

# Refugee Debt and Livelihoods in Northern Kenya



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June 2024





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# Acknowledgements

This report is the result of contributions and generosity of many people. In addition to the co-authors, Raphael Bradenbrink and Andhira Kara worked as lead research coordinators during our fieldwork in Kakuma and Kalobeyei. Pascal Zigashane Bahati worked effectively as our field coordinator, assisted by Christine Achola Dominic, John Amanyia Simon, Betty Zekira Valeirano, Samuel Binja Cimanuka, and Farhan Aden to manage data collection.

One feature of our work under the Refugee Economies Programme is close collaboration with researchers from the refugee and host communities. During survey implementation, we were privileged to work with an excellent team of enumerators and interviewers. We are especially grateful to Michael Kuany Bol, Mayen Aguer Arok, David Reeth Lual, Tunda Emmanuel Ladu, Rami Hessen Almarat, Dak Simon Riek, Buay Kangach, Islam Ahmed Ismail, Dau Dave Jima, Orifa Joseph Jinaro, Arkanjelo Ogwalu Hillary, Hellen Nakeny Peter, Final Jendiya Taban, Dominic Pasquina Abalo, Piyo Ongoro Sebastian, Chubaka David, Niyungeko Antoine Bazahica, Daniel Kabala, Delphin Lwaboshi Balazire, Abdifatah Abdirahman Hussein, Sahara Khalif Jama, Khalid Abdikadir, Abdirashid Burhan, Abdi Sharmake, Feysal Abdi Abdirahman, David Chol, Zaituni Ali Hussein, Sirak Eshetu Alemu, Simon Oliya, Ntagahoraho Anicet, Awak Duot Ajang, Ghak Atem Ghak, Sabrino Musa Anur, Ifrah Mohamed Mohamud, Esther Nakuju Mauro, Abubakar Rugumba Kabura, Oriama Simon Oliya, Mary Awak, and Nyanchieu Paul.

We thank the Government of Kenya for approving our research, particularly the Department of Refugee Services (DRS). The field operations and logistics of this study were supported by the World Food Programme (WFP). From WFP, we are especially grateful to Calum Gardner, Felix Okech, Olivier Nkakudulu, Tina Wu, Zippy Mbatia, Samal Lokuno, Boniface Wanganju, Thomas Chika, Harun Kamau, Elizabeth Wambui, Walter Nyasinga, Ronald Odhiambo, Nicholas Mweresa, and Jackline Mwinzi among other colleagues. In addition, the ideas and comments kindly provided by Madison Bakewell, Alexander Betts, Antonia Delius, Naohiko Omata, Jade Siu, and Maria Stierna shaped the design and implementation of the study.

Finally, we wish to thank our funders. Our data collection in Kenya was generously funded by the IKEA Foundation as the main supporter of the Refugee Economies Programme. The report is based on the independent research of the RSC and does not necessarily reflect the views or policies of our donors and partners.

Published by the Refugee Studies Centre, ODID, University of Oxford, June 2024.

Designed by Vittorio Bruni.

Pictures taken by: Raphael Bradenbrink

Citation: Bruni, V., Muthui, P., M., Rodgers, C., Sterck, O. (2024). Refugee Debt and Livelihoods in Northern Kenya (Oxford: RSC).

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# Executive Summary

While humanitarian assistance to refugees has increasingly focused on fostering self-reliance, refugees are highly exposed to economic shocks that make self-reliance difficult to achieve. With limited access to employment and low wages, refugees are rarely able to put aside savings in case of emergency. Those who have recently fled their country of origin may have no assets to sell if needed. Informal social protection mechanisms may be unavailable or less effective in contexts of mass displacement where existing networks are disrupted and vulnerability becomes widespread. Given these constraints, borrowing is often the only coping strategy available to refugees.

Based on quantitative and qualitative data collected over a one-year period, this report studies how debt is used as a coping strategy by refugees living in Kakuma refugee camp and the Kalobeyei settlement in Kenya, which, together, constitute one of the largest refugee camps in Africa, hosting more than 270,000 refugees in October 2023 (UNHCR, 2023). In our analysis we find:

## 1. Refugees are highly dependent on humanitarian assistance

Refugee economies in Kakuma and Kalobeyei remain very dependent on humanitarian assistance. Only 40 percent of households in Kakuma and Kalobeyei have at least one adult working for an income, and those working earn only 5827 KES (\$49)<sup>1</sup> per month on average. Many of these jobs are supported by humanitarian actors. Other households tend to be reliant on food assistance distributed by the WFP.

## 2. Almost 9 in 10 refugees are indebted

Of households surveyed in October 2022, 87 percent had contracted a debt with their food retailer. Debts are large, especially in Kalobeyei. The average value of debt to food retailers is 6850 KES (\$57) per person among South-Sudanese households in Kalobeyei, which represents more than three months of food assistance through Bamba Chapaa. In Kakuma, the average value of debt to food retailers is 1380 KES (\$12) per person across all sampled nationalities. These levels appear to be unsustainable: 74 percent of households don't think they will be able to repay their debt. In comparison, levels of debt from other sources – such as family, friends, micro-finance institutions – are marginal.

<sup>1</sup> We use the exchange rate 1\$ = 120 Kenyan Shillings, which was the prevailing exchange rate at the start of the survey (October 2022).

### 3. Debt levels dramatically increased since 2019

Our data suggests that debt levels have dramatically increased since 2019. For South-Sudanese households in Kalobeyei Village 3, the average value of debt quadrupled over the four-year period, from an average of 2034 KES (\$17) per capita in November 2019 to 9667 KES (\$81) in September 2023.

### 4. Aid cards are used as a collateral to secure debt

Lack of livelihood opportunities, low levels of assistance, increasing prices, aid delays, aid cutbacks, and shocks all play a role in the creation and continuation of debt. Refugees use the SIM or ATM card on which food assistance is distributed as collateral to secure their debt. This mechanism explains why debt levels are higher in Kalobeyei, where 100 percent of food assistance is distributed through cash transfers (vs. 50% in Kakuma): the value of the collateral in Kalobeyei is higher.

### 5. Implicit interest rates push refugees into a debt trap

While there is no explicit interest rate associated with credit from shopkeepers, indebted households pay an implicit interest rate through higher prices. Data from the price survey shows indebted customers face prices that are 16 percent higher on average compared to prices with cash. This implicit interest rate can push households into a debt trap. Debt can lead to a state of dependency for households, restricting their ability to be proactive buyers and contributing to, or intensifying market inefficiencies. When debt escalates to uncontrollable levels, it can effectively push households further into the debt trap, and may intensify stress, feelings of shame, and result in ostracization and onward migration.

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# 01 Introduction

While humanitarian assistance to refugees has, in recent years, increasingly focused on fostering self-reliance, refugees are highly exposed to economic shocks that make self-reliance difficult to achieve. They are frequently victims of theft, harassment, discrimination, and aggression (Betts et al., 2018), and are affected by high rates of communicable and non-communicable disease (Langlois et al., 2016), including mental health issues (Bradenbrink et al., 2023). For those who do rely on aid, frequent disruptions and cutbacks in humanitarian assistance prevent them from moving toward economic stability (Siu et al., 2023).

Refugees have limited options for coping with shocks. In most countries, their legal status does not grant them the same level of entitlements as citizens (Betts and Sterck, 2022). Access to healthcare, education, employment, and social benefits is frequently curtailed. This is also the case in Kenya, where refugees struggle to access employment, permanent housing, and freedom of movement. In addition, while poor households generally rely on networks, selling assets, or seeking employment to cope with shocks (Dercon, 2002; Cox and Fafchamps, 2017), displaced populations often have limited recourse to these strategies (Jacobsen, 2014). With limited access to employment and lower than average wages, refugees are rarely able to put aside savings in case of emergency. Those who have recently fled their country of origin may have no assets to sell if needed. Informal social protection mechanisms may be unavailable or less effective in contexts of mass displacement, where existing networks are disrupted and vulnerability becomes widespread. Given these constraints, borrowing is often the only coping strategy available to refugees.

In this report, we study how debt is used as a coping strategy by refugees living in the Kakuma refugee camp and the Kalobeyei settlement in Kenya. Together, the Kakuma refugee camp and the Kalobeyei settlement constitute one of the largest refugee camps in Africa, hosting more than 270,000 refugees in October 2023 (UNHCR, 2023). Refugees in Kakuma and Kalobeyei primarily come from South-Sudan, Somalia, and Democratic Republic of the Congo (DRC).



Our research exploits five sources of data. First, we collected cross-sectional quantitative data on a representative sample of 1030 households from South-Sudan, Somalia, and DRC in October 2022. Second, we followed 622 South-Sudanese households over time, interviewing each household 10 times over a one-year period. Third, we collected data on prices on a weekly basis in different markets of Kakuma and Kalobeyei. Fourth, we did more than 200 qualitative interviews, with a range of respondents including refugees with and without debt, shopkeepers, community leaders, and staff from international organisations and NGOs. Finally, we collected high-frequency qualitative data with six South-Sudanese households over a one-month period to document their experiences throughout the duration of one aid distribution cycle.

This rich dataset allows us to expand the results from our 2019 study of South-Sudanese refugees living in Kalobeyei Village 3 (the Kalobeyei settlement is subdivided in three villages). Our 2019 study highlighted the massive scale of indebtedness in Kalobeyei Village 3, with 89 percent of South-Sudanese households reporting that they had taken food on credit from their food retailer (Sterck et al., 2021). Refugee households were using debt to cope with shocks, frequent delays in the distribution of food assistance, and unexpected aid cutbacks. The present report expands our 2019 assessment by focusing on the entire Kakuma camp and Kalobeyei settlement, by considering the three main nationalities of refugees living in these sites, and by examining changes over time as well as seasonality. Furthermore, the comparison of our 2019 and 2022-2023 datasets allows us to examine how the situation of refugees evolved over the past four years, a period during which the global economic, political, and humanitarian landscape was challenged by a series of crises – including the Covid-19 pandemic, Russia’s invasion of Ukraine, and crises in Afghanistan, Ethiopia, Sudan, and Yemen (see e.g. Vintar et al., 2022).

We conclude the report by proposing different policy options to address the debt issue, including (1) boosting consumer agency, (2) increasing the reliability and predictability of aid, (3) strengthening alternative coping strategies, (4) investing in livelihoods, and (5) encouraging progressive debt repayment.

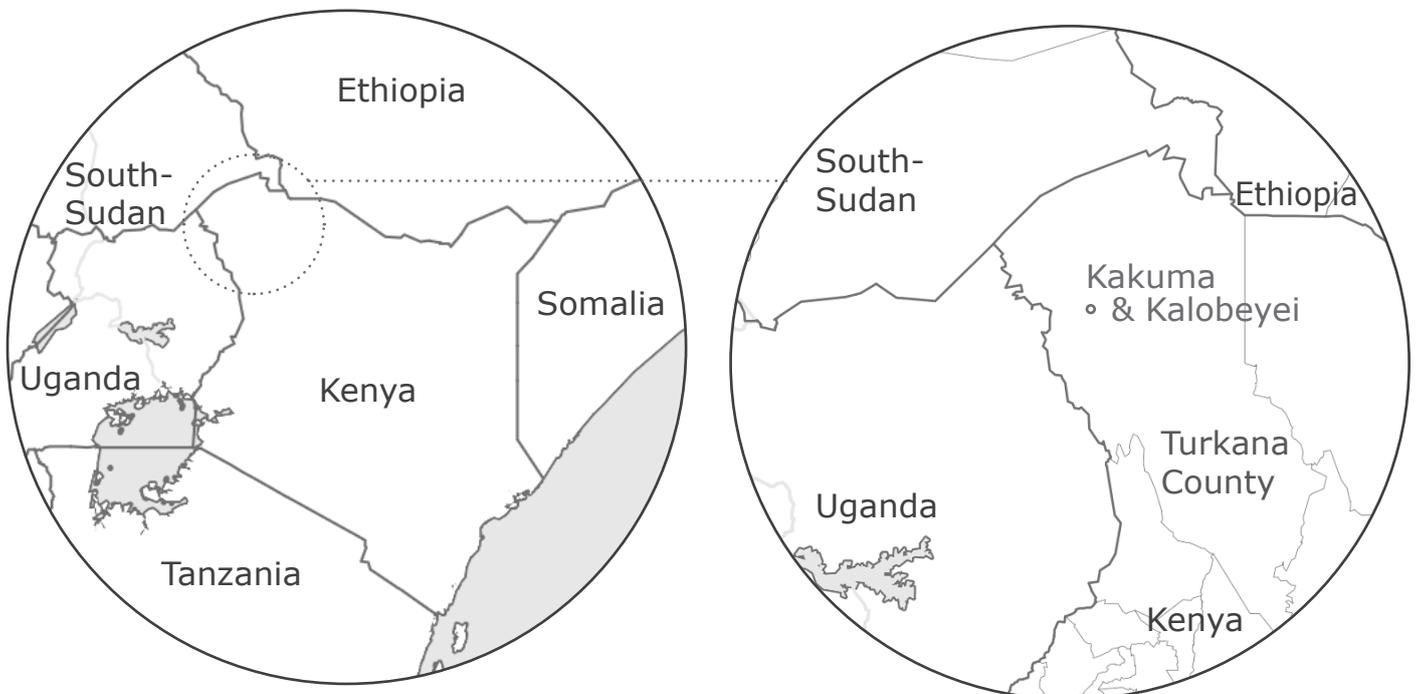
This report is structured as follows. Section 2 outlines the survey methodology. Section 3 describes the socio-economic context of the Kakuma camp and the Kalobeyei settlement. Section 4 discusses our findings on refugee over-indebtedness in Kakuma and Kalobeyei, exploring the causes and consequences of this issue. Section 5 concludes by discussing policy implications and possible solutions.

