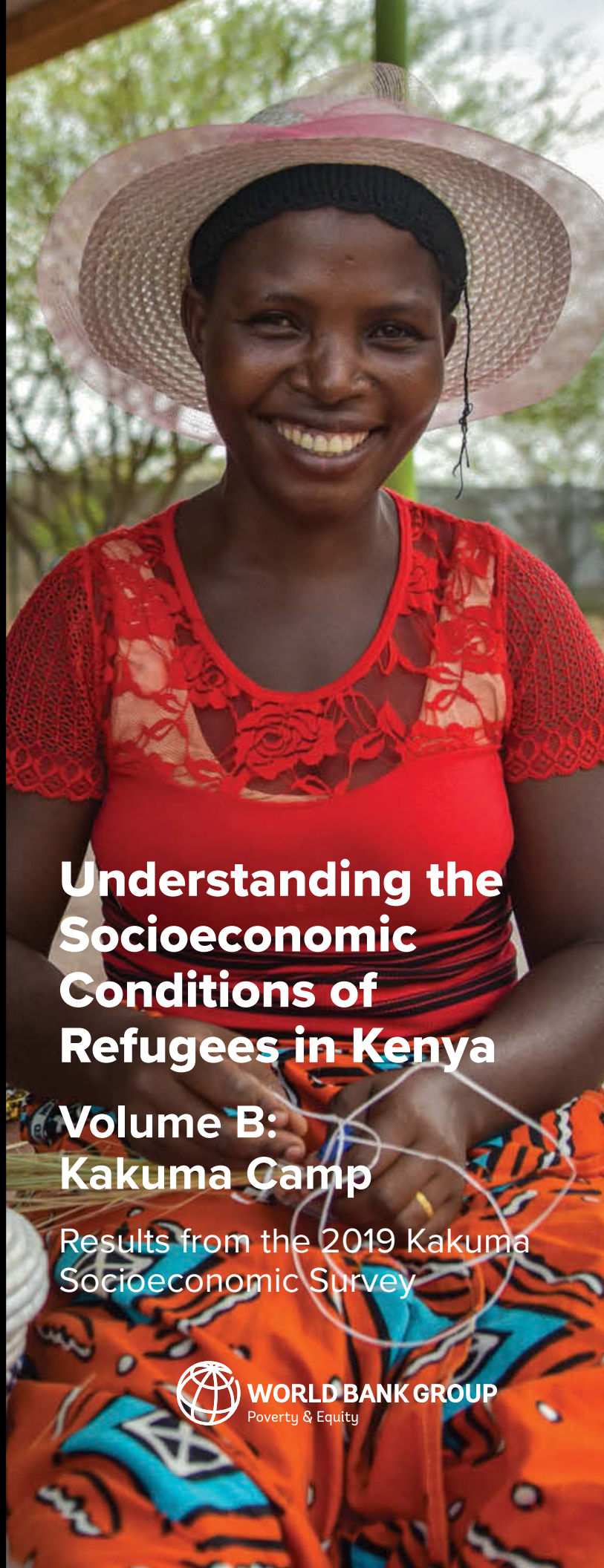


Understanding the Socioeconomic Conditions of Refugees in Kenya

Volume B: Kakuma Camp

Results from the 2019 Kakuma Socioeconomic Survey

2021

UNHCR
The UN Refugee Agency

WORLD BANK GROUP
Poverty & Equity

Understanding the Socioeconomic Conditions of Refugees in Kenya

Volume B: Kakuma Camp

Results from the 2019 Kakuma Socioeconomic Survey

Cover photos by UNHCR Kakuma.

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF BOXES

Acknowledgments

This report was prepared by a team led by Utz Pape (World Bank) and Theresa Beltramo (UNHCR). The team consisted of Felix Appler (World Bank), Jedidiah Fix (UNHCR), Florence Nimoh (UNHCR), and Laura Abril Ríos Rivera (World Bank), with additional contributions received from Eugenie Rose Fontep (World Bank), Felix Schmieding (JDC), and Antonia Delius (World Bank). The team is grateful to refugees without whose participation, insights, and contributions this work would not have been possible.

The team would like to thank the outstanding efforts of the enumerators and supervisors who collected the data: Charles Lomer Amul Ayen, Joseph Esinyen Emoni, Nahashon Echoto Lokoriyara, Silas Barkinyo Cheruiyot, Eleman Josephat Edapal, Akuron E. Mark, Catherine Natiir Ngimare, Christopher Musyoki, Ekai Mathias Lokwee, Ephraim Ariong Lokiyoto, Evans Mutinda Munyao, Imuge Ikaal Immauuel, Johnson Ekal Mzee, Martin Malonza Kimeu, Rachel Sericho Akitela, Simon Ekadeli Looyalem, Mani Osman Ali, Shinnan Samir John, Thiem Chuol Biel, Aksante Buluhukiro Patrick, Stephen Sebit Goryang, Mohamed Anur Kuku, Reth Maker Reth, Amana Marinho Osio, Wol Makuach Wol, and Akune Obang Atale.

The team would like to thank the peer reviewers Arthur Alik Lagrange (World Bank) and Alexandra Jarotschkin (World Bank).

The team would like to thank UNHCR Kakuma Sub-Office management Ignazio Matteini, Seda Kuzuku, Jennifer Chuwa, Elodie Lamal, Tayyar Sukru Cansizoglu, and Mohamed Shoman for their vision and commitment to this work, as well as Pierella Paci and Allen Dennis from the World Bank. The team would also like to express its gratitude to UNHCR Assistant High Commissioner (Operations) Raouf Mazou, UNHCR Kenya Representative Fathiaa Abdalla, and Deputy Representatives Walpurga Englbrecht and Ivana Unlova, UNHCR's Director of Division of Resilience and Solutions Ewen Macleod and Sajjad Malik, UNHCR's Division of Resilience Chief of Section for Partnerships Analytics Research and Knowledge Section Betsy Lippman, the World Bank Acting Country Director Camille Nuamah, and World Bank Advisor for the Fragility, Conflict and Violence Group, Xavier Devictor, as well as the Government of Kenya, its Refugee Affairs Secretariat, and the Turkana County Government.

This work is part of the Prospects partnership program funded through the Multi Donor Trust Fund for Forced Displacement (FDTF) administered by the World Bank.

This report is part of the socioeconomic survey series on the living conditions of refugees and host communities in Kenya. The Kalobeyei Socioeconomic Assessment survey[1] precedes the present Kakuma Socioeconomic Assessment, which will be followed by the urban refugees' Socioeconomic Assessment. A comparative report presenting the consolidated results for all three populations (refugees in Kalobeyei settlement, Kakuma camp, and urban areas) will be jointly prepared and released by the World Bank and UNHCR. This report focuses on the living conditions of hosts and refugees in Kakuma camp and does not provide comparative analyses.

[1] UNHCR, United Nations High Commissioner for Refugees and World Bank. 2020. "Understanding the Socioeconomic Conditions of Refugees in Kenya. Volume A: Kalobeyei Settlement. Results from the 2018 Kalobeyei Socioeconomic Profiling Survey."

List of Abbreviations

BDI	Burundi
COD/DRC	Democratic Republic of Congo
ETH	Ethiopia
GCR	Global Compact on Refugees
GoK	Government of Kenya
KCHS	Kenya Continuous Household Survey
KIHBS	Kenya Integrated Household Budget Survey
KISEDP	Kalobeyei Integrated Socio-Economic Development Plan in Turkana West
NGOs	Nongovernmental Organizations
proGres	Profile Global Registration System (UNHCR)
RAS	Refugee Affairs Secretariat
RCM	Rapid Consumption Methodology
RRPS	Rapid Response Phone Survey
RSD	Refugee Status Determination
SDN	Sudan
SES	Socioeconomic Survey
SOM	Somali
SSD	South Sudan
UG	Uganda
UN	United Nations
UNHCR	United Nations High Commissioner for Refugees
VRX	proGres Registration Verification Exercise
WEE	Women Economic Empowerment

Executive Summary

Socioeconomic data of refugees and host communities are crucial to support the objectives of the Global Compact on Refugees (GCR), inform effective development policy, and respond timely to shocks. Even though significant progress to produce displacement statistics has been made, data gaps persist. Limitations include variation across countries in terms of statistical capacities and lack of comparable socioeconomic data of refugees and hosts, which hinders efforts to design targeted policy interventions.[2] Micro-data collection through household surveys that are comparable to national measures can support the objectives of the GCR by filling socioeconomic data gaps to inform evidence-based responses. Household survey data, in combination with frequently collected data—as carried out for the COVID-19 Rapid Response Phone Survey (RRPS)—are critical to inform timely measures to mitigate socioeconomic shocks. Such data are also necessary to inform government, humanitarian, and development plans, as was done for the Kalobeyei Integrated Socio-Economic Development Plan in Turkana West (KISEDP).

By closing displacement data gaps, the Kakuma Socioeconomic Survey (SES) contributes to inform targeted responses to improve the living conditions of refugees and hosts, and to address the socioeconomic impacts of the COVID-19 pandemic on refugees. Initiated jointly by UNHCR and the World Bank, the Kakuma SES, and the preceding Kalobeyei SES, help inform evidence-based programming and development policy by addressing socioeconomic data gaps.[3] The Kakuma SES's analysis and recommendations provide a comprehensive snapshot of the socioeconomic lives of refugees in Kakuma in North West Kenya as well as local and national hosts. The SES covers demographics, housing characteristics, access to services, livelihoods, poverty incidence, food security, social cohesion, trajectories of displacement, and intentions to move. It links its findings to the results of the COVID-19 RRPS on health, education, and livelihoods. The SES provides the following refugee-specific and cross-cutting policy recommendations resulting from the survey findings, while offering options to help mitigate the socioeconomic impacts of the COVID-19 pandemic on refugees (Table 1).

Refugee household surveys, which are comparable to national and host community measures in Kenya, are crucial to provide evidence for policy planning, and linking humanitarian and development efforts. Refugees in Kenya are not included in national surveys, resulting in a lack of comparable socioeconomic data of forcibly displaced people (FDP) and host communities at the national and county levels.[4] This limits efforts to design policy and programs that inclusively address the needs of vulnerable populations, especially when facing socioeconomic shocks such as those deriving from the COVID-19 pandemic. Developing and strengthening national and international policy frameworks that promote the implementation of household surveys that include FDP are crucial to produce evidence needed to inform targeted humanitarian and development response. National statistical capacity

[2] In this report, host community includes all Kenyan residents of Turkana County.
[3] This report focuses on the living conditions of hosts and refugees in Kakuma camp and does not provide comparative analyses with the preceding Kalobeyei SES. A comparative report presenting the consolidated results of the Kalobeyei SES, the Kakuma SES, and the coming Urban SES will be jointly prepared and released by the World Bank and UNHCR in 2021.
[4] FDP: refugees, asylum seekers, and internally displaced persons. UNHCR, United Nations High Commissioner for Refugees. 2021. "Key Indicators."

needs to be strengthened to ensure that FDP are integrated into national household surveys. Moving forward, making data and survey findings publicly available (after anonymization) is critical to ensure that the government, development partners, and civil society organizations have access to evidence to inform their action.

Improving the quality of housing, water, and sanitation, and expanding access to lighting and non-biomass fuels is essential to lift refugees and hosts' living standards and help build a physically and psychologically healthier population. Refugees and hosts widely live overcrowded and in dwellings built with unimproved materials. Reducing overcrowding is important to prevent stress, domestic violence, and the spread of infectious diseases such as COVID-19. Improved housing materials can enhance living standards and reduce vulnerability to environmental shocks. Only 1 in 10 refugee and host community households have electricity compared to 4 in 10 households at the national level. Increasing availability of lighting by investing in grid and off-grid solutions can help decrease security risks. Expanding solar energy projects, such as the mini-grid operated by Renewvia and the Yelele system in Kalobeyei settlement, and the Okapi Green (refugee owned company) mini-grid in Kakuma, can support these efforts. Ninety-nine percent of refugee households use firewood and charcoal for cooking. Making non-biomass fuels easily accessible can help prevent negative health impacts and the risk of abuse while collecting firewood. Only 60 percent of host community households have access to improved drinking water compared to 100 percent of refugee households, although shortages are common, and toilet sharing is prevalent among both communities. Ensuring 20 liters per person per day, access to unshared toilets, and behavioral interventions to eradicate open defecation can result in improved health outcomes and prevent sexual and gender-based violence (SGBV).[5] UNHCR, partners, and governments must collaborate to ensure an integrated service delivery while investing in accelerating the KISEDP's areas of intervention.

Supporting transition from primary to secondary school is necessary to build human capital among refugees and hosts.[6] Secondary school attendance is low for refugees, and even lower for hosts and women of both communities. It is crucial to understand barriers facing host communities in accessing education and developing flexible programs that address their educational needs by accommodating their livelihoods and seminomadic lifestyles. Investing in building new facilities and more classrooms in existing schools can help increase attendance rates and support efforts to prevent COVID-19 infections, while becoming a source of labor for construction workers. Campaigns to promote education and to provide information about availability of schools inside and outside camps, and requirements to join can help lift attendance. Scholarship programs and reducing school fees can add to such efforts. Girls' education can be promoted by addressing early marriage and gender-based stereotypes through information and behavioral programs that identify cultural barriers and sensitize communities, teachers, parents, and students about the importance of boys' and girls' education.[7] Second chance education programs for women, which allow for flexible timetables and provide childcare and early childhood education, can support inclusive human capital building. In-kind and cash assistance programs conditional on children school enrollment can support the return to school of children who stopped attending and are now engaged in income generation due to economic stress.

[5] WHO. 2020. "What Is the Minimum Quantity of Water Needed?"
[6] Hosts include Kenyan nationals who reside in Turkana County, as provided by the KIHBS 2015/16.
[7] Jesuit Refugee Service. 2019. "Her Future. Challenges & Recommendations to Increase Education for Refugee Girls"; Freeman et al. 2020. "Improving Attendance and Reducing Chronic Absenteeism."

Shifting from in-kind to cash transfers is crucial to support efforts to improve food security among refugees, while host community's food needs can be addressed through national programs, avoiding refugee-exclusive assistance. Eight in 10 refugees in Kakuma are highly food insecure, while Turkana County residents stand out as being far more food insecure than residents of any other county.[8, 9] Shifting from in-kind to cash transfers for refugees has proven to be the most cost-efficient way forward and can increase food consumption.[10] Precedent studies confirm that refugees have noted a strong preference for receiving cash over in-kind resources, as it gives them more choice in terms of products and services.[11] Market imperfections must be considered when designing cash transfer programs to avoid increasing inequality between businesses, households, and communities. Aid programs that are universal for refugees and exclude hosts can create resentment and conflict.[12, 13] Thus, governments and development partners must collaborate to improve the quality of existing service delivery systems while strengthening the government's capacity to sustainably address refugees' and hosts' needs.

Raising the voice and concerns of refugees through community leadership structures and promoting host-refugee interactions are critical to improve perceptions of trust, safety, and participation.[14] Perceptions of social cohesion among refugees are generally positive. However, refugees feel their voices are considered within community leadership structures but not for higher-level decisions by the Kenyan government. As local institutions play an important role in fostering social cohesion, strengthening available communication mechanisms between refugees, organizations, and the government could be instrumental to raise concerns of refugees and improve perceptions of participation and social cohesion.[15, 16] It is crucial to communicate the availability of such mechanisms. Refugees tend to trust other refugees more than hosts. Refugees with difficulty remembering and concentrating—Posttraumatic Stress Disorder (PTSD)-related—are less likely to trust and interact with hosts. Social cohesion can be enhanced by designing participatory programs that include the views and needs of both communities, and that promote collaboration, social interaction, and a better integration of host and refugee economies while supporting self-reliance.[17] Additional research regarding the link between social cohesion and PTSD is needed to design successful social cohesion programs.

Understanding refugees' intentions to move, their plans, and information needs are necessary to support the design of durable solutions in terms of resettlement, voluntary repatriation, and integration.[18] In most households, refugees report wanting to leave Kakuma and move to a new country,

[8] WFP. 2016. "Comprehensive Food Security and Vulnerability Analysis (CFSVA) Kenya 2016." Of Turkana households, 86 percent had to cope with not having enough food or money to purchase food.
[9] The livelihoods-based and consumption-based coping strategies indexes of the WFP were used to estimate food security among refugees. Comparable data on food security are not available for host communities.
[10] Delius and Sterck. 2020. "Cash Transfers and Micro-Enterprise Performance: Theory and Quasi-Experimental Evidence from Kenya."
[11] IFC. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya."
[12] Vemuru et al. 2016. "Refugee Impacts on Turkana Hosts."
[13] Betts et al. 2018. "Self-Reliance in Kalobeyei? Socio-Economic Outcomes for Refugees in North-West Kenya." In Turkana, hosts are not eligible for the in-kind or cash aid for refugees. The Hunger Safety Net Program (HSNP) provides cash transfers for food; however, eligibility is based on socioeconomic indicators and only considers vulnerable groups such as the elderly, orphans, or disabled.
[14] Comparable data on social cohesion are not available for nationals.
[15] UNDP. 2020. "Strengthening Social Cohesion. Conceptual Framing and Programming Implications."
[16] Ongoing mechanisms include the Communicating with Communities group linking refugees, government, UNHCR, and partners; the helpdesk system KASI where refugees can register their concerns; and an online portal https://help.unhcr.org/kenya/kakuma/
[17] For more details, see World Vision. 2020. "Social Cohesion between Syrian Refugees and Urban Host Communities in Lebanon and Jordan."
[18] UNHCR. 2021. United Nations High Commissioner for Refugees, "Durable Solutions."

mainly in the global North, due to lack of food assistance, perceived insecurity in the camp, and perceived better security in desired destinations. While 7 percent of households wish to return to their countries of origin, 17 percent wish to stay in the camp. Refugee households lack specific information to guide their plans. Expanding information services, such as Kiosk for Access Service and Information, (KASI) to ensure easy to access and comprehensive information can help reduce negative consequences resulting from imperfect information on resettlement or repatriation. Campaigns can be rolled out to inform refugees about realistic resettlement possibilities and requirements, security conditions in countries of origin, and repatriation options, as well as employment opportunities and common requirements in Kenya and desired destinations.[19] Providing information about integration and livelihood alternatives in Kenya is crucial to broaden refugees' plans and aspirations, while encouraging self-reliance.[20]

Cross-cutting recommendations: livelihoods, access to finance, women and host community needs, and response options to COVID-19 impacts

Refugees have useful job-related skills that can be strengthened and matched to market and community needs; engaging the private sector is important to enhance access to the labor market. Most refugees are literate, 50 percent know how to use the internet, and more than 70 percent know math and have valuable experience as entrepreneurs. However, only 20 percent of working age refugees are employed compared to 62 percent of Turkana hosts. Job-related skills building programs linked to work opportunities through subsidized internships in nongovernmental organizations (NGOs) and within the private sector can be instrumental to increase employment rates and to address market needs. Language skills of refugees can be used to support communication for international projects in the humanitarian, development, and private sectors. Refugees' language skills can also be used to improve literacy of refugees and hosts, strengthening intercultural relations and social cohesion. Attracting and scaling up operations of private sector companies and social enterprises in Kakuma and Kalobeyei areas can increase employment prospects for refugee and host communities. Incentive measures, such as tax reductions to firms that hire a certain quota of refugees and host community members, can foster inclusive participation in the labor market.

Broadening access to financial services by easing SIM card registration requirements for refugees, providing information about financial services as well as financial literacy training, and collaborating with the private sector are crucial to support business growth in Kakuma. Refugees' and hosts' ownership of bank and mobile banking accounts, as well as access to credit, are limited, although more so among refugees.[21] Simplifying requirements for SIM card registration for refugees is necessary to enhance access to finance among refugees.[22] Refugees and hosts do not have enough information

[19] Programs such as Migrant Care can be explored and adapted to the refugee context. UN Women. 2019. "Gaining Protection for Indonesia's Migrant Workers and Their Families."
[20] As durable solutions in terms of resettlement and relocation are limited, it is not always possible to design them based on refugees' aspirations. Currently durable solution options available for refugees are: (i) integration in host country, (ii) naturalization in host country, (iii) voluntary return to country of origin, and (iv) resettlement to a new country (for exceptional cases).
[21] IFC. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya."
[22] National Council for Law Reporting. 2015. "The Kenya Information and Communications Act." Buying a SIM card in Kenya requires registration and proof of identity (accepted documents: identity or service card, passport, or alien card), which many refugees do not have.

about available financial services nor business registration.[23] Informative sessions can be organized in community centers, while household and business visits can be carried out to inform refugees and hosts about access to finance and benefits of business permits and formalization.[24] Finance programs that link loans with business registration can increase formalization.[25] Commercial firms offering financial services have sizeable opportunities in Kakuma, as the availability of services is limited. Thus, collaborating with the private sector can help enhance access to finance for refugees and hosts. Providing financial services must be coupled with financial literacy and business training to help refugees and hosts make informed financial decisions. Expanding access to finance will be key in easing the implementation of cash transfers and other support programs.

Easing restrictions on refugees' capacity to work and providing easy-to-access information can translate into increased participation in the labor market. Refugees face restrictions to work and move within Kenya, which curtail their ability to generate income. Continuing advocacy efforts can help reformulate restrictive policies that limit refugees' capacity to work and become self-reliant. Coupled with that, refugees need information on local job opportunities. Job positions can be advertised via community leaders, as well as by announcing them through speakers in religious and community centers. While social media can also be useful to advertise jobs, ensuring that refugees with no access to social media also have access to job-related information will be key. Informative campaigns can highlight the advantages of employment experience in terms of broadening prospects in hosting and third countries. Prioritizing employment will be crucial in mitigating the socioeconomic impacts of the COVID-19 pandemic.

Supporting refugee and host women's economic empowerment and their participation in the paid labor market are critical to build and maintain human capital, and to boost overall economic growth. Most refugee and host community households are headed by women who need support to provide for and take care of their dependents, to contribute to household expenses, and to control their earnings. Women's economic empowerment (WEE) programs that consider domestic and caretaking responsibilities, and intra-household and intercommunity dynamics can result in improved health and education of children, and reduced poverty and fertility, while bringing large contributions to the economy and tax revenues through increased labor participation.[26] However, WEE is not a magical recipe for development, and it is not only about women's economic participation or strengthening business skills. Structural causes underpinning women's lack of power must be tackled. Advocacy components embedded in WEE programs can accelerate gender equity and development policies that promote quota approaches (mainly among formal employers) and allow refugee and Kenyan women to perform the same jobs as men.[27] WEE programs must also prioritize skills building and education for refugee and host girls, as well as behavioral interventions aimed at deconstructing gender norms that refrain women from participating in the paid labor market. Engaging men through awareness raising programs is crucial to support women's economic participation and girls' education, and to prevent SGBV and discrimination.

[23] IFC. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya"; IFC and MarketShare. 2019. "Gender Assessment of Kakuma Refugee Camp and Town & Kalobeyei Settlement and Town."
[24] Such as government funds (including Uwezo, uwezo.go.ke), NGO and private tenders, formal finance, and business-related movement passes.
[25] ILO. 2017. "Enterprise Formalization," 5.
[26] ILO. 2017. "Gender in Employment and Labour Market Policies and Programmes: What Works for Women?"
[27] World Bank. 2020. "Women, Business and the Law 2020." In Kenya, women face restrictions on the type of jobs they can hold.

Childcare services constitute a sector that can create jobs, cover childcare needs, and enable women to fully participate in the labor market. Many refugee women report not looking for paid work mainly due to 'family responsibilities', and most of them prefer self-employment as it allows them to work from home or close by, enabling them to carry out childcare activities.[28] Hence, childcare services are needed and can become a source of employment. Private sector institutions in partnership with government and development organizations have important opportunities to professionalize care work and transform it into an income generating activity. Expanding initiatives such as the Kakuma Kalobeyei Challenge Fun (KKCF) can support these efforts.[29]

Targeting programs aimed at improving the living conditions of refugees and hosts must consider similarities across communities and differentiated needs; a collaborative approach between governments and humanitarian organizations is key to ensure adequate response. Both communities have similar poverty rates, depict a similar population distribution, and have large households headed by women who are a key vulnerable group, as they are the poorest for both communities. Important differences across communities are noted. Turkana hosts have lower access to water and sanitation and have lower school attendance rates than refugees. In turn, refugees face specific legal restrictions not applicable for Turkana hosts. Refugees' comparative disadvantages are rooted in institutional rights and legal restrictions that limit their capacity to work, move freely, and access financial services.[30] It is crucial that development and humanitarian organizations and governments collaborate to ensure a coordinated response to address refugees' and hosts' needs by parallelly lifting both communities' living standards. Programs targeting host and refugee women-headed households which are large in size can be jointly planned and implemented by the Government of Kenya (GoK) in collaboration with humanitarian organizations. Such joint implementation and inclusive coverage can be useful to foster social cohesion. As Turkana hosts largely face lack of access to services and refugees face legal restrictions limiting their social and economic opportunities, addressing hosts' and refugees' specific needs also requires a collaborative approach between organizations and the government at the county and national levels.

Investing in health, education, and livelihood strategies is necessary to mitigate the impacts of the COVID-19 pandemic. Selected findings of the COVID-19 RRPS show that most refugees report lower access to health facilities than before the COVID-19 outbreak, mainly due to fear of infection and unavailability of medical staff. Investing in creating enough and adequately staffed health facilities, and strengthening information campaigns on COVID-19 and the distribution of cases in camps can help mitigate the risk of future health crises and utilize the designated COVID-19 facilities if needed. The pandemic has translated into nearly zero school attendance and low engagement in learning activities. Providing homeschooling materials and increasing access to e-learning (including TV and radio broadcasts in different languages spoken by refugees) are crucial to support children's education and avoid lags. Scaling up second chance education programs for those that are behind, or those who may otherwise drop out can support education continuation. Employment rates, earnings, and business revenues have sharply dropped. Enhancing access to credit, coupled with building financial literacy,

[28] For more details, see IFC and MarketShare. 2019. "Gender Assessment of Kakuma Refugee Camp and Town & Kalobeyei Settlement and Town."
[29] IFC. 2020. International Finance Corporation, "AECF, IFC Launch Global Competition for Private Sector and Social Enterprises in Kenya's Kakuma Refugee Hosting Area."
[30] Mainly due to required documentation to open bank accounts and to acquire SIM cards, which are needed for mobile banking.

and positive strategies to cope with socioeconomic shocks can mitigate the impacts of the COVID-19 pandemic. Substantial investment will be needed to help refugees and hosts cope with the impacts of this pandemic.

▶ **TABLE 1:** Policy recommendations summary

Finding	Policy recommendation
Refugees in Kenya are not systematically included in national surveys, which results in a lack of comparable socioeconomic data.	1. Refugee household surveys, comparable to national measures, can provide evidence for program and policy planning while linking humanitarian and development efforts.
Refugee and hosts' dwellings are widely unimproved and overcrowded. Only 10 percent of households have access to electricity; 99 percent of refugee households use firewood and charcoal for cooking, and only 60 percent of host community households have access to water; toilet sharing is common for both communities.	2. Improving the quality of services is essential to lift living standards and help build a physically and psychologically healthier population by (i) improving quality of housing and reducing overcrowding, (ii) increasing availability of lighting, (iii) easing access to non-biomass fuels, and (iv) ensuring 20 liters of water per person per day for all, and reducing toilet sharing for refugees and hosts.
Secondary school attendance is low, especially for hosts and women of both communities.	3. Supporting transition to secondary school is necessary to build human capital by (i) understanding barriers facing hosts and developing flexible programs that accommodate their livelihoods and seminomadic lifestyles, (ii) creating new facilities and more classrooms, (iii) providing information on availability of schools and requirements to join, (iv) reducing fees and providing scholarships, (v) combatting early marriage, (vi) providing second chance education programs for women and offering childcare, and (vii) rolling-out assistance programs conditional on children school enrollment.
Eighty percent of refugees in Kakuma are highly food insecure, while among host communities in Turkana county food insecurity is high.	4. Food insecurity can be addressed by shifting from in-kind to cash assistance. Host community's food needs must be addressed through national programs, avoiding refugee-exclusive assistance.
Refugees feel their opinion is not considered by the host government and tend to trust their fellow refugee neighbors more than hosts.	5. Raising the voice and concerns of refugees through community leadership structures and promoting host-refugee interactions are critical to strengthen social cohesion.
Most households want to leave the camp, some want to stay, and a few wish to return to the country of origin. Forty percent of households need information to guide their plans.	6. Understanding refugees' intentions to move, their plans, and information needs is necessary to support the design of durable solutions in terms of resettlement, voluntary repatriation, and integration.
Only 20 percent of refugees are employed compared to 60 percent of host community members in Turkana.	7. Refugees have job-related skills that can be strengthened and matched to market and community needs; engaging the private sector can enhance access to the labor market for both communities. Tax reductions and quota strategies can foster inclusive participation.

Finding	Policy recommendation
Refugees' and hosts' access to finance is limited, which undermines business growth.	8. Broadening access to financial services by easing SIM card registration requirements for refugees, providing information about financial services as well as financial literacy training, and collaborating with the private sector are crucial to support business growth.
Refugees face restrictions to work and move within Kenya. They need information on job opportunities.	9. Easing restrictions on refugees' capacity to work and providing easy-to-access information can translate into increased participation in the labor market.
Refugee and host community women need support to be able to provide for and take care of their dependents, contribute to household expenses, and control their earnings.	10. Supporting refugee and host women's economic empowerment and their participation in the paid labor market are critical to build and maintain human capital, and to boost overall economic growth. Engaging men through awareness raising programs is crucial to support women's economic participation and girls' education, and to prevent SGBV and discrimination.
Refugee women do not look for paid work mainly due to 'family responsibilities' and prefer self-employment, as it allows them to carry out domestic and care work.	11. Childcare services constitute a sector that can create jobs, cover childcare needs, and enable women to fully participate in the labor market.
Key vulnerable groups for both communities include large households headed by women. Turkana hosts face limited access to water, sanitation, and education, while refugees face restrictions to move, work, and access financial services.	12. Targeting programs aimed at improving the living conditions of refugees and hosts must consider similarities across communities and differentiated needs; a collaborative approach between governments and organizations is key to ensure adequate response.
Refugees report lower access to health facilities than before the COVID-19 outbreak. The pandemic has translated into nearly zero school attendance and low engagement in learning activities. Employment rates, earnings, and business revenues have sharply dropped.	13. Health, education, and livelihood strategies can help mitigate the socioeconomic impacts of the COVID-19 pandemic by (i) creating enough and adequately staffed health facilities, (ii) providing homeschooling materials, expanding e-learning and scaling up second chance education, and (iii) broadening access to credit, and enhancing financial literacy and strategies to cope with socioeconomic shocks.

Background

1. Policy Design and Targeted Programming Can Be Informed by Socioeconomic Data

1. One percent of the world's population has been forced to leave their places of habitual residence due to conflict, violence, and environmental hazards.[31] Almost every nation in the world has been impacted by forced displacement, either as a point of transit, origin, or host country. Nevertheless, developing countries are disproportionately affected—hosting most refugees while facing tight government budget constraints. The socioeconomic impacts of the COVID-19 pandemic exacerbate the existing difficulties faced by low- and middle-income countries, placing refugees in a particularly vulnerable situation, considering their reduced access to social safety nets, low level of assets, and fragile livelihoods. As recognized by the Global Compact on Refugees (GCR), greater international cooperation as well as equitable responsibility sharing across member states are required and call for measures to better support refugees and communities that host them.

2. The Global Compact on Refugees recognizes that reliable, comparable, and timely data are critical for effecting burden and responsibility sharing. Data are essential for evidence-based measures to improve socioeconomic conditions for refugees and host communities; assess and address the impact of large refugee populations on host countries; and identify and plan appropriate solutions.[32] In situations of emergency, such as the one derived from the COVID-19 pandemic, timely and frequent data can support the design and implementation of a targeted response. The GCR urges states and relevant stakeholders to support evidence-based responses by promoting the development of harmonized or interoperable standards for the collection, analysis, and sharing of disaggregated data on displaced populations, returnees, and hosts.

3. While significant progress in the production of displacement statistics has been made, persistent data gaps must be closed to develop effective solutions by linking humanitarian and development efforts. Displacement data have become progressively relevant for official statistics, which need to consistently take account of forcibly displaced populations. Although efforts to produce data and reliable displacement statistics have emerged, multidimensional data gaps persist.[33] Limitations include variation across countries in terms of statistical capacities, and lack of comparable socioeconomic data of refugees and hosts. Timely and reliable statistics are crucial to better understand forced displacement, analyze its impact, monitor changes, enhance public debate and advocacy, and inform policy planning and programming.[34] Especially socioeconomic data are also crucial to link humanitarian and development efforts by addressing immediate, medium-, and long-term needs, ensuring sustainable solutions.

[31] At the end of 2019, there were 79.5 million displaced people. UNHCR. 2019. "Global Trends. Forced Displacement in 2019."
[32] United Nations. 2018. "Global Compact on Refugees," 17.
[33] World Bank. 2019. "Using Micro-Data to Inform Durable Solutions for IDPs."
[34] European Union and United Nations. 2018. "Expert Group on Refugee and Internally Displaced Persons Statistics—International Recommendations on Refugee Statistics," 13.

4. The Kakuma Socioeconomic Survey (SES) and preceding Kalobeyei SES help close data gaps while contributing to inform targeted response to address the impacts of the COVID-19 pandemic. Even though preceding surveys provide useful information on the living conditions of refugees and hosts, there is no comparable analysis that uses national poverty measurement instruments to understand the living conditions of such communities (see list of preceding surveys in Appendix 11). The Kakuma SES and Kalobeyei SES provide comparable poverty profiles by using measurements that are comparable to the most recent national poverty survey, the Kenya Integrated Household Budget Survey (KIHBS) 2015/16. The Kakuma SES provides one of the first comparable analysis on the economic lives of refugees and hosts in Kakuma, North West Kenya. The Kakuma SES and the preceding Kalobeyei SES[35] can help address socioeconomic data gaps and inform evidence-based programming and development policy. In doing so, they provide lessons for how socioeconomic information may be collected in other settings to facilitate replication. The Kakuma SES links its findings and recommendations to the preliminary results of the Kenya COVID-19 Rapid Response Phone Surveys, round 1 (Box 1).

BOX 1

COVID-19 rapid response phone surveys

The World Bank has launched a global initiative to track the socioeconomic impacts of COVID-19 through rapid response phone surveys. In over 100 countries, rapid response phone surveys are being designed and implemented. These phone surveys mainly cover nationals, although some countries, namely, Bangladesh, Colombia, Jordan, Uganda, and Kenya, among others have included refugees. Guidelines on sampling and implementation for phone surveys, as well as a questionnaire template were developed to support this effort. The COVID-19 questionnaire template includes core modules: knowledge about COVID-19, behavior changes, income loss, safety nets, access to medicine and food, and employment; and optional modules: food security, coping mechanisms, and concerns; and is continuously developing additional modules.

The Kenya Rapid Response Phone Survey (RRPS) collects bimonthly data from national, stateless, and refugee households, as well as formal enterprises and micro-entrepreneurs. The RRPS has recently completed the first of three data collection rounds, including a sample of 1,250 refugees and stateless people in Kalobeyei settlement, Kakuma camps, Dadaab camps, and Nairobi.[36] This report incorporates selected preliminary results on health, education, and livelihoods for camp and urban refugees in Kenya, while providing relevant recommendations.[37] More details on the Kenya RRPS as well as a results dashboard can be accessed through the Kenya COVID-19 tracker website (www.kenyacovidtracker.org).

