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LIST OF ACRONYMS AND ABBREVIATIONS

DLG - District Local Government

DRC - Democratic Republic of Congo

FGD - Focus Group Discussion

GOU - Government of Uganda

HH - Household Heads

IDP - Internally Displaced Persons

NGO - Non-Government Organization

ODK - Open Data Kit

OPM - Office of the Prime Minister

REHOPE - Refugee and Host Population Empowerment Strategic Framework Uganda

SPLM - Sudan People's Liberation Movement

SPLA/IO - Sudan People's Liberation Army In Opposition

TGNOU - Transitional Government of National Unity

UGX - Uganda Shillings

UNHCR - United Nations High Commissioner for Refugees

WFP - World Food Programme

WHO - World Health Organization

WVU - World Vision Uganda

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KEY FINDINGS

- The majority of the refugees rely on food assistance for their livelihood. In total, 58% are not participating in any economic activity while 24% are engaged in farming activities by renting out land from the host communities. Meanwhile, 75% of the host communities depend on agricultural production as their primary economic activity, and 10% are involved in petty trade. Most people lack access to capital to expand businesses.
- Food scarcity among the refugees and the host communities are driving prices of essential food items. Both communities have resulted in reducing meals and relying on less expensive foods to cope with the situation.
- Refugees are mainly concerned about the reduction in the quantity of food distributed by World Food Programme (WFP) while the host communities are particularly worried about the scarcity of food in the markets causing inflation of prices of staple food such as cassava flour which doubled in price since December 2016.
- Though the markets in the refugee and host community settlements are functional and providing the essential household items, there are few economic activities undertaken in comparison to their potential. Cash injection through cash-based programming is needed to spur growth.
- Both the host communities and refugees are mainly relying on firewood for cooking, creating competition and pressure on this shared resource.
 - In total, 81% of the refugees and 79% of the host communities stated they were already concerned about the availability of fuel.
 - Only 4% of refugees and 5% of host communities are using fuel-efficient stoves (Lorena)
- Most of the refugees and host communities (44% and 51% respectively) have a primary level of education only with 25% of the refugees and 6% host communities being illiterate/semi-literate.
- Most employment opportunities accessible to the majority is mainly casual labour for 0 to 2 days per week earning an income of between 0 to 10,000 UGX.
- Most people are unskilled and unable to take advantage of economic activities on offer. The skills most demanded
 of men were building, followed by brick laying. Meanwhile, for women, the skill most demanded was hairdressing
 followed by tailoring.
- Savings groups were identified as the most available and preferred lenders of money at 32%, followed by friends
 and relatives at 23% and 21% respectively. Commercial banks and MFIs were least accessible to communities with
 only 1% of the respondents benefiting from their loans.

BACKGROUND

The South Sudan conflict started in December 2013 as an 'internal clash' and was confined to Juba, the capital city of South Sudan. This internal clash turned into a full blown conflict which later spread to the regional cities of Bor and Malakal in Upper Nile region. The internal clash was as a result of the power struggle within the main political party, Sudan People's Liberation Movement (SPLM) which led to the displacement of thousands of people, loss of lives and destruction of property. Initially, the majority of the civilians were displaced into Internally Displaced Persons (IDP's) camps, but later many fled to neighbouring countries of Kenya, Sudan, Ethiopia and Uganda.

In August 2015, a peace agreement was signed between the opposing parties under the auspices of regional and international



communities and led to the formation of the Transitional Government Of National Unity (TGONU). Just as preparations were in place to implement the August 2015 peace agreement, a scuffle ensued in July 2016 pitting the presidential guards and the first vice president in Juba against each other. This dispute resulted in the Sudan People's Liberation Army In Opposition (SPLA/IO) being pushed away from Juba. This conflict has now spread to densely populated and more remote regions of Equatorial region and brought mass displacement of people from the Equatorial region of South Sudan into neighbouring Uganda.

Uganda, and in particular the West Nile region, has a long history of hosting refugees from the neighbouring countries of Democratic Republic of Congo (DRC), Sudan and the present-day South Sudan. Since 2014, Uganda has seen a continuous influx of South Sudanese refugees fleeing from violence and destruction. As of June 2017, the United Nations High Commissioner for Refugees (UNHCR) had registered more than 950,000 South Sudanese refugees (mainly women and children) in Uganda who are resettled into the various settlements in the countryside of Uganda.

This interagency needs assessment by World Vision Uganda (WVU), UNHCR and Caritas was conducted in two settlement areas of Rhino and Imvepi located in the West Nile Region of Uganda. The Imvepi settlement is the most recently opened area (February 2017) for resettlement and located about 72km east of the district town of Arua. This settlement is expected to resettle about 100,000 South Sudanese refugees, the majority of them are remote peasant farmers fleeing from the conflict in the productive Equatorial region of South Sudan. This assessment will therefore propose immediate, medium and long-term strategies to address the livelihood needs of the refugee and host communities created by the changes in the environment and the pressure on the available resources to ensure smooth coexistence and sustainable utilization of resources.

OBJECTIVES

This study aims to:

- 1. Assess the food security situation and coping mechanism of the refugees and their host communities.
- 2. Review livelihood activities, challenges faced and existing economic opportunities.
- 3. Identify the key driving factors to food insecurity and vulnerabilities for the poorest households in targeted communities.
- 4. Identify appropriate short-term and long- term livelihood interventions for refugees and host community.
- 5. Provide recommendations on livelihood programming focus areas.

METHODOLOGY

Stakeholder consultations and document review

In preparations for the assignment WVU, UNHCR and OPM engaged the Uganda government's technical staff and peer organizations to discuss assessment details, encourage participation and pool of financial, logistical and human resources to support the study. The joint approach aimed to build a strong sense of ownership and up-take of the results of the study.

Study design

The study adopted a cross-sectional study design; using data collection techniques that comprised both quantitative and qualitative participatory approach methodologies to provide information on the existing livelihoods, food security situation and gaps in livelihoods of refugees and the host communities of Imvepi and Rhino area settlements. Both primary and secondary data were collected from identified respondents and sources respectively. Qualitative data was collected from identified key informants through in-depth interviews and Focus Group Discussions (FGD) with various stakeholder groups. Quantitative data was collected through a household survey among adult-targeted respondents.

Data Collection Methods

Quantitative Data Collection Methods

This study focused on refugees. However, given the guidelines from the Office of the Prime Minister (OPM) to implementing partners requiring programming in refugee settlements to include at least 30% of the host communities among the direct beneficiaries of implemented interventions, the study population comprised 69% refugee households and 31% host communities' households. Probability sampling approaches were used to determine the sample from the survey population. The survey targeted a sample of 1,135 people (781 refugees and 354 host community members). The sample size (1,135) was scientifically determined using Solvin's formula.

