.2.10. Does the HH own a wheelbarrow? (1=yes and 0=no)		3.2.10b. If yes, how much did you pay for this? (write 0 if a gift)	
3.2.11. Does the HH own a table? (1=yes and 0=no)		3.2.11b. If yes, how much did you pay for this? (write 0 if a gift)	
3.2.12. Does the HH own a satellite dish? (1=yes and 0=no)		3.2.12b. If yes, how much did you pay for this? (write 0 if a gift)	

Electricity source	CODE	Light source	CODE	Cooking appliance	CODE
Community generator	1	Electricity	1	Stone fire	1
Solar panels	2	Lantern/Torch	2	Traditional jiko	2
Own generator	3	Kerosene lamp	3	Improved jiko	3
Car/motorcycle battery	4	Mobile phone	4	Kerosene stove	4
Solar lanterns	5	Candle/wax	5	Gas/electric cooker	5
None	6	None	6	Other	6
Other	7	Other	7		

Section 4. Livelihoods and income (in Kshs)

Kimetrica

4.1 Household income

4.1.01. Does anyone in the HH have a business? (1=yes and 0=no)		4.1.01b. If yes, What is the business? (refer to code)	
4.1.02. Is it jointly owned? (1=yes and 0=no)		4.1.03. How did you get the funds to start this business? (refer to code)	
4.1.04. How many months have you had the business?		4.1.05. How much rent do you pay for your business each month? (Ksh)	
4.1.06. How many people do you employ?			

	a. Over the last month (Ksh)	b. Over the last year (Ksh)
4.1.07. How much cash has the HH received as a gift from relatives or friends INSIDE the camp?		
4.1.08. How much cash has the HH received as a gift from relatives or friends from OUTSIDE the camp?		
4.1.09. How much cash has the HH borrowed? (from any source including credit from traders, relatives, friends)		
4.1.10. What were your HH savings (disposable income)?		
4.1.11. How much cash has the HH received from reselling the food ration?		N/A
4.1.12. How much cash has the HH received from selling other items?		N/A
4.1.13. How much cash has the HH received from doing small jobs (petty trading) or services (such as carrying water, plastering houses or digging latrines)?		N/A
4.1.14. How much cash has the HH earned through employment (excluding income from businesses)?		N/A
4.1.15. How much cash has the HH earned from running a business?		
4.1.16. Estimated TOTAL income (sum of above)		N/A
4.1.17. How much money did you owe to others (debts)?		

4.1.18 Are you or any member of your HH part of any savings group? (1=yes and 0=no)		4.1.18b. If yes, for how many months have you or any members of your HH been in this group?	
		4.1.18c. Have you or any member of your HH taken any loans from the group? (1=yes and 0=no)	
		4.1.18d. If yes, how much?	

	4.1.18e. For what? (specify)	
4.1.19. Have you or any member of your HH been the victim of theft in the last year? (1=yes and 0=no)	4.1.19a. How many times have you been a victim of theft?	
4.1.19b. If yes, what was taken? (code: food, money, NFIs, other)	4.1.19c. What was the approximate value of stolen goods?	

Business type	CODE	Business type	CODE	Funds for business	CODE
Selling clothes	1	Tailor	8	Savings before came to camp	1
Butchery	2	Movie theatre/arcade	9	Savings earned in camp	2
General Store	3	Hotel/restaurant/coffee house	10	Loan	3
Fruit or veg stall	4	Electrical and repairs	11	Cash gift from abroad	4
Barber	5	Mechanic and repairs	12	Inherited/gift from refugee	5
Milling	6	Other (specify)	13	Other (specify)	6
Transport/boda-boda	7				

4.2.01. How many in the household have work (incentive, regular employment, business or casual employment)? (If at least 1, complete the Employment Table. If 0, skip to Q501)	
4.2.1b. How many in the HH have incentive work or regular employment such as a business? (If at least 1, complete the Employment Table)	
4.2.1c. How many in the HH have casual employment? (If at least 1, complete the Employment Table)	

4.2 Employment table

4.2.02. Name	4.2.03. Age	4.2.04. Incetive Work (1=yes and 0=no)	4.2.05. Main employ-ment type (refer to code)	4.2.06. How long has he/she been working in this job? (months)	4.2.07. Location (refer to code)	4.2.8. Casual or Regular (1=casual and 0=regular)	4.2.8b. If casual, daily wage (Ksh)	4.2.8. If regular, monthly Wage (Ksh)