# 02 Context

The Kakuma refugee camp was established in 1992 in north-western Kenya. War, political violence, and food insecurity in neighbouring countries over the past three decades have increased the refugee population from tens to hundreds of thousands of people. As the population grew, the Government of Kenya and UNHCR expanded the camp several times and, in 2016, they opened the Kalobeyei settlement a few kilometres to the west of Kakuma. By the end of our fieldwork in late October 2023, the combined population of the Kakuma camp and the Kalobeyei settlement was over 270,000, making this one of the largest sites of refugee encampment in the world (UNHCR, 2023). More than half of the refugees living in Kakuma and Kalobeyei fled South-Sudan. The area also hosts significant numbers of refugees and asylum seekers from Somalia, the DRC, Ethiopia, Burundi, and Sudan.

Humanitarian assistance in Kakuma had long been provided under the 'care and maintenance' approach to refugee aid, which assumes that refugee situations are temporary, implying that assistance can focus on short-term provision of food assistance (usually in-kind), shelter, and protection. In practice, however, most refugee crises are protracted, with refugees waiting for years in limbo. Realising this, UNHCR and the Turkana County Government proposed a different vision for the Kalobeyei settlement.

Figure 1: Map of Kenya and Kakuma



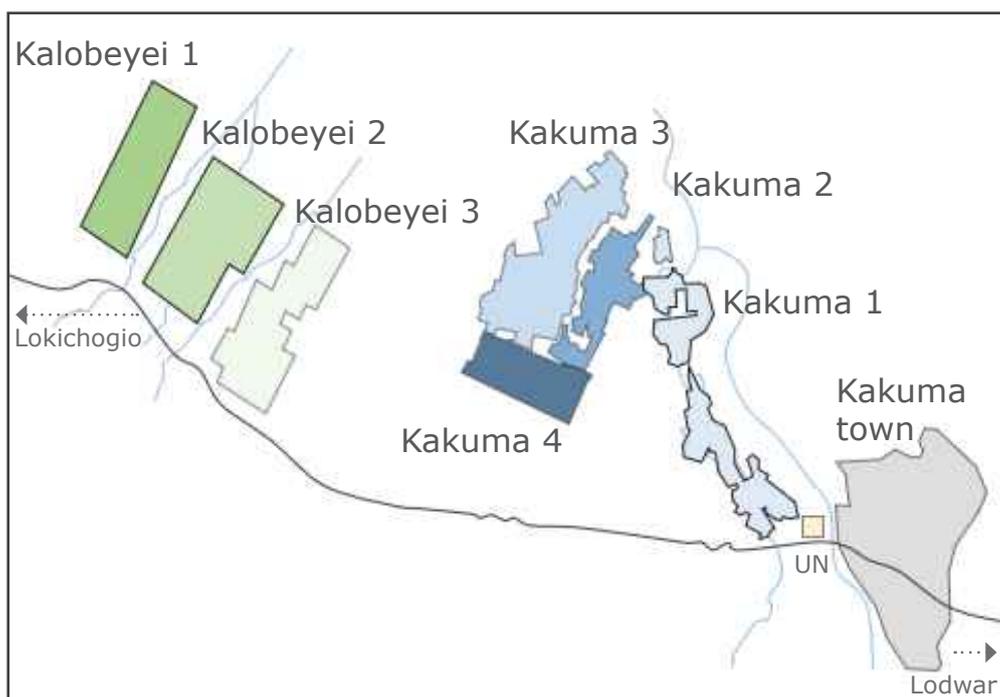
Source: Refugees Economies Programme, 2024

The Kalobeyei Integrated Social and Economic Development Plan (KISEDIP) lays out a strategy to implement humanitarian activities in a manner that also contributes to regional development and the attainment of SDGs in Turkana West sub-county, in pursuit of a win-win scenario for refugees and their host population (UNHCR, 2018). A key objective of the plan is the promotion of self-reliance, which entails “developing and strengthening livelihoods of persons of concern, and reducing their vulnerability and long-term reliance on humanitarian/external assistance” (UNHCR, 2011). For the WFP, the self-reliance agenda has been pursued gradually by replacing in-kind food delivery with digital cash transfers and by promoting access to agriculture.

WFP and UNHCR are the main providers of humanitarian assistance in Kakuma and Kalobeyei. In Kakuma, WFP distributes a combination of in-kind assistance and cash transfers. The cash-transfer programme is called Bamba Chakula; the transfers - which are received on a SIM card - are “restricted”, meaning that they can only be spent on specific food items at particular shops that were contracted by WFP (Siu et al., 2023; Delius and Sterck, 2024).

In October 2022, each refugee registered in Kakuma received 6.51 kg of rice, 1.86 kg of beans, 1.085 L of vegetable oil, and 850 KES (\$7) in cash. In theory, this should be enough to cover 80 percent of refugees’ needs. In July 2023, because of funding issues, WFP reduced in-kind assistance to 6.51 kg of wheat grain, 1.55 kg of beans, 1.085 L of vegetable oil, while cash assistance was reduced to 450 KES (\$4) per month. This reduced ration should cover 60 percent of needs only.

Figure 2: Map of Kakuma and Kalobeyei



Source: Refugees Economies Programme, 2024

In Kalobeyei, WFP distributes food assistance through a programme of unrestricted cash transfers called Bamba Chapaa. Transfers are made on an ATM card and are “unrestricted”, meaning that they can in theory be spent on any food and non-food items at any shop that can accept card payments, or at any shop if the recipient manages to withdraw cash (Siu et al., 2023). In October 2022, WFP was distributing 2000 KES (\$17) per refugee per month in Kalobeyei. The monthly transfer was reduced to 1600 KES (\$13) per month in July 2023.

In both Kakuma and Kalobeyei, UNHCR has also been distributing cash transfers to support purchases of cooking fuel, soap, and other hygiene products through ‘Bi-monthly Cash Grants for Core Relief Items and Energy Support’. However, this programme was discontinued in the first quarter of 2023 because of a lack of funding.

Previous research by the Refugee Economies Programme showed that the promotion of digital cash transfers and agriculture had a positive effect on food security, perception of self-reliance, and life satisfaction one year after the creation of the Kalobeyei settlement (MacPherson and Sterck, 2021). The market-based approach to food delivery has created income opportunities for retailers and wholesalers throughout Kakuma and Kalobeyei, from whom people make their purchases (Delius and Sterck, 2024). The switch from restricted to unrestricted cash transfers in 2019 increased non-food expenditure and subjective well-being, without significantly affecting food consumption (Siu et al., 2023).



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However, these studies have also highlighted the structural barriers to self-reliance, including restrictions on refugees' rights and geographical constraints. Kakuma and Kalobeyei are located in an arid area of the country that has not historically sustained large urban populations. The densely populated camps put immense pressure on scarce natural resources like ground water and firewood. The lack of precipitation constrains farming activities. The significant distance from Kenya's main markets restricts livelihood opportunities.

To be sure, Kakuma and Kalobeyei are similar to medium-sized cities, and lively markets exist in both sites (IFC, 2018). Yet, the overall situation of refugees in Kakuma and Kalobeyei remains difficult (Betts et al., 2019; Pape et al., 2021), with many refugees remaining dependent on humanitarian actors as providers of humanitarian assistance and work (Jansen, 2018). Yet, humanitarian actors also face their own challenges, including a systemic lack of adequate funding or, as stated by one of our key informants, a "stark disproportionality between funds and needs". Funding gaps worsened following the Covid-19 pandemic and crises in other contexts, including Russia's invasion of Ukraine, which led donors to redirect their attention towards other priorities. In parallel, the refugee population in Kakuma and Kalobeyei continued to grow due to continued conflict in neighbouring countries and secondary movements of refugees coming from Uganda, where humanitarian aid for many refugees had been reduced.



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# 03 Methodology

Our mixed-methods research exploits qualitative and quantitative data collected in the Kakuma refugee camp and the Kalobeyei settlement between September 2022 and November 2023. Data collection was organised in four phases: (1) an exploratory qualitative phase, (2) a cross-sectional quantitative survey of refugee households, (3) a longitudinal quantitative survey of refugee households and prices, and (4) an in-depth qualitative phase. The data were collected by trained refugee enumerators of South-Sudanese, Congolese, and Somali nationalities. This project obtained ethical approval from Oxford University and the required research permissions from the Government of Kenya. Logistical support was generously provided by WFP Kenya.

## 03.1 Exploratory qualitative phase

In September 2022, a total of 70 semi-structured qualitative interviews were conducted with refugees and shop owners. Topics covered in the questionnaire included economic activities, resources, assets, consumption patterns, support received, challenges faced (with an emphasis on indebtedness), and coping strategies to deal with these challenges. Qualitative interviews were administered in local languages, and translated transcripts were coded according to emerging themes. We also conducted several focus group discussions with our team of enumerators to examine the causes and consequences of debt and identify potential policy solutions that would work and be accepted by refugee communities. This data informed the subsequent phases of the research, including the construction of the questionnaire for the quantitative surveys.

Figure 3: Sample size by country of origin and data collection

Country of origin	Kakuma	Kalobeyei	Cross-sectional	Panel data
 South-Sudan	260	362	Yes	Yes
 Democratic Republic of the Congo	216	0	Yes	-
 Somalia	192	0	Yes	-
   Total	668	362	1030	622

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## 03.2 Cross-sectional quantitative survey

In October 2022, we conducted representative surveys of refugee households in Kakuma and Kalobeyei (Figure 3). In total, 1030 refugee households were interviewed, further divided into 260 South-Sudanese households, 216 Somali households, and 192 Congolese households in Kakuma, and 362 South-Sudanese households in Kalobeyei. Overall, our target population covers 82 percent of the total refugee population in Kakuma and Kalobeyei. In each household, we interviewed the person in charge of the last food purchases. Sampling weights are accounted for in the analysis.

The questionnaire included a variety of questions on household demographics, employment, consumption, expenditures, food stock, aid, and food security. A large part of the questionnaire also focussed on shocks and possible coping strategies, including debt. The questionnaire was translated into six different languages. The Oxford research team trained refugee enumerators for over a week.

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## 03.3 Longitudinal quantitative survey

We undertook a high-frequency survey with the 622 households from South-Sudan that were interviewed as part of the cross-sectional study (we could not follow the Somali and Congolese households because of budget constraints). Each South-Sudanese household participated in 10 rounds of interviews. A quasi-random process was used to allocate interview dates for each household. Thanks to this research design, we can examine trends over time, both in the short run (within a given month) and long run (over a one-year period).

In parallel, we also undertook a price survey, collecting data on the prices of dozens of goods on a weekly basis in different markets of Kakuma and Kalobeyei. This dataset allows us to examine how prices evolve over time and respond to shocks affecting the camp economy (e.g. reduction in humanitarian assistance).

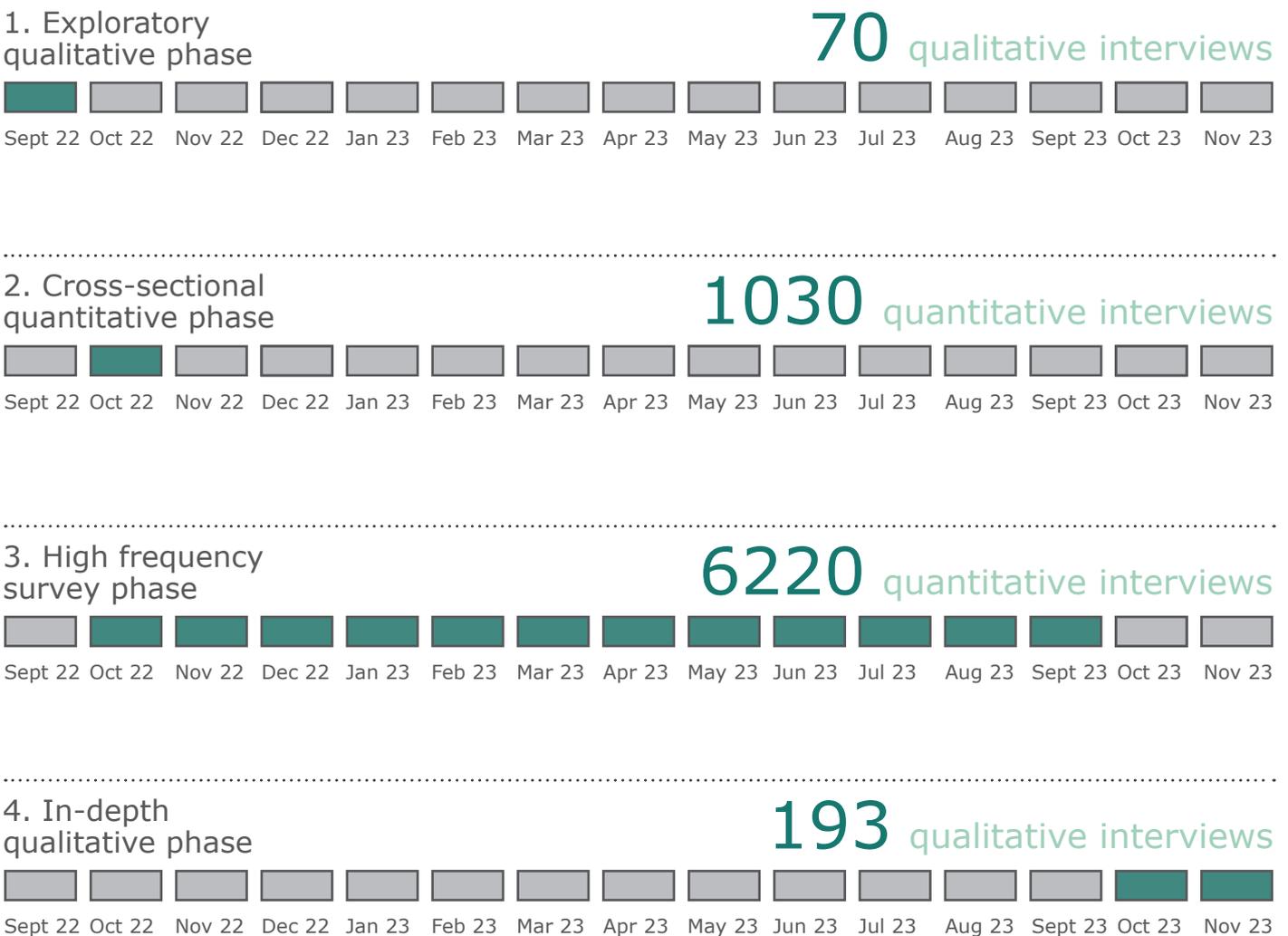


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## 03.4 In-depth qualitative phase

In October and November 2023, our team undertook a second phase of qualitative work to examine preliminary findings from the quantitative survey. This final phase was characterised by two qualitative components: one-off interviews and household food security journaling. First, 134 one-off qualitative interviews were conducted with refugees, shopkeepers, wholesalers, and key informants (UN, NGOs, and Equity bank staff). Themes covered were shocks and recovery; debt, aid-reduction, and the economic cycle; water scarcity; debt and migration; challenges for new arrivals; and prospects for durable solutions. For the food security journaling component, six South-Sudanese households of different ethnicities living in Kakuma or Kalobeyei were interviewed two to three times per week for one month, which corresponds to one cycle of food distribution. This allowed us to understand the strategies that people use to make ends meet, and how these strategies vary over time throughout the monthly cycle of food aid distribution (which differs from Kakuma and Kalobeyei).