In total, 1,135 respondents (781 refugees and 354 host communities) were successfully interviewed representing a 100.3% response rate based on the initial target of 1,132 respondents. A semi-structured questionnaire was used to collect data from respondents in the sampled households. This was designed and uploaded onto mobile smartphones using Open Data Kit (ODK) technology for data collection. The questionnaire was directly administered by enumerators specifically trained for this assignment. Though the questionnaires were in English (for uniformity), the interviews were conducted in the local dialects of the respective host communities through the help of trained translators who are knowledgeable of the different dialects. The common dialects among the refugees were: Kakwa, Kuku, Didinka, Acholi, Lutugo and Jandi while for the host communities Lugbara and Madi dialect were most common.

Qualitative Data Collection Methods

Qualitative data was collected through interviews with key informants, focus group discussions, document review of secondary sources and observation.

To enhance the validity and reliability of primary data, available literature was examined to supplement the primary sources. The following documents provided references to the study: REHOPE— Refugee and Host Population Empowerment Strategic Framework Uganda (United Nations Country Team and the World Bank in Uganda; Feb 2014); Food Security and Nutrition Assessment in Refugee Settlements Report UNHCR 2016; Arua District Development Plans (FY2016 to FY 20120); District Disaster Management Plans (FY2016 to FY 20120); Uganda Refugee Policy 2006; Agricultural Policy 2013; Uganda Poverty Status Report 2014. These provided key insights of livelihood interventions as prioritized by the Government of Uganda (GOU), Arua District Local Government (DLG) and appropriate responses for the refugees and host communities as guided by the Refugees and Agriculture policies respectively. Thus, implementation of the proposed interventions will support the overall achievement of GOU overarching development goals as provided for in the Vision 2020.

Also used was observation checklist, key informant interviews with 10 persons (district staff, NGO staff, and traders) and focus group discussions (4 among the refugees and 4 among the host communities).

LIMITATIONS

- The questionnaire was in English but in some cases enumerators had to translate the question to the local language. There is a chance of distortion or loss of the real meaning in translation.
- Inaccurate recall and quantitative estimates by some of the respondents could compromise the level of validity of some the study findings.
- Respondents' expectations for the assessment's hidden benefits could influence their responses.

ASSESSMENT FINDINGS

Household characteristics

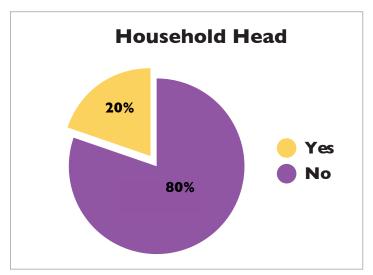
The assessment covered 1,135 households in Imvepi and Adjumani settlements. Out of the sampled 1,135 people, 69% were refugee households, and 31% were citizens of the host communities, in line with the guidelines provided by

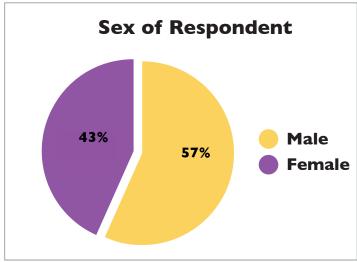
UNHCR and REHOPE framework. The survey targeted the household heads as the most appropriate respondents and, in cases where the head was not available or did not want to be interviewed, an adult member of the households was interviewed instead with permission from the household head. This approach ensured that all targeted households were interviewed. As such, 80% of the respondents were household heads were selected, while 20% were representatives. This approach was selected primarily because the delegated representative (since s/he was a member of the household) was deemed to be well informed about issues of that household, and therefore the information provided was considered reliable.

Overall, 57% of the respondents were female, and 43% were male.

Figure 1: Household heads interviewed

Figure 2: Sex of household heads interviewed





Demography

The majority, 62% of the refugee households, were headed by females and only 38% of the households were male-headed. Most of the female-headed refugee households reported that their husbands had either been killed or had gone back to South Sudan to secure household assets. On the other hand, among the host communities, the demography was a fair representation of normal demographic characteristics in most rural areas of Uganda, male-headed households were the majority at 72% while female-headed comprised 28%.

The survey also learned that 3% of the sampled refugee households were child-headed with the household head being less than 18 years of age. The number of child-headed households is particularly worrying given the hardships already experienced by refugees due to limited economic opportunities in the settlements and reported insecurities which pose a protection concern for such households. Furthermore, the heads of child-headed households are unlikely to engage in economic opportunities such as employment due to age factors, in addition to other challenges, such as lack of needed skills. The situation is worsening as the child head is usually unable to attend school as they are required to take care and provide for their younger brothers and sisters.

Household Size

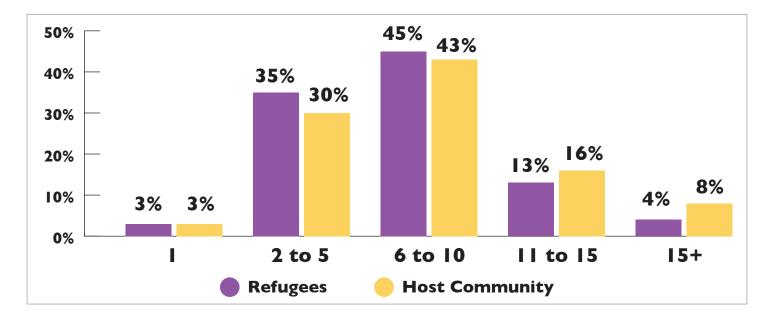
Household size has a significant impact on the way of life for a particular household. A smaller household is easier to maintain than a larger one, given that resources are usually limited. Regarding the refugees whose livelihood options are very limited, the size of the household is more critical when it comes to the means of livelihood in the settlements where they currently are.

The household sizes for both the refugee and host community households are similar. The majority, 45% of the refugee and 43% of the host communities had between 6 to 10 members in a household. About 13% of the refugee and 16% of the host

community households had between 11 to 15 members, with a few cases going beyond 15 members in a household (about 4% and 8% for refugees and host communities respectively).

Figure 3 below shows the household sizes of refugee and host communities in the study area.

Figure 3: Household sizes of refugee and host community in study area



Economically Inactive Persons

The survey also sought to know the number of adults in a household between the ages 18 and 65 years who were economically inactive and were increasing the burden to the household head.