[35] UNHCR, United Nations High Commissioner for Refugees and World Bank. 2020. "Understanding the Socioeconomic Conditions of Refugees in Kenya. Volume A: Kalobeyei Settlement. Results from the 2018 Kalobeyei Socioeconomic Profiling Survey."
[36] The national sample is comprised by 4,750 households and 4,000 enterprises. Four thousand households were selected from the Kenya Integrated Household Budget Survey 2015/16, while 750 were contacted through random digit dialing. Two thousand enterprises were selected from the Kenya Youth Employment and Opportunities Project, while an additional 2,000 were selected from the Kenya Census of Establishment.
[37] The refugee sample covers 250 refugees in Kakuma, 250 in Kalobeyei, 250 in Dadaab, 250 in Nairobi, and 250 stateless persons.

2. Refugees in Kenya

5. Kenya has hosted refugees since the 1960s, and it shifted its refugee policy from integration toward encampment in the early 1990s. The flow of asylum seekers into Kenya gathered momentum in the early 1970s, owing to the regime of Uganda's President Idi Amin. Refugees—mainly Ugandans, Asians, and Africans from neighboring countries—were able to work, move, and settle across Kenya. Many Ugandan refugees had relatives in Kenya and were relatively well-off professionals and businesspeople.[38] Thus, the refugee policy supported Kenya's interest in welcoming skilled workers and investment. In the early 1990s, the refugee influx from Somalia, Ethiopia, Sudan, Burundi, Rwanda, and the Democratic Republic of Congo brought with it a shift in Kenya's refugee policy from integration toward encampment.[39] Such policy change can be partly explained by the escalation in the number of refugees which overwhelmed Kenya's coping capacities, as well as by ethnic, political, and economic aspects.[40] The new approach was based on the continued offer of temporary protection, and the containment of refugees in camps close to the borders with Somalia and South Sudan. Somali refugees—initially settled along the coast—were relocated to Dadaab camps in Garissa County, while Ethiopians, Sudanese, and South Sudanese were transferred to Kakuma camp in Turkana County.[41]

6. Kenya hosts nearly 500,000 refugees who are under the responsibility of the Refugee Affairs Secretariat (RAS) and UNHCR.[42] Despite an early emphasis on the temporary nature of the camps established along Kenya's borders, today most refugees in Kenya live in camps, while an estimated 16 percent reside in urban areas. Kenya's national refugee legislation only came into force through the 2006 Refugee Act, 55 years after the 1951 Refugee Convention and its related 1967 Protocol. The Act established the Department of Refugee Affairs (DRA) which was replaced by the Refugee Affairs Secretariat (RAS) in 2016. In 2017 RAS fully assumed responsibility for reception, registration, documentation, refugee status determination (RSD), and refugee management, with UNHCR's active support. RAS and UNHCR grant refugee status through individual interviews and prima facie group determination. The Refugees Act stipulates that upon status determination, refugees should be provided with a 'refugee identity card,' which takes the form of either a UNHCR Mandated Refugee Certificate (MRC) that is valid for two years, or the RAS-issued Alien Refugee Certificate (ARC), valid for five years (see Appendix 9 "Types of refugee identification documents").

7. Forty percent of Kenya's refugee population reside in Turkana West, an ethnically diverse region where host communities face widespread poverty and difficult living conditions.[43] Turkana West is an impoverished, and semiarid location mostly inhabited by Turkana people, a Nilotic, seminomadic community. The most important economic activity is pastoralism, where the main livestock are cattle, donkeys, camels, and goats. In 2015, 72 percent of the Turkana population lived beneath the

[38] Abuya. 2007. "Past Reflections, Future Insights: African Asylum Law and Policy in Historical Perspective"; Kagwanja. 1999. "Challenges and Prospects for Building Local Relief Capacity in Kenya: Reflections on Humanitarian Intervention."
[39] Campbell, Crisp, and Kiragu. 2011. "Navigating Nairobi: A Review of the Implementation of UNHCR's Urban Refugee Policy in Kenya's Capital City."
[40] Lind, Mutahi, and Oosterom. 2015. "Tangled Ties: Al-Shabaab and Political Volatility in Kenya" Other aspects reinforcing the policy shift included a decline in the Kenyan economy, regional conflicts, social unrest, and a shortage of arable land.
[41] O'Callaghan and Sturge. 2018. "Against the Odds: Refugee Integration in Kenya."
[42] UNHCR. 2020. "Kenya: Registered Refugees and Asylum-Seekers. July 2020."
[43] UNHCR. 2020. "Kenya: Registered Refugees and Asylum-Seekers." Kakuma camp and Kalobeyei settlement host more than 197,000 refugees.

international poverty line of US$1.90 a day (2011 PPP), while in Kenya overall 37 percent did.[44] According to the Kenya Demographic Health Survey (KDHS) 2008/09, the Turkana West subcounty's health and development indicators are among the worst globally.[45] Thus, refugees in Turkana West face an already deteriorated socioeconomic landscape.

8. Refugees have been residing in Turkana West since 1991, when about 10,000 Sudanese boys fled into Northern Kenya to escape the civil war in southern Sudan. In 1992, following talks with the Government of Kenya (GoK), local leaders, and elders of the Turkana community, UNHCR formally established a refugee camp in Kakuma. The refugee population has fluctuated over the years due to the outbreak of different conflicts in neighboring countries. Refugees have become an integral part of the social, cultural, and economic fabric, and their presence has contributed to demographic and socioeconomic variations in the region. Turkana West has seen an increase in population. In fact, most non-Turkana Kenyans in the area moved to Kakuma to open businesses and pursue economic activities after the creation of the camp. Socioeconomic interactions between refugees and hosts have helped to boost the overall local economy, improving nutritional outcomes and physical well-being for both.[46] Nevertheless, refugees and hosts in Turkana continue to face poor living conditions.

9. In 2015, UNHCR and the GoK agreed to pilot a new approach by developing a settlement promoting the self-reliance of refugees and hosts by enhancing livelihood opportunities and inclusive service delivery. Subsequently, the county government, UNHCR, and partners embarked on a 15-year comprehensive multisectoral and multi-stakeholder initiative, also known as Kalobeyei Integrated Socio-Economic Development Plan (KISEDP) in Turkana West. KISEDP uses an area-based approach which envisions that both refugees and host communities will benefit from strengthened national service delivery systems and increased socioeconomic opportunities, along with sustained investments in people's skills and capabilities, so that they can become drivers of economic growth.[47] Through its eight components,[48] the KISEDP aims to transition refugee assistance from an aid-based to a self-reliance model, while increasing opportunities for interaction between refugees and hosts. Aligned with the GRC and an integral part of the County Integrated Development Plan (CIDP), the KISEDP recognizes the need for collecting and using data for programming and reporting. Specifically, socioeconomic data are acknowledged as an essential input to understand specific needs and vulnerabilities, and inform area-based programming and investments to achieve the expected outcome of socioeconomic growth among hosts and refugees.

10. The Kakuma SES and preceding Kalobeyei SES provide comparable poverty profiles for refugees and host community members. Initiated jointly by UNHCR and the World Bank, the socioeconomic survey series to understand the living conditions of refugees in Kenya was designed to support the global vision laid out by the GRC and the Sustainable Development Goals (SDGs).[49] The Kakuma

[44] World Bank. 2018. "Kenya Gender and Poverty Assessment 2015/16. Reflecting on a Decade of Progress and the Road Ahead."
[45] KNBS. 2010. "KDHS. Kenya Demographic and Health Survey 2008/2009."
[46] Betts, Omata, and Sterck. 2018. "Refugee Economies in Kenya"; World Bank. 2020. "'Yes' In My Backyard? The Economics of Refugees and Their Social Dynamics in Kakuma, Kenya."
[47] UNHCR. 2018. "KISEDP Progress Report."
[48] Health; education; water and sanitation; protection; spatial planning and infrastructure; agriculture, livestock, and natural resource management; sustainable energy solutions; and entrepreneurship.
[49] The series will be comprised by the Kalobeyei SES (vol. A), Kakuma SES (vol. B), Urban SES (vol. C), and a comparative policy note. The present Kakuma SES report focuses on hosts and refugees in Kakuma and does not provide comparisons with Kalobeyei refugees.

SES covers socioeconomic indicators, both at the household and individual levels, aligned with the national 2015/16 Kenya Integrated Household Budget Survey (KIHBS) and Kenya Continuous Household Survey (KCHS).[50] To improve efficiency, the Rapid Consumption Methodology (RCM) was used to estimate consumption and thus the level of poverty of the refugee population in Kakuma.[51] The Kakuma SES, ensuing analysis, and recommendations provide a comprehensive snapshot of refugees' and hosts' demographics, disabilities, housing characteristics, access to services, livelihoods, and poverty incidence while introducing preliminary results of the COVID-19 RRPS on health, education, and livelihoods. Refugee-specific sections cover food security, social cohesion, trajectories of displacement, and intentions to move (see Kakuma-Kalobeyei map in Appendix 3).

BOX 2

Survey design and methodology

The sample is drawn based on a complete list of dwellings in the camp, obtained from UNHCR's dwellings mapping exercise. Both, the mapping exercise and the SES were carried out in parallel to UNHCR's Registration Verification Exercise (VRX) in 2019.[52] The objective of the dwellings mapping is to update UNHCR's database containing information on every shelter in Kakuma camp. The mapping exercise took drone photographs of the camp in order to identify the number of dwellings on the Kakuma camp territory, and then tagged every dwelling in the camp with a number, differentiating between residential or business dwellings. Finally, a data set including the tag numbers of each residential dwelling in the camp was created and used in the sampling frame for the Kakuma SES.

Based on the sample of dwellings, households are randomly selected to ensure a representative sample. The SES is designed to be representative of all households living in Kakuma, which are defined as groups of people who regularly cook and share meals together (Appendix 1 "Definitions"). The Kakuma SES covers 2,127 households across the four Kakuma subcamps (Appendix 11 "Preceding socioeconomic surveys for refugees and host communities in Kenya"). Selected dwellings were visited by trained enumerators who conducted the SES interviews via Computer Assisted Personal Interviewing (CAPI). Upon arriving in a sampled dwelling, enumerators first asked for the number of households living there. Then, one of the households was randomly selected for the interview. Both the number of households living in each dwelling, as well as the number of dwellings each household occupied are used to calculate sampling weights and ensure representative statistics for the full camp population (see Table 5).

The SES questionnaire is designed to produce data comparable with national household survey instruments, as well as with the Kalobeyei SES 2018. Modules on education,

[50] Kenya National Bureau of Statistics. 2018. "Basic Report 2015/16 KIHBS."
[51] Pape and Mistiaen. 2018. "Household Expenditure and Poverty Measures in 60 Minutes: A New Approach with Results from Mogadishu."
[52] Together with the Government of Kenya, UNHCR maintains a database of all registered refugees and asylum seekers in the country. While registration takes place on a continuous basis, verification exercises are conducted periodically, typically every two to three years.

employment, household characteristics, assets, consumption, and expenditure are aligned with the most recent national poverty survey, the KIHBS 2015/16, and are comparable to results reported at the county and national levels.[53] Host community households therefore include those who reside in Turkana County, as provided by the KIHBS 2015/16 data (see Table 6 "Sample allocation for KIHBS 2015/16"). Additional modules on access to remittances, loans and credit, vulnerabilities, social cohesion, coping mechanisms in response to lack of food, displacement trajectories, and durable solutions were administered to capture refugee-specific challenges. The questionnaires were administered in English. The instrument was not translated into different languages but rather interpreters—who were refugees themselves—were hired to interpret the questions during the interview. The questionnaire was interpreted from English to Lotoku, Didinga, Arabic, Nuer, Dinka, Somali, Oromo, and Anyuak.

Comparability between the refugee and host communities can be limited. Comparisons are limited by a gap of four to five years between the SES data and the KIHBS 2015/16 data, during which national averages might have changed considerably.

[53] Questions are also aligned with the Kenya Continuous Household Survey (KCHS) which, since 2019, has collected comparable statistics for all counties in Kenya.

Findings

11. Understanding the socioeconomic characteristics of the refugee and host population in Kakuma is key to identify factors limiting livelihoods and informing targeted programming. The Kakuma SES findings provide a wide-ranging overview of the living conditions of refugees and hosts. Furthermore, it delivers key insights that contribute to detecting the socioeconomic needs of both communities, thus serving as a comprehensive tool to advise policy making and programmatic response.[54]

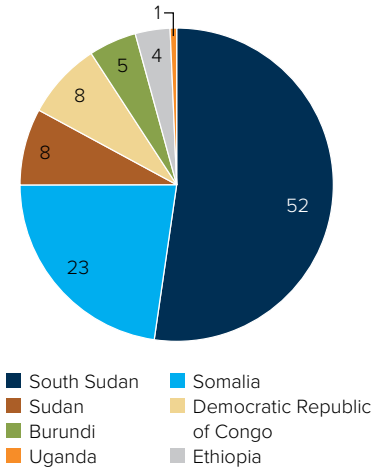
1. Demographic Profile

Most Kakuma refugees arrived after 2007 from South Sudan, Somalia, Sudan, and the Democratic Republic of Congo. Around 60 percent of refugees and host community members are under 18 and often integrate large households headed by women.

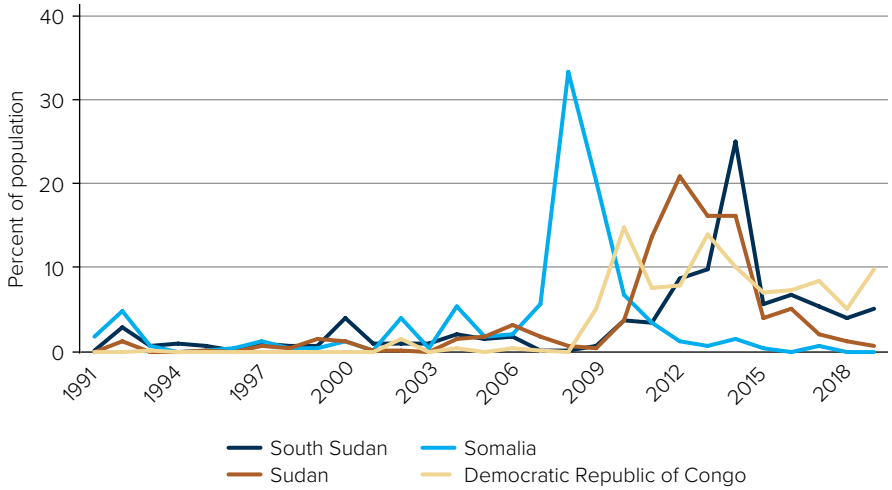
12. The Kakuma camp hosts over 156,000 refugees, mainly from South Sudan, Somalia, Sudan and the Democratic Republic of Congo most of whom arrived after 2007. Fifty-two percent of Kakuma's refugee population is from South Sudan, while 23 percent of them come from Somalia. The remainder of the refugee population in Kakuma comes from Sudan, the Democratic Republic of Congo, Burundi, Ethiopia, and Uganda (Figure 1). In 2015 new arrivals settling in Kakuma sharply decreased (Figure 2), which can be explained by the establishment of Kalobeyei integrated settlement in the same year, which in turn handled most new arrivals after 2015. Kakuma is divided into four subcamps. Kakuma 1 was the first camp established in 1992. After a peak of arrivals in 2008, Kakuma 2 and 3 were established followed by Kakuma 4 in 2014. Currently, most of the South Sudanese population resides in Kakuma 1 and 4, while Somalis are spread across Kakuma 1, 2, and 3 (Figure 3; see Kakuma maps in Appendixes 2 and 3).

[54] Graphs and charts for refugee estimates were created based on the Kakuma SES 2019 data (Kakuma 2019). Graphs and charts depicting national and Turkana County information were created based on the Kenya Integrated Household Budget Survey 2015/2016, (KIHBS 2015/16). Significance levels are reported as p-values for comparative figures, with 1 percent ($p<.01$) and 5 percent ($p<.05$) levels considered significant. Error bars in graphs display standard error estimates.

▶ FIGURE 1: Countries of origin[55]

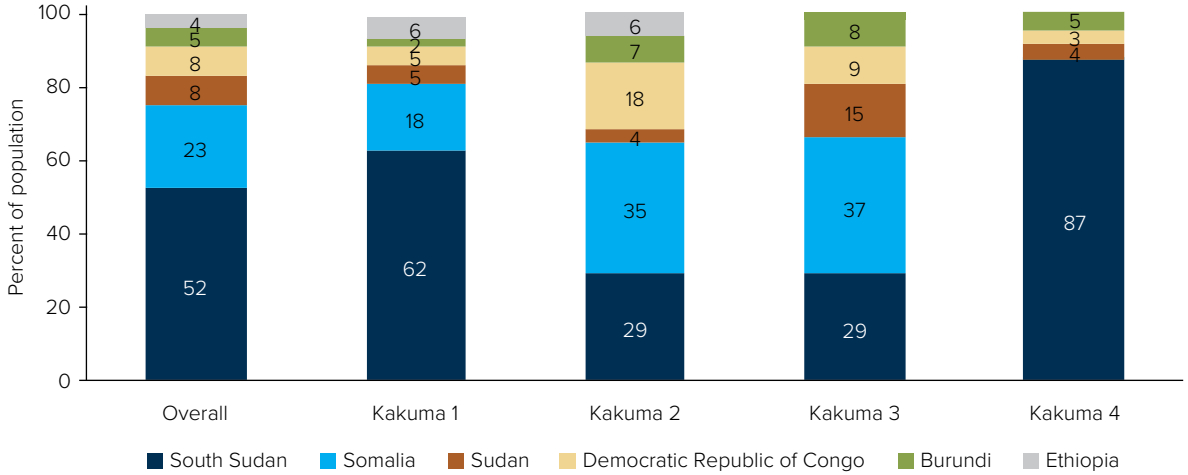


▶ FIGURE 2: Year of displacement by main countries of origin of household heads



Sources: Kakuma (2019); ACLED (1997–2019).[56]

▶ FIGURE 3: Countries of origin by subcamp

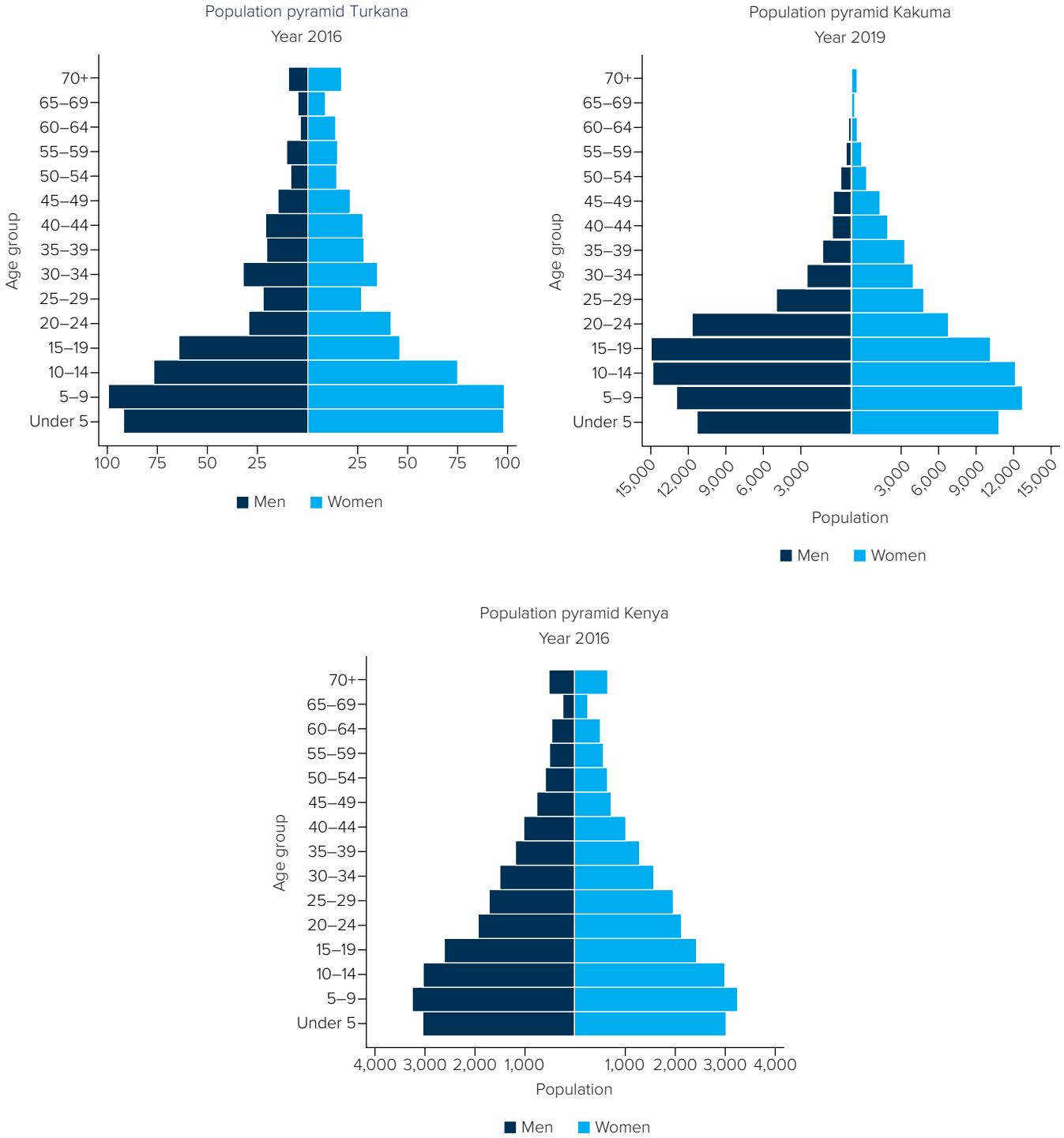


Source: Kakuma (2019).

13. Younger refugees in Kakuma are mostly men, while most of those ages 30 and above are women. The age pyramid of Kakuma's population reveals that 61 percent of the population are 18 and below, compared to 59 percent of Kenyans residing in Turkana County and 50 percent nationally (Figure 4). While most refugees are men, the opposite is true for the Turkana population (54 percent vs 47 percent respectively, $p<0.01$). In greater Kenya, the distribution by sex is nearly balanced (49 percent men). Interestingly, while most refugees are men, those ages 30 and above are mostly women, which is largely driven by the South Sudanese community whose population is mostly made up of children and adult women. Very few elders remain, with only 0.6 percent of refugees ages 65 and above, and 4 percent of both the Kenyan population at the national level as well as those in Turkana.

[55] Arrival date is based on the Kakuma SES data, and thus might differ from UNHCR official records.
[56] "ACLED (Armed Conflict Location and Event Database)." n.d.

▶ **FIGURE 4:** Population pyramids for Kenyans at the national and Turkana levels



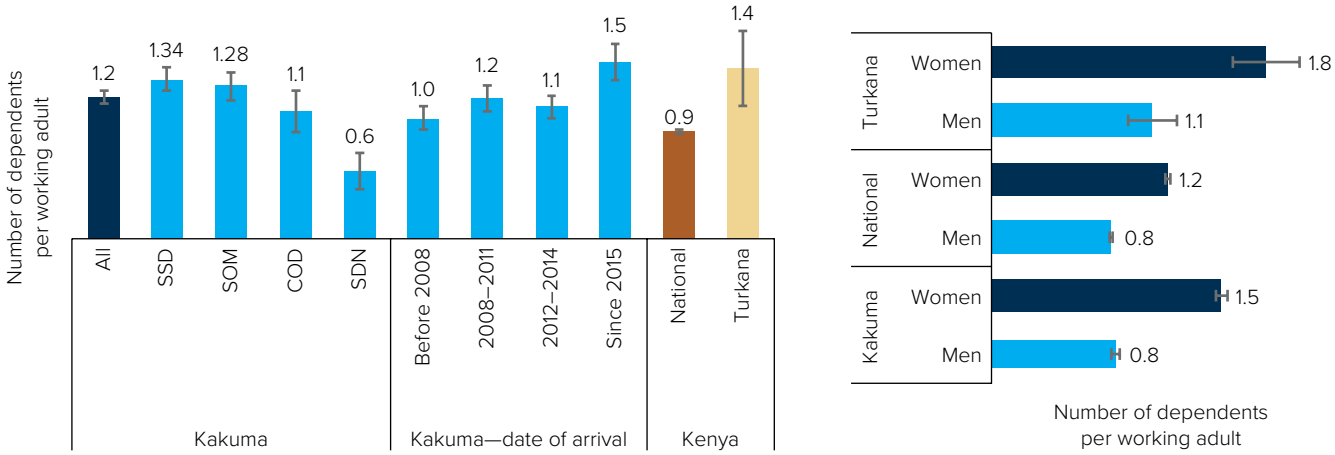
Sources: Kakuma (2019); KIHBS (2015/16).

14. Refugee households are larger in size than local and national households. The average household in Kakuma is made up of 6.3 people, compared to 4.4 in Turkana County ($p<0.01$), and 4 in greater Kenya ($p<0.01$). The largest refugee households are those headed by South Sudanese (7.3 members, on average) followed by Somali-headed households (6.8 members, on average). Only 15 percent of refugee households are made up of one or two members, versus nearly 32 percent nationally ($p<0.01$)

and 27 percent at the Turkana County level. In turn, 43 percent of refugee households are formed by seven or more people, compared to 15 percent nationally and 21 percent at the Turkana level ($p<0.01$).

15. A higher incidence of dependents can lead to higher household dependency ratios.[57] In Kenya overall, the ratio is 0.9 and thus, working-age adults slightly outnumber dependents. In Turkana County it is 1.4 (7 dependents for every 5 working age adults, Figure 5). Although the Turkana population is mainly made up of youth, the presence of elders is larger than among refugees. Thus, Turkana dependents comprise children and elders, while refugee dependents are mostly children. The refugees' dependency ratio is 1.2 (6 dependents for every 5 working-age adults). Refugees who arrived in 2015 or later—mostly South Sudanese—have the highest ratios ($p<0.01$). Since most refugees ages 30 and above are women, it is not surprising to find that dependency ratios are higher among women-headed households ($p<0.01$, Figure 5). Furthermore, according to UNHCR's protection monitoring framework, Kakuma is home to an estimated 1,598 unaccompanied minors and 5,825 separated children.[58] These populations face additional protection risks and require specialized programming, including counseling, and placement within existing household networks. Interestingly, refugees heading households with the highest number of dependents report to be married, with women being more likely to be separated and widowed than men (Figure 6).

▶ **FIGURE 5:** Dependency ratio by country of origin and sex of head, for refugees and Kenyans

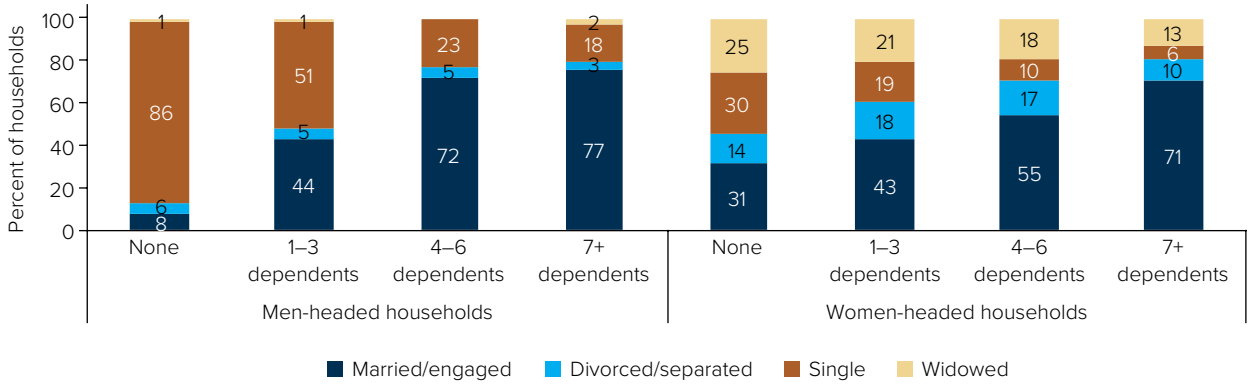


Sources: Kakuma (2019); KIHBS (2015/16).

[57] The household dependency ratio relates the number of children (0–14 years old) and older persons (65 years or over) to the working-age population in a household. A higher dependency ratio suggests a larger economic burden placed on working-age adults. (15–64 years old). United Nations. 2007. "Dependency Ratio—the United Nations."

[58] Under international law, a child is someone who is under 18 years. Unaccompanied child is a child who is separated from his/her family (both nuclear and extended) and is totally alone. Separated child is a child who is separated from both parents or guardians or any other person who under law or custom is responsible for his/her care. This definition is also sometimes used to cover unaccompanied children, although in many emergencies children are sometimes accompanied by either community members, friends, or members of the extended family. UNICEF Indonesia. 2008. "Toolkit on Child Protection in Emergencies: A Guide for Fieldworkers," 3.

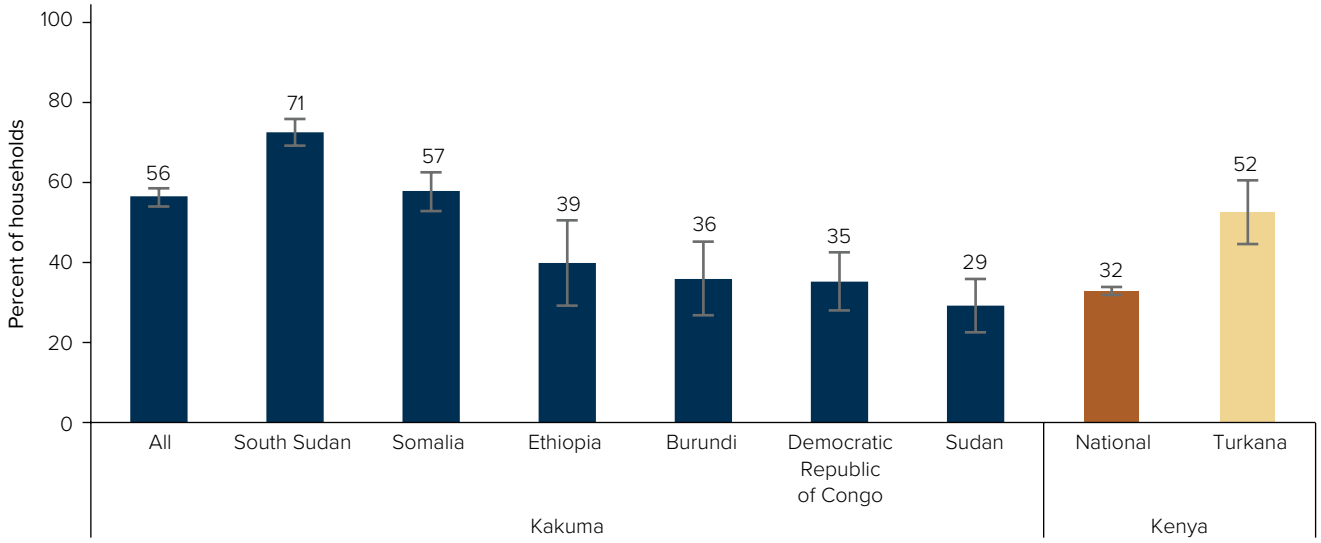
▶ FIGURE 6: Marital status by number of dependents



Sources: Kakuma (2019); KIHBS (2015/16).

16. Most refugee households are headed by women (56 percent), differing substantially from the proportion of households headed by women at the national level (32 percent), although not significantly different from that of Turkana (52 percent, Figure 7). Refugee households headed by women tend to be larger in size and have more dependents than those headed by men. This is particularly true for South Sudanese households. Similar patterns were observed in the 2017 South Sudan Poverty Assessment and the 2017 Ethiopia Skills Survey, where 90 percent of South Sudanese households are headed by women.[59]

▶ FIGURE 7: Proportion of households headed by women by country of origin

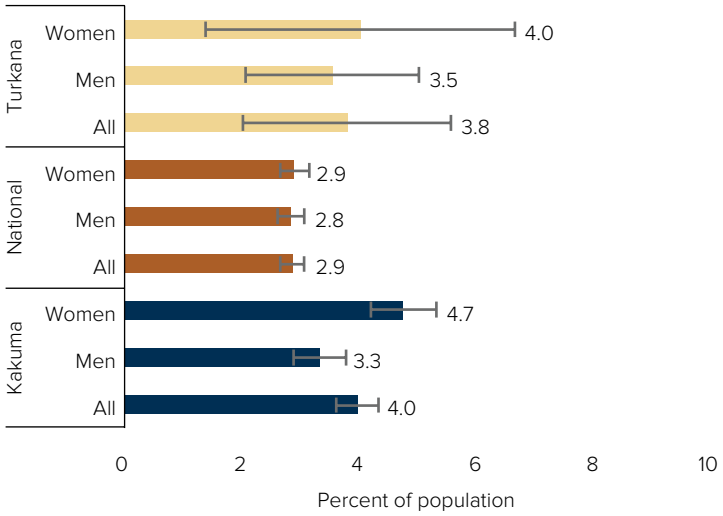


Sources: Kakuma (2019); KIHBS (2015/16).

[59] World Bank. 2019. "Using Micro-Data to Inform Durable Solutions for IDPs."

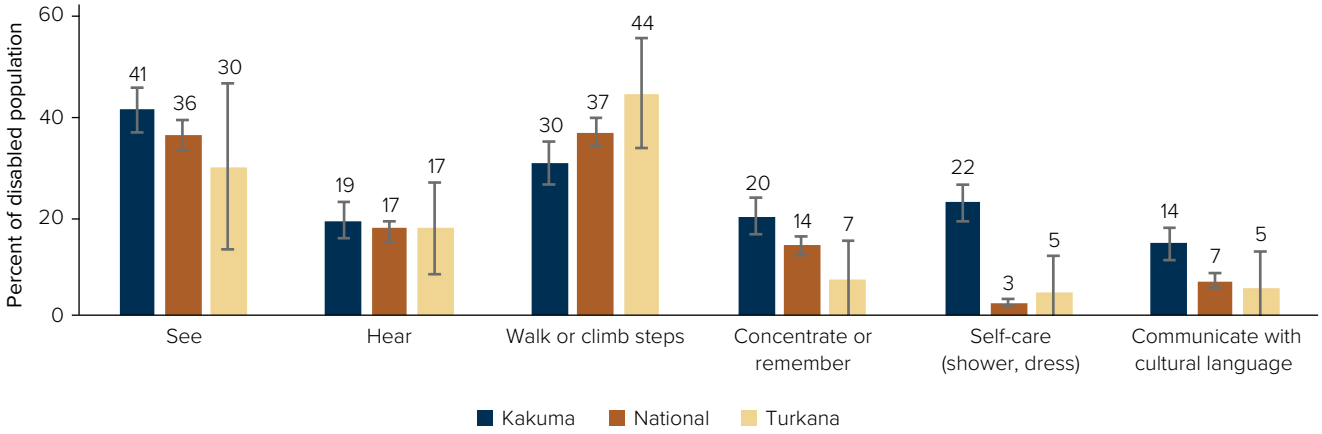
17. Refugees and hosts are more likely to be disabled than Kenyans at the national level.[60] In Kakuma, women are more likely to be disabled than men ($p<0.01$), while differences according to sex in Kenya at the national and Turkana County level are not significant (Figure 8). As expected, elderly refugees (ages 65 and above) are more likely to be disabled than younger refugees ($p<0.01$). Visual disability is the most common among refugees, while for hosts, difficulty in walking, or climbing steps is the most prominent one (Figure 9). Importantly, 20 percent of refugees reported difficulty remembering or concentrating, while for nationals and hosts this is not as common. Facing traumatic events where one's life is at risk, such as war and generalized violence, can derive in post-traumatic stress disorder, depression, and anxiety.[61] Such mental disorders can cause difficulty remembering and concentrating, which affects people's ability to engage in education and income generating activities.[62]

▶ **FIGURE 8:** Disabled population by location and sex



Sources: Kakuma (2019); KIHBS (2015/16).