Figure 4: Overview of data collection phases





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# 04 Socio-economic situation in October 2022

In this section, we use quantitative data from our cross-sectional survey to describe the socio-economic situation of refugees living in Kakuma and Kalobeyei in October 2022. We also use qualitative data to illustrate findings.

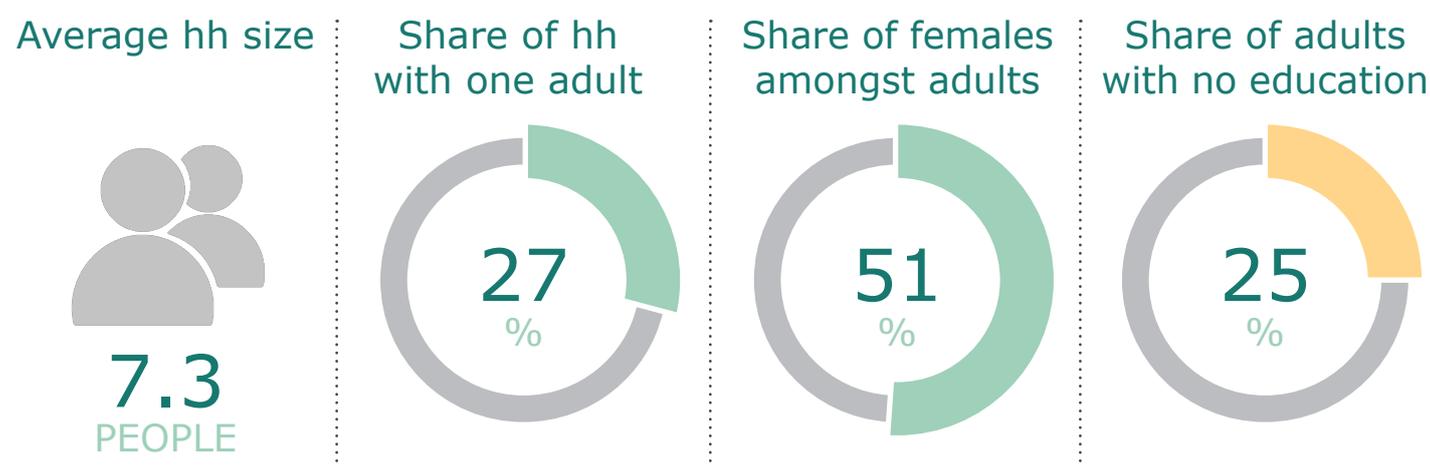
## 04.1 Demographics

Using our cross-sectional data collected in October 2022, we estimate that the average household size in Kakuma and Kalobeyei is 7.3 people. South-Sudanese households tend to have larger households than other nationalities, with an average household size of 8.5 people. Dependency ratios are large: the ratio of the total number of children (<18 year old) and elderly ( $\geq 65$  year old) to the total number of working-age adults is 1.48. By comparison, this ratio was about 0.64 in OECD countries in 2022 (OECD data). This shows that families living in Kakuma and Kalobeyei have a limited number of potential bread winners for each dependent individual. The adult population is young, with an average age of 30 years.

Slightly more than half of adults are female (51%). Female refugees are more likely to live in households with no other adults. Overall, 27 percent of households have one single adult, of which 68 percent are female.

One quarter of adults do not have any formal education (25%) and 37 percent of adults did not complete primary school. This is in stark contrast with younger generations, as 97 percent of children between 6 and 18 are regularly attending school in Kakuma and Kalobeyei. Most of the children enrolled in school regularly receive free meals at school.

Figure 5: Demographic indicators



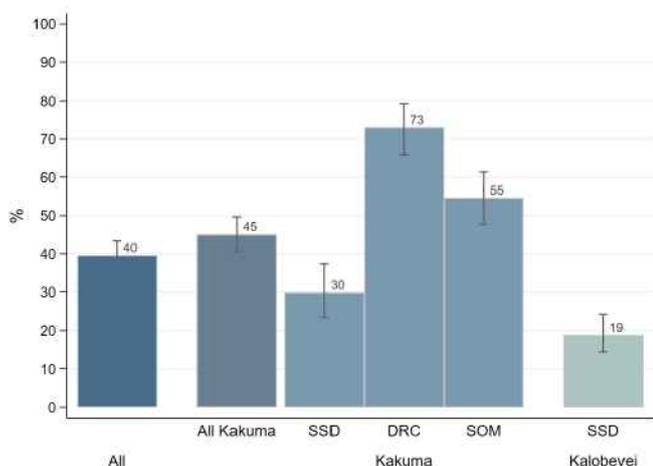
## 04.2 Livelihoods

Refugees in Kenya remain subject to a strict policy of encampment, with limitations on their rights to move and seek employment. Refugees can only work formally if they have the necessary authorisations and if their qualifications are recognized by the relevant authorities. These conditions are difficult to fulfil, which is why most employed refugees work informally or are employed by NGOs and international organisations as ‘incentive workers’, a status of volunteer giving access to a small financial compensation. While some opportunities exist in Kakuma and Kalobeyei (IFC, 2018), the remoteness and aridity of the location severely constrain both agriculture and trade.

Using data from October 2022, we estimate that only 40 percent of households in Kakuma and Kalobeyei have at least one adult working for an income (Figure 6). This share was the highest for Congolese households in Kakuma (73%) and lowest for South-Sudanese households in Kalobeyei (19%). At the individual level, only 15 percent of adults worked for an income, which includes both wage employment and self-employment (Figure 7). This proportion was largest for Congolese (38%) and Somali (25%) refugees in Kakuma and lowest amongst South-Sudanese refugees (8% in Kakuma and 9% in Kalobeyei). The most common sectors of employment of working adults are manual work, food related business, and education.

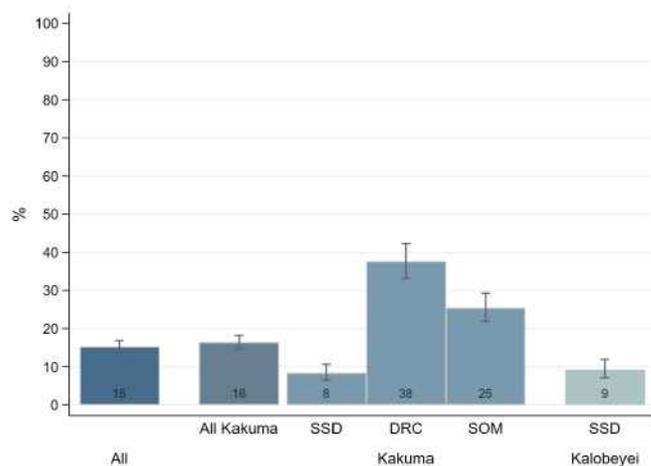
About 35 percent of working adults are self-employed or work for a family business. Another important form of refugee employment is incentive work with international organisations and NGOs. About 27 percent of workers reported being employed as incentive workers. The average wage for this type of employment was 6400 KES (\$53) per month. This is below what national staff with similar job descriptions are paid when employed by the same organisations.

Figure 6: Share of adults with at least one working adult



Source: Refugees Economies Programme, October 2022

Figure 7: Share of adults working by camp and nationality

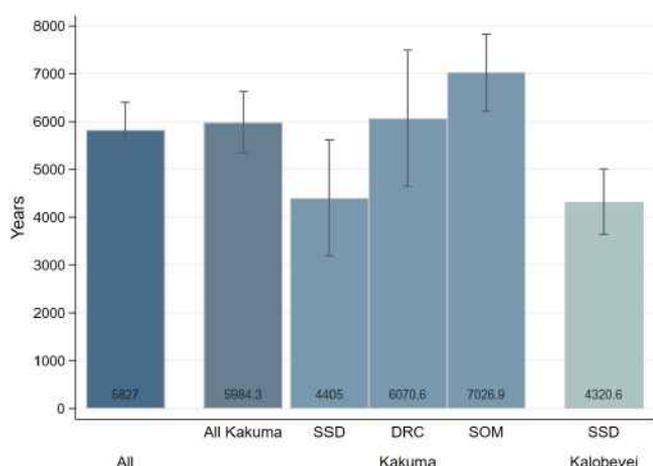


Source: Refugees Economies Programme, October 2022

Our data highlights the important segmentation of the labour market in Kakuma and Kalobeyei by nationality. Incentive work is the primary source of employment for South-Sudanese workers (53%), compared to 11 percent for Somali workers whose main occupation is being self-employed or working for the family business (44%). The situation of Congolese workers is more diverse, with 38 percent working as incentive workers and 30 percent working for their own or family business. For those working, we also observe important differences in average monthly income by nationality (Figure 8), from 4300 and 4400 KES per month (\$37 and \$38) for South-Sudanese refugees in Kalobeyei and Kakuma respectively, to more than 7000 KES per month (\$58) for Somali workers in Kakuma.

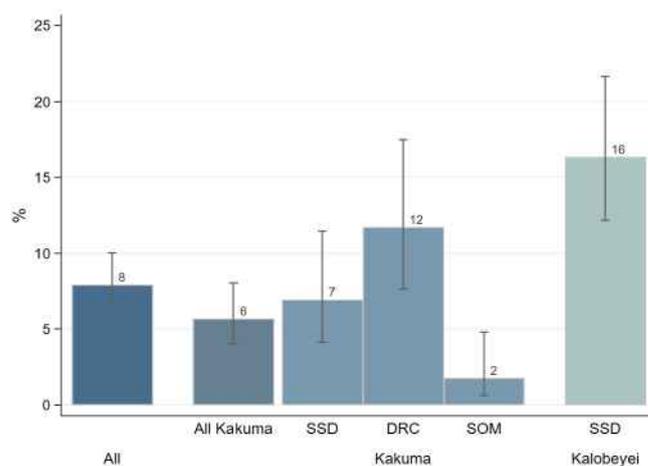
Farming is also an important activity (Figure 9), especially in the Kalobeyei settlement, where the WFP has collaborated with the Food and Agriculture Organisation (FAO) to construct several water pans for drip irrigation farming. Each water pan supports cultivation for a maximum of 150 refugees and 150 local Kenyans. Some individuals have indicated that this can be highly profitable, but the number of plots available is small relative to the population of the settlement. Kitchen gardens near people’s shelters offer a modest but more widespread option for cultivation, although produce is limited by lack of access to water. Overall, 16 percent of South-Sudanese households in Kalobeyei reported farming (which is lower than the 28 percent recorded in 2019 in Village 3), while only 6 percent of the refugees living in Kakuma were involved in farming. In Kakuma, the share was highest amongst Congolese (12%) and lowest for Somali households (2%). On average, 93 percent of the households farming reported facing issues with this activity in the four weeks before the survey and, by far, the most common problem reported was lack of water.

Figure 8: Average monthly income from work for those working



Source: Refugees Economies Programme, October 2022

Figure 9: Share of households involved in agriculture



Source: Refugees Economies Programme, October 2022

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## 04.3 Aid economy

With scarce employment opportunities and limited access to water for farming, many refugee households are partly or totally dependent on humanitarian assistance delivered by WFP and UNHCR to survive. As one South-Sudanese woman in Kalobeyei explained:

“There is nothing I can do to reduce this poverty for my family, because there is no job, nor any kind of business. We can only depend on Bamba Chakula.”

In Kakuma, WFP distributes a combination of in-kind assistance and cash transfers restricted to food items (see Section 2). In Kalobeyei, WFP distributes only cash transfers made on an ATM card. The transfers are “unrestricted”, meaning that they can in theory be spent on any food and non-food items at any shop that can accept card payments (Siu et al., 2023). Figure 10 shows that food assistance constitutes an important part of the total income for refugee households, especially for South-Sudanese households in Kalobeyei. Refugee households are far from being self-reliant.

The effects of these cash transfers on the camp economy are many-fold. For one, the dependency of the local economy on monthly injections of food aid has given rise to irregular business patterns. Some shops are only open during distribution week and focus on the trade of in-kind rations. Other shopkeepers solely focus on selling goods under the Bamba Chakula system and work only during cash-transfer week.

Secondly, the aid economy is characterised by specific price increases or decreases. For instance, during distribution week, when tens of tons of grains, pulses, and oil are distributed to refugees, prices tend to drop. Some shopkeepers even reported not buying certain goods at all when these are being distributed. WFP also informs shopkeepers of the content of their next in-kind distribution one or two weeks in advance, so that food retailers avoid purchasing these items. As explained by one participant to our qualitative survey:

“During the distribution week, food prices decrease, but only for the food being distributed. For example, five litres of cooking oil that costs 1800 shillings before the distribution week may reduce to 1500 shillings during the distribution week. It then increases again for the three weeks after the distribution.”

We confirm this observation using quantitative data from the price survey: prices of staple food that are distributed drop by about 5 percent on distribution day, and then progressively increase to get back to their median level at the end of the month.