According to the responses, 92% of the refugee households have at least one or two adults between the ages of 18 and 65 years who are not currently working while 96% of the host communities have at least one or two adults between the same age brackets who are not currently working. About 5% and 3% respectively of both refugee and host community households have at least three or four adults between 18 and 65 years who are not currently working. About 2% and 1% of the refugee and host community households respectively have at least five to six adults who are not currently working. Meanwhile, in the host communities, 1% reported having nine adults or more who are not currently working.

Marital Status

The majority of both the refugees and the host communities surveyed were married, reflecting 70% and 83% respectively though there are also many cases where spouses involuntarily live apart due to conflict or where some reported that their husbands had returned to South Sudan to rescue and guard property they left behind.

100% 83% 80% 70% 60% 40% 20% 9% 10% 5% 5% 2% 1% 0 **Host Community** Refugees

Figure 4: Household heads by marital status

Marital separation was twice as likely among refugees than the host communities and, as explained by the different respondents, the primary reason for separation, particularly among the refugees, was due to the South Sudan conflict. Many separated refugees did not know where their spouse was whether dead or alive. At least 9% of the refugee respondents recounted separation of a spouse due to the confusion that forced them to flee their country. Marital separation was not prevalent among the host communities, as 6% of the respondents were single.

Separated

Widowed

Widower

Literacy

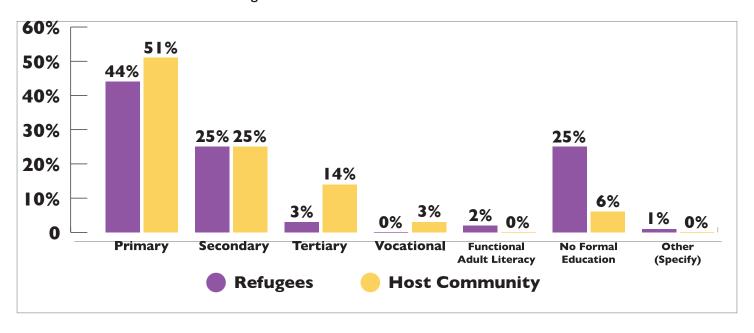
Single

Married

The majority of the respondents in the refugee and host communities attained primary (44% and 55% respectively) and secondary level (25%) of education. A smaller percentage, I4% from the host communities transitioned to tertiary level education while 3% from the refugee attended tertiary education - a limiting factor to accessing formal employment opportunities in Uganda. The level of education can predispose households to food insecurity and dependence on negative coping strategies to survive.

Around 25% of refugee households surveyed did not have any formal education compared to 6% of the host communities. Most of the youth interviewed requested vocational training opportunities to equip them with the necessary skills to take advantage of available employment as well as engage actively in the local and international market economy.

Figure 5: Household heads education level



Seasonal Calendar

Arua receives a bimodal rainfall pattern with the major rainfall between July to November and harvests falling in November and December. The minor cropping season occurs in March and May with harvest occurring in July. Rainfall variability and reliability is impacting negatively on the productive capabilities of the residents of Arua and Rhino camp whose predominant livelihood is agriculture. In the recent past, the area has experienced longer than normal droughts coupled with variable rainfall patterns-all pointing to the effects of climate change.

Jan Feb Mar Apr May Jun lul Sep Oct Nov Dec lan Land Preparation, Land BIMODAL Weeding Weeding First Season Harvest Dry Sowing in **Planting** Preparation Second Season Harvest East & North and Planting Second Rainy Season First Rainy Season Land Preparation, Weeding Weeding Sorghum Planting (KARAMOJA) UNIMODAL Main harvest Lean Season

Figure 6: Seasonal calendar

January and February are the driest months. During this time farmers are mainly preoccupied with land preparation for the minor season. During the minor season, the following crops are cultivated: cassava, maize, groundnuts, sorghum. Maize, groundnuts, and sorghum are harvested in July and cassava, depending on the variety grown, is harvested either in December or February the following year.

Rainy Season

During the major agricultural season from July to November, beans, groundnuts, maize, sesame, and millet are planted

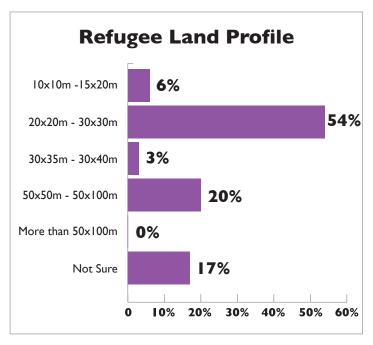
and harvested in November or December of the same year.

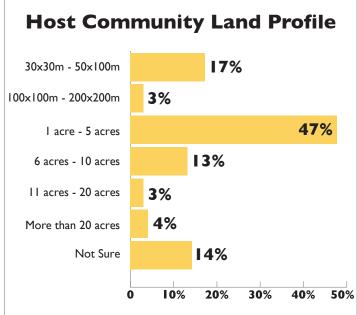
Access to agricultural Land

The majority of refugees (54%) in Imvepi and Rhino Settlements have plot size of between 20 and 30 square meters which they are using for agricultural production. Host community land sizes vary with mast 54% owning land of sizes between 1-5 acres, 17% mostly the poorest with between 30 square meters and 150 square meters.

Figure 7: Refugee land profile

Figure 8: Host community land profile





The above statistics are important especially when planning for an appropriate agricultural intervention for the poor target groups. Kitchen Garden will be more ideal for refugee and poorest host community households in the surveyed locations.

Markets

Markets in the settlement and host community towns are functioning well with most household items and preferred food items such as cassava, sorghum, millet beans, maize meal and various vegetables available.

Trade is primarily cash based, with 68% of the population using cash to purchase items and 31% of the population engaging in barter trade.

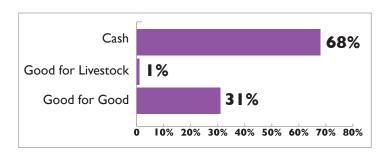


Figure 9: Terms of trade

Livelihood strategy

A total of 58% of refugees surveyed are currently not engaged in any form of economic activity. Instead, they rely entirely on food assistance for survival. Meanwhile 24% of refugees surveyed supplement food assistance provided by Non-Government Organizations (NGOs) with their crop production on allocated plots. Some refugees have rented land from the host communities to do further farming activities. A minority are engaged in petty trade, 9%, and casual work, 7%.

Among the host communities, 75% mainly depend on agricultural production as the main economic activity followed by petty trade, 10%, and casual labour, 9%.