▶ **FIGURE 9:** Type of disability among refugees and hosts



Sources: Kakuma (2019); KIHBS (2015/16).

[60] A person is disabled, according to the Washington Group on Disability Statistics, if he/she answers 'a lot of difficulty' or 'cannot do it at all' to at least one of the following: seeing, hearing, walking/climbing, remembering/concentrating, washing/dressing, and communicating. Refugees who are disabled were compared to nationals who have any type of disability (based on the KIHBS).

[61] As the SES did not use a psychometric test to measure PTSD, additional research is required to understand PTSD and its link with educational and labor outcomes.

[62] National Collaborating Centre for Mental Health. 2005. *Post-Traumatic Stress Disorder: The Management of PTSD in Adults and Children in Primary and Secondary Care.*

2. Services

Refugee and host community households have low access to improved housing, very few are connected to the electricity grid, and most refugee households use firewood for cooking. Refugees' and hosts' educational attainment and secondary school attendance rates are low, although lower for hosts and women of both communities.

18. Assistance and service delivery in Kakuma is managed by the Government of Kenya (GoK), UNHCR, and humanitarian and development organizations, however with limited funds, scale, and capacity. Quality is limited and requires improvement. While the increasing refugee population has contributed to a growing economy in Kakuma, it has led to a surge in the need for assistance and services. UNHCR and partners provide assistance and services such as protection, shelter, water and sanitation, health, education, infrastructure and housing materials, food and nonfood items, and cash assistance, as well as support for livelihoods activities, vocational training, and basic financial services (see Appendix 4 "Resources distributed in Kakuma camp"). Nevertheless, substantial investment is needed to enhance and extend inclusive delivery of services for hosts and refugees.

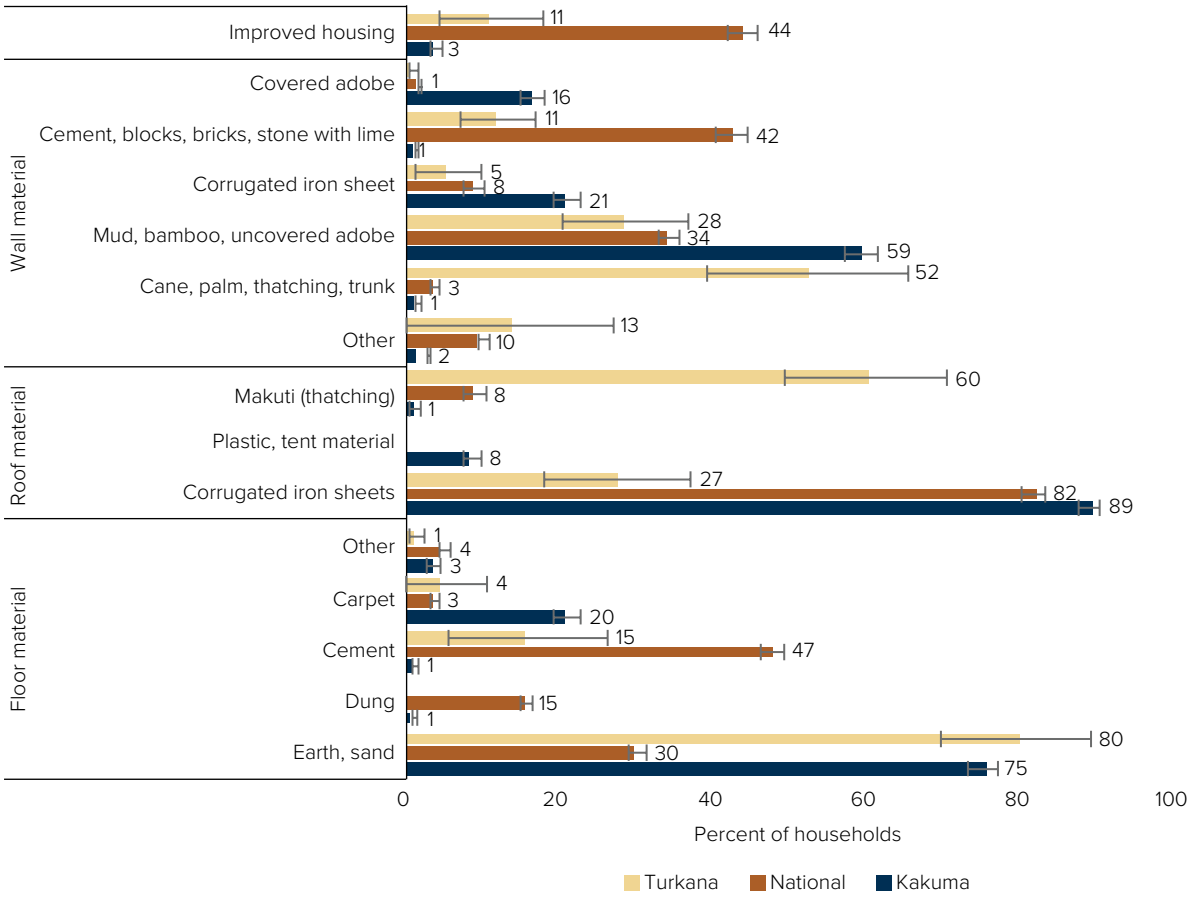
19. Kakuma refugee camp is comprised of four subcamps divided into zones, blocks, and designated areas for residential lots, health facilities, schools, and markets. As in the Kalobeyei settlement, the service delivery approach in Kakuma camp promotes integrated delivery through the joint efforts of the county government, and humanitarian and development partners. However, reported availability and access to services among refugees and hosts, reflect that there is room for improvement. On housing, refugees are provided with residential dwellings, or with materials in case repairs are needed. Access to health services is granted by UNHCR and partners, and are complemented by the county government. Heath facilities in Kakuma camp are accessible for both hosts and refugees (see Section 2.3 "Water, sanitation, and health services"). Primary and secondary schools are also run by UNHCR and partners. Efforts to strengthen inclusion of refugees in the national education system are being carried out through the development of the Refugee Education Policy.[63] Food is distributed through monthly rations and complemented with mobile money transfers under the World Food Programme's Bamba Chakula program.[64]

[63] UNHCR. 2019. "KISEDP Progress Report."
[64] Bamba Chakula is a cash-based intervention designed as an alternative to in-kind food aid. By providing refugees with currency rather than food aid, it allows recipients to purchase goods according to their priorities from a network of registered traders. Whereas in Kakuma refugees receive a mix of cash transfers and in-kind aid, in Kalobeyei, assistance is provided almost completely through Bamba Chakula.

2.1 Housing

20. Kakuma refugees have lower access to improved housing than Kenyans at the national and Turkana County levels. The types of wall, roof, and floor materials determine the classification of housing as improved or unimproved (Appendix 7 "Classification of housing materials"). Refugee and host community households tend to use unimproved housing materials more often than Kenyans at the national level. The most widely used roofing material among national and refugee households is corrugated iron sheets, which are provided by UNHCR to refugees. In contrast, Turkana hosts tend to use thatching as the main roof and wall materials (Figure 10). The proportion of Turkana households that use improved materials is higher than that of refugee households ($p<0.05$), but much lower than the national average.[65] Turkana residents' low access to improved housing is at least partly explained by preferences based on their seminomadic lifestyle. They migrate periodically and build their dwellings themselves (using thatching or makuti), thus their construction materials need to be temporary and readily available.[66] This is noticeable mainly for makuti, a roof and wall material that is made by employing a weaving technique using dried leaves.

▶ **FIGURE 10:** Distribution of households by floor, roof, wall materials, and type of housing

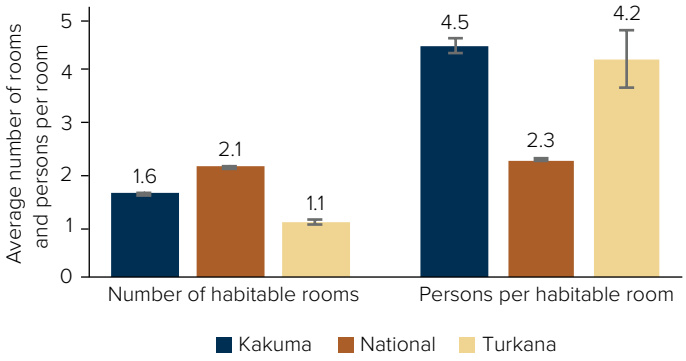


Sources: Kakuma (2019); KIHBS (2015/16).

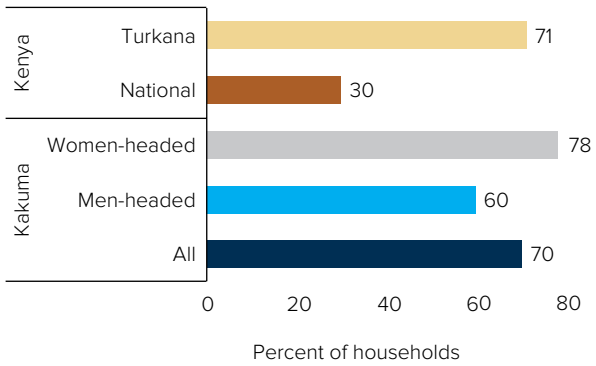
[65] Figures include urban and rural Turkana County. The use of cement for floors and walls could be more prevalent in urban areas.
[66] Ali et al. 2015. "Effectiveness of Ng'adakarin Bamocha Model in Improving Access to Ante-Natal and Delivery Services among Nomadic Pastoralist Communities of Turkana West and Turkana North Sub-Counties of Kenya." Turkana pastoralists migrate in groups of 40 to 100 households that have agreed to move together under a recognized leader in pursuit of pasture, water, and security.

21. Kakuma refugees and Turkana County residents experience more overcrowding than Kenyans at the national level.[67] Overcrowding has proven to be linked with stress, domestic violence, and spread of infectious diseases.[68] Even though refugee households occupy more rooms than Turkana hosts ($p<0.01$), the density of room use is not significantly different (Figure 11). However, it largely differs from the national level (Figure 12). Overcrowding varies according to wealth quantile. In Kakuma, 88 percent of the poorest refugee households live in overcrowded conditions compared to 49 percent of the least poor. In Kenya at the national level, 61 percent of the poorest and 10 percent of the least poor households experience overcrowding; at the Turkana County level, 91 percent of the poorest versus 33 percent of the least poor experience overcrowding. Between refugees, overcrowding is higher among women-headed households ($p<0.01$).

▶ FIGURE 11: Number of habitable rooms and density, for refugee and Kenyan households



▶ FIGURE 12: Overcrowding among refugee and Kenyan households



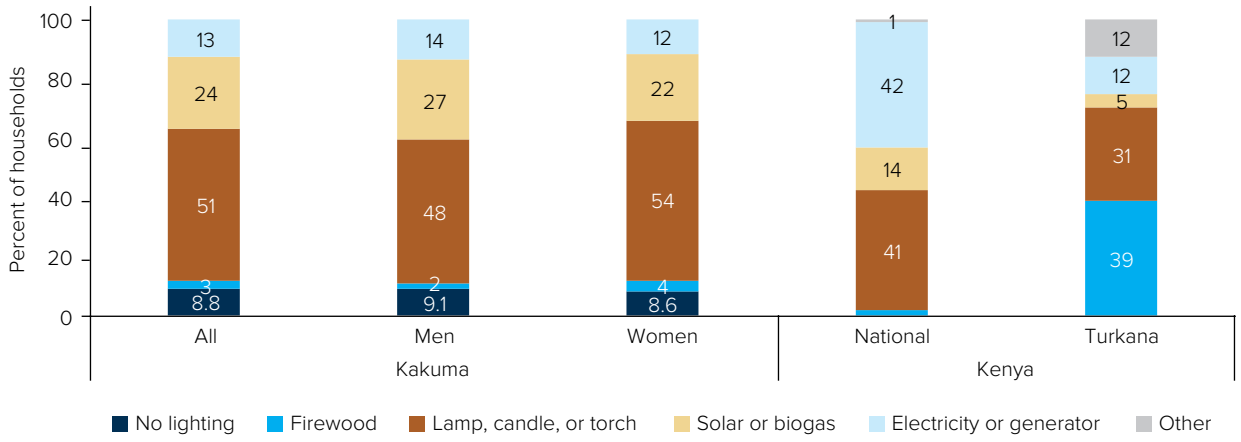
Sources: Kakuma (2019); KIHBS (2015/16).

2.2 Lighting and energy for cooking[69]

22. Most refugee households are not connected to the electricity grid and use battery or solar lamps, candles, or torches for lighting; nearly 10 percent do not have access to any source of lighting. Only 13 percent of households have access to electricity (grid or generator, Figure 13). Comparably, 42 percent of households at the national level and 12 percent at the Turkana level are connected to the main grid or a generator.[70] The main sources of lighting in Kakuma are battery lamps, candles, or torches (51 percent), which are the second main source of lighting for Kenyans at the national (41 percent) and Turkana level (31 percent). Compared to 39 percent of Turkana hosts, only 3 percent of refugees use firewood for lighting. Firewood collection is reserved for the Turkana community,[71] which can explain why it is a more common source of lighting for hosts. Lack of access to lighting can have negative implications on education outcomes, perceptions of insecurity, risk of gender-based violence (GBV), crime, and community violence.

[67] UN Habitat. 2010. "A Practical Guide for Conducting Housing Profiles," 84. Overcrowding occurs if three or more people occupy each habitable room. According to a UN Habitat slum-related definition of overcrowding, a house is considered to provide a sufficient living area for the household members if not more than two people share the same room.
[68] WHO. 2020. "What Are the Health Risks Related to Overcrowding?"
[69] Comparable data on energy for cooking are not available for nationals. Only refugee data are presented in the cooking energy section.
[70] Turkana County Government. 2019. "County Integrated Development Plan." In Turkana, the main challenges faced by the energy sector include a poor transmission and distribution infrastructure, high cost of power, low per capita power consumption, and low countrywide electricity access.
[71] Betts, Omata, and Sterck. 2018. "Refugee Economies in Kenya."

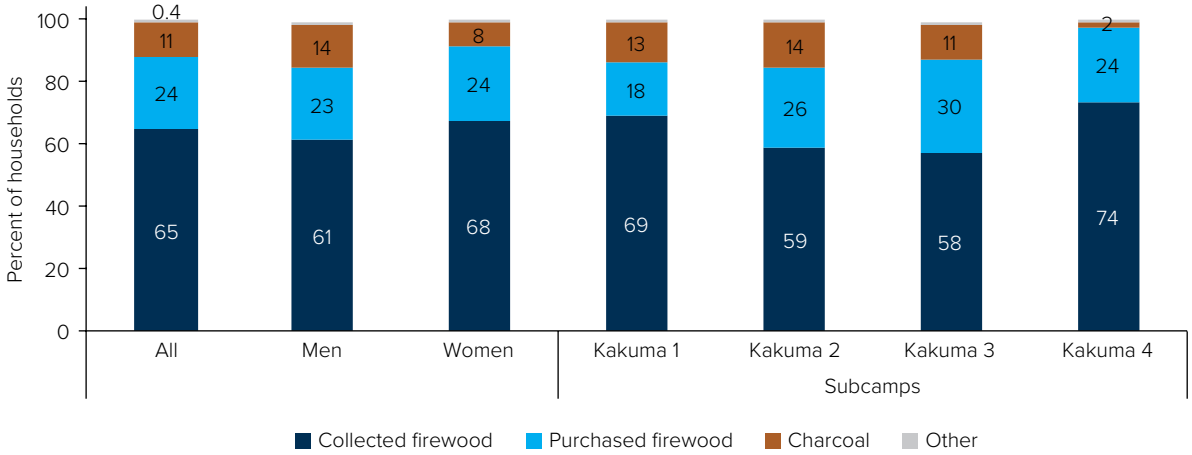
▶ FIGURE 13: Source of lighting among refugees and hosts



Sources: Kakuma (2019); KIHBS (2015/16).

23. Refugee households overwhelmingly use firewood or charcoal for cooking. Although firewood collection is not allowed for refugees, 65 percent of households reportedly use collected firewood for cooking, while 24 percent of them use purchased firewood, and 11 percent use charcoal (Figure 14). UNHCR provides 10 kg of firewood per refugee every two months. However, previous assessments have shown that the amount of firewood provided is insufficient to cover household cooking needs.[72] Therefore, many refugees supplement their needs by purchasing firewood sold by Turkana hosts (often in exchange for food rations) or collecting it outside the camp. Since firewood collection is particularly reserved for Turkana hosts, collecting firewood is dangerous for refugees as it can generate conflicts with hosts for whom selling firewood constitutes a main source of income.[73] Furthermore, firewood collection contributes to land degradation which has serious long-term implications for communities at the local, national, and international levels.

▶ FIGURE 14: Main source of energy for cooking by sex of household head and subcamp



Source: Kakuma (2019).

[72] IFC and MarketShare. 2019. "Gender Assessment of Kakuma Refugee Camp and Town & Kalobeyei Settlement and Town"; UN Women. 2019. "Gender Assessment of Kalobeyei Settlement and Kakuma Camp. Determining the Level of Gender Mainstreaming in Key Coordination Structures."
[73] Betts, Omata, and Sterck. 2018. "Refugee Economies in Kenya."

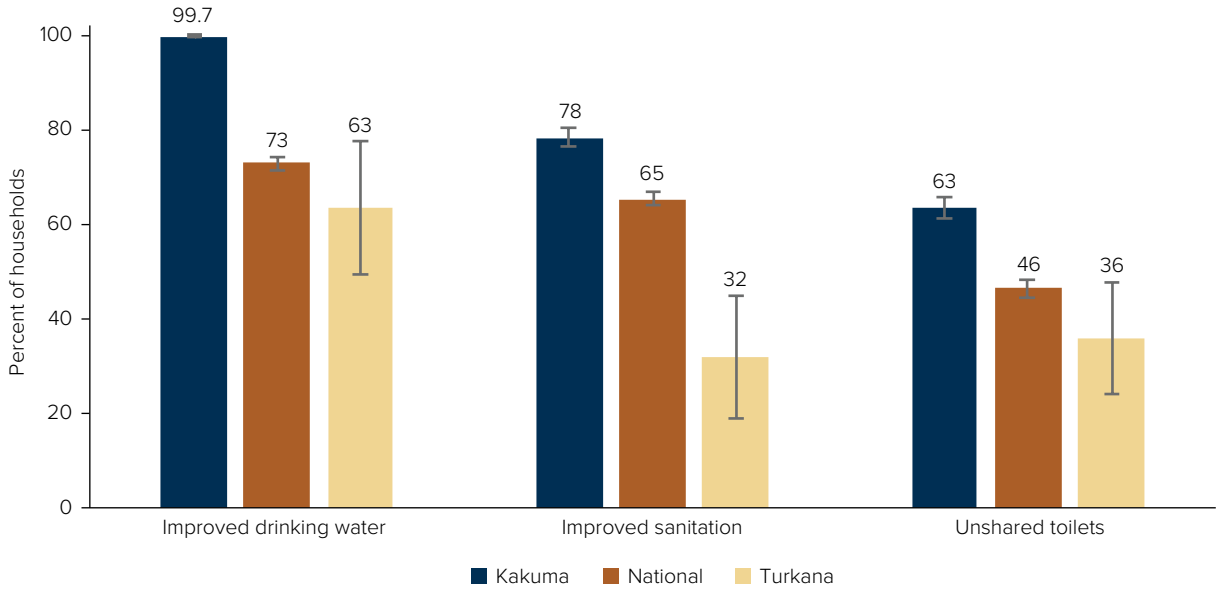
24. The collection and use of firewood for cooking is a risk especially for refugee women. Collecting firewood and cooking with it have important negative implications, including increased risk of physical abuse and sexual assault, as well as health implications.[74] The combustion of solid fuels emits large amounts of airborne pollutants which can generate acute respiratory diseases and other ailments, especially for women and girls who are usually the main household cooks, as well as for children under age 5 who normally remain in the proximity of the cooking area when food is prepared.[75] Furthermore, the collection and cooking process can take several hours, limiting women's and girls' time to pursue education or engage in income-generating activities.

2.3 Water, sanitation, and health services

25. Refugees' access to improved drinking water is higher than for Kenyans at the national and Turkana County levels, although water shortages are persistent and commonly reported by refugees. The nearly universal access to water may be explained by the work of international and local organizations that provide water services within the refugee camp (Figure 15). A recent WASH evaluation[76] indicated that 99.9 percent of Kakuma camp residents collect water from protected or treated sources. Nevertheless, the SES findings show that 84 percent of refugee households reported water supply shortages in the last month. The recommended daily volume of water per day is 20 liters per capita to ensure basic personal needs and food hygiene.[77] However, as reported by UNHCR, the average amount of potable water per person per day in Kakuma is 12.75 liters, decreasing to only 6 liters per day in Kakuma 2.[78] Therefore, while refugees have access to water, quantities do not suffice. At the national level, as of 2015/16, 73 percent of households had access to improved sources of water, while only 63 percent did so in Turkana County. However, a recent Joint Monitoring Programme (JMP) report shows that only 59 percent of national households have access to improved water.[79]

[74] Global Alliance for Clean Cookstoves. 2016. "Gender-Based Violence in Humanitarian Settings: Cookstoves and Fuels"; UN Women. 2019. "Gender Assessment of Kalobeyei Settlement and Kakuma Camp. Determining the Level of Gender Mainstreaming in Key Coordination Structures."
[75] Smith, Mehta, and Feuz. 2004. "Indoor Air Pollution from Household Use of Solid Fuels"; Kurmi et al. 2012. "Lung Cancer Risk and Solid Fuel Smoke Exposure: A Systematic Review and Meta-Analysis"; Dasgupta et al. 2004. "Who Suffers from Indoor Air Pollution? Evidence from Bangladesh."
[76] UNHCR, NRC, and European Commission. 2019. "Knowledge Attitude and Practice—KAP Survey and a Mini Evaluation of the Wash Project in Kakuma Refugee Camp and Kalobeyei."
[77] WHO. 2020. "What Is the Minimum Quantity of Water Needed?"
[78] Water is not equitably distributed across the camp due to the ad hoc expansion and settlement of new influxes of refugees. Recently UNHCR did a hydraulic modelling exercise for Kakuma 2, 3, and 4 to determine the inequitable distribution of water that will be followed by redesigning of the water reticulation system. UNHCR has installed real time water measuring at the water reservoir to be able to compute the specific water access for specific blocks in the camp. http://unhcr.independent-software.com/#/projects/10
[79] WHO and UNICEF. 2019. "WASH Joint Monitoring Programme Report."

▶ **FIGURE 15:** Access to improved drinking water and sanitation for refugees and Kenyans



Sources: Kakuma (2019); KIHBS (2015/16).

26. Access to improved sanitation facilities is also higher among refugees compared to nationals and Turkana hosts.[80] Some 37 percent of refugee households share toilets with other households. A UNHCR WASH evaluation has reported that over the 12 months before their survey in 2019, 12 percent of refugees practiced open defecation (OD), most commonly in Kakuma 4.[81] Importantly, the same evaluation reported that 19 percent of refugee households did not have access to soap in the last 12 months, while 18 percent did not have access to a solid waste disposal facility. Compared to refugees, Turkana residents have the lowest levels of access to improved water and sanitation ($p<0.01$). Even though the GoK and organizations implement programs to provide these services, most of the Turkana population has low access to improved drinking water and sanitation.[82] Access to unimproved drinking water and a poor water supply impacts health by causing acute infectious diarrhea and nonarboreal diseases, while limiting the maintenance of personal hygiene.[83] Poor sanitation, open defecation, and toilet sharing can reduce human well-being, and social and economic development due to impacts such as infectious diseases, anxiety, and the risk of sexual assault.[84]

[80] "Improved sanitation" is defined as access to a flush toilet, piped sewage system, septic tank, pit latrines, ventilated improved pit (VIP), or compositing tanks. "Unimproved sanitation" includes pit latrines without slab, hanging toilet, or bucket.
[81] OD is higher in Kakuma 4 as it is often practiced by South Sudanese new arrivals who are the main inhabitants of the subcamp. UNHCR is investing in WASH interventions fostering behavioral change and is working with the county government to advocate for Community Led Total Sanitation (CLTS), where communities identify and solve sanitation problems by using locally available technologies and materials.
[82] REACH. 2015. "Country Diagnostic Report, Kenya"; Wanjiku. 2018. "Why Kenya's Sanitation Challenge Requires Urgent Attention"; Ali et al. 2015. "Effectiveness of Ng'adakarin Bamocha Model in Improving Access to Ante-Natal and Delivery Services among Nomadic Pastoralist Communities of Turkana West and Turkana North Sub-Counties of Kenya.
[83] Hunter, MacDonald, and Carter. 2010. "Water Supply and Health."
[84] WHO. 2020. "Sanitation."

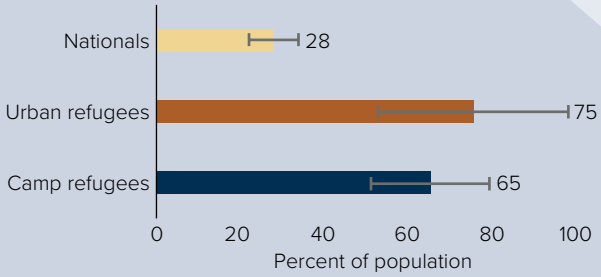
27. UNHCR and partners provide health services to refugees and hosts and have adapted isolation facilities to treat COVID-19 cases. Kakuma camp has six health facilities while Kalobeyei settlement has three. Three partners are assigned to run the various health facilities, namely, the African Inland Church (AIC); the Kenya Red Cross Society (KRCS); and the International Rescue Committee. All facilities in Kakuma camp provide health services without charge for refugees as well as hosts; the latter group comprises between 10–15 percent of all beneficiaries.[85] Furthermore, in response to the COVID-19 pandemic, UNHCR and partners have prepared isolation and quarantine facilities, trained health care workers and teachers, and rolled out informative campaigns (Appendix 6 "COVID-19 response").

BOX 3

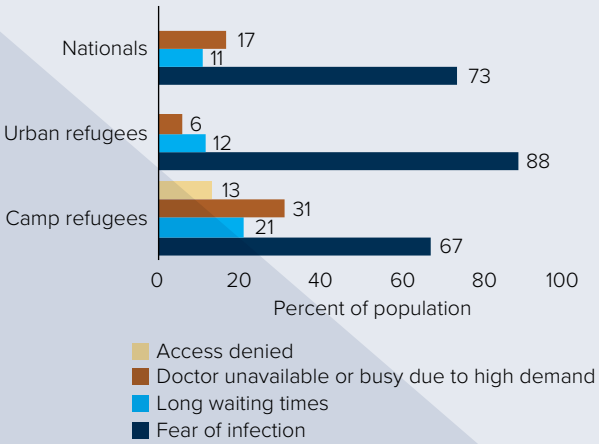
Kenya RRPS insights on access to health care

Even though UNHCR and partners have prepared facilities to respond to the COVID-19 pandemic, most refugees report lower access to health facilities than before March 2020, mainly due to fear of infection and unavailability of medical staff. Nearly 7 in 10 camp-based refugees and more than 7 in 10 urban refugees report lower access to health facilities compared to nearly 3 in 10 nationals (Figure 16; $p<0.01$). The difference between camp and urban refugees may reflect the higher incidence of COVID-19 cases in Nairobi where most urban refugees live, compared to rural areas. The main reason for having lower access to health facilities is fear of infection (Figure 17). Unavailability of medical staff and denial of medical treatment are also important reasons which can result in an increase in fatality rates due to other diseases.

▶ FIGURE 16: Lower access to health facilities than before March 2020



▶ FIGURE 17: Reasons for less access to health facilities[86]



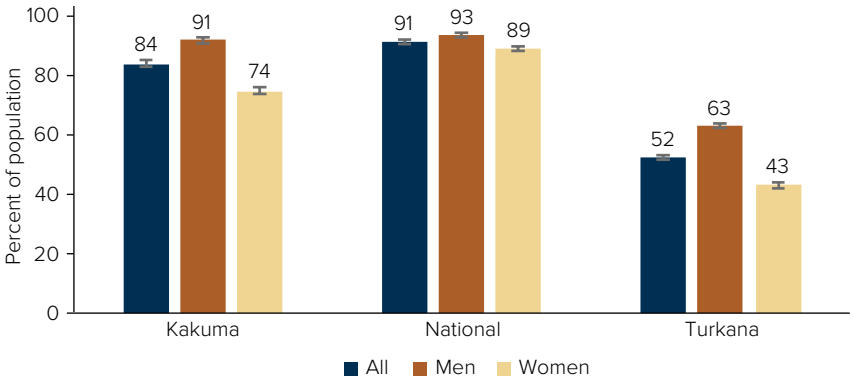
Source: Kenya COVID-19 Rapid Response Phone Survey, round 1.
Note: More details in online dashboard: www.kenyacovidtracker.org

[85] Health services cover access to primary and emergency secondary health care including: maternal and child health care; immunization services; consultation of major common causes of morbidity, including care for noncommunicable diseases; laboratory diagnostic services; imaging diagnostic services, including X-ray and ultrasound services; provision of essential medicine and medical supplies; and ambulance services 24 hours a day for emergency cases.
[86] Confidence intervals not included.

2.4 Education

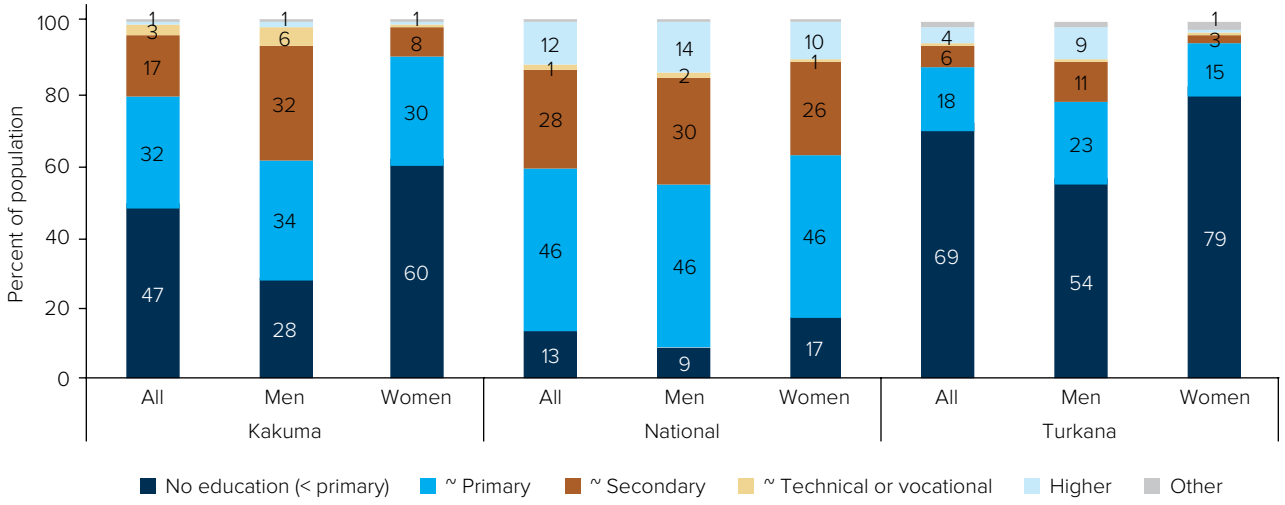
28. Although most refugees have attended school at least once in their lifetime, educational attainment is low, especially for women and girls. Turkana hosts have the lowest attendance rates ($p<0.01$) compared to refugees and Kenyans at the national level. Overall, men are more likely to have attended school than women. The gender gap is higher among refugees and Kenyans at the Turkana level than at the national level (Figure 18), which may be partly explained by more restrictive gender norms limiting women's and girls' engagement in education, coupled with unavailability of schools and worse economic conditions. Even if 84 percent of refugees ages 4 and above have reportedly attended school, educational attainment for refugees ages 15 and above is low, especially for women (Figure 19). Access to vocational and higher education is limited for refugees and Kenyans at the Turkana level. Nonetheless, technical and vocational education is slightly more common among refugees, which can be related to the work of organizations providing vocational training in the camp. In turn, higher education attainment is significantly lower for Kakuma refugees than for Kenyans at the national and Turkana levels ($p<0.05$).[87]

▶ **FIGURE 18:** Distribution of population who have ever attended school (4+)



Sources: Kakuma (2019); KIHBS (2015/16).
Note: All levels of education included (even below primary school).

▶ **FIGURE 19:** Educational attainment for refugees and Kenyans (15+, not attending school)

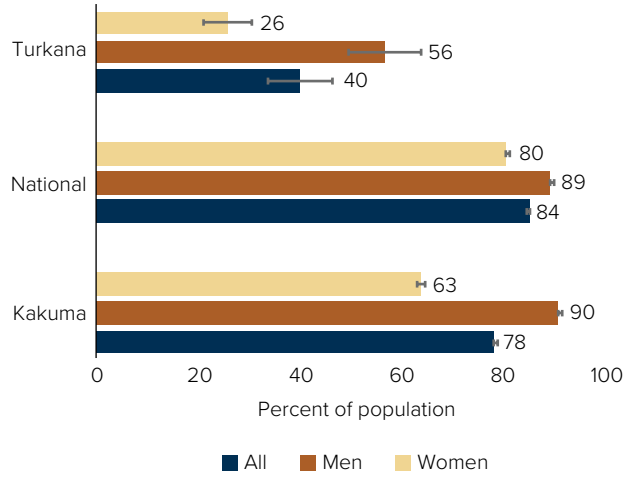


Sources: Kakuma (2019); KIHBS (2015/16).
Note: Levels of education include less than primary (no education), and at least some primary, secondary, technical or higher education.

[87] This is consistent with trends identified among refugees in Ethiopia. World Bank. 2019. "Using Micro-Data to Inform Durable Solutions for IDPs."

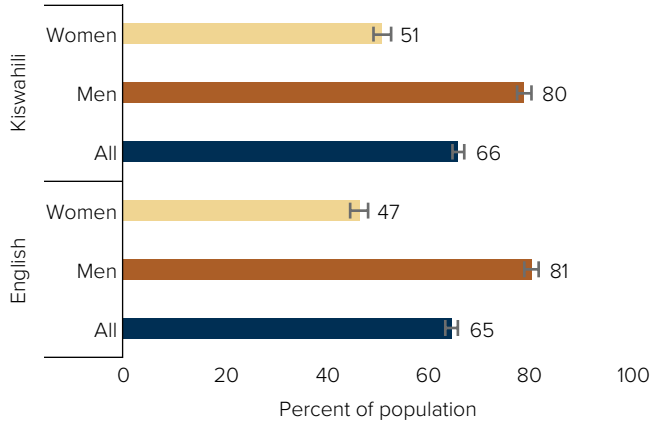
29. Refugees have higher literacy rates than hosts at the Turkana County level, but only 60 percent are literate in Kenya's national languages. While 78 percent of refugees can read and write in any language, 40 percent and 84 percent of Kenyans do at the Turkana County and national levels, correspondingly (Figure 20). Sudanese are more likely to speak English than refugees from the Democratic Republic of Congo, Somalia, and Sudan ($p<0.01$). Kiswahili is widely spoken by Sudanese but also by Congolese refugees (Figure 22). Nevertheless, refugees' literacy rates in English (65 percent) and Kiswahili (66 percent) are lower than for other languages. This suggests that refugees are more likely to be literate in other languages—such as their local and national languages—than in Kenya's national languages. At the same time, this reflects that refugees have a wide set of language skills which can be used to enhance intercultural communication and strengthen language skills among the refugee and host communities. Among refugees and Kenyans, women have lower literacy rates than men ($p<0.01$). Importantly, refugee men are more likely to speak Kenya's official languages (English and Kiswahili) than women, which can translate into better job prospects for men (Figure 21).