Employment type	CODE	Employment type	CODE	Location	CODE
Carpenter	1	Welder	10	Kakuma 1	1
Builder	2	Community health officer	11	Kakuma 2	2
Barber / Hairdresser	3	Community Counselor	12	Kakuma 3	3
Tailor	4	Teacher	13	Kakuma 4	4
Mechanic	5	Doctor	14	Kakuma town	5
Electrician	6	Interpreter	15		
Plumber	7	Artisan	16		
Shopkeeper	8	Farmer	17		
Driver (boda boda)	9	Other (specify)	18		

Section 5. Food assistance, voucher, and NFIs

501.When did you collect your last food ration from the FDP? (dd/mm/yy)	___/___/___	502. Did you sell or barter any of your ration? (1=yes and 0=no)	
503. Payment in cash for transport to FDP (Kshs)		504. Payment in cash for transport to home (Kshs)	
505. Payment in-kind for transport to FDP (1=yes and 0=no)		506. Payment in-kind for transport to home (1=yes and 0=no)	

507. Food Item	508. How much received from FDP (Kg)?	509. No. Days Food Lasted	510. How much of the ration was sold or bartered (Kg)?	511. If sold, total revenue (Ksh) (skip if 510 = 0)	512. Who did you sell it to? (refer to code) (skip if 510 = 0)	513. Reason for selling/ bartering? (refer to code) (skip if 510 = 0)	514. How much of the ration was given away or shared? (Kg)
Sorghum							
Maize							
Wheat flour							
Other cereal							
Pulses							
Oil							
CSB							
Salt							

515. Do you have 1. SIM card (for the voucher from WFP). 2. Phone. 3. Both. 4. Neither.		520. How much do you have left on the voucher? (Ksh)	
516. Did you receive a voucher this month? (1=yes and 0=no)		521. Did you use your phone to cash in the voucher? (1=yes and 0=no)	
517. What was the value of the voucher you received last? (Kshs)		522. Did you have to pay to use a mobile phone to redeem your voucher? (1=yes and 0=no)	

518. Have you redeemed the voucher yet? (1=yes and 0=no)		522b. If yes, how much did you pay in total for this last voucher?	
519. What were the 5 main items you bought with the voucher in order of importance? (refer to codes)		1. 2. 3. 4. 5.	

Reason for selling/bartering	CODE	Who sold ration to	CODE
To buy another type of cereal	1	HH in same sub-camp	1
To buy vegetables or meat or milk	2	HH in another sub-camp	2
To buy other food items	3	Host community HH	3
To buy non-food items	4	Trader in sub-camp	4
To pay for transport	5	Trader in another sub-camp	5
To buy prepared meals	6	Trader in town	6
Other (specify)	7	Other (specify)	7

Item purchased	CODE	Item purchased	CODE	Item purchased	CODE
Maize	1	Other orange veg (specify)	20	Kidney	39
Sorghum	2	Sukuma	21	Other organ meats	40
Millet	3	Spinach	22	Tilapia	41
Wheatflour	4	Cabbage	23	Omena	42
Rice	5	Other green leaf veg (specify)	24	Tinned tuna	43
Pasta	6	Tomato	25	Other fish (specify)	44
Bread	7	Onion	26	Eggs	45
Porridge	8	Other vegetable (specify)	27	Fresh goat milk	46
Other cereal (specify)	9	Mango	28	Fresh camel milk	47
Potatoes	10	Papaya	29	Processed milk	48
Cassava	11	Bananas	30	Powdered milk	49
Other root crops (specify)	12	Apples	31	Other milk products (specify)	50
Beans	13	Other fruit (specify)	32	Drinks	51
Cowpeas	14	Goat	33	Sugar	52
Pigeon peas	15	Camel	34	Oil, fats, butter	53
Green grams	16	Beef	35	Salt	54
Other pulses (specify)	17	Chicken	36	Drinks	55
Carrot	18	Other meat (specify)	37	Other food items (specify)	56
Pumpkin	19	Liver	38	Non food items (specify)	57

	523. Have you received the following NFIs? (1= yes and 0= no) (If no, move to the next item)	523b. If yes, was this item received upon arrival? (1= yes and 0= no)	524. Date of when you last received this item (dd. mm.yyyy)	525. Have you received this item more than once? (1= yes and 0= no)	525b. If yes, on what basis? (1 = monthly, 2 =bi-monthly, 3= bi- annually, 4=annually, 5 = every two years 6 = Other specify)	526. How many times have you received this item in the last one year?	527. Donating agency (1= UNHCR and 2= other)	528. Did you resell the Item?(yes=1 no=0)	529. Did you give out the item as a gift?(yes=1 no=0)
Tent									
Mosquito nets									
Blankets									
Sleeping mats									
Kitchen set (Cooking utensils, pots)									
Buckets and jerry cans									
Soap									
Firewood									
Corrugated iron sheets									