Figure 10: Livelihood strategy-Refugees

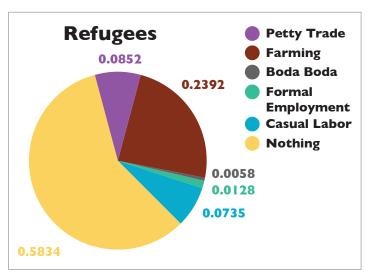
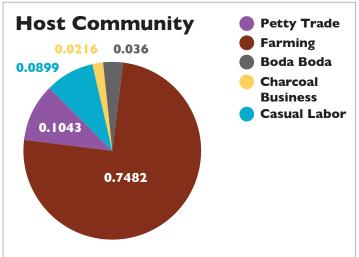


Figure 11: Livelihood strategy-Host Community



Limited labour opportunities exist for both refugees and host communities. The survey revealed that 95% of refugees and 82% host communities participated in two days of employment a week. From the data obtained, 93% of refugees and 77% of host communities earned an average of UGX 7,317 per day from employment, meaning they only earned about 15,000 per week or 60,0000 per month, since they were only able to work for two days per week.

Figure 12: Number of Days Worked Per Week

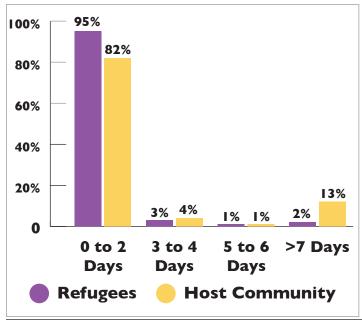
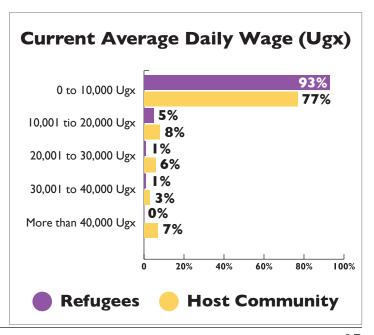


Figure 13: Average Daily Wage





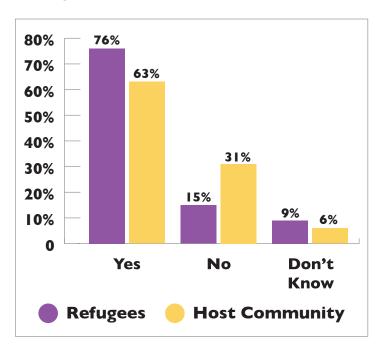


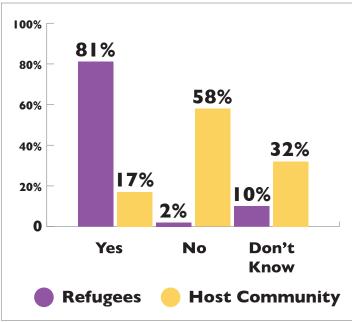
Main concerns on income

The region received lower than average rainfall in the last season, and this has had an adverse impact on livelihoods and food security among some of the poorest persons in the region. The low rainfall has resulted in inflation of food item and, therefore, deteriorating livelihoods and exacerbating poverty. At least 76% of the refugees and 63% of the host communities expressed concern about the low level of their household income, especially due to the current inflation on common household products. Most refugee households (89%) were concerned about limited income generation opportunities in the settlement and price inflation - making access to essential household items difficult.

Figure 14: Concern on income

Figure 15: Reason for concern about income

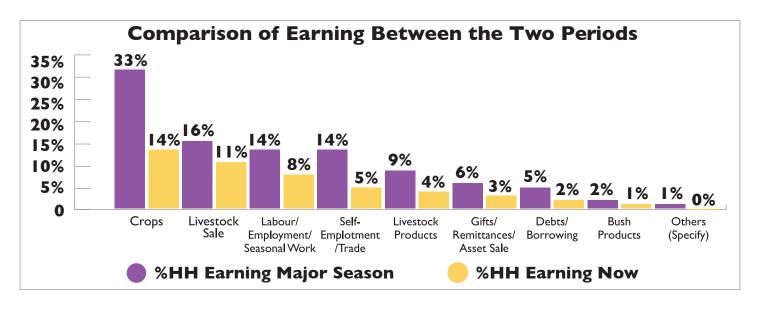




Similar concerns were raised by the host communities, with 43% concerned with inflation and 32% reporting bad weather that led to low yields. A total of 25% reported a lack of income generation activities.

Income earnings in agricultural major and lean season

Agriculture is the main source of livelihood for the host communities. Crop farming is rain-fed and mostly influenced by rain and climate. There is usually a bumper harvest and high milk production during the major planting season when there is adequate rainfall. The survey attempted to compare earnings between the major and minor agricultural season for the main income sources as identified by the respondents.



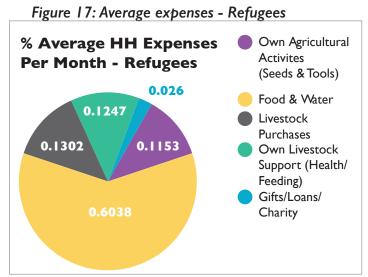
As seen from Figure 16, there's a significant drop in earnings between the two periods as highlighted above. It seems, to a large extent, trade, employment opportunities and other nonagricultural activities for both populations are rooted in agricultural production.

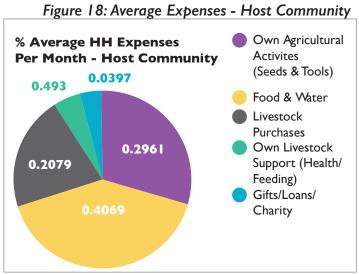
Strategies that help farmers adapt to climate change such as climate-smart agriculture, dry land farming, conservation agriculture, fodder farming and water use efficient irrigation technologies could buffer and ensure sustained crop production, income and labour opportunities throughout the season. As a precaution, there is also need to diversify income sources by promoting climate resilient livelihood options such as formal employment for youth in other production sectors and engagement of small and medium enterprises.

Household expenditure

Purchase of food for household consumption remains the highest cost for households, taking 60% of refugee and 41% host community household total income. In essence, this means that less income is available for meaningful economic activities, investments or savings for lean seasons and emergency situations, leaving households exposed to shocks such as drought or other emergencies.

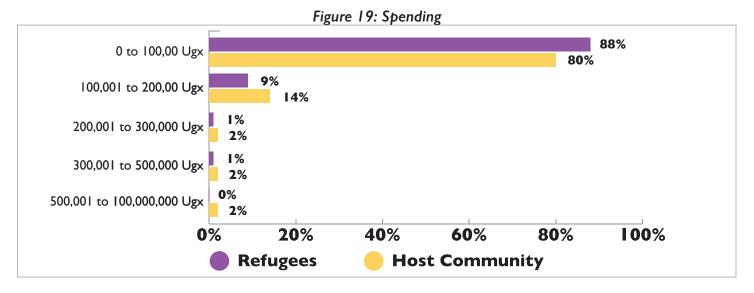
The lack of available money also affects the ability of the community to restart their economic activities and, therefore, curtails the road to self-reliance.