▶ FIGURE 20: Literacy in any language, refugees and Kenyans (15+)



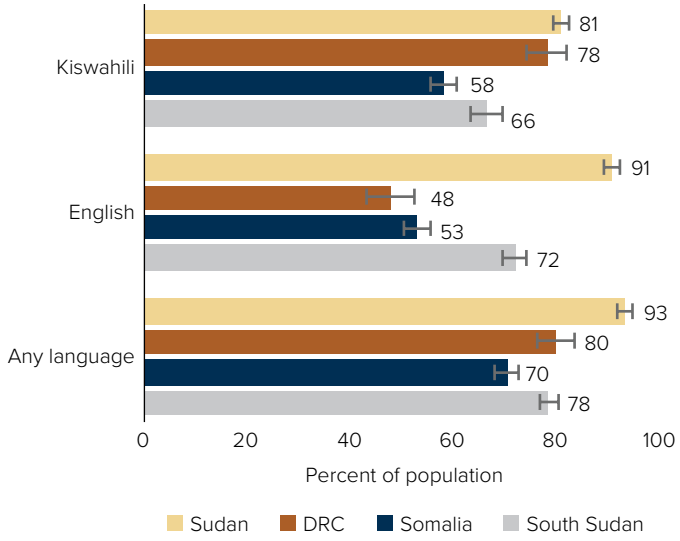
Sources: Kakuma (2019); KIHBS (2015/16).

▶ FIGURE 21: Literacy in Swahili and English, among refugees (15+)



Source: Kakuma (2019).

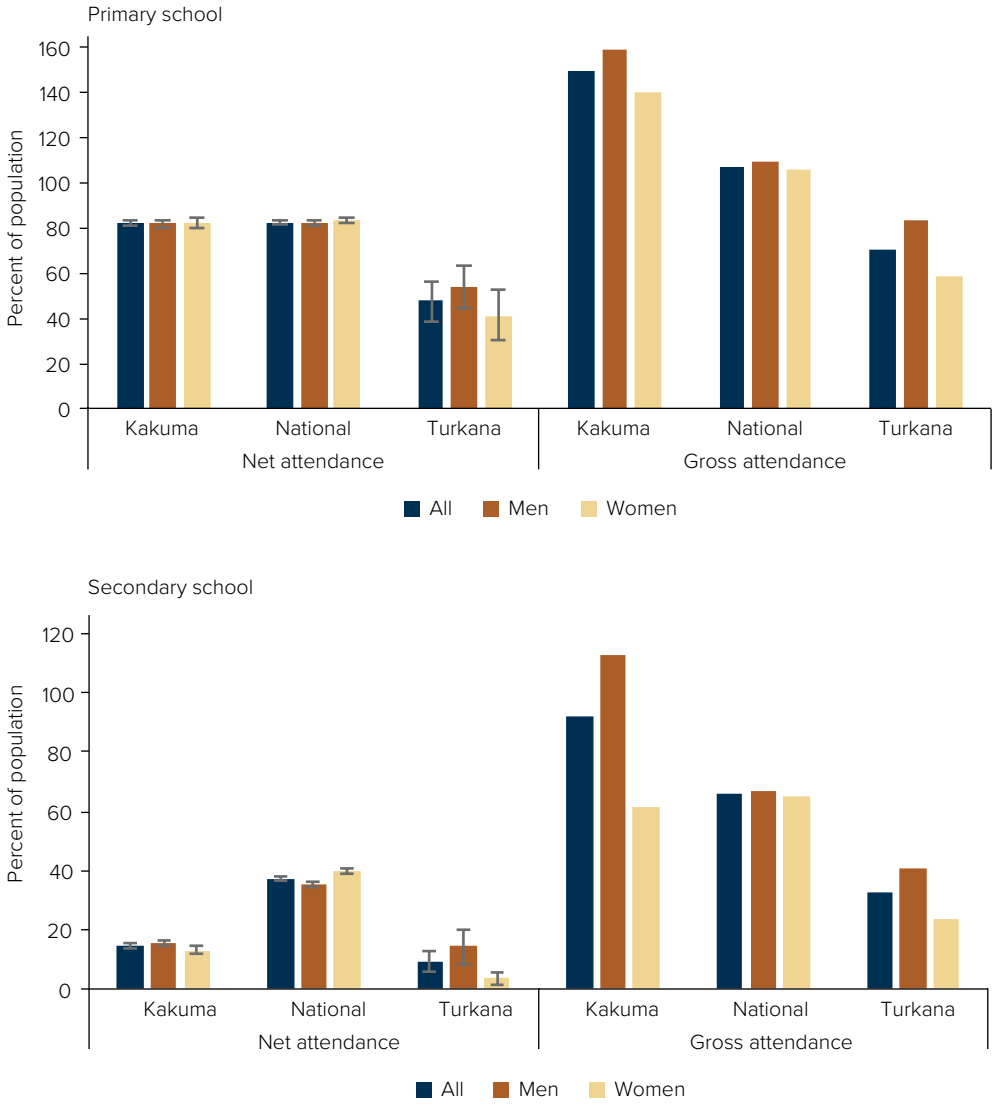
▶ FIGURE 22: Literacy by refugees' country of origin (15+)



Source: Kakuma (2019).

30. While primary school attendance is high, secondary school attendance is low. Like Kenyans at the national level, most refugees in primary school age attended school at the time of the interview, before school closures due to COVID-19 (Figure 23). In contrast, less than half of primary school age Turkana hosts are enrolled in primary education. This could partly be due to the work of development organizations who cover refugees' education needs while hosts' needs remain underserved. Secondary school attendance rates for Turkana hosts are lower than those of refugees, 9 percent vs 14 percent, correspondingly. Secondary school overage attendance rates are significantly higher than those for school age refugees and hosts, although still lower for Turkana hosts.[88] In the context of the COVID-19 pandemic, primary and secondary school attendance has sharply dropped to nearly zero (Box 4).

▶ **FIGURE 23:** Primary and secondary school net and gross attendance rates, refugees, and nationals



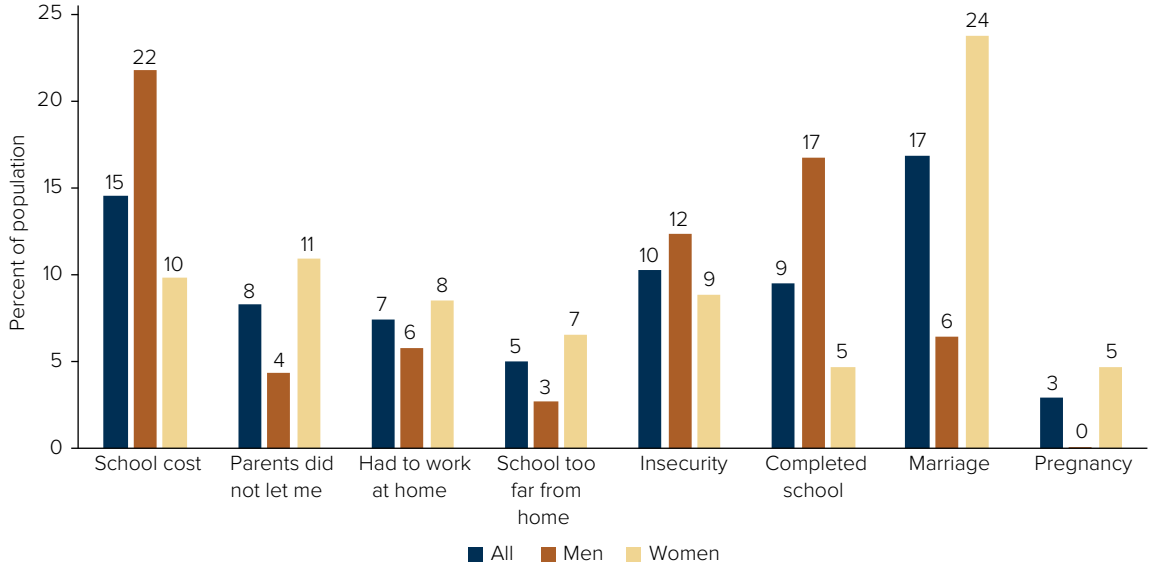
Sources: Kakuma (2019); KIHBS (2015/16).

[88] The Net Attendance Rate (NAR) measures the attendance status of the official age group for a given level of education expressed as a percentage of the corresponding population. The Gross Attendance Rate (GAR) is the number of students attending a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education. The GAR is greater than NAR, and it can exceed 100 percent. The NAR helps determine whether school-age children are attending school at the correct age, whereas the GAR is important to determine the participation of overage participants.

31. Transition to secondary education is limited for refugees and Turkana County hosts. The low secondary school attendance rates among refugees and hosts can be partly due to the reduced number of secondary schools in the Kakuma area and associated costs with delivering and accessing education.[89] Low attendance can also be explained by the high opportunity cost of going to school. Since school age youth could work and contribute to the household income, going to school can represent a loss of income. Particularly among girls, early marriage could be a reason why refugee and host community adolescents do not attend school. Host community members might lack awareness regarding the possibility of attending schools in the camp.[90] Distances from Turkana settlements to camp schools and security concerns connected to walking long distances may also explain the low attendance.[91] Seminomadic lifestyles of Turkana hosts can also play a role in limiting school attendance, as children may move far away from education centers and discontinue their education.

32. Women refugees who have never attended school or stopped attending did so mainly because of marriage, while reasons reported by refugee men are related to costs. Primary schools in Kakuma can be accessed free of charge, while secondary schools involve a fee of 3,000 Kenyan shillings (about US$30) per year. Fees for education may constitute one of the most important expenses. However, school books, uniforms, and transport, as well as forgone child labor income, are additional costs that seem to have a bigger impact on men's motivations for not studying (Figure 24). Coupled with school costs, men also reported having stopped attending school because they completed their studies (17 percent vs 5 percent of women, p<0.01). In contrast, 24 percent of women and 6 percent of men reported that they never attended school or stopped because of marriage (p<0.01). An additional 11 percent of women never attended school or stopped attending because their parents did not allow them to study, while 5 percent did so because of pregnancy.

▶ **FIGURE 24:** Reason for never attended or stopped attending school



Source: Kakuma (2019).

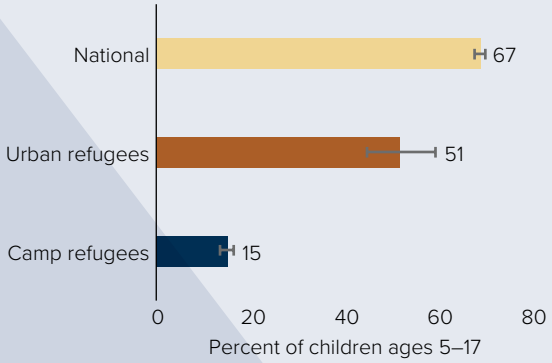
[89] UNHCR and Windle Trust International Kenya. 2019. "Secondary Education in Refugee Hosting Areas in Kenya: Transition Crunch."
[90] According to UNHCR Kakuma operation records, at the end of 2019, 499 host community learners (40 percent women) were enrolled in primary and secondary schools in Kakuma. In contrast, considering only secondary school education, 11,805 refugees were enrolled.
[91] Distances to the closest host community villages from Kakuma camp 1, can be as low as 0.5 km, while from Kakuma camps 3 and 4 as far as 12.0 km. Within the camp, refugee schools are in proximity of 1.0 to 4.0 km, depending on the location of each zone.

BOX 4

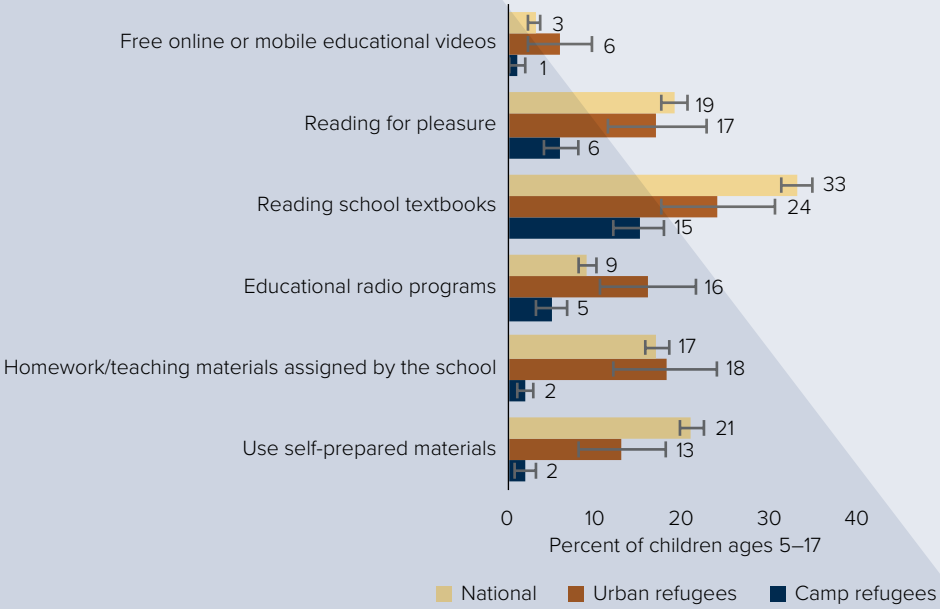
Kenya RRPS insights on education

The COVID-19 pandemic has translated into nearly zero school attendance and can affect re-enrollment once schools are reopened. On March 15, 2020, in response to the COVID-19 pandemic, the Kenyan government closed schools and colleges nationwide, which reopened in January 2021.[92] The Ministry of Education urged learners to engage in online learning or technology-mediated learning on TV, radio, educational apps, and smartphones. However, such learning means are not accessible for many children, especially those in rural areas and camps. Before schools reopening, refugee children ages 5–17 report substantially less engagement in learning activities than nationals, while camp refugees report the lowest engagement overall (Figure 25). School textbooks, self-prepared materials, radio programs, and reading for pleasure are the most frequently used types of learning activities (Figure 26).

▶ **FIGURE 25:** Engagement in learning activities in the last week for refugees and nationals



▶ **FIGURE 26:** Main learning-related activities for refugees



Source: Kenya COVID-19 Rapid Response Phone Survey, round 1.
Note: More details in online dashboard: www.kenyacovidtracker.org
Camp refugees include those living in Kalobeyei settlement, Kakuma and Dadaab camps, while urban refugees refer to those living in Nairobi.

[92] Parsitau and Jepkemei. 2020. "How School Closures during COVID-19 Further Marginalize Vulnerable Children in Kenya"; BBC News. 2020. "Coronavirus: Kenyan Schools to Remain Closed until 2021.

3. Livelihoods: Work, Income Generation, and Access to Finance

Refugees in Kenya face restrictions to work and move outside camps, which severely impact their ability to participate in the labor market. Only 20 percent of refugees are employed, compared to 62 and 71 percent of hosts at the Turkana County and national levels, correspondingly. Access to finance is limited for refugees.

33. Even though refugees have the right to work in Kenya, they face practical restrictions. The 2006 Refugee Act stipulates that refugees can work in Kenya if they have a work permit. The migration section of the Ministry of Interior issues 'Class M' work permits that enable refugees to legally work in the country. Applications for permits need a recommendation from a prospective employer and must be accompanied by a letter from the RAS confirming refugee status.[93] While refugees are legally allowed to work, in practice, it is reportedly much more difficult given that work permits for asylum seekers or refugees are very rarely issued.[94] In addition, Kenya's encampment policy restricts freedom of movement, and refugees in Kakuma and Kalobeyei are not allowed to travel beyond the town of Kakuma and adjacent areas unless a movement pass is granted.[95] Passes are issued for a limited set of reasons, such as medical and educational requirements, or protection concerns. Movement restrictions and the obstacles faced in obtaining work permits fundamentally curtail refugees' ability to work and generate income, undermining self-reliance.

3.1 Labor force status

BOX 5

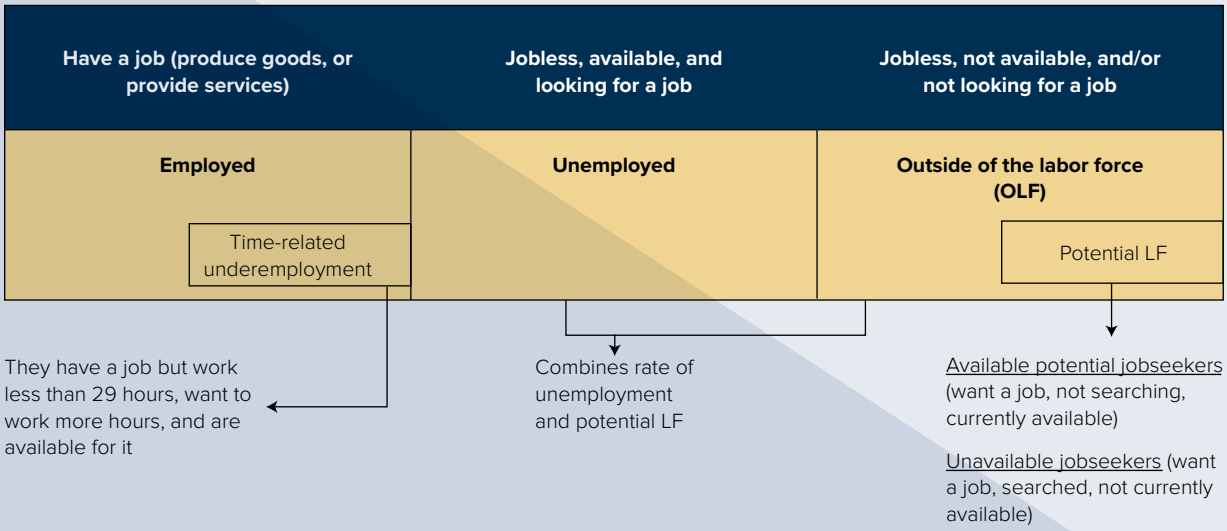
International Labor Organization (ILO) labor force framework

The ILO labor force framework is used to understand employment dynamics among refugees and Kenyans. The working-age population (15–64 years) is classified into three categories according to their labor force status. A person is (i) in employment if they are engaged in any activity to produce goods or provide services for pay or profit, or only temporarily absent from such an activity.[96] Those who are not employed are either (ii) in unemployment, so they recently carried out activities to seek employment and are available to take up employment given a job opportunity, or (iii) outside the labor force (OLF) if they do not fulfill these criteria (Figure 27). The categorization of labor force status refers to the seven days preceding the interview and are mutually exclusive and exhaustive. Within those OLF, the potential labor force is defined as all persons of working age who: (i) recently carried out activities to seek employment but are not currently available to start work (i.e., unavailable

[93] Zetter and Ruaudel. 2016. "KNOMAD Study Part-II Refugees' Right to Work—An Assessment."
[94] Refugee Consortium of Kenya. 2012. "Asylum Under Threat. Assessing the Protection of Somali Refugees in Dadaab Refugee Camps and along the Migration Corridor."
[95] O'Callaghan et al. 2019. "The Comprehensive Refugee Response Framework. Progress in Kenya."
[96] In this report, we have considered 'employed' those who have carried out activities.

jobseekers); or (ii) did not carry out activities to seek employment, but want employment and are currently available (i.e., available potential jobseekers). Finally, the combined rate of unemployment and potential labor force (LU3) represents the share of the extended labor force that are in unemployment or are part of the potential labor force.[97]

▶ **FIGURE 27:** Labor force classification



Source: ILO 2013.

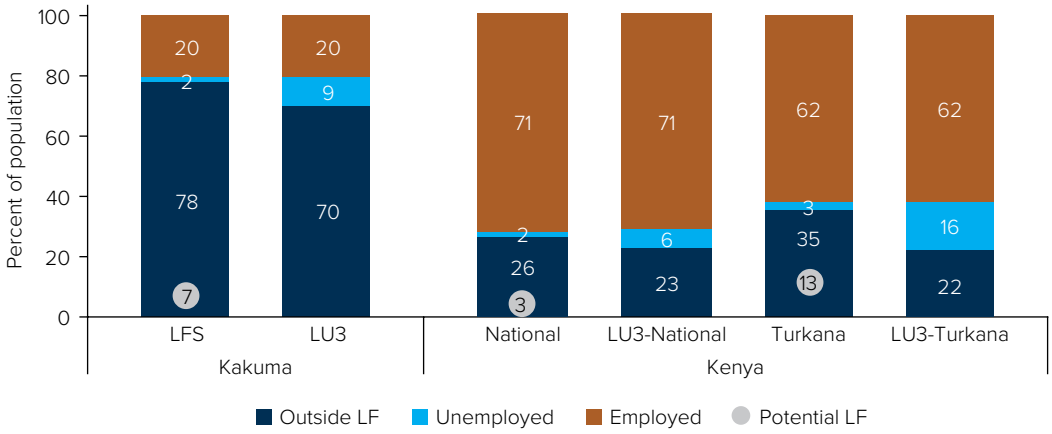
34. While half of refugees are of working age, nearly 80 percent of them are outside the labor force (OLF), a share that nearly doubles that of Kenyans at the Turkana County and national levels. Half of the refugee population is between 15 and 64 years old, which is higher than among Turkana hosts (46 percent) and lower than for Kenyans at the national level (55 percent, $p<0.05$). Labor force status also varies greatly between Kenyans and refugees, while 26 percent of Kenyans at the national level and 35 percent at the Turkana County level are OLF, the overwhelming majority of refugees are in this category (Figure 28, $p<0.01$). Such a high proportion of refugees OLF reflects the lack of income generating opportunities.

35. Only 20 percent of refugees are employed, while 9 percent are jobless; the remainder are either not seeking work or are unavailable to work. Employment status varies greatly between Kenyans and refugees (Figure 28). More than 60 percent of Kenyans at the national and Turkana levels are employed, while only 20 percent of refugees are. Employment status sharply dropped after the COVID-19 outbreak (Figure 38). Among refugees, men and women report similar employment rates, although occupations and earning potential differ by sex (Figure 30). If the strict criteria of being available and

[97] ILO. 2019. "ILO Glossary of Statistical Terms"; ILO. 2013. "Resolution Concerning Statistics of Work, Employment and Labour Underutilization. International Conference of Labour Statisticians."

looking for work are applied, unemployment rates are very low among refugees (2 percent).[98] This measure does not include those who have not looked for work, mainly due to unavailability of jobs, discouragement to search, or mismatch of skills (Figure 33). This group represents the potential labor force. If the potential labor force is combined with the 2 percent of those 'strictly' unemployed, the resulting unemployment rate among refugees is 9 percent, while the OLF status (represented in the LU3 bar, Figure 28), drops to 70 percent, which includes those who are not available to work mainly due to studies and domestic work. Field observations suggest that a large proportion of students and homemakers who did not search for work would be interested in working if a job was offered.[99]

▶ **FIGURE 28:** Labor force status for refugees and Kenyans



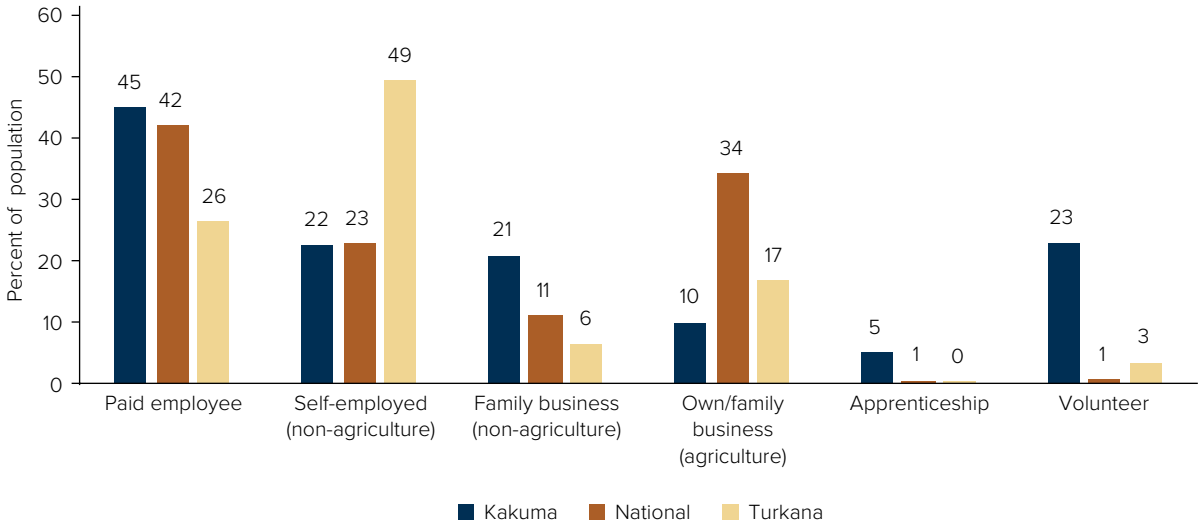
Sources: Kakuma (2019); KIHBS (2015/16).
Note: Labor Force Status (LFS) refers to the strict definition, while LU3 presents the combined rate of unemployment and potential LF.

3.2 The employed: incentive work, volunteering, and barriers to self-employment

36. Nearly 50 percent of the employed refugees work as paid employees, and 20 percent work as volunteers. Due to regulatory frameworks that curtail refugees' opportunities to move and work, many refugees take low paying jobs, usually in the informal sector.[100] Formal jobs in Kakuma town are scarce and primarily filled by nationals. In the camp, jobs are mostly offered by the 17 partners of UNHCR and other UN agencies who employ approximately 2,338 refugee 'incentive workers' who must demonstrate literacy in English and Kiswahili in order to get an incentive job.[101, 102] Therefore, although most employed refugees are paid workers (45 percent), they are not necessarily self-reliant (Figure 29). The second most common type of work among refugees is volunteering. At least 600 volunteers in Kakuma overall work for one of the 30 Community Based Organizations (CBOs), while other refugees may volunteer for other organizations. CBO volunteers receive stipends depending on the individual group's mandate and unanimous group decisions.

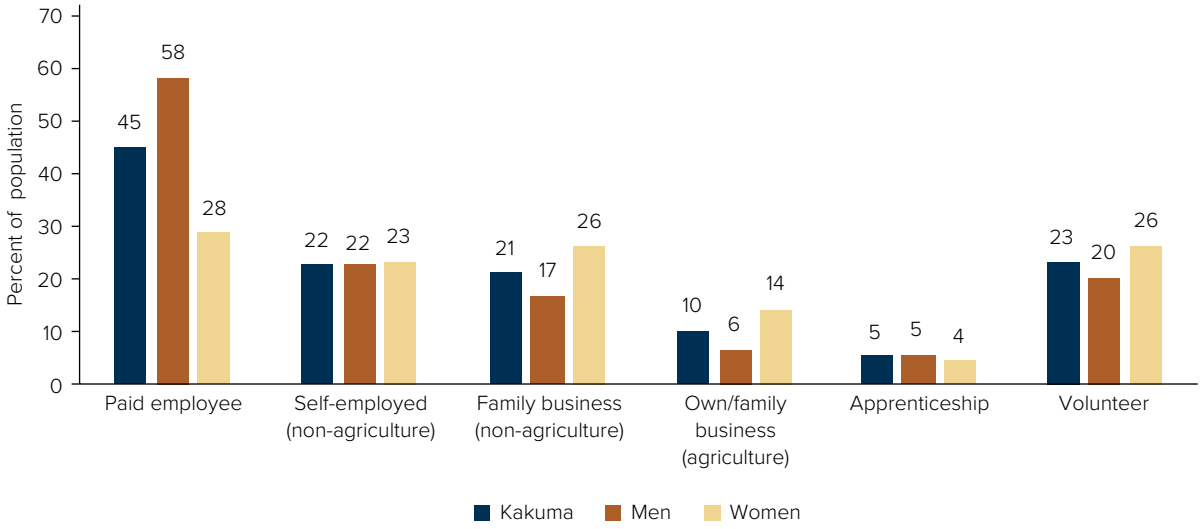
[98] The ILO definition of unemployment considers unemployed as those who are jobless *and have actively looked for employment.*
[99] The Kakuma SES does not include this specific detail.
[100] Betts, Omata, and Sterck. 2018. "Refugee Economies in Kenya."
[101] IFC. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya."
[102] According to UNHCR, most incentive staff earns US$40–US$55 monthly, while those delivering specialized services earn between US$65–US$150 per month. UNHCR's recently launched Refugee UN Volunteer (RUNV) program offers a different pay scale, targeting a few highly educated refugees who are engaged as professionals earning approximately US$800 per month.

▶ **FIGURE 29:** Type of work in last seven days, among employed



Sources: Kakuma (2019); KIHBS (2015/16).
Note: Percentages do not sum up to 100 since they may have engaged in more than one activity.

▶ **FIGURE 30:** Type of work in last seven days, among employed refugees by sex



Sources: Kakuma (2019); KIHBS (2015/16).
Note: Percentages do not sum up to 100 since they may have engaged in more than one activity.

37. Volunteering is nearly 8 times more common among refugees than Kenyans. In fact, 10 percent of refugees reported that volunteering is currently their main work activity, which compares to only 1 percent before displacement (Figure 31). Although volunteering is not paid, many refugees volunteer to strengthen their skills, hoping to find paid (incentive) employment in the future.[103] Notably, refugees' activities vary according to sex. Even though most of the refugee working-age population is made up of women, only 28 percent of them are paid employees compared to 58 percent of men ($p<.01$). Women are mainly employed as volunteers and in family businesses, which suggests that women refugees tend to work in lower paying jobs than men.

[103] Betts, Omata, and Sterck. 2018. "Refugee Economies in Kenya," 1.

38. Self-employment is the most common work activity among Turkana hosts, while only two in ten refugees do the same job. Such a difference can be partially explained by the lack of access to finance, as well as practical limitations in accessing sectors reserved for Turkana hosts: selling firewood, charcoal, or rearing livestock.[104] Starting up a business requires seed capital to cover licensing and other costs; thus, the lack of formal financial services for refugees undermines their capacity to open businesses (Figure 43).

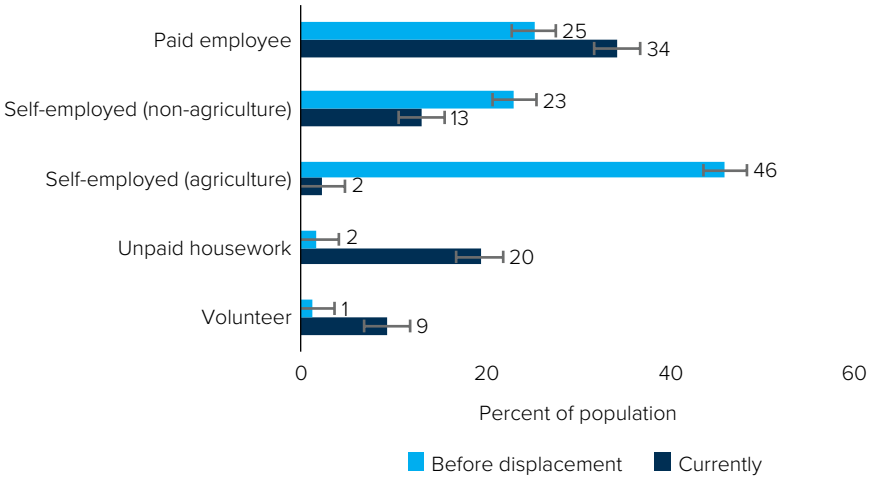
39. All refugee- and host-owned businesses require an annually renewed permit to run their businesses. According to Turkana County law, all business owners must pay for and annually renew a "business permit" for each business they operate, regardless of whether their businesses are formally registered.[105] Thus, business permits and national business registrations are two separate procedures—the latter being more complex as it requires registration with the Revenue Authority, national health insurance, a pension plan, and other documentation.[106] Refugees in possession of a valid refugee ID can acquire a business permit independent of a Class M work permit, which costs about K Sh 3,500 per year.[107] Permits are issued only to enterprises with permanent facilities, while street vendors or traders with temporary stalls are charged daily fees that lack clear regulation.[108] Many refugees end up not acquiring a business permit and paying higher costs since they use "intermediaries" to help navigate this information asymmetry.[109] Like hosts, refugees enter the informal sector, although not in equal circumstances as hosts, since refugees face additional challenges such as limited access to specific sectors and restricted freedom of movement.

40. The types of businesses owned by refugees and earnings vary according to sex. Women are concentrated in retail hospitality and services (tailoring and baking), which have a low earning potential and tend to run small, informal, often home-based businesses, which allow them to easily manage household and childcare responsibilities. Men are more likely to work in technical and professional occupations. Furthermore, precedent studies have shown that women refugee-owned businesses generate on average K Sh 3,300 in earnings per month, while men-owned businesses generate on average K Sh 6,200.[110]

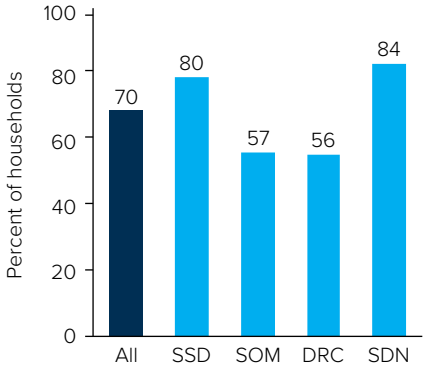
41. Before displacement, 70 percent of refugee households derived their main source of income from agriculture (Figure 32). Currently, only 2 percent of refugees are self-employed in agriculture, while 13 percent are self-employed in nonagricultural businesses (Figure 31). In contrast, agricultural activities are the second most common type of work for Kenyans at the national level (34 percent) and the third most common at the Turkana County level (17 percent). This difference can be partly explained by land ownership restrictions, as refugees are not entitled to own land in Kenya. Since most refugees used to work on their own in agriculture and in other sectors before displacement, they have valuable business skills that can be used to help them become self-reliant and actively contribute to the local economy by creating jobs and generating socioeconomic interactions.

[104] Betts, Omata, and Sterck. 2018, 39.
[105] National Council for Law Reporting. 2016. The Turkana County Revenue Administration Act, 2016; National Council for Law Reporting. 2016. The Turkana County Finance Act, 2016.
[106] IFC. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya."
[107] Mass registration is usually done at the end of the year by officials in Lodwar. Business registration at the national level requires travel to Nairobi and documentation, such as an Alien Card and KRA PIN, which many refugees don't have. IFC and MarketShare 2019.
[108] UNHCR. 2017. "Kakuma Integrated Livelihoods Strategy 2017–2019. Towards Sustainable Solutions for Refugee and Host Communities in Kakuma and Kalobeyei, Turkana West, Kenya."
[109] UNHCR. 2018. "KISEDP. Kalobeyei Integrated Socio-Economic Development Plan in Turkana West," 90.
[110] IFC and MarketShare. 2019.