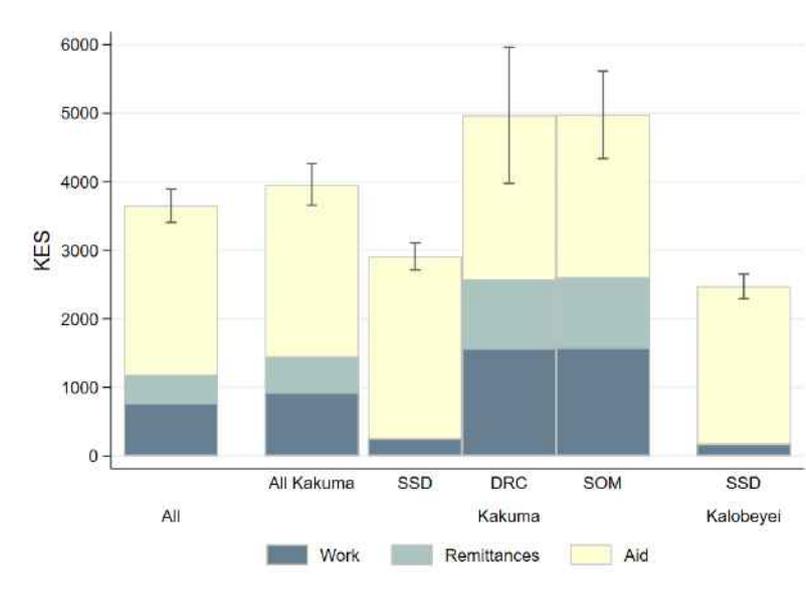
The impact of cash transfers is opposite, meaning that food prices tend to increase during the distribution week. There are only a handful of wholesalers catering for the whole camp and they can act as an oligopoly, collectively increasing food prices when cash transfers are made. Prices also respond to shocks to aid programmes: using data from our price survey, we find that prices of staple food reduced by about 6 to 7 percent when food rations were cut by WFP in July 2023, which led to a reduction in demand.

A third peculiar effect of the aid economy is that the ATM and SIM cards used to receive aid transfers are handed over to shopkeepers as a form of security in order to take food on credit. This has enabled the accumulation of a level of debt that was not possible before the introduction of cash transfers in Kakuma and Kalobeyei. We examine this issue in Section 5.

A fourth peculiarity is the restricted nature of the Bamba Chakula programme of cash transfer in Kakuma. The transfers are technically “electronic food vouchers” that can only be used to purchase specific food items at registered retail locations. These restrictions have led to the emergence of an important resale market as, when they need cash, refugees purchase food with their vouchers and then resell it in exchange for cash. As shown by Siu et al., (2023), median prices in the resale market are 18 to 38 percent lower than prices in the retail market, implying that households reselling goods incur significant losses. A less-common strategy to obtain cash is to withdraw it from a Bamba Chakula food retailer. However, as this practice is not allowed by WFP, shopkeepers typically add a 10 percent charge for withdrawing cash.

These examples indicate that the camp economy is largely based on a monthly economic cycle, and highly affected by aid distribution. All intervention modalities: in-kind, restricted cash, and unrestricted cash affect the camp economy differently.

Figure 10: Monthly income per capita by source of income



Source: Refugees Economies Programme, October 2022

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## 04.4 Living standards

One of the main consequences of low income and lack of livelihood opportunities is food insecurity (Figure 11). Using data from October 2022, we estimate that about 83 percent of the sample population is food insecure according to the Household Food Insecurity Access Prevalence index (HFIAP). The situation is particularly severe for South-Sudanese households in both Kakuma (95%) and Kalobeyei (86%). The average daily calorie intake per capita is only 1375 kcal for South-Sudanese households in Kalobeyei and 1512 kcal for South-Sudanese households in Kakuma, which is much lower than WFP's recommended intake of 2100 kcal per person per day. Only 31 percent of households had more than 2100 kcal the day preceding the survey.

In terms of eating habits, about 27 percent of the population ate only one meal the day before the interview and 1 percent of all households reported going without eating food the day before the interview. Some respondents also drew attention to the problem of dietary diversity. As one South-Sudanese man in Kakuma explained:

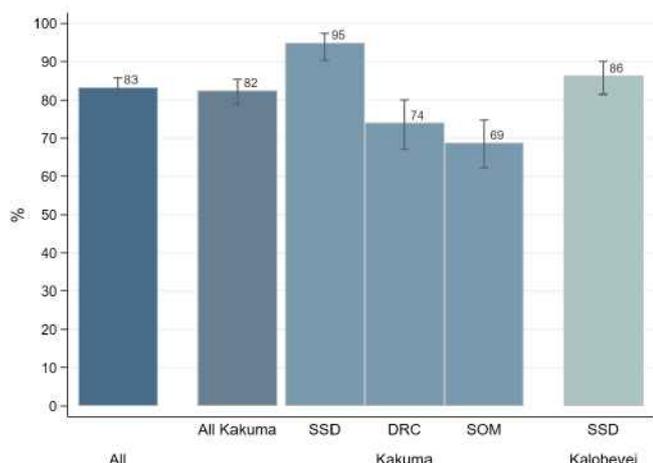
“With in-kind food distribution, they give me food for two months; rice, peas and so on. But also remember I am a human being, and I cannot just feed on rice and peas for two months. The body becomes malnourished when it receives just one food type. With the cash transfers, I can have a more balanced diet. When the body gets a full range of foods... proteins, vitamins and all the necessary things... It can resist disease. But when eating only rice and peas for two months, it is difficult. For this reason, I prefer cash transfers.”



Looking at assets, our data indicates that 92 percent of refugee households in Kakuma own a mobile phone, while 62 percent of South-Sudanese households in Kalobeyei do so. About 60 percent of refugee households had at least one smartphone (Figure 13). This was most common amongst Somali refugees (89%) in Kakuma and least common for South-Sudanese households in Kalobeyei (29%). Less than 3 percent of households reported owning a computer. The average value of assets owned by households vary by nationality, from 7100 KES (\$59) for South-Sudanese households in Kalobeyei and 9700 KES (\$81) for South-Sudanese households in Kakuma, to more than 20,000 KES (\$167) for both Congolese and Somali households in Kakuma (Figure 12).

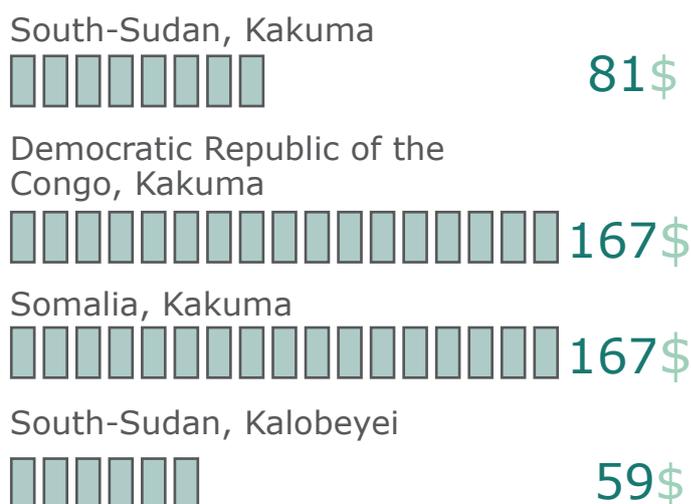
About one in five refugee households reported having farm animals (mostly doves and chickens). This was most common amongst South-Sudanese households in Kalobeyei (34%), followed by Congolese (27%) and South-Sudanese households (20%) in Kakuma. Refugees are prevented from raising larger livestock, such as goats or camels, as these would deplete the available vegetation for the herds of the local pastoralist population.

Figure 11: Share of severely food insecure households (HFIAS scale)



Source: Refugees Economies Programme, October 2022

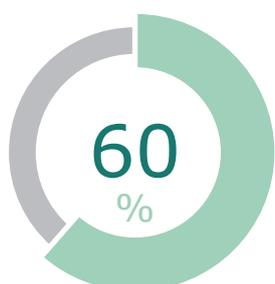
Figure 12: Asset value by camp and nationality



Source: Refugees Economies Programme, October 2022

Figure 13: Asset ownership

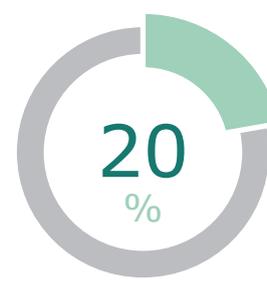
Share of hh with a smartphone



Share of hh with a laptop

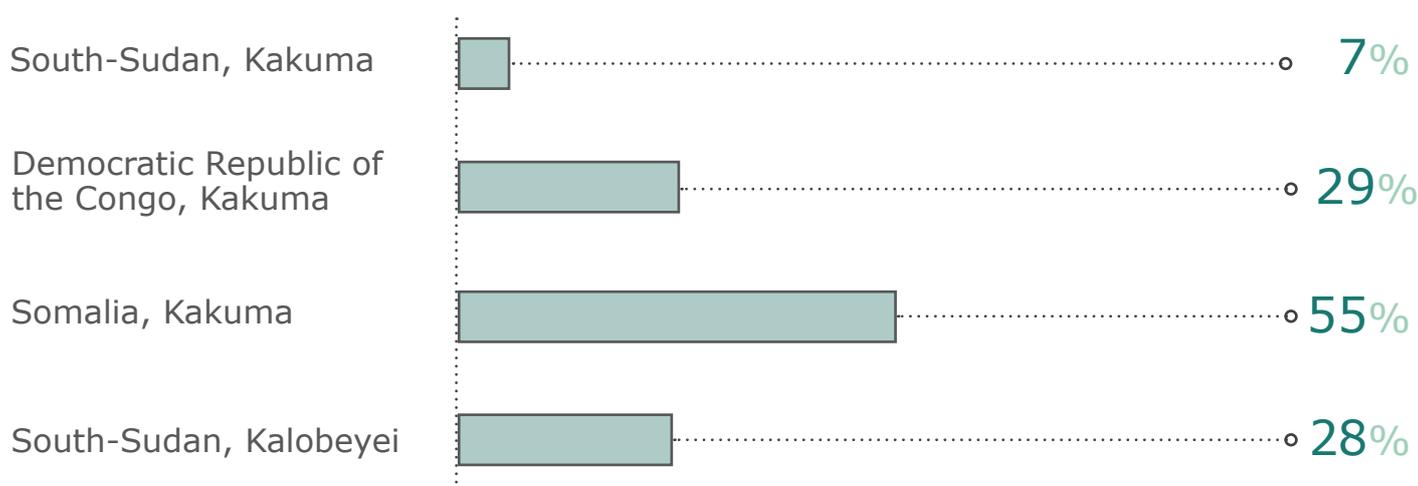


Share of hh with farm animals



Visible differences between camps and nationalities exist in terms of housing and amenities. These differences are largely a product of the times when they were built and the different shelter programmes that were offered in different parts of Kakuma and Kalobeyei. In Kakuma 1 – the oldest part of the camp – the walls of most houses are built with mud bricks (67%) or iron sheets (31%), while in Kakuma 4, most houses are built with mud bricks (98%). In Kalobeyei, the walls of a majority of houses (61%) are constructed with stones or concrete bricks, while 36 percent of houses are plastic tents. This is the result of the progressive roll-out of the Cash-for-Shelter programme in Kalobeyei, through which households receive between \$1000 and \$2000 from UNHCR to replace the plastic tents offered by UNHCR upon arrival with permanent shelters. In both locations, the most common material used to build the roof is iron sheets (94%). House floors tend to be made of earth or sand in both Kakuma (86%) and Kalobeyei (71%). In Kakuma, 55 percent of Somali households are connected to a source of electricity, while only 29 percent of Congolese households and 7 percent of South-Sudanese households are connected. In Kalobeyei, 28 percent of South-Sudanese households reported having electricity (Figure 14).

Figure 14: Access to electricity by camp and nationality



Source: Refugees Economies Programme, October 2022



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# 05 Debt

In this section, we first characterise the extent of indebtedness in both Kakuma and Kalobeyei, we then describe how the magnitude of indebtedness evolved over time and, finally, we examine both the causes and the consequences of (over-)indebtedness.

## 05.1 Indebtedness in October 2022

Using our cross-sectional data collected in October 2022, we estimate that 87 percent of refugee households in Kakuma and Kalobeyei are indebted to a food retailer (Figure 15). Indebtedness is more common amongst South-Sudanese households in both Kalobeyei (96%) and Kakuma (88%) compared to Somali (86%) or Congolese households (67%) in Kakuma. In almost every case, the debt is contracted with the main Bamba Chakula or Bamba Chapaa food retailer of the household, as explained by a South-Sudanese woman in Kakuma:

“The shop owner is in charge of everything; I just have to go on monthly intervals to pick up my Bamba Chakula. I don’t really know the exact amount sent to my Bamba Chakula; all we do is avail ourselves at the end of the month or whenever you want to take food stuffs on credit. [...] With the credit piling up, you don’t really care how much is sent or if they have added more.”

Borrowing food or money from family and friends is the second most common borrowing strategy after debt from food retailers. One Burundian man, who was a new arrival in the Kalobeyei settlement, explained how he had relied on the generosity of others on occasions when his own household ran out of food:

“That sort of situation used to happen a lot, where the food you have in your store cannot complete a full month. When that would happen, we used to go and ask help from neighbours, or from people at the church where we used to pray. And sometimes a neighbour would just tell you to bring your small children to eat with theirs.”

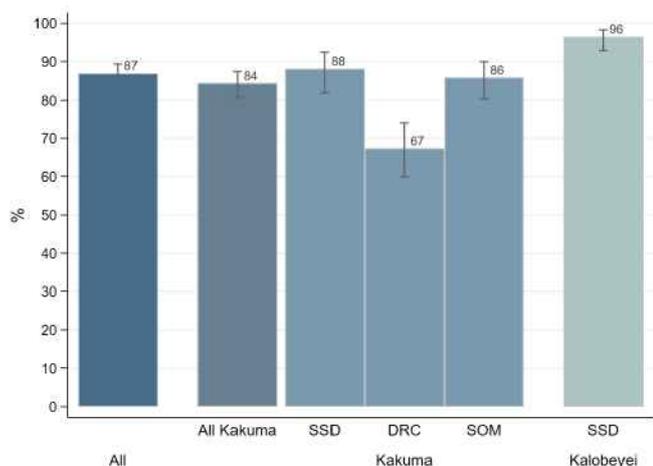
Overall, 18 percent of households owe money to family and friends. In addition, 10 percent of households owe food or non-food items to family and friends. However, the fear of losing the respect of friends and relatives pushes some to turn to credit arrangements with shop owners instead. As one Somali man explained:

“Asking for help too much can take away your dignity. For that reason, I have decided instead to take on debt [from a shop].”