Section 6. Household consumption expenditure

6.1 Expenditure and consumption of food over PAST WEEK

Food Consumption in the last 7 days

6.1.01. Food item	6.1.02. How many days in the last 7 days has the HH consumed this item? (# of days, 0 if not consumed) (If 0, go to the next item)	6.1.03. How much purchased (excludes voucher purchase)?			6.1.04. How much of the purchased was consumed?		6.1.05. How much was consumed from own production?		6.1.06. How much was consumed from own stock?		6.1.07. How much was consumed from gifts and food aid ?		6.1.08. How much HH consumed in total?	
		Q	Unit code	Kshs	Q	Q	Q	Unit code	Q	Unit code	Q	Unit code	Q	Unit code
Maize														
Sorghum														
Millet														
Wheat flour														
Rice														
Pasta														
Bread														
Porridge														
Other cereals														
Potatoes														
Cassava														
Other root crops														

Beans							
Cow peas							
Pigeon peas							
Green grams							
Other pulses							
Carrot							
Pumpkin							
Other orange veg.							
Sukuma							
Spinach							
Cabbage							
Other green leafy veg.							
Tomato							
Onion							
Other veg.							
Mango							
Papaya							
Banana							
Apple							
Other fruits							
Goat							
Camel							
Beef							
Chicken							
Other meat							
Liver							
Kidney							

Tilapia							
Omena							
Tinned tuna							
Other fish							
Eggs							
Fresh goat milk							
Fresh camel milk							
Processed milk							
Powdered milk							
Other milk products							
Sugar							
Oils, fats, butter							
Salt							

Item purchased	CODE
Kg	1
Litre	2
Bunch	3
Item	4
Cup	5
Other	6

6.2 Expenditure and consumption of food and NFIs

Food Consumption in the last 8- 14 days

6.2.01. Food item	6.2.02. How many days in the last 8-14 days has the HH consumed this item? (# of days, 0 if not consumed) (If 0, go to the next item)	6.2.03. How much purchased (excludes voucher purchase)?			6.2.04. How much of the purchased was consumed?	6.2.05. How much was consumed from own production?	6.2.06. How much was consumed from own stock?		6.2.07. How much was consumed from gifts and food aid ?		6.2.08. How much HH consumed in total?	
		Q	Unit code	Kshs	Q	Q	Q	Unit code	Q	Unit code	Q	Unit code
Maize												
Sorghum												
Millet												
Wheat flour												
Rice												
Pasta												
Bread												
Porridge												
Other cereals												
Potatoes												
Cassava												
Other root crops												
Beans												

Cow peas						
Pigeon peas						
Green grams						
Other pulses						
Carrot						
Pumpkin						
Other orange veg.						
Sukuma						
Spinach						
Cabbage						
Other green leafy veg.						
Tomato						
Onion						
Other veg.						
Mango						
Papaya						
Banana						
Apple						
Other fruits						
Goat						
Camel						
Beef						
Chicken						
Other meat						
Liver						
Kidney						
Tilapia						

Omena							
Tinned tuna							
Other fish							
Eggs							
Fresh goat milk							
Fresh camel milk							
Processed milk							
Powdered milk							
Other milk products							
Sugar							
Oils, fats, butter							
Salt							

Item purchased	CODE
Kg	1
Litre	2
Bunch	3
Item	4
Cup	5
Other	6

NFIs Consumption in the last 30 days

	6.2.09. Did you use the following items (1=yes and 0=no) (If no, move to the next item)	6.2.10. Total amount spent on purchased? (Ksh)	6.2.11. Total value of amounts gifted? (Ksh)	6.2.12. Were any items re-sold? (1=yes and 0=no)	6.2.13. How much did you get from reselling? (Ksh)
Soap and other detergents					
Candles and matches					
Electricity					
Mobile phone charging					
Cooking fuel/charcoal					
Milling costs					
Phone calls and airtime					
Water					
School fees					
Toiletries					
Travel or transport					
Haircuts					
Fuel/diesel					
Domestic help					
Entertainment					
Drugs or medical expenses					
Loan repayments					
Gifts or loans to other people					
Other non-food expenditure					