Around 88% of the refugees reported spending cash of between 0 to 100,000 UGX per week on food, and 9% reported spending cash equivalent of between 100,000-200,000 UGX per week. Meanwhile, 80% of the host communities spent up to 100,000 UGX per week and 14% between 100,000 and 200,000 per week.

Only 1% of refugees and 2% of the host communities reported that their spending ranges fall between 200,001 to 300,000 and 300,001 to 500,000 UGX. Meanwhile, 2% of the host communities reported that they spent between 500,001 to 1 million UGX.

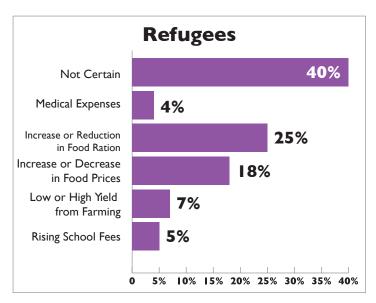


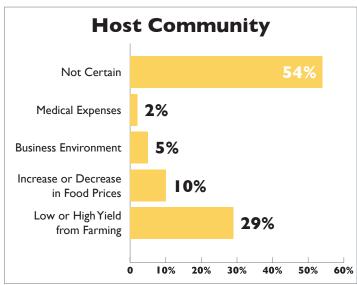
Future events likely to change household spending patterns

To promote self-reliance and resilient communities, understanding risk and future events are essential to help households and communities plan by putting necessary actions to mitigate and manage the situation. From the surveyed respondents, household expenditure was affected by an increase or reduction in food ration for refugees while the host communities reported low/high yields from farming the most important events likely to affect the household expenditure.

There is still a large population, 40% of refugees and 54% of the host communities, that are not aware of any events likely to affect their spending patterns inspite most of them experiencing cyclical shocks of different magnitudes. This lack of awareness puts them at risk, as they are not able to adequately prepare and plan.

Figure 20: Events likely to take place in the next four months that will change household spending patterns





According to Figure 20 above, 40% of the refugees were not sure of any events likely to take place in the next four months that will change household spending patterns.

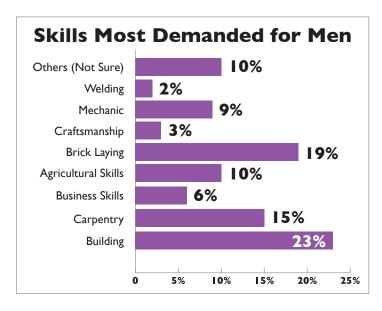
Livelihood skills demand for men and women

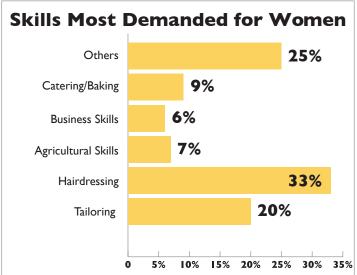
It's important to note that the analysis of livelihood skills demand for men and women were purely based on the aspirations of respondents. The assessment did not cover needs of the labour market (supply side). An in-depth assessment of skills and labour requirements is therefore required to understand and promote the right marketable skills based on the labour market gaps.

As observed 23% of respondents reported building skills is most demanded for men, followed by brick laying skills reported at 19%. According to figure 20, 33% of the respondents reported hair dressing as the most demanded skill for women, followed by tailoring reported at 20%.

Figure 21: Skills for Men

Figure 22: Skills for Women

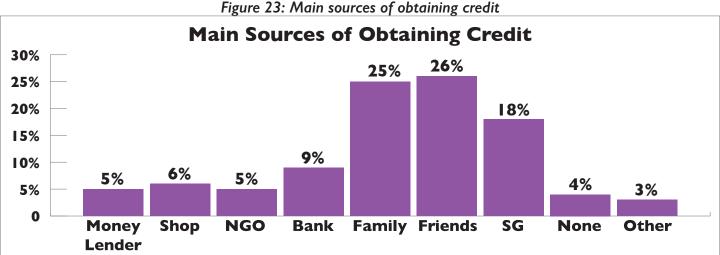




Access to finance

Access to finance and credit services from financial institutions for refugees and host communities are very limited and almost nonexistent.

A total of 26% of refugees and 25% of host community members rely on friends and families for credit. Savings groups are also playing a key role is providing financial services to 18% of these communities, providing a critical lifeline to the beneficiaries, especially during shocks and financial hardships.



21

On average, 30% of households do experience shocks, and 97% of respondents experienced at least a shock that negatively impacted their welfare/well-being. Since most of the population is either living in poverty or at the borderline of poverty margins, when such a shock is experienced, the impact is usually devastating driving them further into destitution.

More than 65% of respondents reported that they were already experiencing shocks from drought and an increase in food prices.



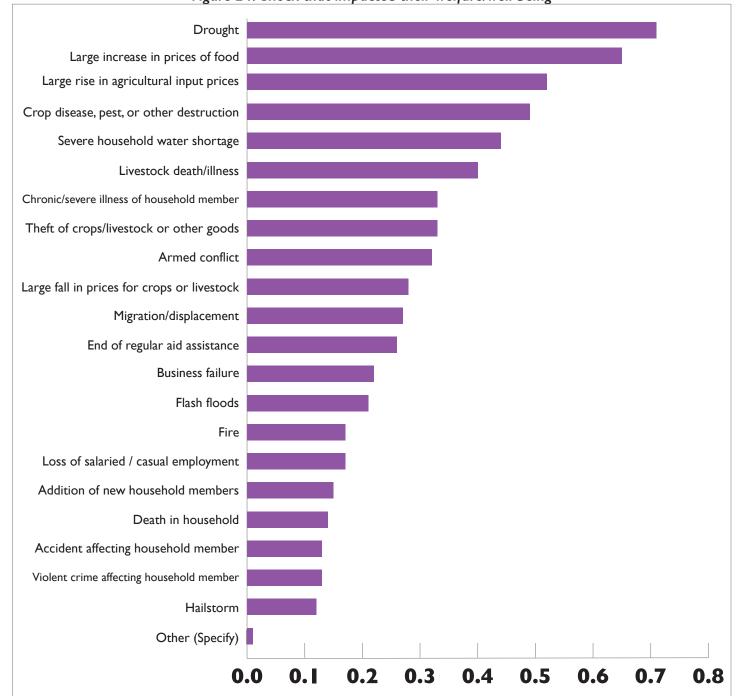


Figure 24: Shock that impacted their welfare/well-being

Food Consumption

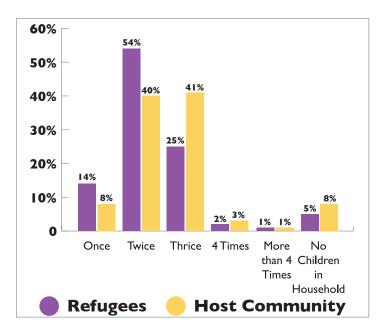
Food consumption is a strong indicator of the state of food security of the household. Intra and inter-households conditions and other factors external to households such as market integration and distribution, influence and determine the state of food consumption indicators.