Debts with banks, microfinance institutions, or saving groups are rare.

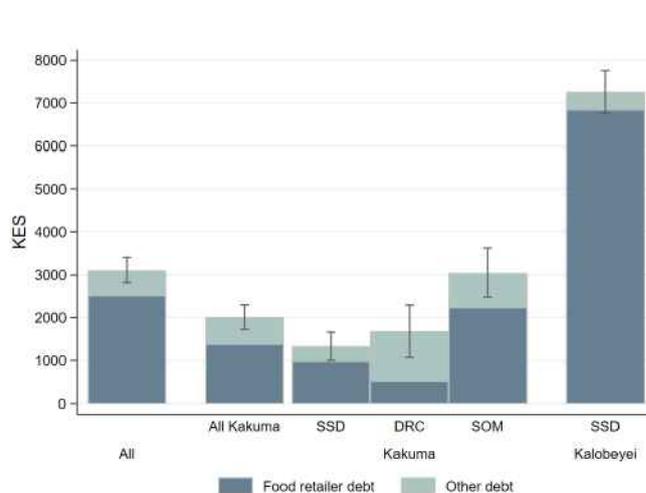
The average amount of debt contracted with food retailers is much larger in Kalobeyei than in Kakuma (Figure 16). The average value of debt to food retailers is 6850 KES (\$57) per person among South-Sudanese households in Kalobeyei, which represents more than three months of food assistance through Bamba Chapaa. In Kakuma, the average value of debt to food retailers is 1380 KES (\$12) per person across all sampled nationalities in Kakuma. The average value of debt to family and friends is much smaller in comparison: 415 KES (\$3) per person for South-Sudanese households in Kalobeyei and 634 KES (\$5) per person for the three nationalities surveyed in Kakuma. We note that debt to family and friends is more important than debt to food retailers for Congolese households.

Figure 15: Share of households that are indebted to a food retailer



Source: Refugees Economies Programme, October 2022

Figure 16: Average amount of debt per capita, by source



Source: Refugees Economies Programme, October 2022

The share of indebted households who completely agree with the statement “your debt is too large” is 82 percent for South-Sudanese households in Kalobeyei, 54 percent for South-Sudanese households in Kakuma, and 36 and 37 percent for Somali and Congolese households in Kakuma respectively (Figure 18). Only 26 percent of indebted households completely agree or mostly agree that they will be able to repay their debt. This share shrinks to 11 percent when considering only South-Sudanese households in Kalobeyei. As one Congolese man in Kalobeyei explained:

“The majority of people here are living off of debts worth five to seven months of Bamba Chakula transfers. Most of my neighbours are no longer given debts when they request them, because of the large amount they already owe to the shop owner.”

During qualitative interviews, some South-Sudanese respondents reported cases of refugees falling so deep into debt that they fled the camp to avoid pressure for repayment. By contrast, for Somali refugees, debt is often considered as a reason for not being able to leave the camp.

Giving out large quantities of credit presents considerable risk to retailers, which they attempt to reduce by taking gages - items of value provided as collateral to guarantee repayment. As one Congolese shop owner explained:

“Some clients who are in debt fear coming back to make purchases from my shop, because they believe that I will force them to repay all of their debts. This brings conflict. I have taken measures to prevent such conflict, which is that customers who want credit will come with a gage [an item of value]... As a gage, I can accept telephones, radios, or the ATM card on which they receive cash transfers for soap... If they fail to repay their debts, I can use that item to regain what I am owed.”

In both camps, the SIM or ATM cards used to receive cash transfers are the most important form of security for credit. Refugees often leave their cards in the custody of the shop owner who provides them with credit, ensuring that they will return to that shop owner when the next month’s transfer arrives, rather than simply moving on to another shop. In principle, the indebted person returns to the shop when the next month’s transfer arrives, which is used to repay what is owed. However, most debtors are by that time also in dire need of more food, such that debts are usually rolled over to the next month.

In Kakuma, about 71 percent of indebted households reported that their Bamba Chakula SIM card is with the shop owner. Some differences between South-Sudanese (78%), Congolese (88%), and Somali (57%) households were observed. In Kalobeyei, a staggering 95 percent of indebted households reported that their Bamba Chapaa ATM card is used as collateral (Figure 17). Overall, we estimate that 75 percent of the Bamba Chakula and Bamba Chapaa cards of indebted households are kept by food retailers (some households have more than one card). When food retailers keep the cards of their clients, they almost always know the PIN used by their customer to withdraw their cash assistance (94%).

Figure 17: Share of indebted households reporting that their card is kept by their food retailer

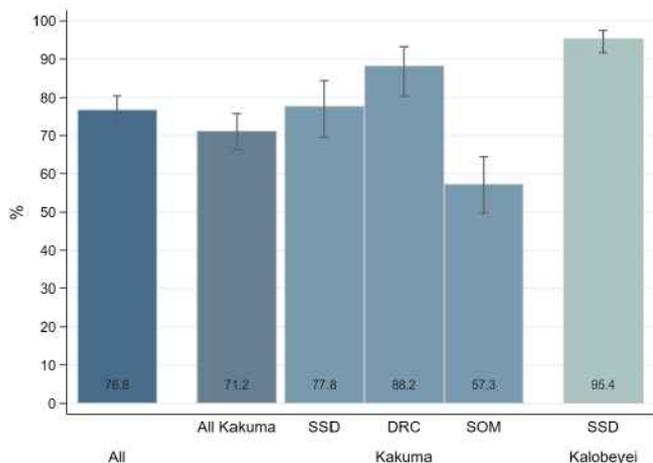
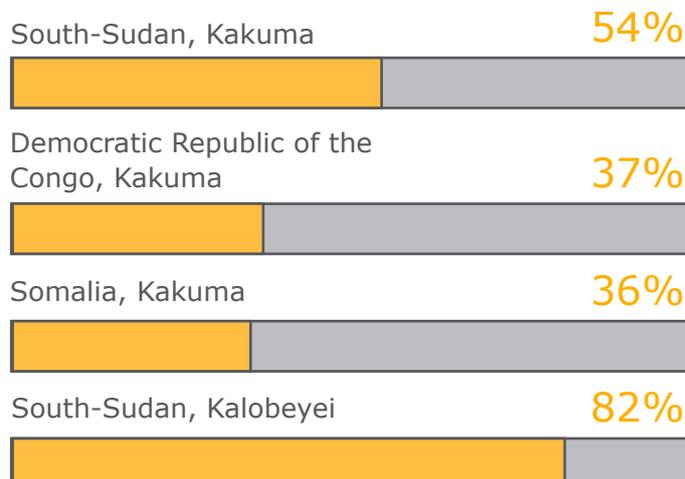


Figure 18: Share of indebted households who completely agree with the statement: “your debt is too large”



Source: Refugees Economies Programme, October 2022

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## 05.2 Indebtedness over time

We examine how indebtedness evolved between November 2019 and September 2023 by combining two datasets. First, we followed a representative panel of 622 South-Sudanese households in Kakuma and Kalobeyei between October 2022 and September 2023, asking them every four to six weeks to report the extent of their debt. Second, we collected data on a representative sample of South-Sudanese living in Kalobeyei Village 3 in November 2019.

In November 2019, a staggering 89 percent of South-Sudanese households living in Village 3 were already indebted to their food retailer. In September 2023, this percentage had further increased to 95 percent. On the intensive margin, we find that the average value of debt of South-Sudanese households in Kalobeyei Village 3 massively increased over the four-year period (Figure 19), from an average of 2034 KES (\$17) per capita in November 2019 to 9667 KES (\$81) in September 2023 (+375%). This increase in indebtedness cannot be solely explained by price inflation or by increased means. Over the same period, prices increased by about 30 percent in Kenya and the food assistance value for Kalobeyei fluctuated over time, increasing from 1400 KES (\$12) in 2019 to 2000 KES (\$17) in September 2022 (+43%), and then dropping to 1600 KES (\$13) in July 2023 (-20%).



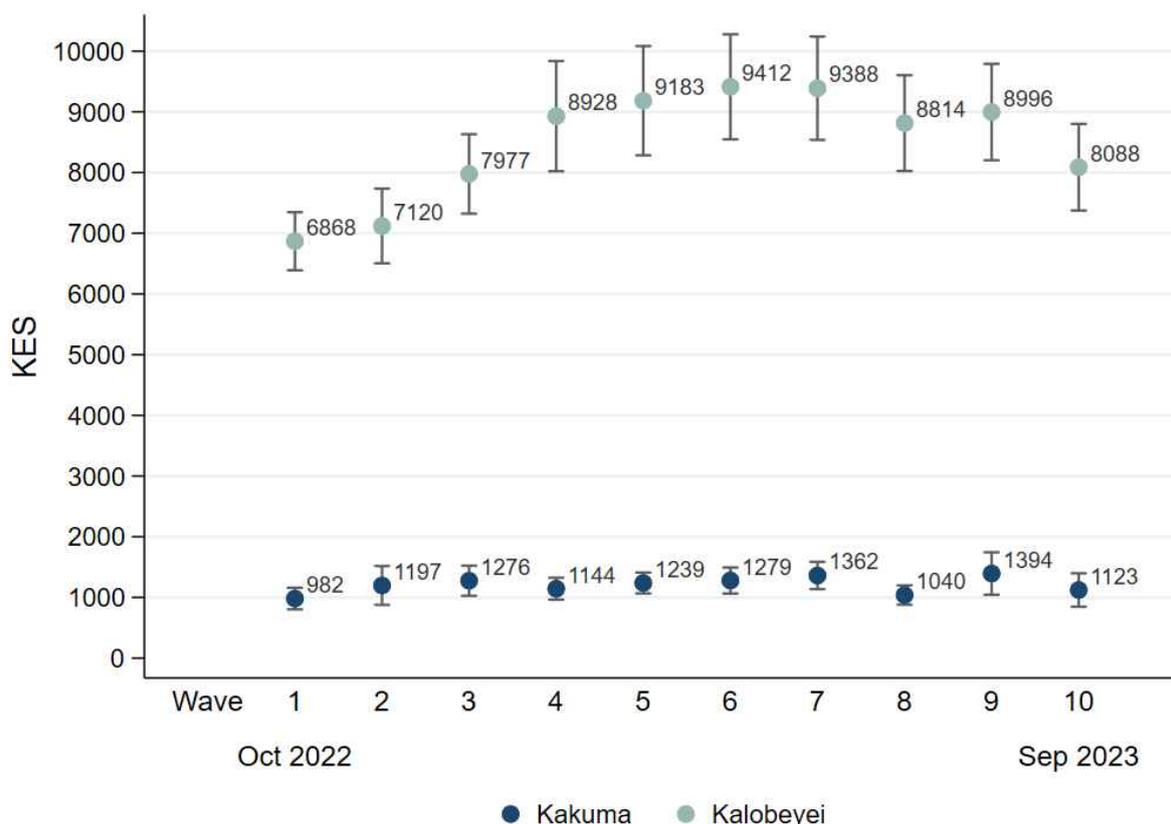
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In other parts of Kalobeyei, we also find that indebtedness increased over the course of our panel study (Figure 19). While the proportion of indebted households remained relatively stable between October 2022 and September 2023, oscillating between 98 percent and 95 percent, the average value of debt per capita increased from 6868 KES (\$57) to 8088 KES (\$67) over the one-year period (+18%).

In Kakuma, the evolution of indebtedness is more complex. First, the share of indebted households appears to have dropped from 88 percent in October 2022 to 75 percent in September 2023. On the other hand, for indebted households, the average value of debt increased by 25 percent over the one-year period. Combined, these two trends imply a slight increase in the average value of debt over time for South-Sudanese households in Kakuma, but this change is not statistically significant at conventional levels.

Overall, we conclude that the magnitude of the debt issue is much more salient in Kalobeyei, where the value of debt per capita has massively increased since 2019.

Figure 19: Evolution of average amount of debt per capita over time (debt to food retailers only)



Source: Refugees Economies Programme, November 2019, October 2022, September 2023

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## 05.3 Causes of indebtedness

Using quantitative data to identify the causes of indebtedness and quantify their importance is complicated by the fact that most households were already indebted at baseline and continued to be indebted for the duration of the research. To circumvent this limitation, we combine data from qualitative interviews and quantitative data on perceived causes of debt and coping strategies, and triangulate findings from different sources. We first discuss the factors that foster refugees' high demand for credit, and then examine the factors that encourage shopkeepers' supply of credit.

Most refugee households in both Kakuma and Kalobeyei (78%) reported going into debt because they had to buy food for the household (Figure 20). Taking food on credit is an important coping mechanism by which refugee families can secure food despite insufficient funds. It is widely recognised as an imperfect arrangement, but poverty makes it necessary. As one Sudanese shop owner in Kakuma explained:

“People are suffering. You don't request credit until you are hungry, until you are suffering. But then you will go and take credit. There are many debts in these shops. Certainly, people disturb these shopkeepers when they borrow money to eat. But it is only hunger or sickness that makes one do such a thing.”

While many people described becoming accustomed to forgoing meals when money runs out, they were compelled to ensure their children received the nutrition they needed. As one South-Sudanese woman in Kakuma explained:

“I am used to eating once a day, but my children eat twice. Because we have limited food, I sacrifice myself for my children. They are still growing.”

One Congolese woman in Kalobeyei explained:

“We take food on credit because we do not want our children to sleep hungry. Our only source of income is the cash assistance given by the UN.”

When asked why they did not have enough money to purchase food, most households pointed to lack of money or savings (62% Kakuma; 35% Kalobeyei), sudden price increase (34% Kakuma; 54% Kalobeyei), job loss or unemployment (31% Kakuma; 21% Kalobeyei), and aid delays (25% Kakuma; 33% Kalobeyei).