▶ **FIGURE 31:** Primary activity, before displacement and currently



▶ **FIGURE 32:** Agriculture as a main source of income before displacement by country of origin



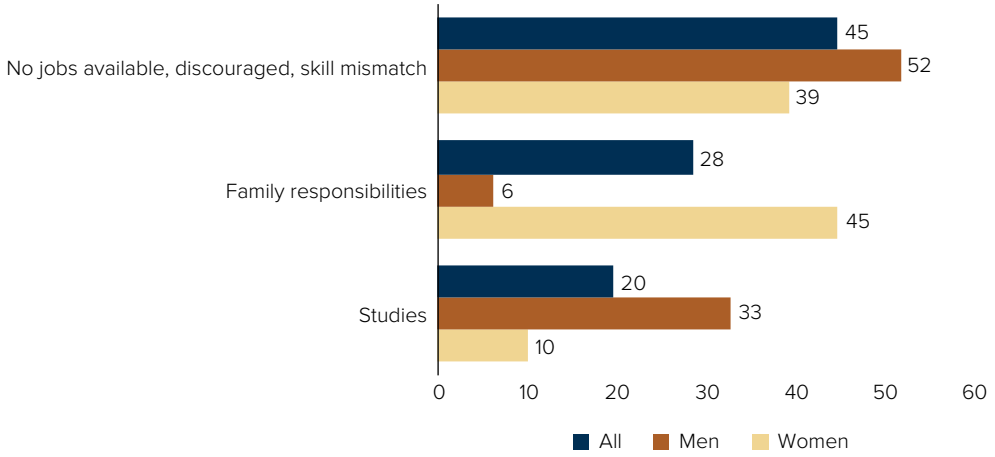
Source: Kakuma (2019).

3.3 The jobless: why they don't search for work and what they need[111]

42. Seven percent of working-age refugees are jobless and did not search for work despite being available to work, mainly due to lack of jobs, discouragement, and skills mismatch. This proportion of the population constitutes the potential labor force (Figure 28). Many of those who did not search cite lack of jobs and feeling discouraged as the main reasons for not having searched. Considering that most of the refugee population is young, and will soon be of working age, it is extremely important to generate employment opportunities for them. Reasons for not having looked for a job vary according to sex. Nearly half of refugee women in the potential labor force did not look for work due to family responsibilities (vs 6 percent of men, $p<0.01$, Figure 33). In contrast, 33 percent of men in the potential labor force did not look for a job due to studies (vs 10 percent of women, $p<0.01$). Gender-based norms refrain women from engaging in education and paid work, which keeps them home, caring for other members, and doing domestic work.[112] The gender gap for working-age refugees who report building human capital through studying is alarming, not only because women are a higher proportion of household heads than men, but also because they bear a disproportionate responsibility in providing for children. While the gains in human capital as a population show great potential for improving overall welfare, women's reported lower human capital accumulation leaves them and their families with a much lower probability for improving welfare through gainful employment in the future.

[111] Comparable data on reasons, obstacles, and support needed are not available for nationals. Only refugee data are presented.
[112] Most married women need their husband's permission to work and retain limited control over earned income. Women are excluded from physically demanding work, working at night, or doing work that involves traveling far away from home. IFC and Marketshare. 2019.

▶ **FIGURE 33:** Reason for not looking for work among potential labor force



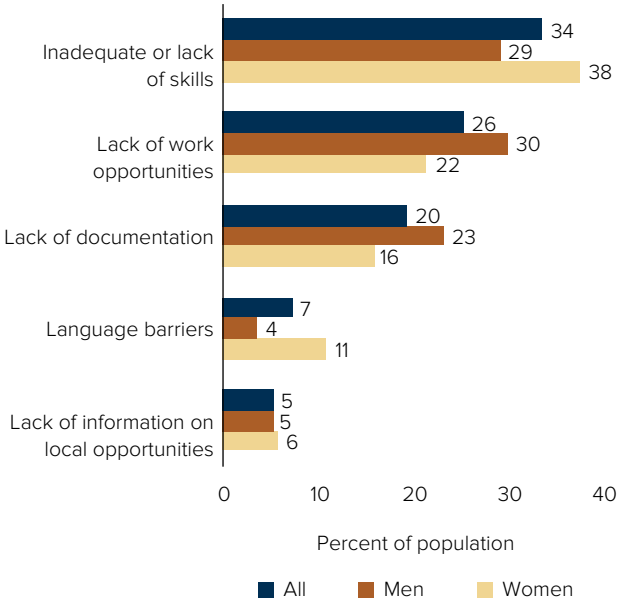
Source: Kakuma (2019).

43. Among those outside of the labor force (OLF) and unemployed, the main reported obstacles for securing a job are lack of adequate skills and lack of opportunities, while the main support needed is training. Refugees who are OLF and 'strictly' unemployed (Figure 28) report that the main obstacles to secure a job are mismatch of skills, lack of job opportunities, and lack of documentation, possibly for businesses permits (Figure 34). Women are more likely than men to cite lack of adequate skills ($p<0.01$) and language barriers ($p<0.01$) as important obstacles. Men are more likely than women to cite lack of documentation as an important obstacle, suggesting that men business owners are more prone to acquire business permits or register their businesses than women. Lack of information about local job opportunities also constitutes an important obstacle, which could be related to language barriers, as job advertisements may be posted in languages that not all refugees understand. Training is reportedly the main needed support (Figure 35). For men, the continuation or completion of education (27 percent) is the second most important needed support (vs 13 percent of women, $p<0.01$). Considering that men have higher education levels and might have truncated their studies, it is reasonable to find that they are more interested in completing their studies to secure a job.

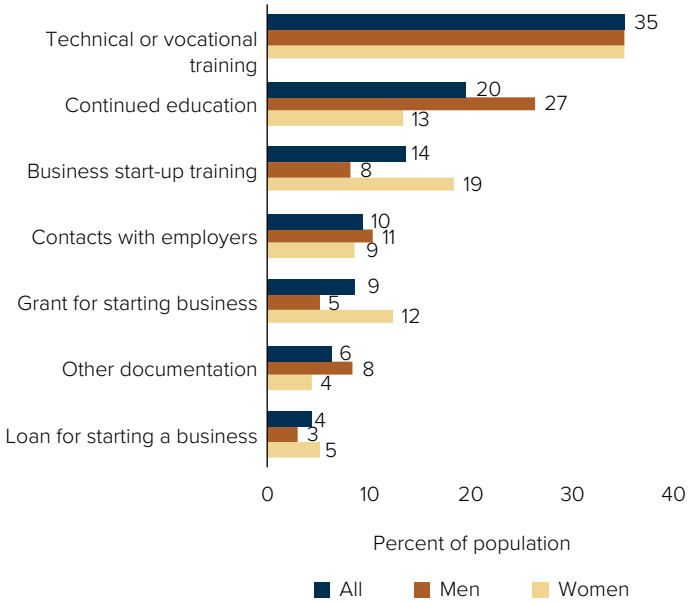
44. Refugees are interested in developing small business management and Information Technology (IT) skills. Women are mostly focused on practical business training, which reflects their interest in becoming entrepreneurs or strengthening existing business (Figure 36). Many women are interested in self-employment in small businesses as it allows them to combine paid work with care responsibilities.[113] In turn, men are interested in developing a wider variety of skills, including automobile mechanics, driving, and electrical work, which are conventionally seen as 'male skills'. Proficiency in computer and internet use, and basic and advanced math also vary according to sex (Figure 37). Overall, refugee men are more proficient in such skills, which can bring better access to economic and skill building opportunities. Women's low level of skills proficiency reflects their low literacy and schooling attainment rates (Figure 19; Figure 20), resulting in unskilled, low earning jobs and limited opportunities to build their skills. UNHCR and partners offer skill and vocational training as well as livelihood programs (Appendix 8 "Livelihoods programs"). Nevertheless, entry requirements in terms of educational attainment, literacy, numeracy, and languages; time involved (duration and schedule); and lack of childcare services often make it difficult for women to access skills.

[113] IFC and MarketShare. 2019. "Gender Assessment of Kakuma Refugee Camp and Town & Kalobeyei Settlement and Town."

▶ FIGURE 34: Main obstacles to secure a job

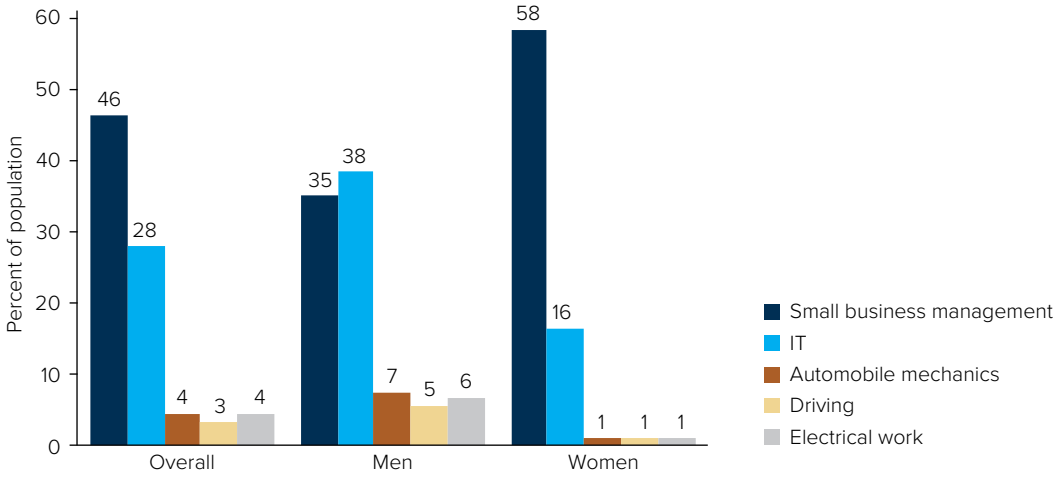


▶ FIGURE 35: Main support needed to secure a job



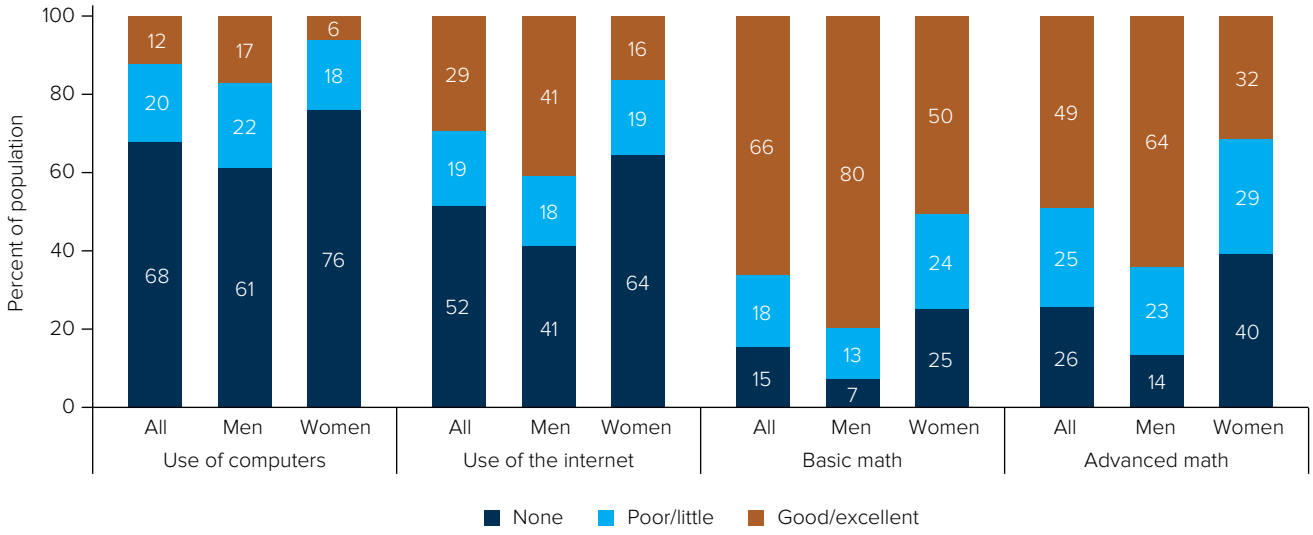
Source: Kakuma (2019).

▶ FIGURE 36: Main skills needed to ensure a job



Source: Kakuma (2019).

▶ **FIGURE 37:** Skills proficiency



Source: Kakuma (2019).

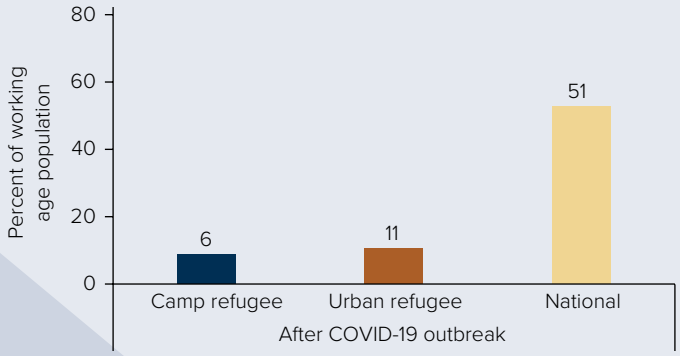
BOX 6

Kenya RRPS insights on employment

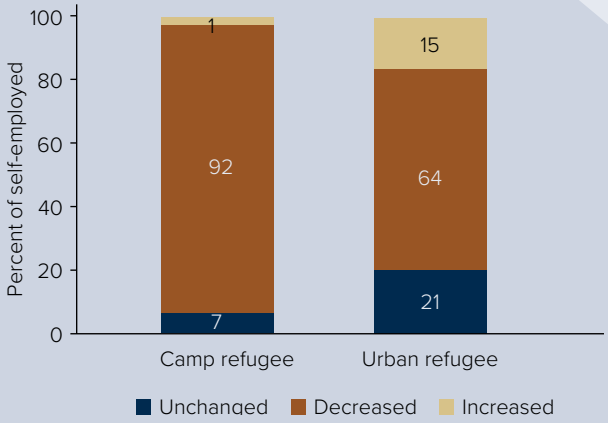
Employment rates, wage employment earnings, and household business revenues dropped sharply after the COVID-19 outbreak. Camp and urban refugees have an alarmingly low employment rate after the pandemic outbreak (6 and 11 percent, respectively), while the national employment rate fell from 72 (Figure 28) to 51 percent (Figure 38). The economic recession induced by the COVID-19 crisis is expected to have a disproportionate effect on refugees' income. The most impacted sectors are manufacturing, accommodation and food services, wholesale and retail trade, real estate, and business activities.[114] These sectors encompassed approximately 436 million enterprises and 30 percent of GDP worldwide before COVID-19.[115] Such sectors are mostly made up of small businesses, often without access to credit, assets, or government stimulus packages. Thus, struggling enterprises will likely be unable to bounce back from COVID-19 impacts. This is reflected in businesses owned by refugees, especially in camps, of which 92 percent experienced a drop in revenue after the COVID-19 outbreak (Figure 39). In contrast, earnings derived from wage employment saw a more pronounced reduction among urban refugees compared to camp residents (Figure 40). Such difference reflects that when facing a shock, small business owners are at a higher risk of earnings loss than wage employees—mainly camp residents.

[114] ILO. 2020. "ILO Monitor: COVID-19 and the World of Work."
[115] Helen et al. 2020. "Locked Down and Left Behind: The Impact of COVID-19 on Refugees' Economic Inclusion."

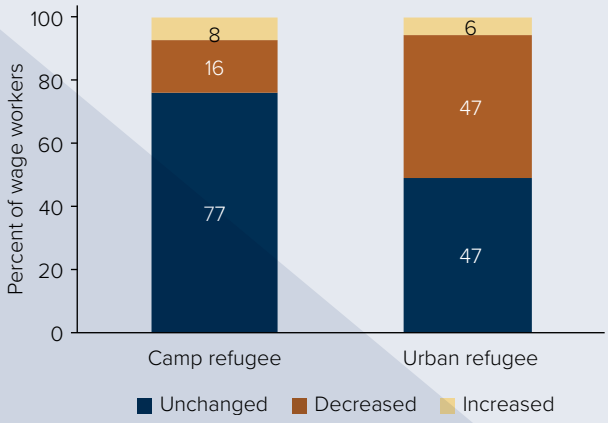
▶ FIGURE 38: Employed in the last seven days



▶ FIGURE 39: Change in business revenues among self-employed



▶ FIGURE 40: Change in earnings among paid employees



Source: Kenya COVID-19 Rapid Response Phone Survey, round 1.
Note: More details in online dashboard: www.kenyacovidtracker.org

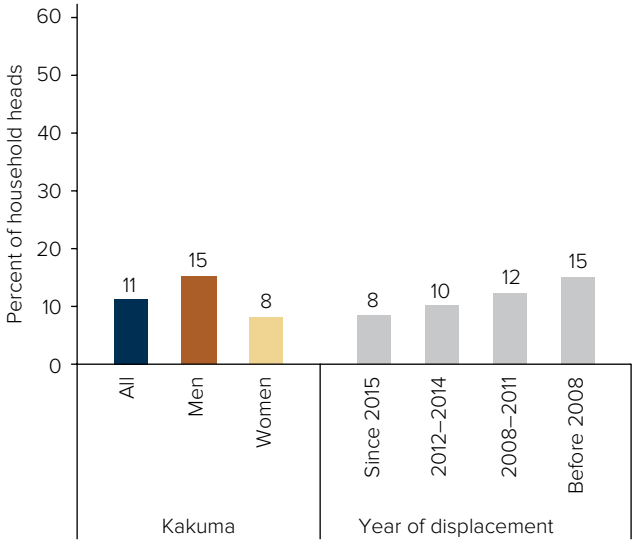
3.4 Access to finance and remittances[116]

45. Only 11 percent of refugee households own a regular bank account (Figure 41). Men-headed households as well as households displaced before 2008 are more likely to own bank and mobile banking accounts ($p<0.01$). Refugees can set up a bank account using their registration document (Manifest); however, previous studies have shown that many of them—especially women—do not see value in having a bank account given irregular and low income.[117] Thus, as was also suggested in precedent studies on market dynamics in Kakuma, there are important opportunities for growth for commercial firms offering financial services, coupled with financial literacy and business training, for refugees and hosts.[118, 119] UNHCR and partners have engaged financial service providers, such as Equity Bank and KCB, to facilitate the opening of bank accounts in line with the scaling up of cash-based interventions for basic needs.

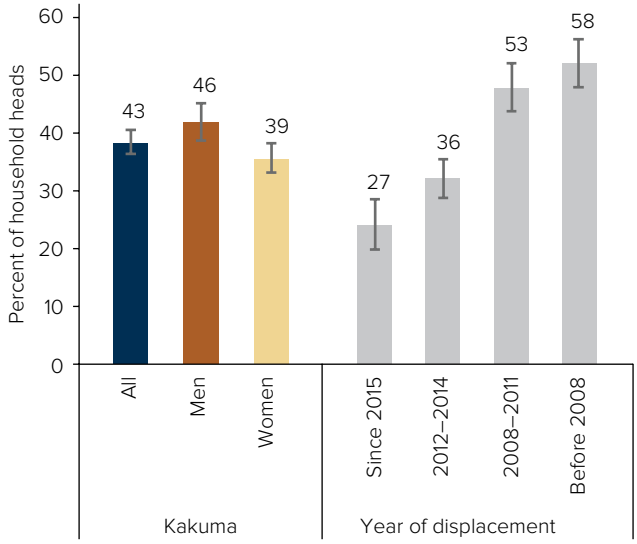
[116] Comparable data on bank account ownership and loans are not available for nationals. Only refugee data are presented.
[117] IFC and MarketShare. 2019. "Gender Assessment of Kakuma Refugee Camp and Town & Kalobeyei Settlement and Town."
[118] IFC. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya."
[119] According to Equity Bank, the only bank with a branch in Kakuma, a refugee can open a bank account if they have an Alien ID card or their proof of registration document from UNHCR and the Refugee Affairs Secretariat (RAS) (IFC 2016).

46. Mobile banking is not available for all and varies according to sex and year of displacement. Only 43 percent of refugee households (46 percent of men vs 39 percent of women) own a mobile banking account, mainly M-Pesa (Figure 42). In contrast, 73 percent of Kenyans at the national level own a mobile banking account.[120] According to IFC, in Kakuma town mobile money is widely used (86 percent), although awareness of financial services is low.[121] Mobile banking requires a telephone and thus involves an investment that not every household can make. Some national and refugee households share one mobile phone among household members to do mobile banking transactions (mainly M-Pesa). This reflects that even when sharing a mobile phone, access to mobile banking is still far from universal.[122] Such low levels of bank and mobile account ownership may partly reflect the lack of financial literacy and information on services among refugees. The IFC has identified that 73 percent of camp residents do not have access to any information on financial matters.[123] Over time, refugees may increase their knowledge regarding the availability of financial services, which can help explain why those who have resided in the camp longer are more likely to own a bank account than those who have more recently arrived.

▶ FIGURE 41: Bank account ownership by sex of head and year of displacement



▶ FIGURE 42: Mobile banking ownership by sex of head and year of displacement

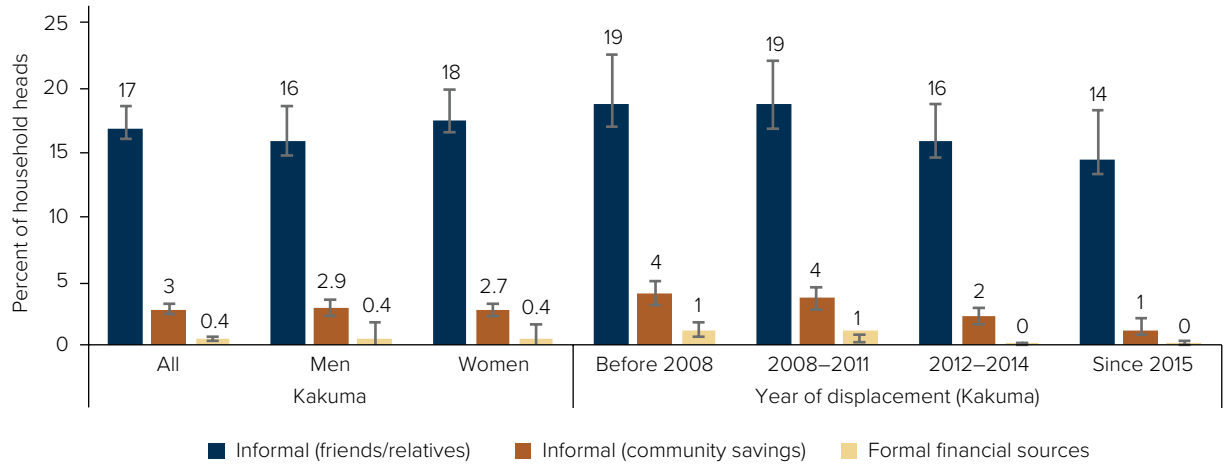


Source: Kakuma (2019).

[120] World Bank Group. 2017. "The Global Findex Database," 20.
[121] IFC, "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya," 73.
[122] Samuel Hall. 2018. "Innovating Mobile Solutions for Refugees in East Africa"; HPN. 2018. "Mobile Phone-Based Cash Transfers: Lessons from the Kenya Emergency Response."
[123] IFC. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya," 17.

47. Refugees rely on informal credit sources, while access to formal credit markets in Kakuma is low. Nearly a fifth of refugees received a loan in the last 12 months, mainly from friends, relatives, or community savings. Formal credit sources were barely used (0.4 percent, Figure 43). Furthermore, refugees who were displaced before 2008 are more likely to have received a loan than refugees who were displaced after 2015, which can be explained by social networks built over time. Previous studies have found that Kakuma refugees tend to borrow money from local shops to buy food on credit, although refugees have also stated that they would be willing to pay for improved energy, housing, and sanitation services if loans and credits were available.[124] Refugee business owners have reported that the lack of access to capital is the main constraint to business growth.

▶ **FIGURE 43:** Sources of loans received in last 12 months by sex of head and year of displacement



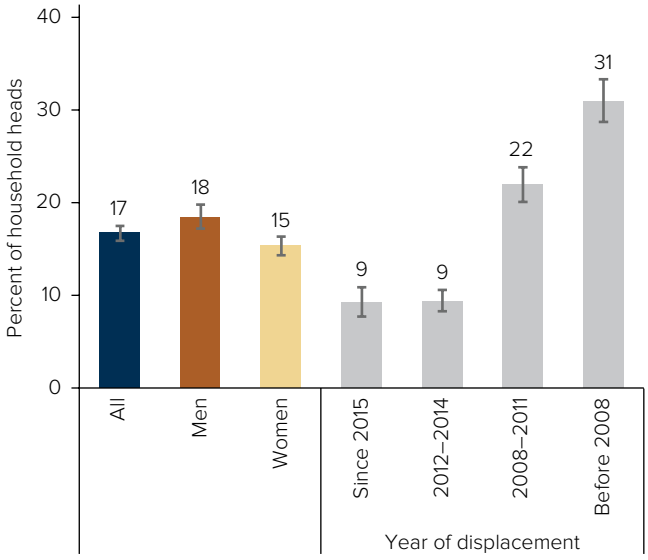
Source: Kakuma (2019).

48. Formal financial institutions have sizable opportunities to expand to Kakuma. Kenya Commercial Bank (KCB) and Equity Bank are the only commercial banks in Kakuma. KCB has approximately 5,000 refugee and asylum seeker account holders, and it has not yet extended credit services to refugees and asylum seekers. Equity has approximately 33,000 refugee and asylum seekers account holders in Kakuma and employs 52 refugee agents in Turkana West sub-County. Equity Bank has 2,500 refugee account holders with a credit portfolio ranging from K Sh 1,000 to 1,000,000.[125] Equity Bank mostly lends money to refugees through risk-partnerships with organizations. In such partnerships, organizations fund loan programs and select beneficiaries, while Equity Bank holds the account and distributes the loans. Despite the possibilities to access formal and semiformal financial services, refugees who borrow money widely use informal sources, which may be partly explained by lack of awareness regarding the available services and complicated procedures, as well as low literacy levels, because banks require filling in forms.

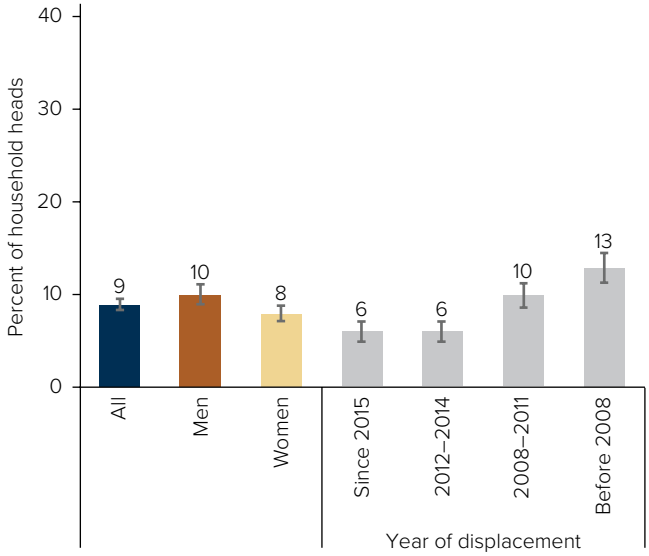
[124] IFC. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya."
[125] Information provided by UNHCR Kakuma operations.

49. Refugees who have been displaced for longer reported to have more relatives resettled to high-income countries and received more remittances overall. Nearly 20 percent of refugees have relatives resettled to high-income countries (Figure 44),[126] while about 10 percent received remittances in the last 12 months (Figure 45). Refugees displaced for longer had more opportunities to be considered under annual quotas of resettlement programs, which could explain why their relatives who remained receive more remittals. In consequence, those who have been displaced for longer than 10 years are more likely to have received remittances as compared to those displaced more recently. Refugees displaced for longer are also more likely to have relatives living within Kenya, outside the camp. Sixteen percent of refugees have relatives living in Kenya, although Somali refugees (25 percent) and those displaced for longer (23 percent) are more likely to have relatives living in Kenya.

▶ **FIGURE 44:** Relatives resettled to high-income countries by sex of head and year of displacement



▶ **FIGURE 45:** Received remittances in the last 12 months by sex of head and year of displacement



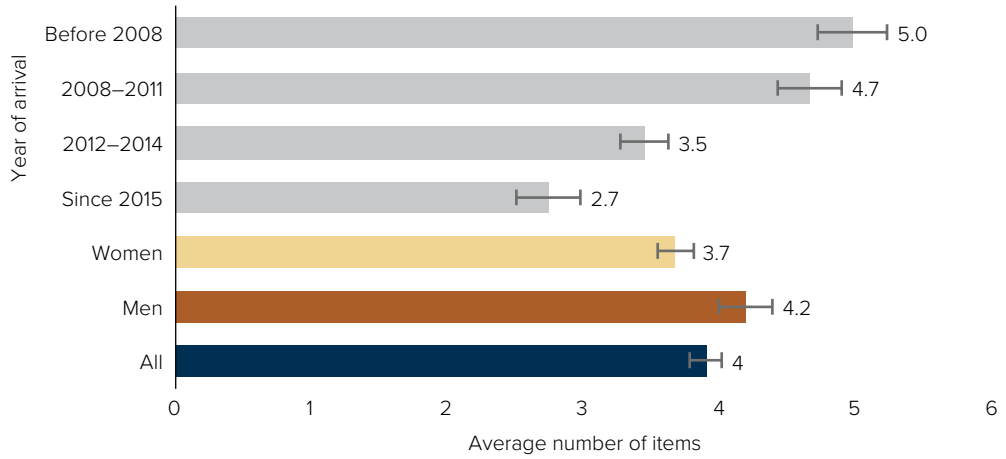
Sources: Kakuma (2019); KIHBS (2015/16).

[126] Self-reported data may slightly differ from official statistics on resettlement.

3.5 Assets

50. Households headed by men and those displaced for longer own more assets than those headed by women and those recently displaced, respectively. Refugee households reported ownership of assets included in a list of 20 items.[127] Refugee households headed by men own more assets than those headed by women ($p<0.01$, Figure 46). Assets are accumulated over time; thus, it is not surprising to find that more protracted refugee households (displaced before 2008) are more likely to own a larger number of assets than refugees who were displaced earlier (2015 or earlier, $p<0.01$). The most commonly owned asset is mosquito net, which should be owned by every household in Kakuma as UNHCR and other organizations provide them (Figure 47).[128] Nearly half of refugee households own a smartphone, although men-headed households (54 percent) are more likely than women-headed households (41 percent) to own one ($p<0.01$). Smartphones connected to the internet can be used as information sources, which are crucial to guide movement paths (Section 7.2 "Intentions to move and information needs"). They can also be used to search for employment as well as to retrieve accurate information about emergencies, such as the COVID-19 pandemic.

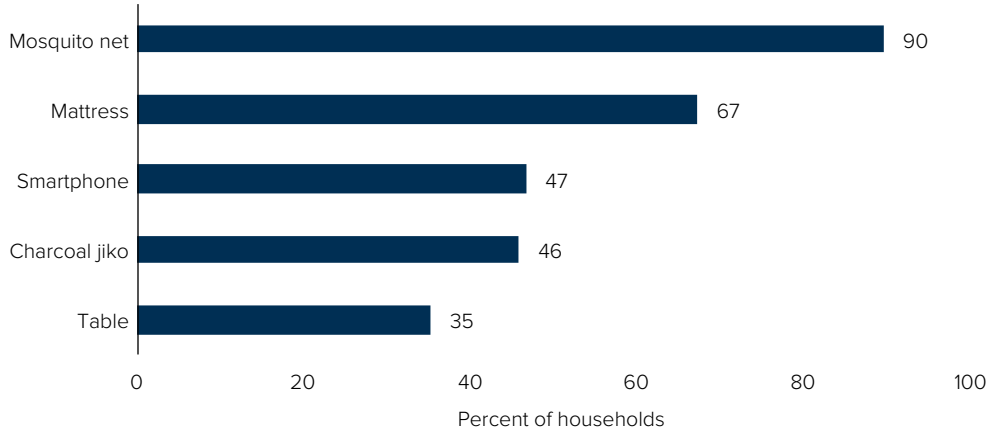
▶FIGURE 46: Number of owned assets by sex of household head and year of arrival



Sources: Kakuma (2019); KIHBS (2015/16).

[127] Assets included in the survey: radio, television, satellite dish, smartphone, refrigerator, table, bed, mattress, mosquito net, fan, bicycle, motorcycle or tuk tuk, car, generator, solar panels, kerosene stove, charcoal jiko, wheelbarrow, corrugated iron fencing, and animals. Such a list is not comparable with national data.
[128] Mosquito nets are given to all new arrivals (1 net for every 2 individuals in a household) and also to pregnant women when they start prenatal care. UNHCR carries out periodic mass distribution to the entire population.

▶ **FIGURE 47:** Most commonly owned assets



Sources: Kakuma (2019); KIHBS (2015/16).

4. Poverty Incidence

Sixty-eight percent of refugees live below the international poverty line of US$1.90 per day (2011 PPP), compared to 72 and 37 percent of hosts at the Turkana County and national levels, respectively. Poor refugee households are mostly headed by women, are large in size, are more likely to be South Sudanese, and were more recently displaced.

BOX 7

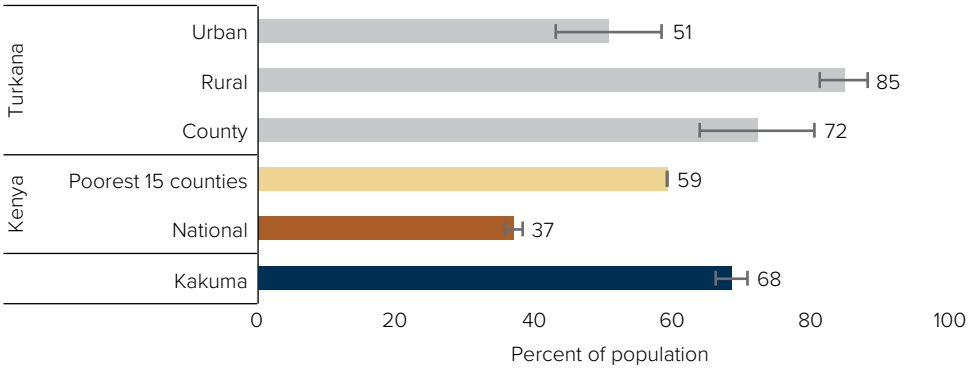
Measures of poverty

Poverty is defined as a level of consumption at which a person's minimum basic needs cannot be met. Three measures of poverty were used in this analysis: poverty headcount, poverty gap, and poverty severity. The poverty headcount is the most widely used poverty metric; it determines the proportion of the population that is poor—who live on less than US$1.90 a day (2011 PPP).[129] The poverty gap estimates the average extent by which poor individuals fall below the poverty line of US$1.90 a day, expressed as a percentage of the poverty line. Simply put, the poverty gap indicates how far away the poor are from escaping poverty and—when multiplied by the poverty line and the population size—can also serve as a measure of the cost of eliminating monetary poverty, given perfect targeting. The squared poverty gap measures the severity of poverty by considering inequality among the poor. It is simply a weighted sum of poverty gaps, where the weights are the proportionate poverty gaps themselves.[130]

[129] The international poverty line determines the threshold of being able to purchase a fixed basket of goods that meets basic needs in a way that is consistent across countries. Possibly, more assets are owned.
[130] Foster, Greer, and Thorbecke. 1984. "A Class of Decomposable Poverty Measures"; Haughton and Khandker. 2009. "Handbook on Poverty and Inequality."

51. Nearly 70 percent of refugees and Turkana residents live in poverty, where South Sudanese refugees and women-headed households are most likely to be poor. Refugees in Kakuma and Turkana residents have similar poverty rates, of 68 percent and 72 percent, respectively, which is substantially higher than the national rate of 37 percent ($p<0.01$; Figure 48). Refugees and Turkana residents' poverty rates are also higher than the average rate of the 15 poorest counties in Kenya (59 percent, $p<0.01$). The poverty rate among refugees varies according to sex, country of origin, and date of displacement (Figure 49). Most refugees who live in households headed by women are poor (Section 8 "Gender-based vulnerabilities"). South Sudanese—whose households are widely headed by women—are the poorest overall ($p<0.01$). Refugee households that have been displaced since 2008 or before, are less likely to be poor than those displaced in 2012–2014 ($p<0.01$). However, the poverty rate drops for those displaced since 2015 or later. Such variation can be driven by the South Sudanese, many of whom were displaced in 2012–2014. Over time, refugees increase their knowledge on income opportunities, develop businesses and/or enter the labor market, and strengthen their networks, which can help explain why refugees displaced for longer tend to have lower poverty rates. Overall poverty incidence among refugees and hosts is strikingly high and may increase given resource constraints derived from new emergencies—mainly the COVID-19 pandemic. Thus, it is likely that going forward, assistance will be reduced, exacerbating the extreme fragility of both populations.