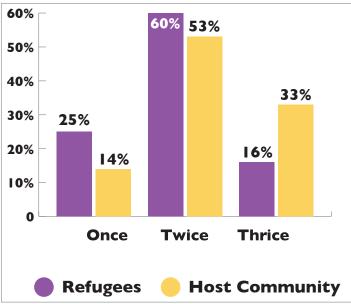
Based on a 24 hour-recall period, 60% of the refugee households and 53% of sampled host community households consumed an average of two meals for both adults and children. The host community households have reduced the number of meals to two meals per day with 25% of the refugees and 14% of the host communities taking only one meal in the previous 24 hours. Most refugee households increasingly resorted to consuming cheaper, less preferred foods,

borrowing money to deal with the prevailing situation.

Figure 25: Number of Meals per Day for Children

Figure 26: Number of Taken in a Day (24 Hours)





Coping strategies

As a result of food scarcity in the market, food prices have skyrocketed, and many are unable to afford basic commodities. A significant number of people are already using different strategies to cope with the situation. A total of 39% refugees sampled and 41% of the host communities have reported eating less in a meal, while 25% of the refugees and 32% of the host communities are skipping meals to cope with food insufficiency. This downward trend is already alarming and likely to impact negatively on the nutritional status for both adults and children if employed for an extended period, affecting productivity.

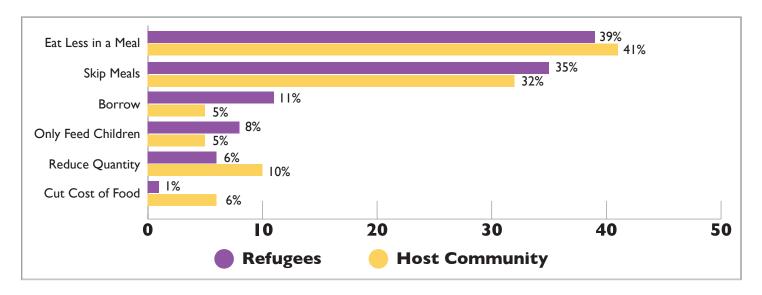
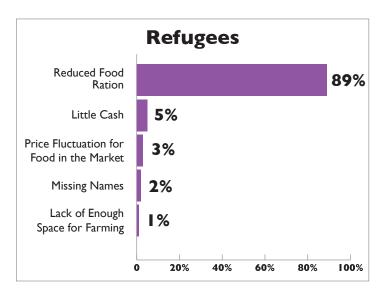


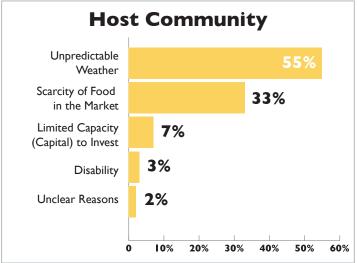
Figure 27: Coping Mechanisms

Major concerns about sources of food

Figure 28: Concerns about food-Refugees

Figure 29: Concerns about food- Host community





According to Figures 28 and 29 above, 89% of the refugees are concerned about the reduced food ration since the majority of them depend entirely on the food aid, and about 5% reported little cash given to sustain them for a cycle. Among the host communities, 55% said unreliable rainfall affects their food production causing food shortages and increases in prices at market level.

Regarding concerns about food, 94% of refugees said that a reduction in food rations distributed is a major concern and 6% reported that their concern is eating the same type of food without having a proper balance diet. A total of 75% of the host communities reported being concerned with food scarcity in the market that would likely lead to high prices of food products and make it difficult for them to afford and access the food. Anecdotal evidence already points to a massive increase in prices for most of food items produced locally, for example the staple food such as cassava flour has doubled in price since December 2016.

According to figure 30 below, 42% of refugees and 27% of the host communities reported that they were concerned about the nutritional status of their children and gave two major concerns: 94% of refugees said that their fear is malnourishment for their children since they feed the same kind of food every month. As well, 59% of the host communities reported that they are concerned about poverty making them unable to purchase food for their children.

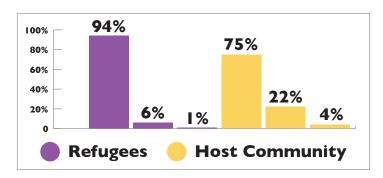


Figure 30: Concerns about food

INFANT AND YOUNG CHILD FEEDING

Breastfeeding has important implications for the health of both newborns and mothers. It's also an ideal way of providing healthy food for optimal development and growth of infants with remarkable health benefits. The assessment revealed that 86% of refugee women and 82% of host community women exclusively breastfed immediately after delivery. Breastmilk plays a significant role in reducing infant mortality due to common illnesses such as diarrhoea or pneumonia.

The study also found 3% of refugees and 9% of the host communities reported starting breastfeeding three days after delivery. On the other hand, 11% of refugees and 8% of the host communities never breastfed due to health related issues.

Figure 31: Respondents who have started exclusive breastfeeding after delivery

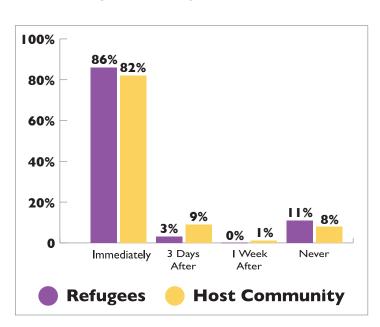
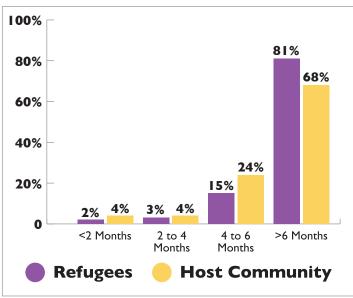


Figure 32: Duration of Exclusive Breast Feeding



As seen from Figure 32 above, the majority of the respondents reported that the length of exclusive breastfeeding is from four months and more with 81% of refugees and 68% of the host communities continuing to breastfeed for more than six months. A small number, 15% of refugees and 24% of the host communities, reported the duration of breastfeeding between four to six months stopping due to work/household chores and some complaining about lack of adequate milk due to poor diet.