Interestingly, these results were different across camps. In Kalobeyei, the main concern was sudden and unexpected increases in prices. This can be linked to the fact that food assistance is provided in cash only in Kalobeyei, implying that households are more exposed to price fluctuations than with in-kind food assistance. Between our first survey in Kalobeyei in 2017 and the present study, we estimate that the median price of 1 kg of wheat flour increased by 44 percent, the median price of 1 kg of rice increased by 50 percent, the median price of 1 kg of beans increased by 115 percent, and the price of one litre of oil increased by 91 percent. By contrast, the nominal value of food assistance increased by only 7 percent between 2017 and the end of our quantitative study, in September 2023.

In Kakuma, lack of cash or savings was the most cited reason for being indebted for South-Sudanese. For Congolese and Somali households, being indebted was often linked to unemployment and job loss. This may be a more significant factor to these two nationalities because they have higher employment rates.

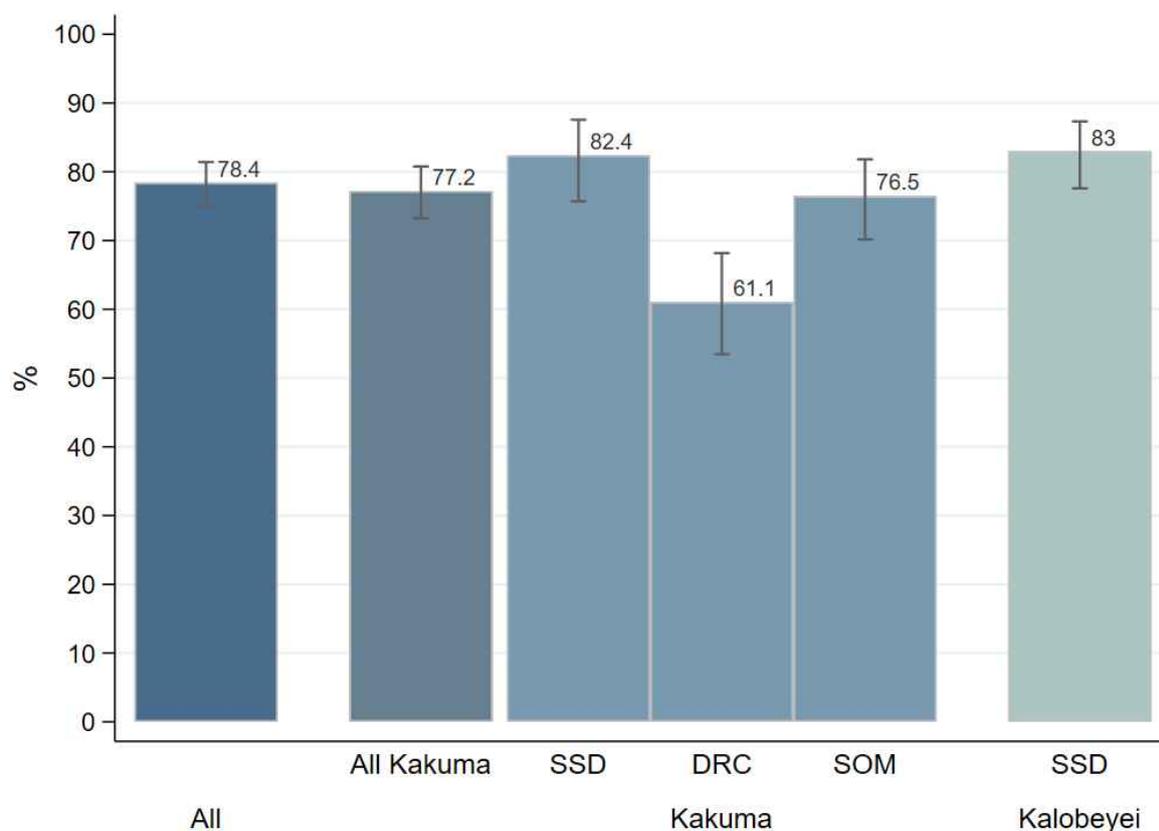
In both Kakuma and Kalobeyei, delays and cuts in humanitarian assistance also contribute to food insecurity and indebtedness. Many households are fully reliant on humanitarian assistance and debt might be their only option if aid is delayed or curtailed. Because of funding issues, many programmes were reduced or stopped during our research. For example, UNHCR's 'Bi-monthly Cash Grants for Core Relief Items and Energy Support' programme was distributed very irregularly in 2022 and then discontinued in the first quarter of 2023 because of lack of funding. Similarly, WFP's food assistance programmes were reduced to about 50 percent of a full ration between October 2021 and September 2022 because of funding issues. Then, rations were increased to 80 percent thanks to a donation from the United States of America. Rations were again reduced to about 60 percent of a full ration in July 2023 because of funding issues. Using regression analysis, we find that calories intake and food stocks are significantly lower and food insecurity is significantly higher when aid is delayed or reduced.

Food assistance delivered in cash is also frequently delayed, which puts pressure on refugees' already-tight budget and contributes to indebtedness. When cash transfers are delayed, households' stocks of food run low and food insecurity is high. Other households are unable to help as everyone faces the same issue. At the same time, stocks in shops are full as shopkeepers wait for the surge in purchases that typically occurs when cash assistance is delivered. Families have no other choice than to rely on debt from food retailers to fill the void.



Besides the need to buy food, several survey participants reported that their debt started from the need to pay medical or school expenses or contribute to ceremonies (such as funerals). Refugee households are particularly vulnerable to shocks and unexpected expenses: 56 percent of households reported expenditures on education and 32 percent reported expenditures on health during the four weeks preceding the survey. For both categories of expenses, borrowing from the shop is by far the most important strategy to find resources. Theft is also an important issue in Kakuma and Kalobeyei, with 14 percent of households reporting being the victim of theft in the four weeks preceding the survey. Again, the main coping strategy used by households is to borrow from their shopkeeper. Principles of generosity - which include the social obligation to organise and contribute to funeral ceremonies - were also highlighted as a contributing factor to indebtedness during focus group discussions. Our quantitative data shows that borrowing from the shop is also the main strategy used by households when they need money for a ceremony. Using regression analysis, we find that households who experienced a shock during the four weeks preceding the survey were significantly more likely to have borrowed money during the three days preceding the survey, and had significantly higher levels of debt.

Figure 20: Share of households who reported buying food as the main reason for borrowing



Source: Refugees Economies Programme, October 2022

While debt is a reality for the majority of refugees, 13 percent of households are actually debt-free and a few households were able to reduce their debt levels throughout the duration of the study. In October 2023, we conducted in-depth interviews with these households to understand how they managed to reduce their debt or become debt free. Generally, these households appear to be better off than others and more likely to have some form of income. Some receive remittances from abroad. Others were able to get out of debt thanks to self-reliance programmes. As one respondent reported:

“Yes, when my child was sick [...] there was no money for buying medicine for the treatment and that’s when I got into debt. [...] that’s what made me get into debt for two months, three months ahead until the child died in my arms. Debt went up because I had to buy food for the funeral and then it became four months. Then I got a farm in this place (the WFP/FAO water pan project) and I was given one plot [...] that I cultivated.”

Finally, other respondents were able to reduce indebtedness by finding alternative employment. For instance, one respondent started to purchase food from distribution, grinding it and re-selling it with a mark-up.

Overall, our analysis shows that a multitude of demand-side factors contribute to the high prevalence of indebtedness in Kakuma and Kalobeyei. Lack of livelihood opportunities, low levels of assistance, increasing prices, aid delays, aid cutbacks, and shocks all play a role in the creation and continuation of debt.

Indebtedness is also exacerbated by supply-side factors, which encourage shop owners’ provision of credit. Importantly, how humanitarian assistance is delivered contributes to the debt issue. Cash assistance delivered on SIM and ATM cards fuels indebtedness as the cards are used as a collateral to obtain food on credit. Consistent with this, we observe that debt levels are much higher in Kalobeyei - where all assistance is provided cash - compared to Kakuma - where about half of the assistance is provided in kind. In Kakuma, cash transfers through the Bamba Chakula programme are restricted to food items, while in Kalobeyei, cash transfers through the Bamba Chapaa programme are unrestricted, implying that the money can be spent on any goods and refugees should – in theory – be able to withdraw cash (Siu et al., 2023). This difference in cash transfer modality does not explain the higher levels of debt in Kalobeyei; if anything, easier access to non-food items and cash should increase consumer agency in Kalobeyei.

During focus group discussions, participants also highlighted that technical problems with SIM and ATM cards can push people into debt when humanitarian organisations do not solve the issues quickly.

In general, many shop owners explained that they feel a moral obligation to extend credit to customers, who are often their neighbours. Many also understand that shocks are unpredictable and force even economically responsible customers into situations where they will need credit. In Kalobeyei, another South-Sudanese shop owner explained:

“Debt is not good, but because the aid is not enough, life is very difficult. Truly, people are suffering and there is no way we can refuse to give them food. They are our customers, their children are hungry. Sometimes you have customers who used to come to buy food with cash. But then they have to pay for a funeral, and they will need food on credit. So you have to give it. There is no business with debt; it is just an obligation and you have to deal with it in a good way.”

Competition between retailers can also encourage indebtedness, as debt permissiveness becomes a marketing strategy to attract clients. For instance, the wealthier Bamba Chakula traders - those shops registered with WFP to accept food vouchers as payment - have more capital that can sustain them for more months. They are often more willing to lend to those who have been denied credit from other shops. During focus group discussions, some refugees highlighted that illiteracy and lack of budgeting and basic calculation skills can fuel indebtedness, as exploitative shop owners may take advantage of vulnerable clients. Our data does not allow us to estimate the frequency of such malpractice. However, the large difference in indebtedness between Kalobeyei and Kakuma suggests that structural factors (such as aid modality, cash transfer amount, cuts and delays to assistance, or lack of livelihoods) may play a more important role than illiteracy, lack of budgeting, and calculation skills in explaining indebtedness.



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## 05.4 Consequences of indebtedness

Studying the consequences of indebtedness is complicated by the fact that almost all refugee households are indebted towards their food retailer, especially in Kalobeyei. This implies that households without debt are rare and are likely to have very different characteristics (for instance, access to employment or to remittances) than households with debt. The analysis below is therefore exploratory, building on descriptive statistics related to respondents' perceptions and qualitative insights.

We discuss three main consequences on indebted households: debt (1) leads to higher prices, (2) reduces agency, and (3) has negative social and psychological impacts. We conclude the section with a brief discussion of consequences for shopkeepers.

While there is no explicit interest rate associated with credit from shopkeepers, indebted households pay an implicit interest rate through higher prices. As one South-Sudanese woman in Kalobeyei explained:

“The price is so high that even the goods that you receive [on credit] cannot cater for your needs. For instance, one sack of maize is 3000 shillings when paid in cash, but on credit it is 4000 shillings.”

In fact, our research suggests that three sets of prices coexist in markets: (1) cash prices when refugees pay with bank notes and coins; (2) Bamba prices when refugees pay with their SIM or ATM cards, and (3) debt prices when refugees purchase goods with debt.

There are notable differences between cash, Bamba, and debt prices for staples. For other types of food such as meat and vegetables, we find that cash, Bamba, and debt prices are very similar. Using data from a price survey undertaken in the main markets in Kakuma and Kalobeyei, we estimate that debt prices are on average 16 percent higher than cash prices for staples. Figure 21 highlights the important differences between “cash” and “debt” prices for most common staples. Differences between Bamba and debt prices are smaller but also significant. Using data from our price survey, we find that debt prices are about 1 percent higher than Bamba prices. With data from the cross-sectional household survey, we find that indebted households report prices that are on average 5 percent higher. With the panel data, we find that doubling the level of debt per capita is associated with debt prices that are 2 percent higher. This suggests that indebted households face higher prices, and the larger the debt, the higher the markup.

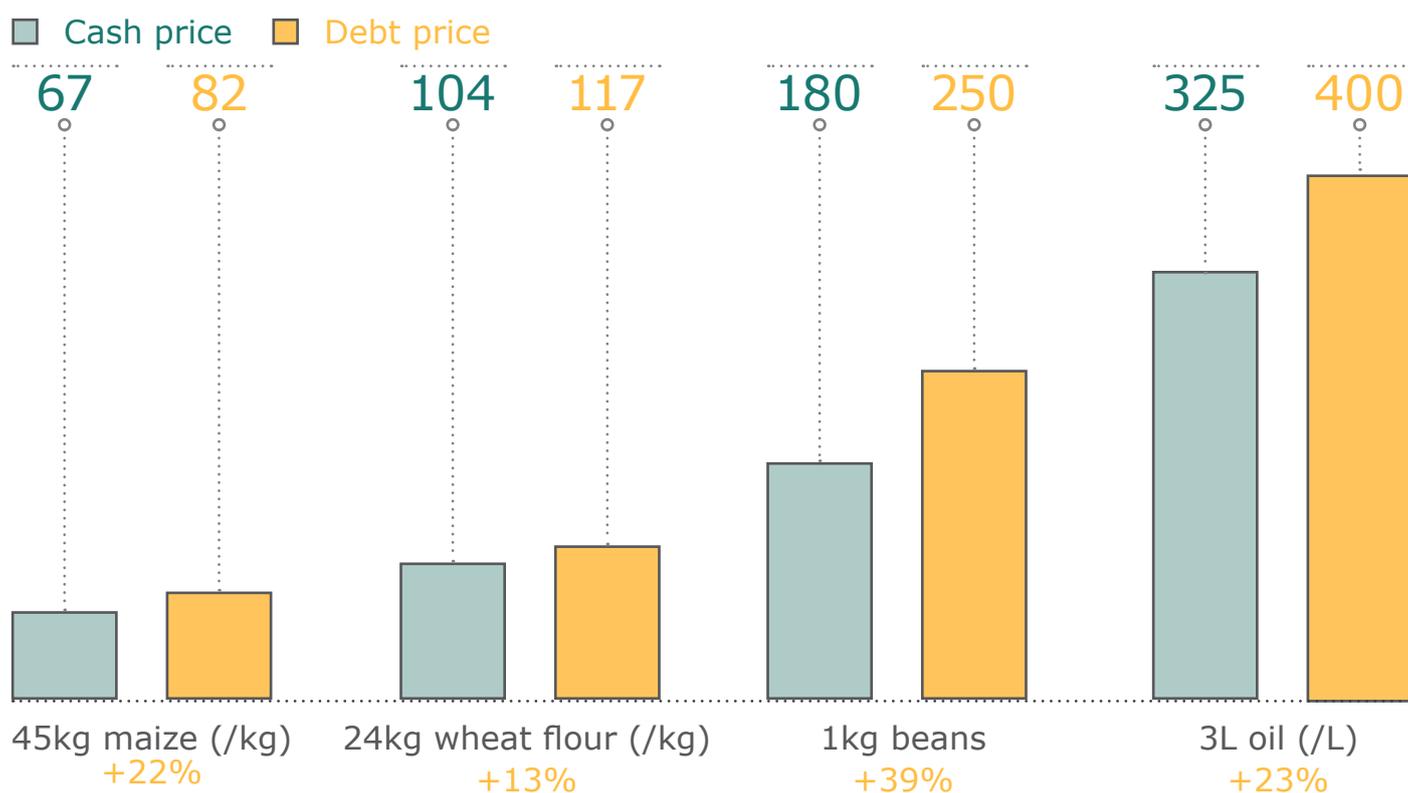
We can convert the difference between cash and debt prices into an implicit interest rate as follows:  $i = \Delta \text{ price} / \text{debt}$ , where  $i$  is the monthly implicit interest rate,  $\Delta \text{ price}$  is the difference between debt and cash prices expressed in percentage terms, and debt is the amount of debt expressed in months of food assistance.