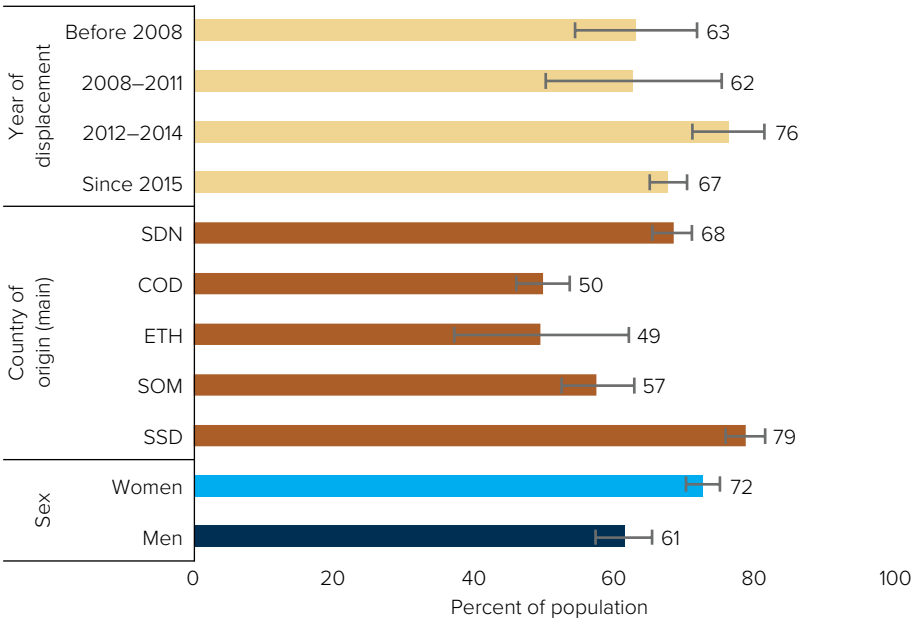
▶ **FIGURE 48:** Poverty headcount for refugees and Kenyans



Sources: Kakuma (2019); KIHBS (2015/16).
Note: Poverty incidence calculated using international poverty line.

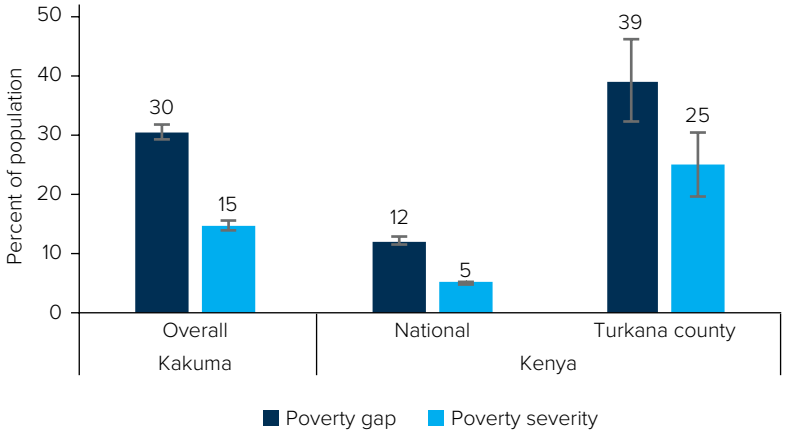
52. The poverty gap and severity of refugees are higher than for nationals, but lower than for Turkana residents. The poverty gap among refugees is 30 percent, versus 12 percent for nationals ($p<0.01$). The refugees' poverty gap is however lower than that of Turkana residents (39 percent, $p<0.05$; Figure 50). In addition, poverty severity among refugees in Kakuma is 15 percent, while for Turkana residents it is 25 percent. As expected, women, South Sudanese, and more recent arrivals (since 2012) are farthest away from reaching the monetary poverty line of US$1.90 a day. The poverty gap can be used for a rough estimation of the cost of closing the poverty gap and thus to eliminate poverty. In this case, eradicating poverty among refugees in Kakuma would require a transfer of US$208 per person per year (2011 PPP) (equivalent to around US$17 a month), versus US$270 per person per year for the rest of Turkana County.

▶ FIGURE 49: Poverty headcount by household head sex, country, and displacement year



Sources: Kakuma (2019); KIHBS (2015/16).
Note: Poverty incidence calculated using international poverty line.

▶ FIGURE 50: Poverty gap and severity for refugees and Kenyans



Sources: Kakuma (2019); KIHBS (2015/16).
Note: International poverty line.

53. Poor refugee households are larger in size, have more children, and tend to be headed by refugees with little or no education. Nearly 80 percent of households with seven or more members are poor. For households with one to three members, this estimate drops to 11 percent. The same patterns are found for Kenya overall (increasing from 10 percent for households with one to three members, to 58 percent for households with seven or more members) and Turkana County (increasing from 41 percent for households with one to three members, to 80 percent for households with seven or more members). Poverty is substantially higher among households in which children reside (members under 18 years old). Of refugee households with children, 64 percent live in poverty as compared to 21 percent of those without children ($p<0.01$). The same pattern is observed for Kenya at the national level (36 percent vs 8 percent, $p<0.01$) and Turkana level (75 percent vs 25 percent, $p<0.01$). Poverty rates are the highest when household heads have never attended school (or completed less than primary education) and the lowest when they have tertiary education. For households who have heads that have never attended school, the poverty rate is 65 percent in Kakuma, which compares to 51 percent and 74 percent at the national and Turkana levels, respectively.

BOX 8

Determinants of welfare

Welfare is driven by household size, housing characteristics and assets. A welfare model based on a regression analysis was carried out to identify factors associated with increasing levels of welfare (Table 2, see complete model in Appendix 13 "Determinants of Welfare").[131] After controlling for other factors, welfare decreases with an increase in household size, and households with two or less persons occupying a room are better off than those with more than three persons per room. Moving to energy for cooking, households who use purchased firewood are better off than those who use collected firewood. Similarly, having an improved floor material is a sign of increased welfare. An assets index was calculated using a Principal Component Analysis. Welfare significantly increases in relation to the assets index. Households that own a mobile phone, mattress, wheelbarrow, TV, charcoal jiko (stove), or a table are better off than those who do not have them. Interestingly, age, gender, and education of heads have no significant effect on welfare for this model. However, households with characteristics related to decreased welfare (South Sudanese heads, large household sizes, overcrowding, and use of collected firewood) are mostly headed by women. Thus, refugee households headed by women tend to be poorer than men-headed ones.

[131] The welfare model is given by $Y_i = \alpha + \beta X_i + \varepsilon_i$; where Y_i is the consumption expenditure on core items X_i, is household and head characteristics, and ε_i is a normally and independently distributed error term.

▶ **TABLE 2:** Preliminary regression analysis on determinants of welfare, consumption per capita[132]

Household characteristics	Variable	Coefficient (standard error)
Subcamp (base: Kakuma 1)	Kakuma 2	−0.101** (0.042)
Household size (base: 1–2 members)	3–4	−0.380*** (0.055)
	5–6	−0.638*** (0.058)
	7+	−0.911*** (0.060)
Crowding index (base: more than 3 persons per room)	Less than 1 person per room	0.309* (0.111)
	2–3 persons per room	−0.090** (0.033)
Source of cooking energy (base: collected firewood)	Purchased firewood	0.100*** (0.030)
Type of floor (base: unimproved)	Improved material	0.084* (0.031)
Assets	Asset index	0.065*** (0.009)
N		1662
Adjusted R^2		36.1

Source: Kakuma (2019).
Note: Significance level: 1% (***), 5% (**), and 10% (*).

5. Food Security

Food insecurity is alarmingly high. Eight in 10 refugees reduce food consumption to cope with the lack of food, while 6 in 10 of them use livelihoods-based strategies, which deplete assets, decrease production, and reduce human capital.[133]

54. In Kenya, food insecurity is a threat for hosts and refugees. Food security defines a situation in which all people at all times have physical and economic access to sufficient, safe, and nutritious food, which meets their dietary needs and food preferences for an active and healthy life.[134] At least 4 million Kenyans are severely food insecure, while Turkana County stands out as being far more food insecure than any other county.[135] The current food security problems in Kenya derive from multiple factors, including droughts, high costs of domestic food production due to high costs of inputs (mainly fertilizer), and low purchasing power of consumers. Thus, food insecurity levels for refugees and hosts in Kakuma are alarmingly high. Although the World Food Programme (WFP) and UNHCR provide

[132] N is smaller than the sample size due to missing values for some variables used for the analysis.
[133] Comparable data on food security are not available for nationals. Only refugee data are presented.
[134] FAO. 1996. "Rome Declaration on World Food Security and World Food Summit Plan of Action."
[135] WFP. 2016. "Comprehensive Food Security and Vulnerability Analysis (CFSVA) Kenya 2016." Eighty-six percent of Turkana households had to cope with not having enough food or money to purchase it.

assistance to ensure that food and other basic needs of refugees are met, food insecurity is likely to increase due to budgetary cuts to assistance derived from the COVID-19 pandemic. In Turkana, the Hunger Safety Net Program (HSNP) provides cash transfers for food; however, eligibility is based on socioeconomic indicators and only considers vulnerable groups such as the elderly, orphans, or disabled.[136]

BOX 9

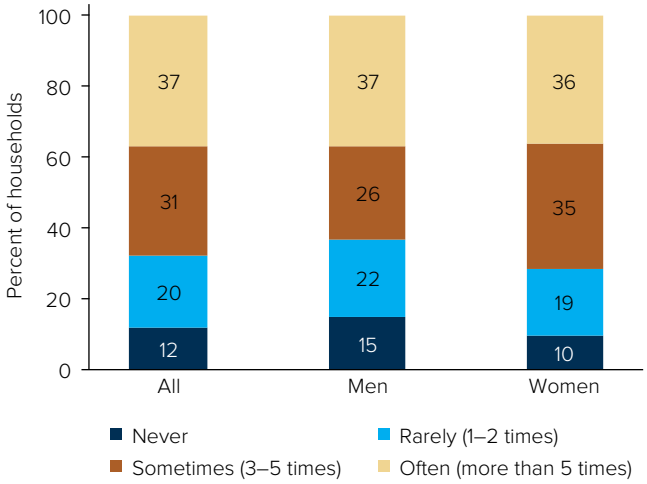
Livelihoods-based and consumption-based coping strategies indexes

Food insecurity is measured using the WFP livelihoods-based and consumption-based coping strategies indexes. The Livelihoods-Based Coping Strategies Index (LCSI) assesses the longer-term coping and productive capacity of households in the presence of food shortages and strategies commonly undertaken to address them. These can include selling assets or livestock, reducing spending on health and education, using savings, and begging. The LCSI questionnaire module inquires if in the last 30 days, strategies were used to cope with the lack of food. The consumption-based or reduced Coping Strategy Index (rCSI) measures the level of stress faced by a household due to a food shortage by assessing the frequency of adoption of five coping mechanisms, and their severity. Strategies include reducing meals, eating less preferred foods, and limiting adult food intake for children to eat. The rCSI module inquires if in the last seven days, strategies were used to cope with lack of food.[137] Consumption-based strategies are more severe than livelihoods-based ones.

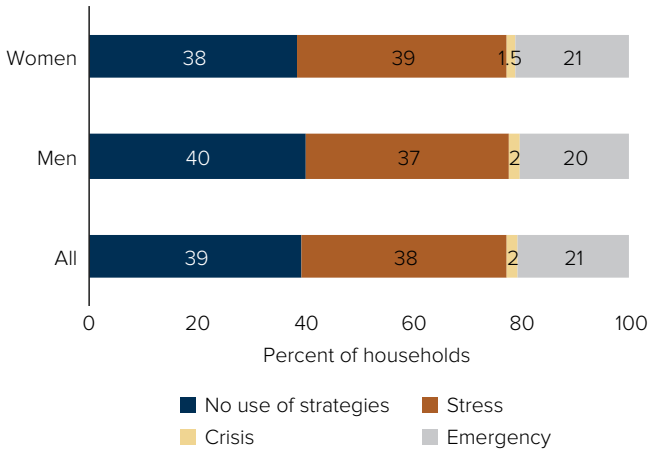
55. In 60 percent of refugee households livelihoods-based strategies are used to cope with lack of food.[138] While 88 percent of refugee households report that they did not have enough food at least once in the 30 days preceding the interview, 60 percent of them use livelihoods-based strategies (Figure 51), which may reflect the lack of assets to use or sell in order to cope with the lack of food. Of refugee households, 38 percent are under 'stress' and 21 percent of them are in 'emergency' levels of food insecurity (Figure 52). The most frequently used strategies are borrowing money or food from a formal lender or bank (29 percent), begging (20 percent), and spending savings (15 percent).

[136] Betts et al. 2018. "Self-Reliance in Kalobeyei? Socio-Economic Outcomes for Refugees in North-West Kenya."
[137] WFP. 2019. "Cameroon: Emergency Food Security Assessment (EFSA) January 2019."
[138] Livelihood coping strategies consider whether households have engaged in any livelihoods-based coping behavior in the last 30 days due to lack of food or money to buy food. Households are categorized as stressed (sold household assets/goods, sent household members to eat elsewhere, purchased food on credit or borrowed food, or borrowed money), in crisis (sold productive assets/transport, removed children from school), or emergency (begged, sold last female animals, engaged in illegal income activity).

▶ **FIGURE 51:** Number of times there was no food to eat in the last 30 days



▶ **FIGURE 52:** Livelihoods-based coping strategies

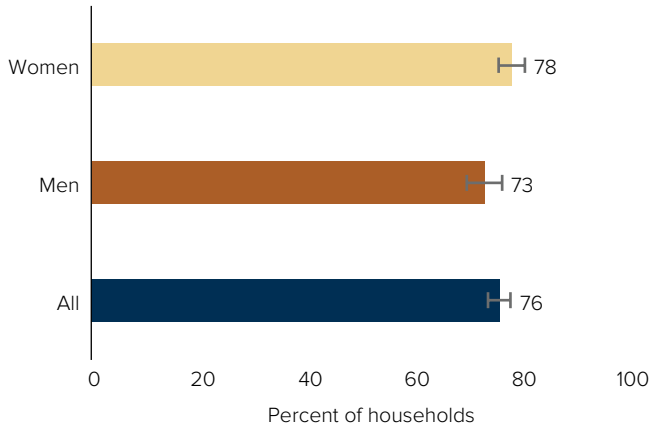


Sources: Kakuma (2019); KIHBS (2015/16).

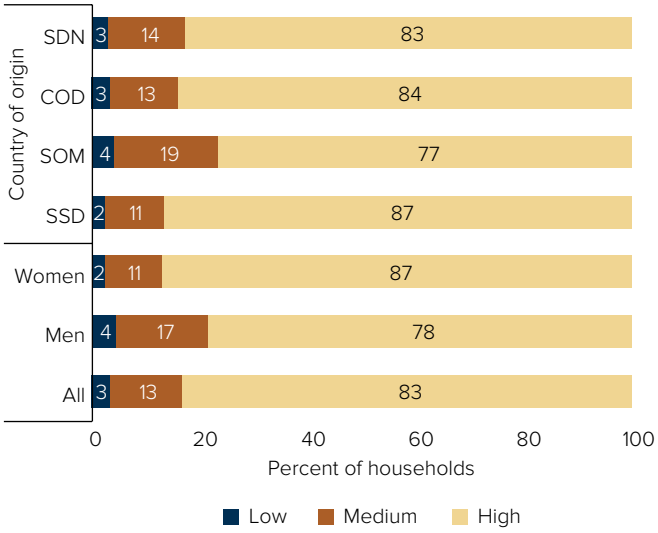
56. Eighty percent of refugee households are highly food insecure, while households headed by South Sudanese and women are the most severely affected. Looking at a shorter time frame still, 76 percent of refugee households report not having had enough food to eat in the week preceding the interview (73 percent men-headed households vs 78 percent women-headed households, $p<0.05$, Figure 53). Alarmingly, 83 percent of refugee households are highly food insecure (78 percent men-headed households vs 87 percent women-headed households, $p<0.01$, Figure 54). The most used strategy is reducing the number of meals (77 percent), while 50 percent of refugee households implement the most severe strategy of restricting adult consumption for children to eat. Poor refugee households are more likely to be food insecure (58 percent vs 42 percent of non-poor). Even though refugees receive in-kind food aid and cash, these findings reflect that the provided aid is not enough.[139] In fact, food aid has occasionally been reduced, which will likely become more common due to budgetary restrictions.

[139] Through the World Food Programme (WFP), refugees receive a monthly mobile money transfer that can only be spent on food items at licensed businesses. Less than half of refugee households in Kakuma receive the cash assistance, while the rest receive monthly food rations.

▶ **FIGURE 53:** Lack of food or money to buy sufficient food in the last seven days



▶ **FIGURE 54:** Food insecurity by sex of head and country of origin



Sources: Kakuma (2019); KIHBS (2015/16).

6. Social Cohesion

Perceptions of trust, safety, and participation are generally positive among refugees; however, refugees interacted with members of the host community in only 50 percent of households.[140]

BOX 10

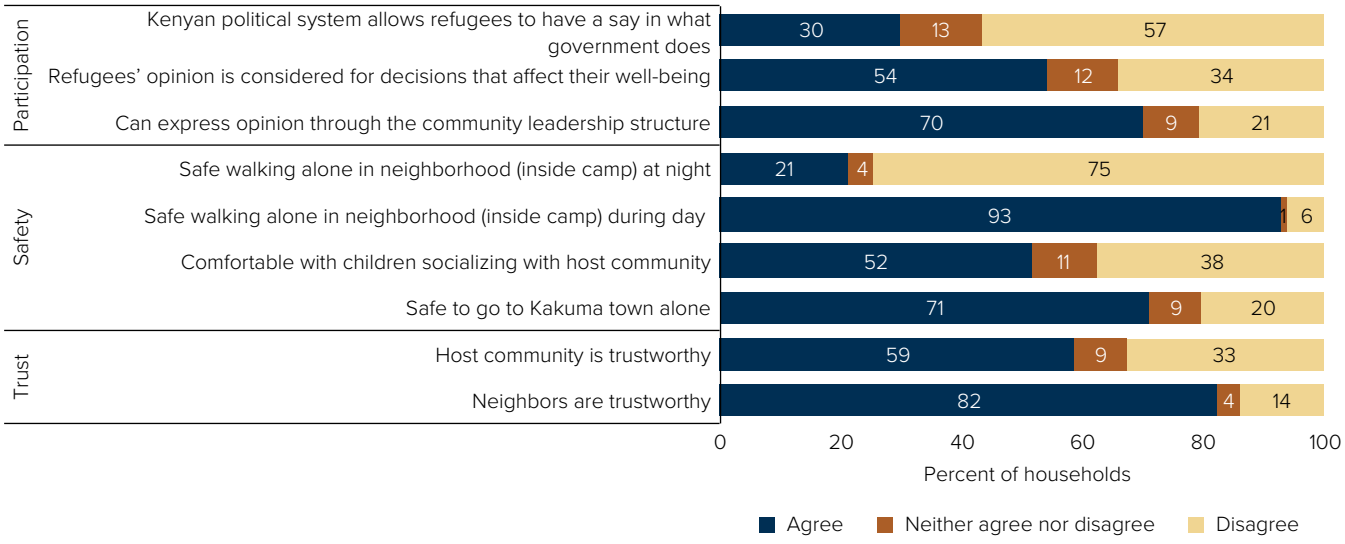
Social cohesion approaches

The concept of social cohesion in the context of displacement is rarely coherently defined and its usage is elastic. Social cohesion is rather a "composite concept that encompasses a range of vectors, including the attitudinal and emotional (for example, acceptance, empathy, and trust), the collective (for example, identity and propensity for joint action), the institutional and systemic (for example, political participation), and the socioeconomic vector (for example, relative deprivation and access to opportunities). Moreover, these vectors run both horizontally (between persons and groups) and vertically (between persons, communities, and institutions)."[141] In sociological terms social cohesion refers to "the extent to which there are bonds within a group or society, which foster trust among strangers, willingness to cooperate, and confidence in institutions."[142] In contexts affected by fragility, conflict, and violence (FCV), the focus on intergroup perceptions and interaction often translates into social cohesion interventions.

[140] Comparable data on social cohesion are not available for nationals. Only refugee data are presented.
[141] De Berry and Roberts. 2018. "Social Cohesion and Forced Displacement," 27.
[142] Rodgers. 2020. "What Does 'Social Cohesion' Mean for Refugees and Hosts? A View from Kenya."

57. Refugees' perceptions of trust, safety, and participation are generally positive, although worse for those who have PTSD-related difficulties.[143] Social cohesion between refugees and hosts are key to the newly embraced approach, based on the Kalobeyei Integrated Socio-Economic Development Plan (KISEDP), which fosters socioeconomic interactions between hosts and refugees.[144] Regarding participation, refugees generally feel they can express their opinion through the community leadership structure, although only in 3 out of 10 households, refugees think their opinion is considered for governmental decisions (Figure 55). This reflects that refugees feel their voices count within their community but not for higher level decisions by the host country government. This finding is in line with refugees' perceptions on trust and safety, which shows that refugees generally trust their fellow refugee neighbors more than hosts. Refugees with difficulty remembering and concentrating (PTSD-related) are less likely than those without such difficulties to trust host community members and to feel comfortable with their children socializing with host children (Figure 56).

▶ **FIGURE 55:** Perception of trust, safety, and participation of Kakuma refugees

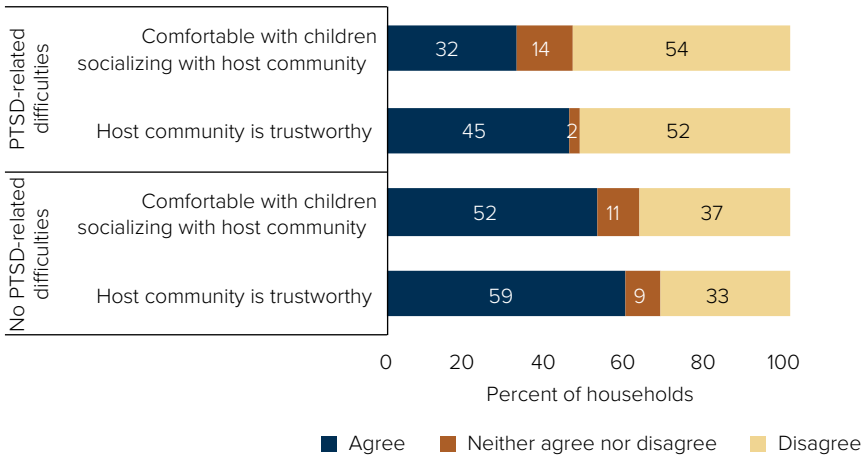


Source: Kakuma (2019).

58. Fifty percent of refugees recently interacted with a host community member, while only 30 percent of refugees with PTSD-related difficulties did so.[145] The SES findings partly reflect that, although not very frequently, frictions between refugees and hosts occur, and have their toll on social cohesion. Previous studies have identified that while everyday interactions and personal relations—including intermarriages—are common, isolated disputes can quickly turn into intercommunal confrontations.[146] This can affect the frequency of interaction between refugees and hosts (Figure 57). Refugees with PTSD-related difficulties are less likely than those without these difficulties to have interacted with a host community member—suggesting that traumatic experiences can have a negative impact on social cohesion.[147]

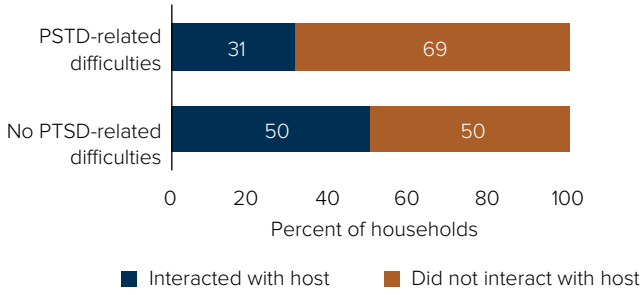
[143] The SES gives insights on social cohesion; nonetheless, this analysis is limited to quantitative data and does not include qualitative insights, which could complement the survey findings.
[144] UNHCR. 2018. "KISEDP. Kalobeyei Integrated Socio-Economic Development Plan in Turkana West."
[145] In this report, host community includes all Kenyan residents of Turkana. Nevertheless, for the Social Cohesion module, host community refers to all Kenyans living close to the camp/settlement. For many refugees, the term indicates the local Turkana people (Betts et al. 2018).
[146] Rodgers. 2020. "What Does 'Social Cohesion' Mean for Refugees and Hosts? A View from Kenya." Conflict such as the clashes in July 2019, have resulted in casualties, loss of property, and persistent mistrust.
[147] The Kakuma SES did not use PTSD test, and thus, additional an analysis is needed to draw significant conclusions.

▶ **FIGURE 56:** Perceptions by PTSD-related difficulty



Source: Kakuma (2019).

▶ **FIGURE 57:** Interaction in last seven days by PTSD-related difficulty



Source: Kakuma (2019).

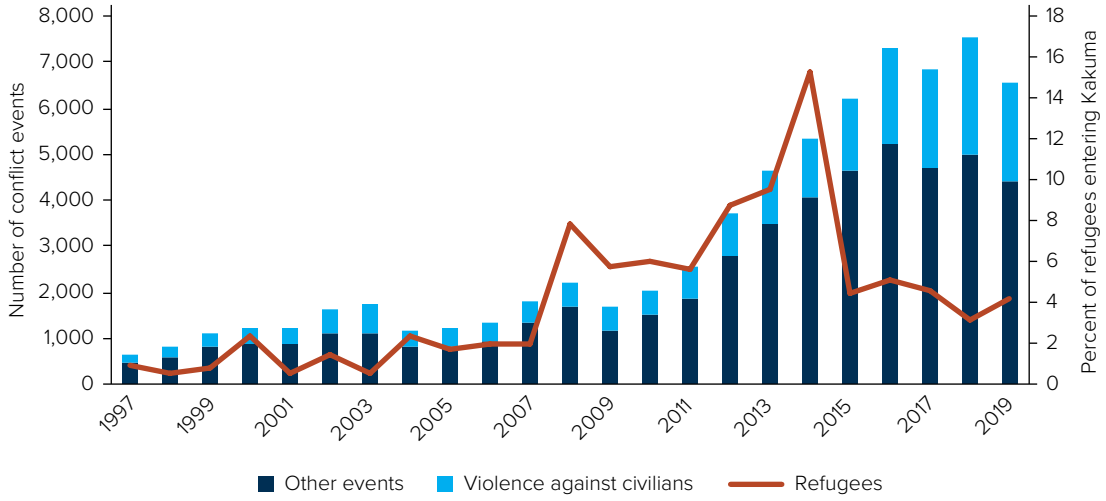
7. Trajectories of Displacement and Intentions to Move

Most refugees were displaced between 2008 and 2015, fleeing conflict, violence, and environmental hazards. Most refugees wish to leave the camp, and need more information to guide their plans to move or stay in Kakuma.

7.1 Triggers of displacement

59. Up to 2015, the chronology of displacement and settlement in Kakuma resembles the chronology of conflict events in refugees' countries of origin. Refugees in Kakuma fled conflict and violence in South Sudan, Somalia, the Democratic Republic of Congo, Burundi, Ethiopia, and Uganda (Appendix 10 "Timeline of displacement events in major countries of origin of Kakuma refugees"). The dates in which conflict events occurred in the main countries of origin and the dates of displacement of Kakuma refugees follow a similar pattern (Figure 58). Even though conflicts in refugees' countries of origin continued to occur from 2015 onwards, the percentage of refugees settling in Kakuma decreased in the same year, which can be explained by the establishment of the Kalobeyei integrated settlement in 2015. Since 2015, new arrivals have mostly been allocated spots in Kalobeyei rather than in Kakuma.

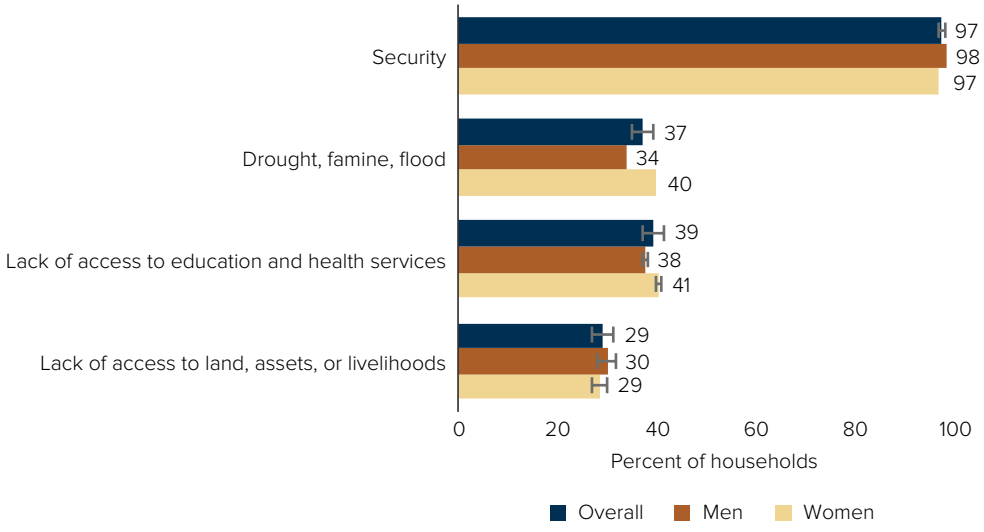
▶ **FIGURE 58:** Conflict events and displacement dates for Kakuma refugees



Source: ACLED (1997–2019).
Note: Conflict events for: South Sudan, Somalia, Sudan, Democratic Republic of Congo, Burundi, Ethiopia, and Uganda.

60. Security concerns constitute the main reason for flight. Secondary reasons include environmental hazards and lack of access to health and education services (Figure 59). Such reasons are particularly predominant among Sudanese and South Sudanese refugees; 46 percent of them reported environmental hazards as secondary reasons for fleeing into Kenya. Likewise, 50 percent of Sudanese and South Sudanese indicated lack of access to education and health services as important secondary reasons for flight. With the outbreak of conflicts and environmental crises, such services are the first ones to be affected, thus, it is not surprising to find that nearly 40 percent of refugees reported lack of access to services as a secondary reason for fleeing.

▶ **FIGURE 59:** Reasons for having fled by sex of head

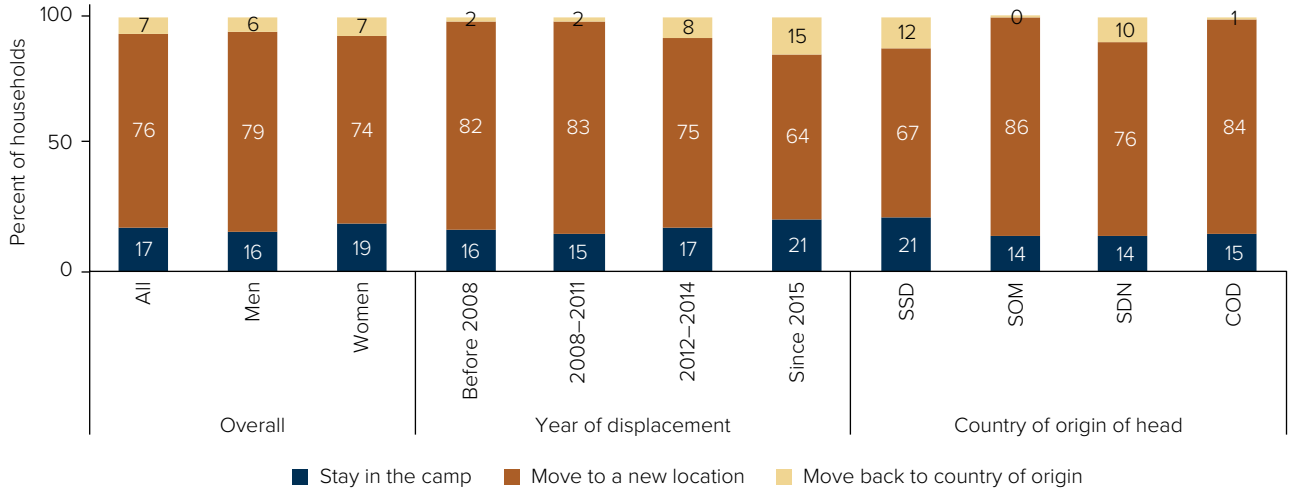


Source: Kakuma (2019).

7.2 Intentions to move and information needs

61. Nearly 8 in 10 refugee households want to leave Kakuma, with most wishing to move to a third country. Of those, more than 7 in 10 would leave even if they had the right to settle freely, live and work in Kenya (Figure 60). Fifty-three percent of refugees who want to leave Kakuma wish to go to North America, while 25 percent of them would like to go to Europe. However, opportunities for resettlement are limited.[148] Due to travel restrictions and other public health measures to prevent COVID-19 infections, resettlement departures worldwide were put almost completely on hold from March 17 to June 18, 2020. Such a pause delayed the departures of some 10,000 refugees to resettlement countries. As more countries begin to lift travel restrictions, more refugee departures can be anticipated; nevertheless, there is a gap between resettlement needs and places.[149] Refugees' desire to leave Kenya may partly reflect that living conditions in the country are seen as hard and undesirable. This could probably reflect that refugees may only know the lifestyle typical of Turkana County, which may not be of interest to them.

▶ **FIGURE 60:** Plans to leave Kakuma camp by year of displacement and country of origin

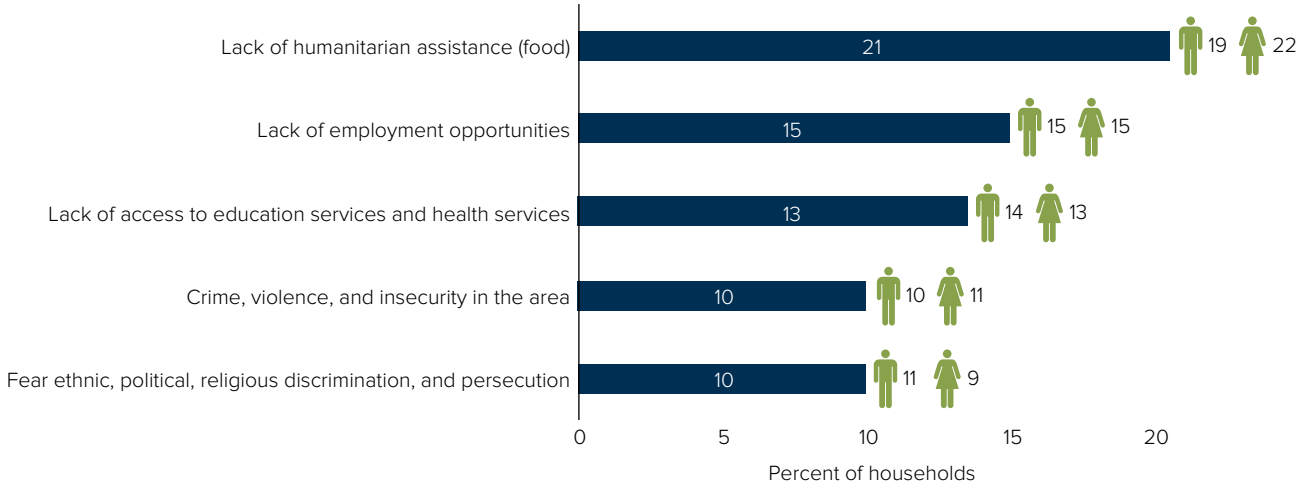


Source: Kakuma (2019).