Deworming

Soil-transmitted helminthiasis is the most common parasitic worm that affects masses of children. The condition affects children's ability to actively participate in their education. According to the World Health Organization (WHO), over 870 million children globally are at risk of parasitic worm infection.

A significant number of survey respondents, 60% refugees and 43% of the host communities, reported not deworming their children. Worm infections interfere with nutrient uptake; can lead to anemia, malnourishment and impaired mental and physical development; and pose a serious threat to children's health, education, and productivity.

Figure 33: Respondents who deworm their children

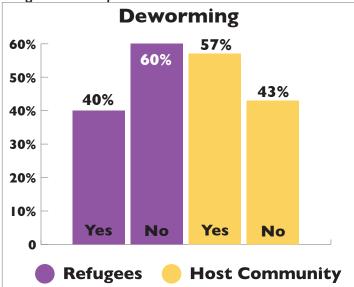
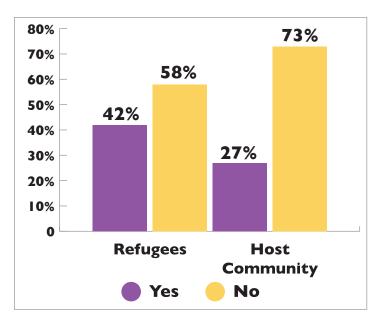
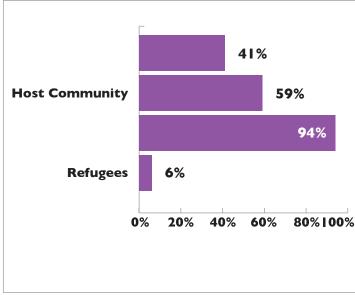


Figure 34: Concern for Nutritional Status of Children

Figure 35: Main Concern for Respondent's Children's Nutritional Status





ENERGY SOURCE FOR COOKING BEING USED BY HOUSEHOLDS

Wood fuel is the primary source of fuel for 98% of refugees and 93% of the host communities with firewood used as the energy source for cooking. A lot of the firewood is harvested locally from surrounding fields, putting pressure on the immediate environment. A total of 95% of refugees and 91% of the host communities reported that they majorly used the three stone type of energy cook stove which was not only wasteful in fuel consumption but also emits a lot of smoke, which could affect the health of the users. The smoke was especially a concern for women who are mainly in charge of cooking, spending between three and seven hours per day near the stove, depending on the demands of the local cuisine.

The smoke also poses a high risk of respiratory diseases such as pneumonia to younger children and infants from poorer

households who spend most of their time with their mothers in the kitchen cooking.

Figure 36: Energy Source for Cooking

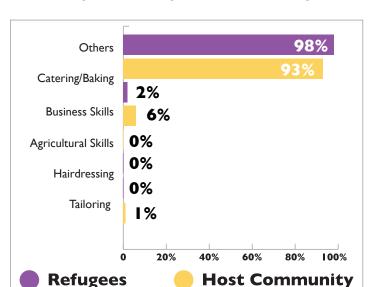
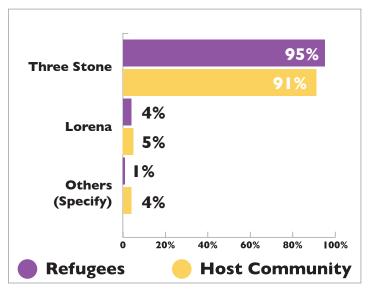


Figure 37: Type of Energy Cook Stove



One of the main concerns is availability of wood fuel. Refugees and the host communities are already harvesting unsustainably, resulting in deforestation, destruction of habitat and the environment's capability to sustain the current and future population. Traditionally the collection of firewood in the host and refugee communities is mainly the work of women and children (especially the girl child). The shortage of wood fuel is a concern for 81% of refugees and 79% of the host communities, as respondents expressed concerns about the availability of cooking energy.

With 79% of refugees and 65% of the host communities stating that it took them an average of one to two hours to collect firewood every day, this trend is likely to continue unless mitigation measures were put in place. About 20% of refugees and 35% of the host communities reported spending between two to four hours respectively, as seen in the figure above. Just 2% of the refugees reported spending more than 4 hours in search of a source of energy. The shortage of fuel for cooking negatively impacts children and women, as they travel further and spend more time gathering firewood to feed their families. The daily scrounge for firewood bars them from engaging in important activities such as participating in education, development and economic activities to better their lives. As they search for firewood, they also expose themselves to dangers such as attack and rape.



Figure 38: Concerns on availability of wood fuel

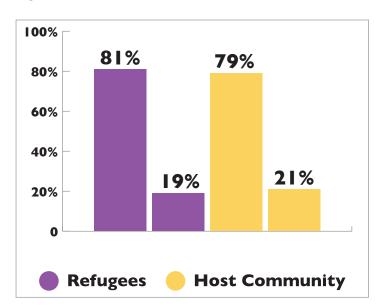
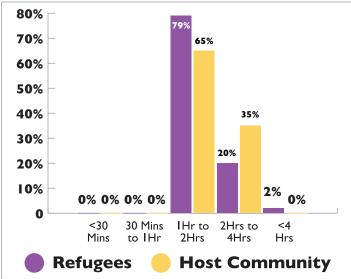


Figure 39: Average time taken to collect firewood



WATER FOR PRODUCTION

The importance of water cannot be underestimated in human life. Water is also a key element for agricultural production, with most of the community members relying on rain-fed agriculture for production. The majority of respondents, 57% of refugees and 76% of the host communities, are water stressed and experience crises during the dry season.

The situation is worse for the host communities who are mainly farmers and experience problems with accessing water for production due to long dry spells and inadequate rain amounts. Low yielding wells are unable to support water for agriculture.

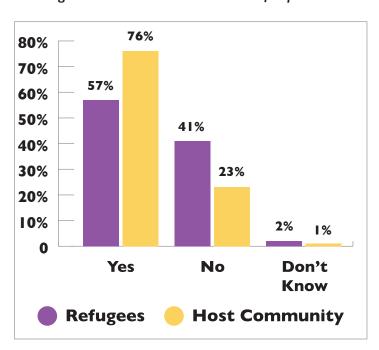


Figure 40: Concerns about water for production

Water for household use

In both host and refugee communities fetching of water is mainly done by women and children, the water is carried either on the head, on the back or by hands to the household. It is a labour intensive process and likely to cause severe health related problems to the back and neck.