For instance, with a 16 percent additional debt markup, households whose debt is equivalent to one month of food assistance pay an implicit interest rate of 16 percent per month (192 percent per year). The implicit interest rate is 4 percent per month (or 48 percent per year) if the debt is equivalent to four months of food assistance. In both cases, households lose about two months of aid per year because of higher prices.

As long as shop owners are willing to increase the amount of credit they provide, indebtedness might reduce food insecurity as debt is used as a coping strategy to smooth consumption. However, shop owners often start limiting credit to their clients when debt levels are deemed too high. In this case, indebted households may become more food insecure than without debt because they face higher prices. Many respondents also reported that shop owners often distribute smaller rations than they should to force debt reimbursement. For example, if the household is size 7, the shop owner might give food for six people.

The implicit interest rate has important implications on the food diet that households can afford (Table 1). To have a diverse diet, covering 100 percent of calories needs, we estimate that refugees on cash assistance would have to pay 2408 KES (\$20) per month if they face cash prices, or 2769 KES (\$23) if they face debt prices. The minimum transfer needed to afford 2100Kcal – the target of WFP - would be 2000 KES (\$17) with cash prices and around 2500 KES (\$21) with debt prices (the resulting diet is not diverse). At the current levels of assistance (1600 KES or \$13 per month) and with cash prices, refugees should be able to cover 80 percent of WFP’s target, but only 64 percent with debt prices.

Figure 21: Comparison between cash and debt prices by good (KES)



Source: Refugees Economies Programme, October 2022

Table 1: Food baskets by items, cost, and calories intake

<b>Food baskets</b>	<b>Items per day</b>	<b>Monthly cost (cash prices)</b>	<b>Monthly cost (debt/BC prices)</b>	<b>Calories (per day)</b>	<b>Calories need (coverage)</b>
<b>WFP Minimum Food Basket (MFB)</b>	415g grains 50g beans 35ml oil 100ml milk 100g vegetables 5g sugar 5g salt	<b>2408 KES</b>	<b>2769 KES</b>	<b>2100</b>	<b>100%</b>
<b>Minimum transfer to achieve 2100 Kcal</b>	346g grains 99g beans 58g oil	<b>2008 KES</b>	<b>2497 KES</b>	<b>2100</b>	<b>100%</b>
<b>Food basket with 1600 KES (cash)</b>	275g grains 79g beans 46g oil	<b>1600 KES</b>	NA	<b>1673</b>	<b>80%</b>
<b>Food basket with 1600 KES (debt)</b>	221g grains 63g beans 46g oil	NA	<b>1600 KES</b>	<b>1346</b>	<b>64%</b>
<b>Food basket with 450 BC + distribution</b>	276g grains 79g beans 46g oil	NA	<b>450 KES</b>	<b>1679</b>	<b>80%</b>
<b>Average per capita consumption (Kakuma)</b>	305g grains 88g beans 38ml oil 9g meat or fish 4g fruit 51g vegetables	<b>2065 KES</b>	<b>2469 KES</b>	mean= <b>2201</b> median= <b>1878</b>	mean= <b>105%</b> median= <b>89%</b>
<b>Average per capita consumption (Kalobeyei)</b>	295g grains 61g beans 28ml oil 11g meat or fish 5g fruit 64g vegetables	<b>1893 KES</b>	<b>2212 KES</b>	mean= <b>1783</b> median= <b>1587</b>	mean= <b>85%</b> median= <b>76%</b>

Source: Refugees Economies Programme, October 2022

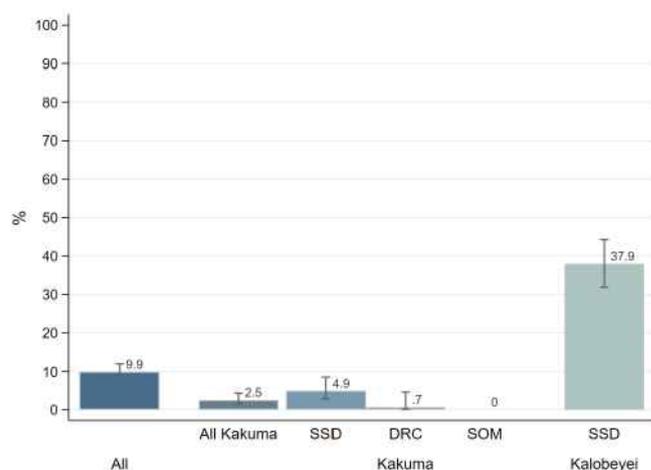
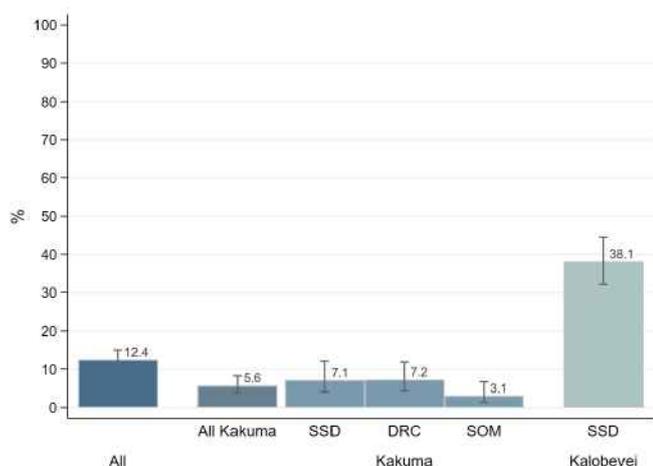
Indebtedness is associated with reduced agency. As illustrated in Figure 22, 38 percent of refugees in Kalobeyei reported that the quality of food is either bad or very bad when they buy food with Bamba Chapaa. This was not found to be a concern in Kakuma. Debt also shapes shopping habits as compared to purchases with cash. For instance, virtually all refugee households (95%) reported visiting only one shop per month for Bamba Chakula or Bamba Chapaa purchases, which mostly consist of staple food. By contrast, refugee households tend to visit more shops and purchase goods more frequently when shopping with cash. Common goods that are bought with cash include greens, tomatoes, onions and vegetables, and meat or fish.

The data shows that almost all refugees in Kakuma, regardless of indebtedness, can decide when to buy food with Bamba Chakula (Figure 23). By contrast, 37.9 percent of indebted South-Sudanese households in Kalobeyei reported not being allowed to decide when to go for Bamba Chapaa purchases: it is the shop owner who tells them when they can come. Being indebted also limits respondents' ability to withdraw from their Bamba Chapaa ATM card. In the four weeks before our survey, only 18 percent of South-Sudanese respondents in Kalobeyei reported withdrawing cash using their ATM card. This also creates an implicit cost for indebted households, as they cannot shop around and benefit from cash prices.

Indebtedness also generates negative psychosocial consequences. We find that 25 percent of respondents in Kakuma, and 51 percent of South-Sudanese respondents in Kalobeyei feel stressed or very stressed when shopping on the Bamba Chakula system. This is in contrast with cash purchases, during which only 6 percent of households in Kakuma and 1 percent of South-Sudanese households in Kalobeyei feel stressed or very stressed.

Figure 22: Share of respondents who find the quality of food purchased with BC being bad or very bad

Figure 23: Share of respondents who cannot choose when to buy goods with BC



Source: Refugees Economies Programme, October 2022

Source: Refugees Economies Programme, October 2022

In qualitative interviews, refugees reported being stressed about their debts. As one woman in Kakuma explained:

“Debt is like death. It is the worst of all things. People run mad - sometimes they look confused and disoriented. This is the stress of having debts that you cannot repay. I see debt like a Hellfire. But we have no other option than to accept it.”

Debt has serious social consequences for those who take food on credit. Many refugees reported feelings of shame and loss of self-esteem. Sometimes the shame is so intense that the victim, especially South-Sudanese, feels pressured to go back to their home country. Debt may also cause conflicts in the household, whereby men accuse their wives of mismanaging the finances. This sometimes culminates in physical violence. Relatedly, parents may ask children to work at the shop owner’s business or home to offset the debt.

Defaulting on the repayment of debt also puts refugees in a difficult situation. Shop owners may confiscate their property or take the borrowers to the police. A Congolese man living in Kakuma described the risks of default:

“If I don’t pay back my debt, there can be intimidation from the shop owner. They might threaten to bring me to the police. There was also a time when a shop owner came and took my TV. He kept it until I repaid my debts, or he could use it to get his money back... Debt is a very bad thing. It disturbs my peace of mind, because I’m always thinking about it. Sometimes I hide myself when they [the creditor] knock on my door. That is why I hate taking debt from anybody.”

Recourse to these actions create enormous stress for debtors, but are seen by shop owners as necessary and legitimate means of recuperating what is owed to them. Some interviewees also reported witnessing the use of physical violence as a means of enforcing repayment, although resorting to such illegal strategies is the exception rather than the norm. In focus group discussions, participants also highlighted that “debt forces some women into prostitution” and that households “whose debt accumulates to unmanageable levels go back to South-Sudan”. The frequency of these extreme consequences cannot be assessed with our quantitative data.

For shop owners, debt can have mixed impacts. On the one hand, debt can be positive for shop owners as indebted clients are obliged to be their customers, even though they charge higher prices. As such, holding cash transfer cards as a form of security has become a way of securing a captive customer base. In fact, the value of a food retail shop depends on the number of ration cards held by the shop as security. As such, giving out credit has become a way for shops to increase the value of their business. For example, a shopkeeper we interviewed reported that he would sell his shop for 1.5 million KES (\$12500) if the deal includes the 50 Bamba cards he held, and 700,000 KES (\$5833) without the Bamba cards.

On the other hand, debt can become a risk for shop owners. Default is the most important risk and, as in formal financial institutions, an (implicit) interest rate is charged to compensate for that risk. To manage this risk, shop owners often limit the amount of credit they give to customers and sometimes restrict the amount of food given to households to reduce their debt.

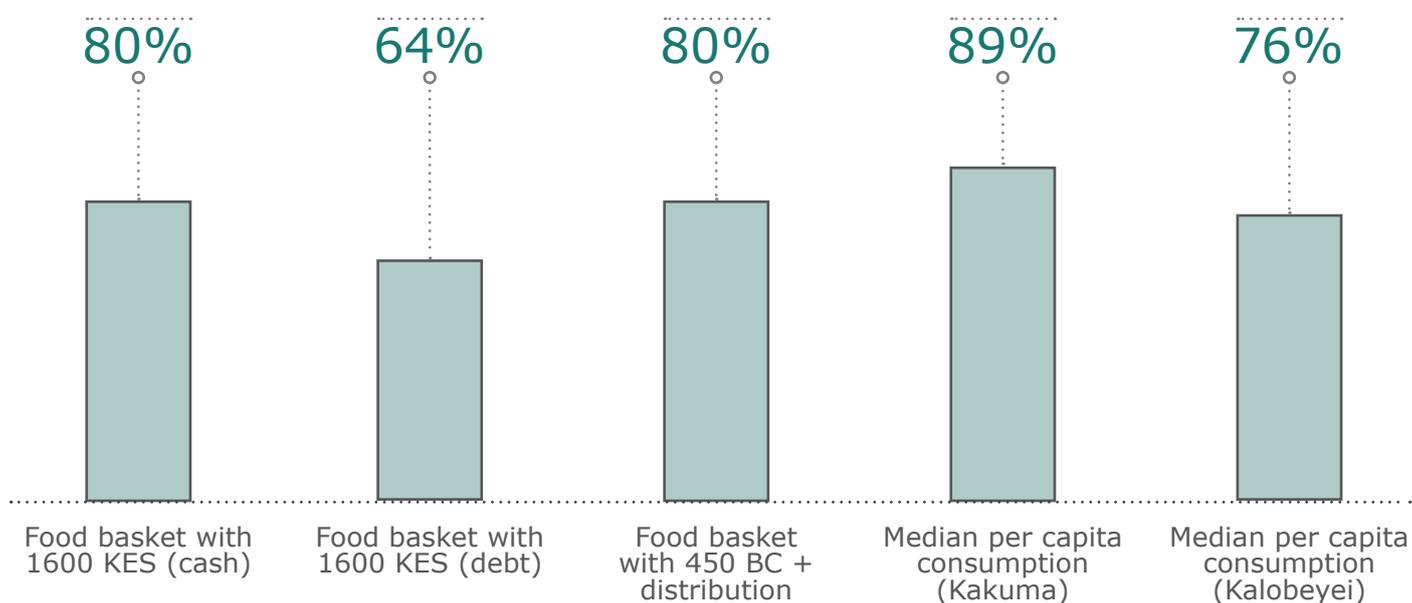
Credit may also leave shop owners without the finance to purchase new stock. When retailers have sold their merchandise on credit, restocking requires either financial reserves to pay for more goods or access to credit from wholesalers. As one former Bamba Chakula trader reported:

“...you cannot survive here [in Kalobeyei] if you do not have enough money. You need to be able to fund your business for at least six months before you can begin to see profits...I started my business with 150,000 Kenyan Shillings but I had to close. Everyone wanted to borrow yet I needed to buy stock. I had to close.”