62. The most important reasons for wanting to leave Kakuma are lack of humanitarian assistance and perceived better security in desired destinations. Food insecurity in Kakuma is alarmingly high (Section 5 "Food security"). Thus, refugees cite lack of humanitarian assistance—particularly food—as one of the most important reasons for wanting to leave (Figure 61). Perceived insecurity in their area, as well as fear of ethnic, political, and religious discrimination, are important reasons why refugees wish to leave the camp. Thinking about their intended destination—mainly countries in the global North—the most important reason why refugees want to leave is that they perceive security conditions to be better there (Figure 62). Lack of employment opportunities in Kakuma is another reason why refugees wish to leave, which is intrinsically linked to high food insecurity.

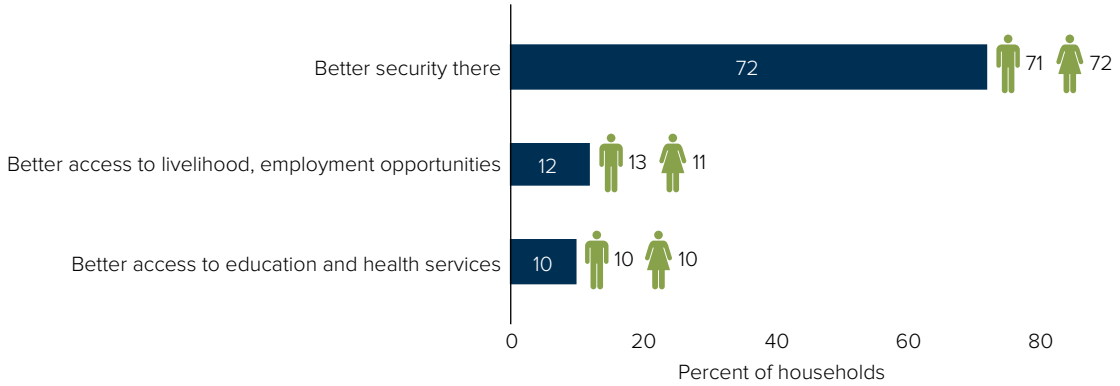
[148] UNHCR. 2019. "Resettlement Data." Only some 64,000 refugees were resettled in 2019 and the trend is declining, making resettlement only a reality for less than one percent of the global refugee population.
[149] UNHCR. 2020. "COVID-19 and Refugees."

▶ **FIGURE 61:** Most important reasons for wanting to leave based on living conditions in Kakuma



Source: Kakuma (2019).

▶ **FIGURE 62:** Most important reasons for wanting to leave based on destination



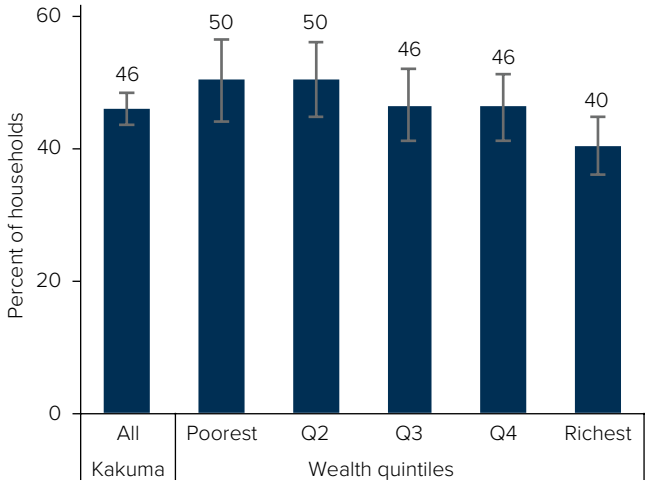
Source: Kakuma (2019).

63. Seven percent of refugee households have intentions to return to countries of origin while 17 percent wish to stay in Kakuma camp. Those who were displaced since 2015 are more likely to wish to go back to their countries of origin than those who were displaced in 2011 or earlier (Figure 60). This mirrors the findings of a recent study on intentions to return of South Sudanese refugees in Kakuma and Kalobeyei, showing that more protracted refugees are more likely to wish to return.[150] However, perceptions of safety in countries of origin are determinant factors for refugees' intentions to return. Among refugee households who want to stay in the camp and considering the situation in their countries of origin, 74 percent reported to wish to stay, mainly due to armed conflict, crime, and fear of ethnic, political, or religious discrimination and prosecution in countries of origin. Intentions to return are largely shaped by dynamics of peace and conflict, although access to services and livelihoods opportunities in return areas play a major role.[151] For refugees from rural areas—who are the majority of Kakuma's population—the ability to reclaim their land or obtain access to land elsewhere is central to their prospects of re-establishing livelihoods and starting anew.

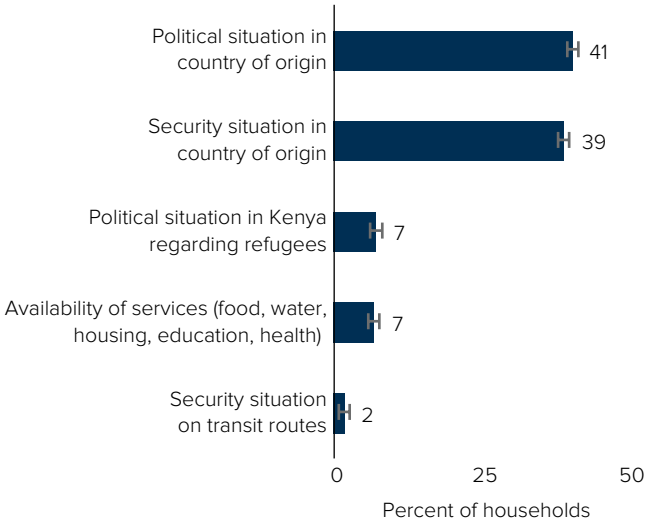
[150] NRC and UNHCR. Unpublished. "Return Intention Survey for South Sudanese Refugees in Kakuma Camp and Kalobeyei Settlement."
[151] World Bank Group. 2015. "Sustainable Refugee Return: Triggers, Constraints, and Lessons on Addressing the Development Challenges of Forced Displacement."

64. Refugees need more information to decide whether to return, move to a new country, or stay in the camp. In more than 4 in 10 households—particularly the poorest—refugees reported they need more information to guide their movement plans (Figure 63). The difference between the poorest and the least poor refugees may be partly explained by the fact that the latter are more likely to own radios, TVs, and smartphones, which they can use to get information on movement options. Furthermore, less poor refugees are more likely to have relatives abroad who can be a valuable source of information. The type of information refugees report needing the most is on the political and security situation in their countries of origin, which may reflect that they might be interested in returning and that they might have relatives there (Figure 64). Refugees in Kakuma mostly have access to Kenyan news (on the radio) and less so to news about their countries of origin or other regions. News is mostly provided in English and Kiswahili, which is an obstacle for many refugees who do not speak such languages (Figure 21). Social media and WhatsApp groups are also important sources of information, although only for those who have smartphones (18 percent). Refugees also receive information on UNHCR resettlement processes and available complementary pathways through the Kiosk for Access Service and Information (KASI) and other means.[152]

▶FIGURE 63: Need of information on relocation options by wealth quintile



▶ FIGURE 64: Type of needed information



Source: Kakuma (2019).
Note: Wealth quintiles Information represent shares of those who need information.

8. Gender-Based Vulnerabilities

65. Refugee and host community men and women face difficult living conditions; however, women face specific and additional vulnerabilities that exacerbate their already complicated circumstances. Households headed by women live more overcrowded than those headed by men (Figure 12). At the same time, toilet sharing is common (Figure 15). Both overcrowding and toilet sharing are linked with a higher risk of sexual assault.[153] Compared to men and boys, women and girls are more likely to be

[152] For more details: UNHCR, United Nations High Commissioner for Refugees. 2020. "Kakuma Information."
[153] WHO. 2020. "What Are the Health Risks Related to Overcrowding?"

at risk of Gender-Based Violence (GBV) mainly due to poor sanitation and firewood collection activities. Moreover, as women and girls are usually the ones who cook using biomass, they are more likely to face additional health risks.[154] Women refugees also face higher levels of food insecurity, tend to have lower literacy rates, are employed in lower earning sectors, and are less likely to have access to financial services than men. Understanding the differences in refugees' and hosts' living conditions according to sex can help inform targeted responses that adequately address their needs by considering gender norms and restrictions.

66. Seventy percent of refugee households headed by women are poor while nearly 90 percent are highly food insecure. Women are significantly poorer than men (72 percent vs 62 percent, $p<0.01$, Figure 49), which is related to the high levels of food insecurity they face.[155] Compared to households headed by men, those headed by women are more likely to face food shortages and to implement severe coping strategies which reduce adult consumption and meal portions. Women tend to use more consumption-based strategies than livelihoods-based ones (Section 5 "Food security"), which is not surprising considering that they are poorer and have less assets they can use or sell in order to cope with the lack of food. The higher incidence of food insecurity among women-headed households exacerbates their existing vulnerabilities and may increase the risk of using other negative coping strategies, such as exchanging food for sex and abandoning children. Considering that households headed by women are the ones with the largest dependency ratios, high levels of food insecurity among them is particularly worrying since it can translate into children's malnutrition and stunting. Thus, the healthy development of Kakuma children, and hence its future human capital, are at great risk.

67. Many refugee women have become heads of household and breadwinners. Fifty-six percent of refugee households are headed by women (Figure 7) and have large dependency ratios (Figure 5). Even though most working-age refugees are women, those who are employed tend to occupy low paying jobs, such as volunteering and agricultural family businesses, while 20 percent of them are self-employed (Figure 30). Women tend to run small, informal, regularly home-based businesses, allowing them to parallelly manage care and domestic work.[156] Conventional gender roles require women to perform caretaking and housekeeping roles; however, their situation as forced migrants has added a new role: breadwinner. Women refugees acknowledge that they need training to perform this new role, and thus, wish to strengthen their vocational and business skills in order to secure a job. Evidently, refugee women-headed households, as well as women members of households headed by men, need support to be able to provide for and take care of their dependents, as well as to support household expenses and control their earnings, strengthen their bargaining power, and secure their self-reliance.

68. South Sudanese refugee women are particularly vulnerable. Worldwide, 80 percent of the South Sudanese refugee population are women and children, while 63 percent of them are under age 18.[157] Conflict and generalized violence in South Sudan have forced hundreds of women to become the sole breadwinners for their families, with some of them having entered the labor market for the first

[154] Lambe. 2016. "Bringing Clean, Safe, Affordable Cooking Energy to Kenyan Households: An Agenda for Action."
[155] Comparable data on food insecurity is not available for nationals.
[156] NRC and IHRC. 2018. "Supporting Kakuma's Refugee Traders. The Importance of Business Documentation in an Informal Economy." Women are more likely than men to not register their businesses, which leaves them at risk of fines and business closures through the local authorities, and out of opportunities for growth through loans, grants and business-related movement passes.
[157] USA for UNHCR. 2020. "South Sudan Refugee Crisis."

time in their lives.[158] In Kakuma, South Sudanese refugee households headed by women mimic some international trends. South Sudanese households, which are mostly headed by women (71 percent), are the poorest in Kakuma (79 percent) and also have the largest dependency ratios (Figure 5) and household sizes (7.3 members, on average). Similarly, they are the most food insecure, and have the lowest employment rates (10 percent) and largest proportion of population outside the labor force (89 percent). South Sudanese refugee households in Kakuma are mostly made up of women and children who are in extreme need of support. Firstly, to cover basic needs, namely food, and secondly to ensure access to education, skill building, and livelihood opportunities.

9. Host Community Insights: Similarities and Differences

69. The refugee and host populations are young, both have high dependency ratios, their households are mostly headed by women, and they have high poverty rates.[159] Nearly 6 in 10 refugees and hosts are 18 and below (Figure 4) and thus, dependency ratios are high (1.2 for Kakuma refugees and 1.4 for Turkana). Even though the Turkana population is mainly made up of youth, the presence of elders is larger than for Kakuma refugees. Therefore, Turkana dependents comprise children and elders, while for Kakuma, dependents are mostly children. This difference is important since it can inform the type of child and elderly care programs needed by each community. As in Kakuma, most Turkana households are headed by women which are poorer than men-headed households. Thus, refugee and host women are the main breadwinners in their communities. Similarly, refugees and hosts face high poverty rates (Kakuma: 68 percent, Turkana: 72 percent), experience similar levels of overcrowding (Kakuma: 4.5 people per habitable room, Turkana: 4.2 people per habitable room) and low access to lighting. Hence, both communities need urgent support to improve their living standards. An additional similarity between hosts and refugees is related to the proportion of disabled, although refugees tend to have more cognitive and self-care difficulties while hosts have more difficulties walking and climbing steps (Figure 9).

70. Access to services, namely water, sanitation, and education is worse among hosts. Host community households have significantly lower access to improved drinking water and sanitation than refugees, and most of them share toilets with other households (Figure 15). Similarly, educational attainment and school attendance rates are lower than those of refugees. Nearly 70 percent of Turkana hosts have no education (Figure 19) while only 40 percent are literate in any language (Figure 20). Primary and secondary net and gross attendance rates are also very low overall (Figure 23), although lower among women and girls, reflecting the need for programs that promote women's and girls' education. Differential access to services can create hostilities between refugees and hosts, affecting social cohesion and increasing the risk of conflict between communities.[160]

[158] USA for UNHCR. 2019. "South Sudan Refugee Crisis Explained." Many South Sudanese men—often husbands and fathers—are either staying behind to work or fight, or are missing or presumed dead.
[159] It is important to take into account that the Turkana host data are from 2015/16 while the Kakuma data are from 2019.
[160] World Bank. 2019. "Using Micro-Data to Inform Durable Solutions for IDPs."

71. Employment rates are higher for Turkana hosts than for refugees, while refugees face restrictions to access financial services. The variation in employment rates partly reflects differentiated institutional rights limiting refugees' participation in the labor market. As opposed to refugees, Turkana hosts are free to move in and out of the camp and within the country, and have the right to work in Kenya. One of the main economic activities among Turkana hosts is firewood selling, which is mostly bought by refugees. Furthermore, it has been documented that some Turkana hosts are hired by refugees as porters, shopkeepers, security guards, or casual laborers (to help with housework).[161] Therefore, the presence of refugees and socioeconomic interactions with hosts have benefited the latter community in terms of access to livelihood opportunities and services. Even though 62 percent of Turkana hosts are employed, compared to only 20 percent of refugees (Figure 28), they are as poor as refugees and face similar struggles to survive (Figure 48). Limitations to access financial services faced by refugees are also rooted in legal restrictions, as the documentation required to open bank accounts and to use mobile baking through a SIM card is often not available for refugees. Thus, refugees' disadvantages are linked to institutional rights and structural limitations.

See Executive Summary for policy recommendations.

[161] IFC. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya."

References

Abuya, Edwin Odhiambo. 2007. "Past Reflections, Future Insights: African Asylum Law and Policy in Historical Perspective." *International Journal of Refugee Law* 19: 51–95.

"ACLED (Armed Conflict Location and Event Database)," n.d. https://acleddata.com/#/dashboard.

Africa Union. 2015. "Final Report of the African Union Commission of Inquiry on South Sudan and the UN Panel of Experts Report to the UN Security Council." UN Secretary General (UNSG) Report.

Ali, Jillo, Peter Obonyo, Susan Njuguna, and Wanja Mwaura-Tenambergen. 2015. "Effectiveness of Ng'adakarin Bamocha Model in Improving Access to Ante-Natal and Delivery Services among Nomadic Pastoralist Communities of Turkana West and Turkana North Sub-Counties of Kenya." *Pan African Medical Journal* 20. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4524908/

BBC News. 2020. "Coronavirus: Kenyan Schools to Remain Closed until 2021." *BBC*. https://www.bbc.com/news/world-africa-53325741

BBC News. 2019. "Democratic Republic of Congo Profile—Timeline." *News* (blog). https://www.bbc.com/news/world-africa-13286306

BBC News. 2018. "South Sudan Profile—Timeline." *News* (blog). https://www.bbc.com/news/world-africa-14019202

Beegle, Kathleen, Joachim De Weerdt, Jed Friedman, and John Gibson. 2012. "Methods of Household Consumption Measurement through Surveys: Experimental Results from Tanzania." *Journal of Development Economics* 98, no. 1: 3–18.

Betts, Alexander, Remco Geervliet, Claire MacPherson, Naohiko Omata, Cory Rodgers, and Olivier Sterck. 2018. "Self-Reliance in Kalobeyei? Socio-Economic Outcomes for Refugees in North-West Kenya." Oxford, UK: Refugee Studies Centre, ODID, University of Oxford.

Betts, Alexander, Naohiko Omata, and Olivier Sterck. 2018. "Refugee Economies in Kenya." Oxford, UK. https://www.rsc.ox.ac.uk/publications/refugee-economies-in-kenya

Campbell, Elizabeth, J. Crisp, and E. Kiragu. 2011. "Navigating Nairobi: A Review of the Implementation of UNHCR's Urban Refugee Policy in Kenya's Capital City." UNHCR.

Dasgupta, Susmita, Mainul Huq, M. Khaliquzzaman, Kiran Pandey, and David Wheeler. 2004. "Who Suffers from Indoor Air Pollution? Evidence from Bangladesh." World Bank.

De Berry, Joanna, and Andrew Roberts. 2018. "Social Cohesion and Forced Displacement: A Desk Review to Inform Programming and Project Design." The World Bank, June 1. http://documents.worldbank.org/curated/en/125521531981681035/Social-cohesion-and-forced-displacement-a-desk-review-to-inform-programming-and-project-design

Deaton, Angus, and Salman Zaidi. 2002. "Guidelines for Constructing Consumption Aggregates for Welfare Analysis." *Living Standards Measurement Study*, 135.

Delius, Antonia, and Olivier Sterck. 2020. "Cash Transfers and Micro-Enterprise Performance: Theory and Quasi-Experimental Evidence from Kenya." Department of International Development. http://dx.doi.org/10.2139/ssrn.3591146

European Union, and United Nations. 2018. "Expert Group on Refugee and Internally Displaced Persons Statistics—International Recommendations on Refugee Statistics." Luxembourg: European Union and the United Nations. https://ec.europa.eu/eurostat/documents/3859598/9315869/KS-GQ-18-004-EN-N.pdf/d331c9cc-1091-43c2-b589-2c250bccc281

FAO. 1996. "Rome Declaration on World Food Security and World Food Summit Plan of Action." Rome: FAO.

Federal Government of Somalia, World Bank, United Nations, and European Union. 2018. "Somalia Drought Impact & Needs Assessment."

Foster, James, Joel Greer, and Erik Thorbecke. 1984. "A Class of Decomposable Poverty Measures." *Econometrica: Journal of the Econometric Society*, 761–66.

Freeman, Jennifer, George Sugai, Steve Goodman, Brigid Flannery, and Sandra Sears. 2020. "Improving Attendance and Reducing Chronic Absenteeism." Positive Behavioral Interventions & Supports. https://assets-global.website-files.com/5d3725188825e071f1670246/5e50280ac2fdfdca9fdeeba0_Improving%20Attendance%20and%20Reducing%20Chronic%20Absenteeism.pdf

Global Alliance for Clean Cookstoves. 2016. "Gender-Based Violence in Humanitarian Settings: Cookstoves and Fuels." Global Alliance for Clean Cookstoves. https://www.cleancookingalliance.org/binary-data/RESOURCE/file/000/000/478-1.pdf

Haughton, Jonathan, and Shahidur R. Khandker. 2009. "Handbook on Poverty and Inequality." The World Bank. http://documents.worldbank.org/curated/en/488081468157174849/Handbook-on-poverty-and-inequality

Helen, Dempster, Ginn Thomas, Graham Jimmy, Guerrero Martha, Jayasinghe Daphne, and Shorey Barri. 2020. "Locked Down and Left Behind: The Impact of COVID-19 on Refugees' Economic Inclusion." Washington DC: Center for Global Development. https://reliefweb.int/sites/reliefweb.int/files/resources/locked-down-left-behind-refugees-economic-inclusion-covid.pdf

HPN, Humanitarian Practice Network. 2018. "Mobile Phone-Based Cash Transfers: Lessons from the Kenya Emergency Response." Overseas Development Institute. https://odihpn.org/magazine/mobile-phone-based-cash-transfers-lessons-from-the-kenya-emergency-response/

Hunter, Paul, Alan MacDonald, and Richard Carter. 2010. "Water Supply and Health." *PLoS Med* 7, no. 11. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2976720/

IFC, International Finance Corporation. 2020. "AECF, IFC Launch Global Competition for Private Sector and Social Enterprises in Kenya's Kakuma Refugee Hosting Area." *Kakuma Kalobeyei Challenge Fund*. https://kkcfke.org/news/aecf-ifc-launch-global-competition-for-private-sector-and-social-enterprises-in-kenyas-kakuma-refugee-hosting-area/

IFC, International Finance Corporation. 2018. "Kakuma as a Marketplace. A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya." Washington DC: International Finance Corporation. https://www.ifc.org/wps/wcm/connect/0f3e93fb-35dc-4a80-a955-6a7028d0f77f/20180427_Kakuma-as-a-Marketplace_v1.pdf?MOD=AJPERES&CVID=mc8eL2K

IFC, International Finance Corporation. 2016. "DHS Analytical Studies. Using Household Survey Data to Explore the Effects of Improved Housing Conditions on Malaria Infection in Children in Sub-Saharan Africa." DHS Analytical Studies No. 61. USA: IFC. https://dhsprogram.com/pubs/pdf/AS61/AS61.pdf

IFC, International Finance Corporation, and MarketShare. 2019. "Gender Assessment of Kakuma Refugee Camp and Town & Kalobeyei Settlement and Town." Kenya: IFC.

ILO, International Labour Organization. 2020. "ILO Monitor: COVID-19 and the World of Work." ILO. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_745963.pdf

ILO, International Labour Organization. 2019. "ILO Glossary of Statistical Terms." https://www.ilo.org/ilostat-files/Documents/Statistical%20Glossary.pdf

ILO, International Labour Organization. 2017. "Enterprise Formalization." ILO. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/---ifp_seed/documents/publication/wcms_544828.pdf

ILO, International Labour Organization. 2017. "Gender in Employment and Labour Market Policies and Programmes: What Works for Women?" Geneva: International Labour Office. https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_614168.pdf

ILO, International Labour Organization. 2013. "Resolution Concerning Statistics of Work, Employment and Labour Underutilization. International Conference of Labour Statisticians." http://www.ilo.ch/wcmsp5/groups/public/---dgreports/---stat/documents/normativeinstrument/wcms_230304.pdf

Jesuit Refugee Service. 2019. "Her Future. Challenges & Recommendations to Increase Education for Refugee Girls." USA. https://jrs.net/wp-content/uploads/2019/03/JRSUSA_HER-FUTURE-for-web-3.3.19.pdf

Kagwanja, P.M. 1999. "Challenges and Prospects for Building Local Relief Capacity in Kenya: Reflections on Humanitarian Intervention." Nairobi.

Kenya National Bureau of Statistics. 2018. "Basic Report 2015/16 Kenya Integrated Household Budget Survey (KIHBS)." Nairobi, Kenya: Kenya National Bureau of Statistics. http://statistics.knbs.or.ke/nada/index.php/catalog/88/related_materials

Kilic, Talip, and Thomas Sohnesen. 2019. "Same Question but Different Answer: Experimental Evidence on Questionnaire Design's Impact on Poverty Measured by Proxies." *Review of Income and Wealth* 65, no. 1: 144–65.

KNBS, Kenya National Bureau of Statistics. 2010. "KDHS. Kenya Demographic and Health Survey 2008/2009." Nairobi: KNBS. https://dhsprogram.com/pubs/pdf/fr229/fr229.pdf

Kurmi, O.P., P.H. Arya, K.B. Lam, T. Sorahan, and J.G. Ayres. 2012. "Lung Cancer Risk and Solid Fuel Smoke Exposure: A Systematic Review and Meta-Analysis." *Eur Respir* 40: 1228–37.

Lambe, Fiona. 2016. "Bringing Clean, Safe, Affordable Cooking Energy to Kenyan Households: An Agenda for Action." Stockholm: Stockholm Environment Institute.

Lind, J., P. Mutahi, and M. Oosterom. 2015. "Tangled Ties: Al-Shabaab and Political Volatility in Kenya." Brighton, UK.

National Collaborating Centre for Mental Health. 2005. *Post-Traumatic Stress Disorder: The Management of PTSD in Adults and Children in Primary and Secondary Care.* NICE Clinical Guidelines, No. 26. UK: Gaskell. https://www.ncbi.nlm.nih.gov/books/NBK56506/

National Council for Law Reporting. 2016. The Turkana County Finance Act, 2016. http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/TurkanaCountyFinanceAct2016.pdf

National Council for Law Reporting. 2016. The Turkana County Revenue Administration Act, 2016. http://kenyalaw.org/kl/fileadmin/pdfdownloads/TurkanaCountyRevenueAdministrationAct2016.PDF

National Council for Law Reporting. 2015. "The Kenya Information and Communications Act."

NRC, Norwegian Refugee Council, and International Human Rights Clinic at Harvard Law School IHRC. 2018. "Supporting Kakuma's Refugee Traders. The Importance of Business Documentation in an Informal Economy." NRC, IHRC.

NRC, Norwegian Refugee Council, and United Nations High Commissioner for Refugees UNHCR. Unpublished. "Return Intention Survey for South Sudanese Refugees in Kakuma Camp and Kalobeyei Settlement." NRC-UNHCR.

O'Callaghan, Sorcha, Farah Manji, Kerrie Holloway, and Christina Lowe. 2019. "The Comprehensive Refugee Response Framework. Progress in Kenya." London: Overseas Development Institute. https://www.odi.org/sites/odi.org.uk/files/resource-documents/12940.pdf

O'Callaghan, Sorcha, and Georgina Sturge. 2018. "Against the Odds: Refugee Integration in Kenya." Overseas Development Institute.

Pape, Utz Johann, and Johan A. Mistiaen. 2018. "Household Expenditure and Poverty Measures in 60 Minutes : A New Approach with Results from Mogadishu." *World Bank Policy Research Working Paper*, Policy Research Working Paper Series, no. 8430. https://ideas.repec.org/p/wbk/wbrwps/8430.html

Parsitau, Damaris, and Evelyn Jepkemei. 2020. "How School Closures during COVID-19 Further Marginalize Vulnerable Children in Kenya." *Brookings. Education and Development* (blog). https://www.brookings.edu/blog/education-plus-development/2020/05/06/how-school-closures-during-covid-19-further-marginalize-vulnerable-children-in-kenya/

REACH. 2015. "Country Diagnostic Report, Kenya." Oxford, UK: University of Oxford. https://reachwater.org.uk/wp-content/uploads/2015/12/CDR-Kenya-WEB.pdf

Refugee Consortium of Kenya. 2012. "Asylum Under Threat. Assessing the Protection of Somali Refugees in Dadaab Refugee Camps and along the Migration Corridor." Nairobi: Refugee Consortium of Kenya. https://reliefweb.int/sites/reliefweb.int/files/resources/Asylum_Under_Threat.pdf

Rodgers, Cory. 2020. "What Does 'Social Cohesion' Mean for Refugees and Hosts? A View from Kenya." *COMPAS. School of Anthropology. Blogs* (blog). https://www.compas.ox.ac.uk/2020/what-does-social-cohesion-mean-for-refugees-and-hosts-a-view-from-kenya/

Samuel Hall. 2018. "Innovating Mobile Solutions for Refugees in East Africa." Kenya: Samuel Hall. https://www.elrha.org/wp-content/uploads/2018/02/Innovating_mobile_soultions_Report.pdf

Smith, Kirk, Sumi Mehta, and M. Feuz. 2004. "Indoor Air Pollution from Household Use of Solid Fuels." In *Comparative Quantification of Health Risk: Global and Regional Burden of Disease Due to Selected Major Risk Factors*. Geneva: WHO.

Turkana County Government. 2019. "County Integrated Development Plan." Turkana, Kenya: Turkana County Government. https://www.turkana.go.ke/wp-content/uploads/2019/10/Turkana_CIDP_Book_POPULAR_V3.pdf

UN Habitat, United Nations Human Settlements Programme. 2010. "A Practical Guide for Conducting Housing Profiles." Kenya: UN Habitat. https://unhabitat.org/sites/default/files/documents/2019-07/a_practical_guide_for_conducting_housing_profiles_-_revised_version.pdf

UN Women. 2019. "Gaining Protection for Indonesia's Migrant Workers and Their Families." https://www.unwomen.org/en/news/stories/2019/6/feature-story-of-change-protection-for-indonesias-migrant-workers

UN Women. 2019. "Gender Assessment of Kalobeyei Settlement and Kakuma Camp. Determining the Level of Gender Mainstreaming in Key Coordination Structures." Kenya: UN Women. https://www.genderinkenya.org/wp-content/uploads/2019/07/Kalobeyei-Gender-Assess-print-28-Feb.pdf

UNDP, United Nations Development Programme. 2020. "Strengthening Social Cohesion. Conceptual Framing and Programming Implications." New York: UNDP.

UNHCR, United Nations High Commissioner for Refugees. 2021. "Durable Solutions." UNHCR Kenya. https://www.unhcr.org/ke/durable-solutions

UNHCR, United Nations High Commissioner for Refugees. 2021. "Key Indicators." Refugee Data Finder. https://www.unhcr.org/refugee-statistics/#:~:text=An%20estimated%2030%20%E2%80%93%2034%20million,age%20(end%2D2019).&text=Developing%20countries%20host%2086%20per,refugees%20and%20Venezuelans%20displaced%20abroad.&text=Data%20on%20some%204.2%20million,was%20reported%20at%20mid%2D2020

UNHCR, United Nations High Commissioner for Refugees. 2020. "COVID-19 and Refugees." COVID-19 and refugees. https://storymaps.arcgis.com/stories/95cc3b65d9264cf3b80fffef0daa0358
UNHCR, United Nations High Commissioner for Refugees. 2020. "DR Congo Emergency." UNHCR. https://www.unhcr.org/dr-congo-emergency.html
UNHCR, United Nations High Commissioner for Refugees. 2020. "Global Trends. Forced Displacement in 2019." Geneva: UNHCR. https://www.unhcr.org/5ee200e37.pdf
UNHCR, United Nations High Commissioner for Refugees. 2020. "Kakuma Information." Help Kakuma. https://help.unhcr.org/kenya/kakuma/
UNHCR, United Nations High Commissioner for Refugees. 2020. "Kenya: Registered Refugees and Asylum-Seekers. July 2020," July. https://www.unhcr.org/ke/wp-content/uploads/sites/2/2020/08/Kenya-Infographics-31-July-2020.pdf
UNHCR, United Nations High Commissioner for Refugees. 2020. "Somalia." https://www.unhcr.org/somalia.html
UNHCR, United Nations High Commissioner for Refugees. 2019. "KISEDP Progress Report." Kenya: UNHCR.
UNHCR, United Nations High Commissioner for Refugees. 2019. "Resettlement Data." Resettlement. https://www.unhcr.org/resettlement-data.html%20only%20some%2064,000
UNHCR, United Nations High Commissioner for Refugees. 2018. "Implementing Registration within an Identity Management Framework." https://www.unhcr.org/registration-guidance/chapter5/
UNHCR, United Nations High Commissioner for Refugees. 2018. "KISEDP. Kalobeyei Integrated Socio-Economic Development Plan in Turkana West." Nairobi: UNHCR. https://www.unhcr.org/ke/kisedp-2
UNHCR, United Nations High Commissioner for Refugees. 2017. "Kakuma Integrated Livelihoods Strategy 2017–2019. Towards Sustainable Solutions for Refugee and Host Communities in Kakuma and Kalobeyei, Turkana West, Kenya." Kenya: UNHCR.
UNHCR, United Nations High Commissioner for Refugees, Norwegian Refugee Council NRC, and European Commission. 2019. "Knowledge Attitude and Practice—KAP Survey and a Mini Evaluation of the Wash Project in Kakuma Refugee Camp and Kalobeyei."
UNHCR, United Nations High Commissioner for Refugees, and Windle Trust International Kenya. 2019. "Secondary Education in Refugee Hosting Areas in Kenya: Transition Crunch." Kenya: UNHCR.
UNHCR, United Nations High Commissioner for Refugees, and World Bank. 2020. "Understanding the Socioeconomic Conditions of Refugees in Kenya. Volume A: Kalobeyei Settlement. Results from the 2018 Kalobeyei Socioeconomic Survey." Nairobi. https://www.unhcr.org/ke/wp-content/uploads/sites/2/2020/04/Kalobeyei_Socioeconomic-Report-1.pdf
UNICEF Indonesia. 2008. "Toolkit on Child Protection in Emergencies: A Guide for Fieldworkers." Indonesia: UNICEF. https://bettercarenetwork.org/sites/default/files/Child%20Protection%20in%20Emergencies%20-%20Section%204%20-%20Separated%20Children.pdf
United Nations. 2018. "Global Compact on Refugees." New York: United Nations. https://www.unhcr.org/5c658aed4
United Nations. 2007. "Dependency Ratio—the United Nations." https://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets/demographics/dependency_ratio.pdf
USA for UNHCR. 2020. "South Sudan Refugee Crisis." USA for UNHCR. https://www.unrefugees.org/emergencies/south-sudan/
USA for UNHCR. 2019. "South Sudan Refugee Crisis Explained." https://www.unrefugees.org/news/south-sudan-refugee-crisis-explained/#Where%20are%20Yemenis%20fleeing%20to?

Vemuru, Varalakshmi, Rahul Oka, Lee Gettler, and Rieti Gengo. 2016. "Refugee Impacts on Turkana Hosts." Washington DC. http://documents.worldbank.org/curated/en/359161482490953624/pdf/111309-REVISED-PUBLIC-Turkana-Social-Impact-Analysis-December-2016.pdf

Wanjiku, Pascaline. 2018. "Why Kenya's Sanitation Challenge Requires Urgent Attention." *World Bank Blogs. Africa Can End Poverty* (blog). https://blogs.worldbank.org/africacan/why-kenyas-sanitation-challenge-requires-urgent-attention

WFP, World Food Programme. 2019. "Cameroon: Emergency Food Security Assessment (EFSA) January 2019." Cameroon: United Nations. https://docs.wfp.org/api/documents/WFP-0000107855/download/

WFP, World Food Programme. 2016. "Comprehensive Food Security and Vulnerability Analysis (CFSVA) Kenya 2016." Kenya: World Food Programme. https://documents.wfp.org/stellent/groups/public/documents/ena/wfp285586.pdf?_ga=2.228888092.1266842524.1591697544-990280095.1561532705

WHO, World Health Organization. 2020. "Sanitation." World Health Organization. https://www.who.int/news-room/fact-sheets/detail/sanitation

WHO, World Health Organization. 2020. "What Are the Health Risks Related to Overcrowding?" World Health Organization. https://www.who.int/water_sanitation_health/emergencies/qa/emergencies_qa9/en/

WHO, World Health Organization. 2020. "What Is the Minimum Quantity of Water Needed?" WHO. https://www.who.int/water_sanitation_health/emergencies/qa/emergencies_qa5/en/

WHO, World Health Organization, and United Nations International Children's Emergency Fund UNICEF. 2019. "WASH Joint Monitoring Programme Report." WHO, UNICEF. https://www.unicef.org/kenya/water-sanitation-and-hygiene

World Bank. 2020. "Women, Business and the Law 2020." World Bank. https://openknowledge.worldbank.org/bitstream/handle/10986/32639/9781464815324.pdf

World Bank. 2019. "Using Micro-Data to Inform Durable Solutions for IDPs." Washington DC: World Bank. http://documents.worldbank.org/curated/en/761091557465113541/Volume-A-Executive-Summary

World Bank. 2018. "Kenya Gender and Poverty Assessment 2015/16. Reflecting on a Decade of Progress and the Road Ahead." Washington DC: World Bank.