There is a fair distance to water sources with the majority, 54% of the population, traveling less than 500 metres - about 30 minutes (to and from) - to a constant water source. About 27% of respondents reported covering between 30 min to Ihour (.5km to Ikm) from their location to a water source. During rainy season when swamp and stream water is available, the distances are further reduced.

Figure 41: Litres of water house holds/day

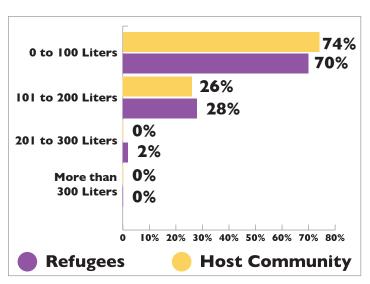
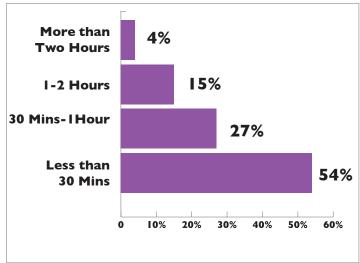
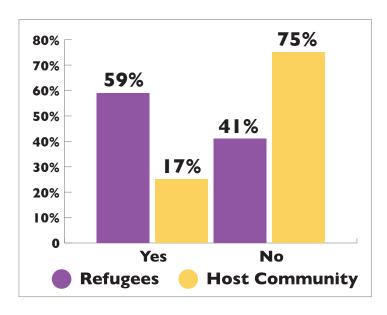


Figure 42: Distance to water



Treatment of Drinking Water

Treating drinking water is one way of ensuring that water is fit for human consumption without any short term or long term risk of any adverse health effect likely to affect the livelihoods. Only 59% of the refugees and 25% of the host communities reported that they treated their water before drinking. They primarily used aqua tabs and boiling as the preferred methods.



CONCLUSION AND RECOMMENDATIONS

- The youth are the majority of the population and most of them are unemployed. There is a need to promote employment by bridging the needs of the labour market (supply side) and building the capacity of youth and employees (demand side). An in-depth assessment of the skills and labour requirements are therefore needed to promote marketable skills based on the labour market gaps and requirements now and in the future.
- Due to limited activities in the settlement, anecdotal evidence exists that some of the youth may be returning to South Sudan to participate in the conflict. There is a need to engage the youth in meaningful social and economic activities that will keep them engaged as well as earning income. Peacebuilding actions and messaging should be an integral part of every livelihood programme.
- There is also a need to promote economic activities among the refugee and host communities to boost income and self-reliance. Some of the refugees had shops in South Sudan and understand how to run businesses. Others were farmers and livestock keepers. Interventions to support restarting former livelihoods are needed to bring the refugees back to self-reliance and participate in the market economy.
- The markets in refugee and host community settlements are functional. They provide essential household items, although little economic activities are being undertaken in comparison to their potential. The refugees do not have meaningful economic activities and the host communities purchasing power has been significantly affected by drought. There is a need to inject cash into these markets to make them vibrant. Targeted safety net interventions targeting the ultra-poor and vulnerable groups should be considered to spur growth in these markets.
- Massive tree cutting for fuel consumption and construction has been witnessed in the settlement and surrounding area. From observation, the rate of harvesting surpasses the regeneration capacity. It is only a matter of time before the impact begins to be felt widely. Therefore, an environmental audit is needed to determine the magnitude of deforestation and regeneration. Urgent conservation measures need to be put in place to reverse the trend. It is worth exploring the promotion of alternative energy sources for cooking fuel, Farmer Managed Natural Regeneration practices, afforestation and reforestation activities (fast growing trees), and promotion of improved stoves.
- Most farmers are only practicing subsistence agriculture, largely rain-fed. With the impact of climate change, the
 rains are sporadic and unreliable, making crop farming risky. Climate Smart solutions such as drought resistant
 varieties, water use efficient irrigation systems, and conservation agriculture, among others, are much needed to
 promote year-round crop farming.
- There is a need to work closely and in coordination with the relevant government ministries to ensure technical skills and support in extension services are offered to refugee and host community populations.

ANNEXES

ANNEX I

Time Line

In a bid to triangulate and get a deeper understandings of the key events and various livelihood interventions, the team carried out a historical timeline among 6 out 8 focus groups.

Table 15: Summarize time line showing major events that happened in the life of the refugees since 2011.

TIMELINE OF SOUTH SUDAN CRISIS

| Period (Year) | Key Events |
|------------------|---|
| 2011 | South Sudan gained independence from Sudan, there was peaceful coexistence in the country and citizens who fled the country were returning home |
| 2012 | There was boom as the country was in serious reconstruction of infrastructure. Some parts of the country had started experiencing some insecurity especially upper Nile region of Jong lei state precipitated by cattle raiding and the Yau rebellion in Pibor. |
| 2013 | The former Vice President Riek Machar and other top government agencies were sacked. This precipitated the December 2013 crisis which split the SPLM party into sharp and distinct tribal lines. |
| 2014 | The insecurity in Juba has subsided but it began spreading into other parts of the country especially upper Nile region. There was relative calm in most parts of the country but hatred and hate speech began building in the country. |
| 2015 | Peace Agreement was signed between the government and Sudan people's liberation Army in opposition (SPLA/IO) in Addis Ababa paving way for the formation of transitional government of national unity (TGNOU). However there were violations of the ceasefire agreement from both sides. |
| 2016 | The former vice president Riek Machar arrived in Juba to implement the peace agreement which created the formation of the transitional government of national unity (TGNOU). Scuffle ensued in Juba pitting the presidential guards of the president and the vice president which resulted into loss of lives and massive displacement of people. This crisis resulted into pushing away of the Sudan people's liberation Army in opposition (SPLA/IO) into disarray. It spiraled into the rest of equatorial region especially the ever peaceful yei, state and displaced thousands of innocent civilians into exile in neighboring Uganda & Democratic republic of Congo (DRC). |
| 2017 | Thousands of refugees continue to flee the country in search for security as staying behind in the country became very insecure to lives & property. These refugees were resettled in various locations in East Africa and Uganda took some portion of these refugees and they are resettled in various settlements in the country. |





54% of refugees in Imvepi and Rhino Settlements have plot size of between 20 and 30 square meters which they are using for agricultural production.



Inter-Agency Livelihood Assessment Targeting Refugees and Host Communities in IMVEPI and Rhino Camp Settlements

Arua District, Northern Uganda

Report Prepared For UNHCR and World Vision Uganda

May 2017