Retailers can also access credit from their wholesalers, but wholesalers have tight conditions. Many impose a cap on the total value of goods that can be taken on credit, and this must be repaid before further goods can be purchased. In many arrangements, there is no interest on the credit, but retailers receive a discount that is voided if their repayment is late. As one South-Sudanese trader in Kakuma explained:

“The wholesaler is willing to give me goods on credit up to a value of 45000 shillings per month... I repay their money after the goods are bought in my shop... Wholesalers give me one month to pay back in order to receive a discount, but if I fail to pay them back within the stipulated time, I will not be given the discount on the goods I had purchased on credit.”

Figure 24: Calories intake by transfer value and modality of payment



Source: Refugees Economies Programme, October 2022

# 06 Conclusion

Our data shows that 87 percent of refugee households in Kakuma and Kalobeyei are indebted to a food retailer. The issue of household debt appears to have worsened between 2019 and 2023, especially in Kalobeyei. Focusing on South-Sudanese households in Kalobeyei Village 3 (the only group for which we have data in both 2019 and 2023), we find that the average value of debt per capita of South-Sudanese households in Kalobeyei Village 3 more than quadrupled over the four-year period, from an average of 2034 KES (\$17) per capita in November 2019 to 9667 KES (\$81) in September 2023. Indebtedness is much more important in Kalobeyei, where all food assistance is delivered in cash, and refugees' ATM cards are used as collateral to guarantee credit.

The debt situation is complex and multi-layered. On the one hand, debt is a life-saving coping strategy for many households. Most survey participants reported going into debt to purchase food for the household, showing that the debt system might be an essential informal strategy to cope with shocks and smooth consumption, which is especially important in households with small children. Debt is often the only strategy that households can use to cope with food insecurity, delays and cuts in humanitarian assistance, health shocks, theft, and important expenses (for instance for education or ceremonies) in the short run.

On the other hand, debt has financial and psychosocial costs in the medium run and long run. While there is no explicit interest rate, indebted households face higher prices for staple food, which may push them into a debt trap. Debt also puts households in a situation of dependency, limiting their agency to be proactive consumers and generating or reinforcing market failures. Debt exacerbates stress, feelings of shame, and loss of self-esteem, especially when it reaches unmanageable levels.

Solutions to effectively prevent and reduce over-indebtedness remain elusive (Karlan et al., 2019; Garz et al., 2021). Debt relief and financial training alone are unlikely to have long-term effects if the root causes of indebtedness are not addressed (Kaiser, 2017; Karlan et al., 2019). To be effective, policy solutions should try to simultaneously reduce the prevalence and levels of debt, address the causes of indebtedness, and mitigate the negative consequences of debt. Furthermore, policies to tackle indebtedness should not undermine households' ability to cope with shocks, which in Kakuma and Kalobeyei is already weak. They should also avoid compromising the sustainability of the embryonic refugee economies in Kakuma and Kalobeyei.

Given the multifaceted nature of the debt issue in Kakuma and Kalobeyei, the lack of existing evidence on effective programmes to sustainably tackle indebtedness, and the risks that anti-debt programmes may hold for vulnerable populations, we recommend to pilot a multifaceted programme targeted at a limited number of indebted households for instance, in Kalobeyei where the debt issue is more salient. It is essential to carefully assess the impacts of the different aspects of the pilot programme before adapting it and rolling it out to other households.

A pilot programme could target a combination of the following objectives.

## 1. Boosting consumer agency

With high levels of debts and no access to their SIM or ATM cards, households cannot withdraw cash and shop around. They become entirely dependent on their food retailer, which limits competition and leads to higher prices and lower product quality. Refugees with limited literacy and numeracy are vulnerable to mis-budgeting and fraud.

Several interventions are needed to address these issues:

- **Refugees could be offered financial training on how to become proactive and responsible consumers.** The training should be as practical as possible and, after the training, a *financial advisor* could regularly meet participants to help them implement the tools learned during the training in practice. The financial advisor could share information about food prices and offer practical guidance on how to manage their household budget. Regular, in-person meetings will help beneficiaries in bookkeeping and keeping track of expenses.

- **Refugees should get direct access to humanitarian assistance.** Indebted refugees lose direct access to humanitarian aid when they give their SIM or ATM cards as a collateral to obtain a credit. They also lose their agency, including their ability to withdraw cash. A solution should be implemented to ensure refugees (or their financial advisors) can access their SIM or ATM cards and directly access assistance. Some sort of repayment schedule or guarantee may be provided to retailers in exchange for returning the SIM or ATM cards.

- **Access to cash should be easier and cheaper.** This would bring at least three benefits to refugees: (1) cash prices are significantly lower than Bamba and debt prices, (2) refugees would save money if they can avoid the high withdrawal fees that are frequently charged by agents, and (3) with direct access to cash, refugees will not have to resell food at low prices to get cash. We see two options to facilitate access to cash in practice. First, cheaper options for withdrawing cash could be organised. Second, refugees could receive the entire amount of humanitarian assistance in hard cash, i.e. in the form of bills and coins.

Both options could be facilitated by the financial advisors we described above if this proposition is implemented. To the best of our knowledge, hard cash has never been used to deliver humanitarian assistance in Kakuma or Kalobeyei. If it is to be implemented, the feasibility, impacts, and unintended consequences of this modality should be assessed in a pilot before being rolled out.

## 2. Increasing the reliability and predictability of aid

Indebtedness primarily results from lack of resources to pay for food, non-food items, health, and education. Given the lack of adequate livelihood opportunities in Kakuma and Kalobeyei, many households have to rely on humanitarian assistance to survive.

Recurrent gaps between funding needs and resources imply that refugees receive reduced levels of assistance in Kakuma and Kalobeyei. In October 2023, food assistance in Kalobeyei was 1600 KES (\$13) per person per month, which is less than \$1 per day at purchasing power parity. The extreme poverty line of the World Bank is set at \$2.15 per day, which gives an idea of the extreme poverty in which refugees dependent on food assistance live. Assistance for cooking fuel, soap, and feminine hygiene products was discontinued by UNHCR because of lack of funding.

**The international community should provide adequate finance to relevant stakeholders**, including UNHCR and WFP, to ensure all refugees receive enough assistance to afford basic necessities, including food, non-food, education, and health expenditures.

Cash transfers are also often delayed, which put extreme pressure on already-vulnerable households. The unpredictability of humanitarian assistance fosters indebtedness. **Humanitarian actors and donors should put in place measures to ensure humanitarian assistance is reliable and predictable.**

## 3. Strengthening alternative coping strategies

Given the scarcity of employment opportunities and lack of assets and savings, borrowing is the only strategy to which refugees have recourse when their monthly assistance falls short of their needs. And because other refugees in their local network are likely facing the same economic challenges, their only option is to borrow food on credit from retailers. This is typically the case at the end of the month, when stocks are running low and all refugees are impatiently waiting for food assistance to come. Different approaches could be piloted to explore how to best encourage social assistance by communities and neighbours.

- **Staggered distribution of cash assistance.** Because of refugees receiving humanitarian assistance simultaneously, there is a situation in which all households lack resources around the same time of the month. This limits households' capacity to informally support each other as times of relative scarcity and abundance coincide for the whole refugee population in each site.

Staggering the distribution of aid across the month could enable more horizontal, informal support to take place, for example by distributing food assistance to half of the population on the 1st of each month, and to the other half on the 15th of each month.

● **Refugees could be organised in consumer groups.** Buying goods in bulk is often cheaper than purchasing small quantities of food. For instance, the price of cooking oil is 300 KES for a one litre bottle, and 195 KES for a five litre bottle. The price of maize per kg reduces from 80 KES to 67 KES when bought in large bags of 45 kg. Consumer groups could be facilitated to make the best out of economies of scale. Financial advisors could assist participants in pooling resources, making bulk purchases, and encourage solidarity mechanisms within each group.

#### 4. Investing in livelihoods

Debt largely results from lack of resources. In line with this and the objective of improving refugee self-reliance, we found evidence that households that had no debt at all or had successfully repaid their debt were often part of livelihood programmes (for instance agriculture). **Livelihood programmes have the potential to boost self-reliance while reducing the demand for credit.**

In an ideal world, international organisations and NGOs should receive enough funding to cover humanitarian assistance (for instance food assistance, shelter, protection) and development assistance (for instance, livelihood programmes). In practice, given scarce resources, they typically face a difficult trade-off between financing humanitarian assistance and livelihood programmes. Addressing this trade-off is beyond the scope of this study.

#### 5. Encouraging progressive debt repayment

We do not recommend debt relief (alone) as a policy option, as borrowers may quickly return to debt if the root causes of indebtedness are not addressed (Karlán et al., 2019). Worse, debt relief can increase indebtedness if refugees anticipate that debt will be cancelled. Debt relief should therefore be a last resort solution. We also do not recommend criminalising the debt system, as this could severely compromise refugees' main coping strategy.

Instead, **indebted refugees should be encouraged to progressively get out of debt**, with the support of their financial advisor. The policy options detailed above should allow programme participants to face cash prices instead of debt prices. As a result, they are expected to save an average of two months of aid per year, which could be used to boost food security and reduce debt levels. Increased levels of humanitarian assistance and livelihood programmes should also contribute to facilitate progressive debt reimbursement by indebted households.

# 07 References

- Betts, A., Omata, N., & Sterck, O. (2018). *Refugee Economies in Kenya*. Oxford: Refugee Studies Centre.
- Betts, A., Omata, N., Rodgers, C., Sterck, O., & Stierna, M. (2019). *The Kalobeyei model: towards self-reliance for refugees?* Oxford: Refugee Studies Centre.
- Betts, A., & Sterck, O. (2022). Why do states give refugees the right to work?. *Oxford Review of Economic Policy*, 38(3), 514-530.
- Bradenbrink, R., Flinder Stierna, M., Pozuelo, J. R., & Sterck, O. (2023). *Depression, Violence, and Socioeconomic Outcomes Among Refugees in East Africa: Evidence from a Multi-Country Representative Survey*. Available at SSRN.
- Cox, D., & Fafchamps, M. (2007). Extended family and kinship networks: economic insights and evolutionary directions. *Handbook of Development Economics*, 4, 3711-3784.
- Delius, A., & Sterck, O. (2024). Cash transfers and micro-enterprise performance: Theory and quasi-experimental evidence from Kenya. *Journal of Development Economics*, 167, 103232.
- Dercon, S. (2002). Income risk, coping strategies, and safety nets. *The World Bank Research Observer*, 17(2), 141-166.
- Garz, S., Giné, X., Karlan, D., Mazer, R., Sanford, C., & Zinman, J. (2021). Consumer protection for financial inclusion in low-and middle-income countries: Bridging regulator and academic perspectives. *Annual Review of Financial Economics*, 13, 219-246.
- IFC. (2018). *Kakuma as a marketplace: a consumer and market study of a refugee camp and town in northwest Kenya*. World Bank.
- Jacobsen, K. (2014) *Livelihoods and Forced Migration*, in *The Oxford Handbook of Refugee and Forced Migration Studies*, (eds.) Fiddian-Qasmiyeh, E., Loescher, G., Long, K., and Sigona, N., Oxford: Oxford University Press.
- Jansen, B. J. (2018). *Kakuma Refugee Camp: humanitarian urbanism in Kenya's accidental city*. Bloomsbury Publishing.
- Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when?. *The World Bank Economic Review*, 31(3), 611-630.

- Karlan, D., Mullainathan, S., & Roth, B. N. (2019). Debt traps? Market vendors and moneylender debt in India and the Philippines. *American Economic Review: Insights*, 1(1), 27-42.
- Langlois, E. V., Haines, A., Tomson, G., & Ghaffar, A. (2016). Refugees: towards better access to health-care services. *The Lancet*, 387(10016), 319-321.
- MacPherson, C., & Sterck, O. (2021). Empowering refugees through cash and agriculture: a regression discontinuity design. *Journal of Development Economics*, 149, 102614.
- Pape, U., Beltramo, T., Fix, J., Nimoh, F., Sarr, I., & Rivera, L. A. R. (2021). Understanding the Socioeconomic Differences of Urban and Camp-Based Refugees in Kenya. The World Bank.
- Siu, J., Sterck, O., & Rodgers, C. (2023). The freedom to choose: Theory and quasi-experimental evidence on cash transfer restrictions. *Journal of Development Economics*, 161, 103027.
- Siu, J., Sterck, O., & Rodgers, C. (2023). The freedom to choose: Theory and quasi-experimental evidence on cash transfer restrictions. *Journal of Development Economics*, 161, 103027.
- Sterck, O., Rodgers, C., Siu, J., Stierna, M., & Betts, A. (2021). Cash transfer models and debt in the Kalobeyei settlement. Oxford: Refugee Studies Centre.
- UNHCR. (2011). Promoting Livelihoods and Self-reliance. Operational Guidance on Refugee Protection and Solutions in Urban Areas.
- UNHCR. (2018). Kalobeyei Integrated Socio-Economic Development Plan in Turkana West: Phase One (2018-2022).
- UNHCR (2023). Operational Data Portal: Kenya. <https://data.unhcr.org/en/country/ken/796>. Accessed on the 10th December 2023.
- Vintar, M., Beltramo, T. P., Delius, A. J. S., Egger, D. T., & Pape, U. J. (2022). Impact of COVID-19 on Labor Market Outcomes of Refugees and Nationals in Kenya. Washington, DC: The World Bank.



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