Non-consumable NFIs in the last ONE YEAR

6.2.14. NFI item	6.2.14b. Details	6.2.15. Total amount spent on purchased? (Ksh)	6.2.16. Total value of amounts gifted? (Ksh)	6.2.17. Were any items resold? (1=yes and 0=no)	6.2.18. How much did you get from reselling? (Ksh)
Furniture eg. table, chairs, beds	Table				
	Chairs				
	Beds				
	Other furniture (specify)				
Appliances eg TV, fridges	TV				
	Solar panels				
	Fridge				
	Mobile phone				
	Other appliances (specify)				
Clothing and footwear					
Shelter or housing materials					
Other					

Section 7. Household coping strategies

During the past 7 days, on how many days did your household use any of the following strategies to cope with lack of food or lack of money to buy it?	*Number of days (0 to 7)*
7.01. Relied on less preferred and/or less expensive food	
7.02. Borrowed food, or relied on help from a friend or relative (food or money)	
7.03. Reduced the quantity of food consumed by adults to ensure that children had enough to eat	
7.04. Reduced the number of meals eaten per day	
7.05. Reduced the portion size of meals	

	7.06. During the past 30 days, did anyone in your household have to engage in any following behaviors due to a lack of food or a lack of money to buy food? (1=yes and 0=no)	7.06b. If 'No', please clarify: 1 = No, because it wasn't necessary 2 = No, because I already sold those assets or did this activity and I cannot continue to do it 3 = Not Applicable
Sold household assets/goods (radio, furniture, refrigerator, television, jewelry etc.)		
Sold last female animals		
Sent household members to eat elsewhere		
Purchased food on credit or borrowed food		
Sold productive assets or means of transport (sewing machine, wheel barrow)		
Borrowed money		
Withdrew children from school		
Begged		
Engaged in illegal income activities		

ANNEX 7: DATA ANALYSIS PLAN AND INDICATORS

Table 18 outlines the key variables that will be calculated for each HH sampled. These include the vulnerability indicators based on consumption expenditure and food insecurity, and possible proxies that will be tested including indicators of wealth, income and livelihood opportunities. Where relevant these are expressed per capita given the wide-range of HH sizes in the camps.

TABLE 18: KEY VARIABLES

Indicator Group	Indicator	HH Specific Variable	Calculations
Vulnerability	Consumption expenditure	Per capita monthly expenditure on food separately and together with NFIs	For example, (1) HHs with zero expenditure on food i.e. rely on ration (2) HHs with < x expenditure on food (3) HHs with > x percent expenditure on cereals
	Food insecurity	Per capita monthly expenditure on food and on NFIs	Ratio of food to NFI expenditure
		FCS score	The sum of the frequency of consumption (number of days) for each food group in the last seven days weighted by a factor based on the nutrient density of each food group
		Dietary diversity (DD)	The number of different food groups consumed in the past week out of a total of seven
Possible proxies (could be used in isolation or combination)	Wealth assets	Ownership of mobile phone, bicycle, TV, generator, satellite dish, table for eating, wheelbarrow, ducks and chickens.	Proportion with ownership of each (and quantity) or combinations of assets
		Per capita asset value	Total value of key wealth assets
	Housing and living conditions	Crowding index	E.g. Number of beds or huts per capita
		HH wealth type	E.g. Based on types of materials for roof, walls and fencing and their condition

	Income	Per capita monthly income and main sources	For example, (1) HHs with zero income (2) HHs with < x income (3) Percent composition by source
		Number of wage earners per HH (also by type)	E.g. HHs with at least one incentive worker, HH with a business or shop
		Access to emergency cash	E.g. HHs with relatives sending money, access to loans and/or savings (determined by some threshold)
		External income	HHs receiving money from relatives or friends who have been resettled.
	Other livelihood access	Vocational training	HHs with a member that has received vocational training
		Knowledge of English	HHs with an adult with working knowledge of English
		No social support network	E.g. HHs with no relatives in the camp, in Kenya and/or resettled, or recently arrived
		Poor physical network	E.g. HHs which live in Kakuma 3 or 4, or far from main market or Kakuma town
	Demographics	Age dependency ratio	Number of dependents (<18 and >64) divided by number of working age
		HHs with no adults able to earn	E.g. child-headed HH, single adult HH with members to care for (children, disabled or sick).

1   There are also refugees from Burkina Faso, Guinea, Iran, Nigeria, Saudi, and Yemen heading a single HH in the camp; Cameroon 2; Ivory Coast and Uganda 3; Tanzania 7; Congo Brazzaville 15; and Eritrea 98.

2   Including the 76 HH with missing location.

3   Including the 174 individuals with missing location.