World Bank. 2018. "Social Assessment Report: Kenya Development Response to Displacement Impacts Project (KDRDIP) Additional Financing." Washington DC: World Bank. http://documents.worldbank.org/curated/en/534001531467006900/Social-assessment-report

World Bank. 2016. "'Yes' In My Backyard? The Economics of Refugees and Their Social Dynamics in Kakuma, Kenya." Kenya: World Bank and UNHCR.

World Bank Group. 2017. "The Global Findex Database." Washington DC: World Bank. https://globalfindex.worldbank.org/#:~:text=Globally%2C%2069%20percent%20of%20adults,characteristics%20like%20gender%20and%20income.&text=About%201.7%20billion%20adults%20remain,through%20a%20mobile%20money%20provider

World Bank Group. 2015. "Sustainable Refugee Return: Triggers, Constraints, and Lessons on Addressing the Development Challenges of Forced Displacement." Washington: World Bank Group. https://reliefweb.int/sites/reliefweb.int/files/resources/Sustainable%20Refugee%20Return%20study.pdf

World Vision. 2020. "Social Cohesion between Syrian Refugees and Urban Host Communities in Lebanon and Jordan." World Vision; Development Learning & Impact, Disaster Management; Urban Learning Hub. https://reliefweb.int/sites/reliefweb.int/files/resources/World%20Vision%20International%20DM2020%20Social%20Cohesion%20Report.pdf

Zetter, R., and H. Ruaudel. 2016. "KNOMAD Study Part-II Refugees' Right to Work—An Assessment."

Appendixes

1. Definitions

Household: This definition is aligned with what is used by the Kenya National Bureau of Statistics (KNBS) and was adapted to the refugee context. According to the KNBS 2015/16 Kenya Integrated Household Budget Survey (KIHBS), households are groups of people who are living together, have a common household head, and share "a common source of food and/or income as a single unit in the sense that they have common housekeeping arrangements [. . .]". Based on the KNBS definition of a household, as well as on the feedback from the field testing carried out before the data collection, the household definition adopted for this survey is: *a set of related or unrelated people (either sharing the same dwelling or not) who pool ration cards and regularly cook and eat together*.

Household head: the household member who makes the key day-to-day decisions for the household. His/her headship must be accepted by all the members of the household.

ProGres family: defined upon registration. The VRX classifies individuals into proGres families, which are groups of people who "live together and identify as a family and for whom a relationship of either social, emotional, or economic dependency is assumed."[162]

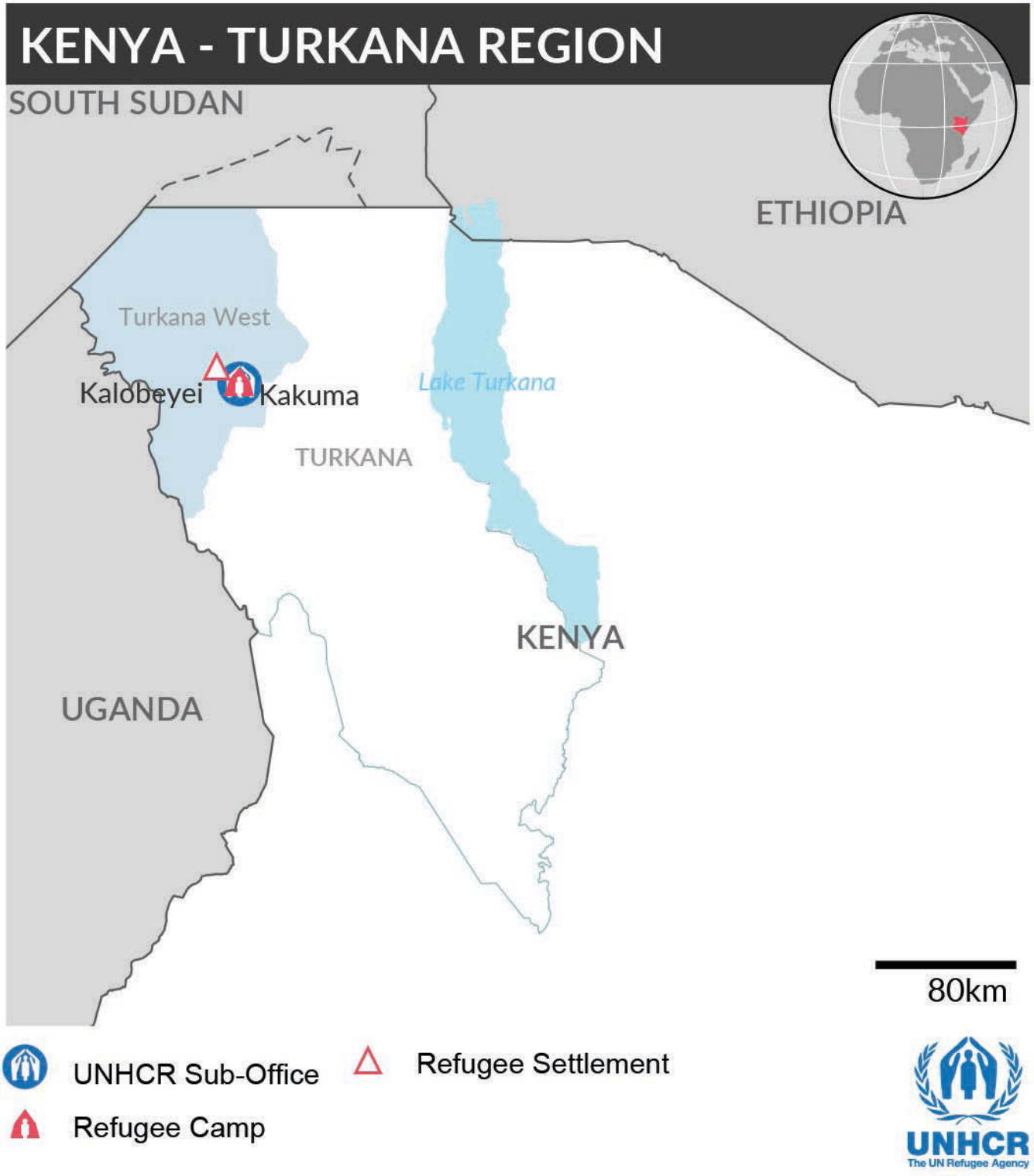
Residential dwelling: a shelter or house made of adobe with a private entrance, occupied by one or more households and proGres families.

UNHCR mapping: exercise to update dwelling locations in Kakuma refugee camp.

VRX, Verification Registration Exercise: UNHCR update and verification of refugee registrations into the Profile Global Registration System (proGres) data set.

[162] UNHCR. 2018. "Implementing Registration within an Identity Management Framework."

2. Map of Turkana West in Kenya



Map Sources: UNCS, UNHCR
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Printing date: 10 Jan 2020

3. Map of Kakuma Refugee Camp and Kalobeyei Settlement

Map Sources: UNCS, UNHCR
The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Printing date: 13 Jan 2020

4. Resources Distributed in Kakuma Camp[163]

Core Relief Items (CRIs): Before settling in the community, newly arrived refugees receive CRIs to enable them to start a new life. These items include a kitchen set, sleeping mats, and 20-litre jerrycans.

Firewood: UNHCR provides 10 kg of firewood to all residents in Kakuma and Kalobeyei every two months depending on household size. The distribution is done through the local organization, Lotus Kenya Action for Development Organization (LOKADO).

Food/Bamba Chakula: In Kakuma, food is distributed through a mixed modality of in-kind and cash-based assistance (Bamba Chakula). In Kalobeyei, refugees receive 98 percent of food assistance through Bamba Chakula and cereals (Corn-Soya Blend).

GOK National Safety Net Programmes: Turkana County is supported through the Hunger Safety Net Program (HSNP), one of the four government unconditional cash transfer programs. Households who are part of the HSNP receive K Sh 5,400 every two months to bank accounts/ATM cards held by targeted households, delivered through Equity Bank. The HSNP routine payments cover around 27 percent of households in Turkana.

Sanitary kits: UNHCR distributes sanitary products (soap, sanitary pads) in kind in Kakuma and through a cash-based program in Kalobeyei. In Kalobeyei, refugees receive K Sh 150–500 depending on sex and household size. UNHCR is planning to distribute sanitary kits and CRIs through a cashed-based program in both Kakuma camp and Kalobeyei settlement.

Shelter: Refugees in Kakuma receive a built shelter once. If repairs are needed, construction materials are distributed on a need basis (Table 3). Partners involved in the repairs are the National Council of Churches in Kenya (NCCK) in Kakuma, and Peace Winds Japan (PWJ) in Kalobeyei settlement. NCCK is also involved in the construction of temporary shelters for newly arrived refugees in Kakuma camp. In Kalobeyei settlement, UNHCR implements a cash-based program for the construction of permanent shelters. UNHCR distributes cash (US$1,400–2,700) to bank accounts and ATM cards issued to refugees, who can then use the funds to pay for labor and materials. UNHCR technical unit and PWJ closely monitor the construction process to ensure UNHCR construction standards are met. The type of permanent housing varies depending on the household size. Households with five members or less, receive one shelter while larger households with more than 5 members, receive two shelters. Building one shelter costs US$1,400, while a double shelter costs US$2,700 (Table 3).

Water: The Turkana County Government, Norwegian Refugee Council (NRC), PWJ, Team & Team, and UNHCR are in charge of water provision in Kakuma. Water is distributed from reservoirs to water taps allocated to each block. Each household is given a daily allocation of water based on size.

[163] The list of resources was prepared based on the information provided by the UNHCR Kakuma operations team and on the IFC Gender Assessment (2019, 45).

▶ **TABLE 3:** Housing materials distributed in Kakuma camp and Kalobeyei settlement

Kakuma camp				Kalobeyei settlement		
Item	Materials description	Unit	Quantity per shelter	Materials description	Unit	Quantity per shelter
1	2.5 m long GCI, 30 gauge (Dumu Zaas)	sheet	18	Natural Turkana Quarry stones	ft	900
2	2.0 ridge cup 30 gauge (Dumu Zaas)	sheet	4	2.5 m corrugated iron sheet (CGI) G30 (Dumu Zaas)	piece	4
3	Hoop iron	kg	2	Hoop iron	kgs	20
4	Tower bolt 6″	pcs	1	River sand	ton	10
5	Pad bolt 6″	pcs	1	Ballast	ton	10
6	Cypress timber 2″ × 2″	ft	547	Water	liters	2,000
7	Wood preservative	liters	15	3″ butt hinges for fixing the windows	pairs	2
8	Steel butt hinges 4″	pcs	2	4″ tower bolts for the windows	pcs	2
9	Nails 4″	kg	5	Roofing nails for the kitchen extension	kgs	1
10	Nails 3″	kg	3	4″ and 3″ nails for the kitchen extension	kgs	2
11	Nails 2″	kg	1.5	Binding wire	kgs	1
12	Roofing nails	kg	4	6 × 1 timber (for ring beam formwork)	ft	132
13	Tarpaulins	no.	2.5	2 × 2 timber props for the formwork	ft	198
14	Plain sheets (plus normal sheets)	roll	1	3″ nails for assembling the formwork	kgs	1
15	Round poles	no.	10	Cement (50 kg)	bags	21
16				Plain sheet G30 (2.4 m × 1.2 m) for door and window	piece	1
17				Pad bolt 6″	piece	1
18				Tower bolt 6″	piece	1
19				Gutters, fittings, joints, and connection to 1,000 liters ROTO tank	piece	1
20				Reinforcement bar Y8	pcs	2
21				Reinforcement bar R6	pcs	1
22				4 × 2 timber (for trusses)	ft	

Source: UNHCR Kakuma operation.

5. Services Provided by the GoK, UNHCR, and Partners

Camp Coordination and Camp Management: Refugee Affairs Secretariat (RAS), UNHCR.

Education: UNHCR, Turkana County Government, the Ministry of Education, Action Africa Help-International, Lutheran World Federation (LWF), World Vision (WV), Peace Winds Japan (PWJ), Waldorf, UNICEF, AAR Japan, Finnish Church Aid (FCA), IAMTHECODE, Vodafone, Norwegian Refugee Council (NRC), Windle International Kenya, World Food Programme (WFP), Don Bosco, In-Zone, Jesuit Worldwide Learning, Microsoft, Google.org

Energy: Turkana County Government, Food and Agriculture Organization (FAO), GIZ, Lotus Kenya Action for Development Organization (LOKADO), UNHCR, WFP, World Vision, SNV

Environment: Turkana County Government, UNHCR, LOKADO

Food Security: WFP, NRC, WV, FAO, LOKADO

Health: Turkana County Government, African Inland Church (AIC-K), International Rescue Committee (IRC), Kenya Red Cross Society (KRCS), UNHCR

Livelihoods: Turkana County Government, RAS, WV, LWF, Swiss Contact, NRC, Danish Refugee Council (DRC), Food for the Hungry (FH), IsraAID, FilmAid, SNV, NCCK, WFP, GIZ, LOKADO, DCA, Humanity and Inclusion, Don Bosco, AAH-I, UNHCR, Africa Entrepreneurship Collective

Protection: (child protection and legal): National and Turkana County Government, UNHCR, LWF, Refugee Council of Kenya (RCK), UNICEF, IRC, DRC, IsraAID, Waldorf, NRC, KRCS, NCCK, AAR Japan, DCA, UNFPA, GIZ, WV, Jesuit Refugee Service (JRS)

Security: The Government of Kenya

Shelter: UNHCR, NCCK, PWJ, UNHABITAT

WASH: Turkana County Government, Norwegian Refugee Council (NRC), PWJ, Team & Team, UNHCR

6. COVID-19 Response

72. In response to the COVID-19 pandemic, UNHCR and partners have prepared isolation and quarantine facilities, trained health care workers and teachers, and rolled out informative campaigns. Two isolation facilities with a combined capacity of 286 beds are ready to receive patients. Additionally, two isolation facilities are under preparation. Two quarantine facilities are already active in Kakuma camp with a capacity of 154 beds. Two additional quarantine facilities are under preparation. UNHCR is working closely with the Ministry of Health (MoH) to ensure testing of all suspected cases. Also, 123 health care workers have been trained on case management and infection prevention. Furthermore, over 220 community health care workers and 60 teachers are carrying out health education on preventative measures against COVID-19. UNHCR and WFP are now carrying out bimonthly distributions of food and core relief items instead of the usual monthly distribution to minimize in-person

interactions. UNHCR is also implementing COVID-19 communication strategies using various channels, including radio, SMS, WhatsApp, and public address. Similarly, UNHCR participates in the Communicating with Communities (CwC) Working Group that is cochaired by national and county governments to coordinate COVID-19 communication and information activities for refugees in Kakuma camp, Kalobeyei settlement, and host communities. UNHCR and partners are closely following the guidelines provided by the GoK and attend biweekly COVID-19 preparedness and response meetings chaired by the MoH, bringing together partners from WASH, site planning, and energy.

7. Classification of Housing Materials

Classification	Wall	Floor	Roof
Improved materials	Cement Stone with lime, cement, or mortar (Turkana stone) Bricks Cement blocks Covered abode Wood planks/shingles Burnt bricks with cement	Wood planks Palm/bamboo Finished floor parquet or polished wood Vinyl or asphalt strips Ceramic tiles Cement Carpet	Asbestos sheet Concrete Tiles Corrugated iron sheets
Unimproved materials	Cane/palm/trunks Mud and sticks Tin/cardboard/paper/bags (corrugated iron sheets) Thatched/straw (grass/reeds) Bamboo with mud Stone with mud Uncovered adobe Plywood Cardboard Reused wood Trunks with mud Unburnt bricks Unburnt bricks with plaster Unburnt bricks with mud Plastic or tent material	Earth/sand Dung	No roof Grass/thatch/makuti Dung/mud Plastic or tent material Tin cans

Source: IFC (2016).[164]

[164] IFC. 2016. "DHS Analytical Studies. Using Household Survey Data to Explore the Effects of Improved Housing Conditions on Malaria Infection in Children in Sub-Saharan Africa."

8. Livelihood Programs[165]

Access to financial services: Action Africa Help-International (AAHI) and African Entrepreneur Collective (AEC) offer semiformalized loans. Through AEC, traders will access KIVA loans (www.kiva.org/about). Jointly with partners, UNCHR is in a process to establish a loans database. This will support KIVA loan assessments and endorsements. There are now two commercial banks, Equity Bank and Kenya Commercial Bank, in Kakuma offering financial services.

Agriculture and farming: FAO/WFP lead large-scale agriculture initiatives in Kalobeyei. With support from WSTF and other donors, AAHI, DRC, DCA, and LWF provide agricultural interventions in Kakuma for both refugees and host communities.

Business development services: UNHCR supports over eight agencies in Kakuma and Kalobeyei that offer layered basic, advanced, and segmented training for new and existing business on cashflow, business registration, consultancy, and follow-ups.

Business incubation: Through UNHCR's partners, refugees are supported to nurture business ideas and strengthen start-ups to meaningfully impact their livelihoods.

Community-based groups: UNHCR Livelihoods and Legal protection pursue registration of refugee self-help groups and Community-Based Organizations (CBOs) within the country's legal framework. This supports a conducive enabling environment for entities to bid competitively for needed products and services.

Enhance refugee artistic skills: Lutheran World Federation (LWF) leads the Kakuma Got Talent initiative to identify and support youth talents in different areas.

[165] The list of programs was provided by UNHCR Kakuma operation based on the leaflet 'Working is not blocking your resettlement opportunities', produced by protection and livelihoods UNHCR Kakuma-Nairobi.

9. Types of Refugee Identification Documents

Type of document	Purpose of document	Information included	Document holder	Validity	Place of issue and authority
DRA asylum pass	To confirm that person/s is accepted as an asylum seeker	Names of all members on a case, photos of each person, age, family relationship	The principal applicant	6 months	DRA Shauri Moyo, Kakuma, Dadaab, Mombasa, Nakuru, Eldoret
Notification of recognition	This document is issued to all refugees recognized after July 1, 2014. The document confirms recognition of refugee status. It is intended to document the refugee status of the individual while the refugee awaits the issuance of the Refugee ID card. It can be used to access all services	File number, photo, name, nationality, and DOB. Indicates that holder and dependents are persons of concern to UNHCR	The principal applicant and all dependents over 16 years	1 year	DRA Lavington. Issued jointly by DRA-UNHCR
Mandate Refugee Certificate (MRC)	This document is issued to all refugees recognized before July 1, 2014. Document confirms recognition of refugee status. Can be used to access all services	File number, photo, name, nationality, and DOB and validity of document	The principal applicant and all dependents over 16 years	2 years. Renewable by UNHCR until further notice	First issuance of by UNHCR, RSD Unit. Renewal is undertaken by UNHCR, Protection Delivery Unit
Refugee ID card		Photo, fingerprints, and name		5 years	DRA
UN Convention Travel Document (UNCTD)	Traveling outside Kenya	—	Applicant	—	DRA in collaboration with UNHCR

Source: Ministry of Interior and Coordination of National Government 2017.

10. Timeline of Displacement Events in Major Countries of Origin of Kakuma Refugees

73. The Democratic Republic of Congo experiences multiple conflicts affecting several parts of its vast territory. Since its constitution as the Democratic Republic of Congo, previously Zaire, it has lived in political unrest, conflict, and violence. War and conflict between rebels—who have reportedly been supported by different African countries—and the government, continued from 1997 to 2002 when a peace agreement was signed in South Africa between rebel groups and Kinshasa government.

Nevertheless, after the peace agreement, the DRC has seen waves of fighting—especially in the eastern parts of the country. In 2016, a devastating wave of violence affected the DRC's Kasai region, a vast area in the south and center of the country, which has pushed thousands to flee. More than 800,000 Congolese live as refugees and asylum seekers, while more than 5 million of them have been internally displaced.[166]

74. In Somalia, clan conflict, violence by armed nonstate actors, and droughts have caused the displacement of nearly 2 million people. Somalia is one of the poorest countries in Sub-Saharan Africa. Since the Siad Barre government collapsed in 1991, the country has experienced successive cycles of conflict, mostly in the south. Somalia has also experienced violent jihadism, as well as conflicts over land, natural resources, pastureland, and economic rents. Furthermore, levels of criminality, interpersonal violence, and gender-based violence are high. Added to conflict and generalized violence, Somalia is extremely vulnerable to climate shocks and has long experienced cyclical droughts, as well as floods, desertification, and land degradation. Violence and environmental hazards have caused the displacement of over 900,000 Somalis in the Horn of Africa and Yemen, while an estimated 2.6 million people are displaced within the country itself.[167]

75. South Sudan has faced war and conflict that has led to mass displacement of over 2 million people. South Sudan is the youngest African country. It gained independence from Sudan in 2011 after years of secessionist war that started in 1955 up to 1972, restarted in 1983 and ended in 2005. South Sudan has faced continuous violence between security forces and rebels, and ethnic clashes, as well as conflict over recently found oil fields since independence. In 2013 a civil war erupted forcing thousands more to flee. In September 2018, a peace deal between the government, opposition, and other parties was signed. However, continued outbreaks of violence render the peace precarious. As a result, more than 2.2 million South Sudanese live as refugees; 63 percent of them are under the age of 18, and 1.3 million have been internally displaced within South Sudan. South Sudanese refugees are hosted in Uganda (39 percent), Sudan (36.5 percent), Ethiopia (15 percent), Kenya (6 percent), and DR Congo (4 percent).[168]

76. Decades of protracted conflicts and human rights violations have been the main drivers of forced displacement in Sudan. Peace in Sudan has been almost nonexistent due to war between north and south Sudan, tensions with Chad, fighting over oil in Abyei, Islamic extremism and sharia law punishments, ethnic clashes, and numerous rebel groups conflicts against the government, as well as protests against the reelection of former Sudan's president Omar al-Bashir who ruled Sudan from 1989 to 2019. Since 2003, conflict has mainly been concentrated in the western part of Sudan, Darfur. Approximately two-thirds of all conflict events in Sudan since 2003 took place in the five Darfuri states.[169] Although Sudan is a host country of refugees mainly from South Sudan, there are nearly 800,000 Sudanese refugees, and an estimated 2.1 million Sudanese have been internally displaced.[170]

[166] UNHCR. 2020. "DR Congo Emergency"; BBC News. 2019. "Democratic Republic of Congo Profile—Timeline"; UNHCR. 2020. "Global Trends. Forced Displacement in 2019."
[167] UNHCR. 2020. "Somalia"; Federal Government of Somalia et al. 2018. "Somalia Drought Impact & Needs Assessment"; UNHCR. 2020. "Global Trends. Forced Displacement in 2019."
[168] World Bank. 2019. "Using Micro-Data to Inform Durable Solutions for IDPs"; Africa Union. 2015. "Final Report of the African Union Commission of Inquiry on South Sudan and the UN Panel of Experts Report to the UN Security Council"; BBC News. 2018. "South Sudan Profile—Timeline"; USA for UNHCR. 2020. "South Sudan Refugee Crisis."
[169] "ACLED (Armed Conflict Location and Event Database)." n.d.
[170] UNHCR. 2020. "Global Trends. Forced Displacement in 2019."

11. Preceding Socioeconomic Surveys for Refugees and Host Communities in Kenya

Survey[171]	Details
IFC. 2018. Kakuma as a Marketplace. "A Consumer and Market Study of a Refugee Camp and Town in Northwest Kenya.	Consumer and market study, which examines Kakuma camp and town through the lens of a private firm looking to enter a new market. The study comprises four components: an in-depth review of previous studies, a survey of 1,417 households in Kakuma camp and town, interviews with UNHCR and other agencies present in Kakuma, and case studies of private companies already active in the camp or that might be potentially interested in launching operations there. The household survey instrument covered modules on business ownership, access to finance and credit markets, telecommunications, employment, education, housing, sanitation, energy, and financial literacy.
Kimetrica; UNHCR; World Food Programme. 2016. Refugee Vulnerability Study: Kakuma, Kenya.	The study contributed to an increased understanding regarding refugee livelihoods and the level and differences in vulnerabilities faced by refugee households. It also explored the feasibility of delivering targeted assistance and identifying the mechanisms that would need to be put in place to do so. The study comprised three phases of fieldwork: an initial scoping study, a survey of 2,000 refugee households, and a follow-up mission to explore the feasibility of various targeting mechanisms. The household survey instrument covered modules on employment, access to finance and credit markets, social and physical networks, food security, consumption, and expenditure.
World Bank "'Yes' In My Backyard? The Economics of Refugees and Their Social Dynamics in Kakuma, Kenya." Kenya: World Bank and UNHCR, 2016.	This report provides an original analysis of the economic and social impact of refugees in Kenya's Kakuma refugee camp on their Turkana hosts. The authors use a methodology that enables running policy scenarios in a rigorous manner, ranging from encampment to decampment (that is, camp closure). A household survey for refugees and hosts in Turkana (in Kakuma and in other towns) was carried out. The survey instrument included modules on household demography, income, and perceptions. Information on consumption was also collected, albeit in a limited fashion, and only intended to detect short-term changes in consumption.
Betts, Alexander, Remco Geervliet, Claire MacPherson, Naohiko Omata, Cory Rodgers, and Olivier Sterck. "Self-Reliance in Kalobeyei? Socio-Economic Outcomes for Refugees in North-West Kenya." 2018. Refugee Studies Centre, Oxford University.	The report draws on data collected from the first of three waves of surveys to be carried out over a three-year period. The resulting panel data set will be used to compare the self-reliance and the socio-economic indicators of recent arrivals living in the Kalobeyei settlement and the Kakuma camp. Focus groups and semi-structured interviews were conducted with refugees, host community members in the region, and other stakeholders. The Kalobeyei refugee interviews cover individuals from South Sudan, Ethiopia, and Burundi; while in Kakuma, they cover individuals from South Sudan.

[171] This is a non-exhaustive list including surveys that used a representative sample and were published between 2016 and November 2020.

Survey	Details
Betts, Alexander, Naohiko Omata, and Olivier Sterck. "Refugee Economies in Kenya." 2018. Refugee Studies Centre, Oxford University.	The study explores the distinctive regulatory environment faced by refugees in urban and camp contexts. The report represents a first systematic comparison of economic outcomes for refugees and host communities. The data collection is based on participatory methods, including the recruitment and training of refugees and host nationals as peer researchers and enumerators. The data were collected in and around both Nairobi and the Kakuma refugee camps, and the quantitative methods are based on representative sampling, with a total of 4,355 survey respondents (1,738 from the host communities and 2,617 refugees).
Betts, Alexander, Antonia Delius, Cory Rodgers, Olivier Sterck, and Maria Stierna. 2019. "Doing Business in Kakuma: Refugees, Entrepreneurship, and the Food Market." Refugee Studies Centre, Oxford University.	The report draws upon a business survey with food retailers to assess the impact of the 'Bamba Chakula' (BC) model of electronic food transfers and business contracts. The aim was to examine what role BC status, among other factors, has played in influencing business performance and market structure. The study is based mainly on a business survey of three groups of food retailers: successful BC applicants, unsuccessful BC applicants, and food retailers who have not applied to be BC traders. The survey targeted all traders in WFP's registry of applicants to BC and a random sample of non-applicant food retailers, sampled from a Norwegian Refugee Council (NRC) census. 730 entrepreneurs (of whom 629 currently have a business), were interviewed. The survey was complemented with qualitative data collection based on semi-structured interviews and focus groups.
Vemuru, Varalakshmi, Rahul Oka, Lee Gettler, and Rieti Gengo. 2016. "Refugee Impacts on Turkana Hosts." World Bank.	This social impact analysis describes the complexities of the interactions between refugees and their host community and assesses their positive and negative outcomes within the current relief paradigm, contextualized by: (1) the history of interactions between the Turkana people and the central Kenyan government from the British colonial period to the current administration; (2) recent developments regarding devolution, oil, and water; and (3) since 1992, the arrival and continuing flow of large numbers of refugees into northern Turkana. To better understand the social economies of the Turkana people and the refugees of Kakuma, ethnographic approaches were used.
UNHCR, World Bank. 2020. "Understanding the Socioeconomic Conditions of Refugees in Kalobeyei, Kenya: Results from the 2018 Kalobeyei Socioeconomic Profiling Survey."	The Kalobeyei Socioeconomic Survey (SES) employed a novel approach to generating data that are statistically representative of the settlement's population and comparable to the national population. The SES included a range of standard socioeconomic indicators, both at the household and individual levels, aligned with the national 2015/16 Kenya Integrated Household Budget Survey (KIHBS) and Kenya Continuous Household Survey (KCHS). The SES and ensuing analysis provide a comprehensive snapshot of the demographic characteristics, standards of living, social cohesion, and specific vulnerabilities facing refugees regarding food security and disabilities.

12. Methodology

12.1 Design and survey instrument

77. The SES was conducted by using the resulting data set of UNHCR's dwellings mapping exercise. Both the mapping exercise and the SES were carried out in parallel to—but independently from—UNHCR Registration Verification Exercise (VRX) 2019. The objective of the dwellings mapping was to update UNHCR's database containing information on every shelter in Kakuma camp. The mapping exercise was divided into two phases: (i) drone photographs of the camp were taken in order to identify the number of dwellings on the Kakuma camp territory, and (ii) a team of enumerators tagged every dwelling in the camp with a number, and differentiated if the structure was a residential or a business dwelling. Dwellings were tagged on visible places of the structure, namely doors and low roofs. Finally, a data set including the tag numbers of each residential dwelling in the camp was created and used as a sampling frame for the Kakuma SES, where dwellings were drawn in a first sampling stage.[172] Selected dwellings were visited by trained enumerators who conducted the SES interviews via CAPI.

78. Refugee households are identified using the dwelling information as captured by UNHCR's mapping exercise. The mapping exercise data set organized individuals into dwellings occupied by one or more households. Households were selected as the unit of observation to ensure comparability with national household surveys. Households are a set of related or unrelated people (either sharing the same dwelling or not) who pool ration cards and regularly cook and eat together (See Definitions Appendix for details).[173] Upon registration, UNHCR groups individuals into 'proGres' families which do not necessarily meet the criteria to be considered a household.[174] Then, a proGres family normally encompasses no more than one household. In turn, a household can be made up of one or more proGres families.[175] The identification of households and proGres families in dwellings was captured at the beginning of the SES interview. For each dwelling, the survey software then randomly selected one household for the interview, where sampling weights are used to account for the differing selection probabilities, depending on the number of households per dwelling.

79. The SES was designed to produce data comparable with national household survey instruments as well as with the Kalobeyei Socioeconomic Assessment 2018. Modules on education, employment, household characteristics, assets, consumption, and expenditure were aligned with the most recent national poverty survey, the Kenya Integrated Household Budget Survey (KIHBS) 2015/16, and are therefore comparable to results reported locally and nationally. Questions were also aligned with the Kenya Continuous Household Survey (KCHS) which, since end-2019, has collected comparable statistics on an annual basis for all counties in Kenya. Additional modules on access to remittances, loans

[172] The sampling frame generated through the mapping exercise was instrumental in the logistical coordination of UNHCR VRX.
[173] Registered individuals have both an individual proGres ID and a proGres family ID, which are stated on a 'UNHCR manifest' document. Single individuals who are not part of a family are registered as proGres family size 1. ProGres IDs grant access to ration cards and thus, food rations vary depending on the registered proGres family size.
[174] ProGres families are groups of people who "live together and identify as a family and for whom a relationship of either social, emotional, or economic dependency is assumed." UNHCR. 2018. "Implementing Registration within an Identity Management Framework."
[175] For instance, someone may at the time of registration have identified a group of people as her family, yet they do not or no longer live together nor cook and eat together. She would thus be registered as part of the same proGres family but not be part of the same household. Or, a person may live and eat with a group of people, but not have a shared proGres family ID. They will then be part of the same household but not be part of the same proGres family.

and credit, vulnerabilities, social cohesion, coping mechanisms to lack of food,[176] displacement trajectories, and durable solutions were administered to capture specific challenges facing refugees. The questionnaire was divided into 14 sections (Table 4); five of them are comparable to the KIHBS and the KCHS, and nine are comparable to the Kalobeyei socioeconomic survey 2018.

▶ **TABLE 4:** 2015/16 KIHBS, 2019 KCHS, Kalobeyei 2018 and Kakuma 2019 questionnaires

Questionnaire modules	KIHBS 2015/16	KCHS 2019	Kalobeyei 2018	Kakuma 2019
Random household selection	✓	✓	✓	✓
Informed consent	✓	✓	✓	✓
Education	✓	✓	✓	✓
Employment	✓	✓	✓	✓
Household characteristics	✓	✓	✓	✓
Assets	✓	✓	✓	✓
Consumption and expenditure	✓	✓	✓	✓
Access to finance			✓	✓
Vulnerabilities			✓	✓
Social cohesion			✓	✓
Coping mechanisms			✓	✓
Displacement and durable solutions				✓

Sources: KIHBS (2015/16), Kalobeyei (2018), Kakuma (2019).

80. The Kakuma SES data can be linked to UNHCR's proGres database for additional analysis and targeted programming. The SES questionnaire recorded the proGres IDs of the participants, which enables cross-checks and comparisons across the proGres and SES data sets. Such comparisons allow verifying the accuracy and plausibility of the data in the analysis. The correlation between variables in the proGres database and the more detailed SES indicators can be further explored and used for informing targeted program design. Moreover, proGres-SES comparisons can be useful to better understand the implications of the currently available proGres data, which are collected for a large number of refugee populations worldwide.

12.2 Sample size estimation and sampling weights calculation

81. A sample size of 2,347 was needed to ensure a margin of error of less than 3 percent at a confidence level of 95 percent for groups represented by at least 50 percent of the population. The survey was designed to accurately estimate socioeconomic indicators such as the poverty rate for groups of the population that have at least a 50 percent representation in the population. A 3 percent margin of error at a confidence level of 95 percent is considered accurate, resulting in a sample size of 2,113. Considering a 10 percent nonresponse rate, the target sample size was 2,347, of which 2,125 households were surveyed.

[176] World Food Program Livelihoods Coping Index.

82. The Kakuma SES utilized a two-stage sampling process where the first stage samples dwellings, stratified by subcamp, followed by second-stage households. Dwellings were drawn as the primary sampling unit (PSU) from an up-to-date list of all dwellings in the camp provided by UNHCR shelter unit, which serves as the sampling frame. The sample was drawn with explicit stratification for the four Kakuma subcamps, with uniform probability for Kakuma 1–3. For Kakuma 4, the selection probability was slightly increased because of higher expected nonresponse (Table 5).[177]

▶ **TABLE 5:** Number of dwellings in subcamps, and selection probabilities

	Kakuma 1	Kakuma 2	Kakuma 3	Kakuma 4	Total
Dwellings in population	16,491	5,033	11,631	4,798	37,953
Dwellings in sample	995	303	701	348	2,347
Dwelling selection probability	6.0%	6.0%	6.0%	7.3%	

Source: Authors' calculations.

83. The first-stage probabilities incorporate increased selection probabilities for households occupying more than one dwelling. These households were more likely to be sampled because each of their dwellings has a chance of being selected as a PSU. Let the selection probability of any dwelling in subcamp i be p_i. The first-stage selection probability for a household k occupying n_{ik} dwellings in this subcamp can be expressed as the complement of the probability that none of its dwellings is selected:

$$p_{1,ik} = 1 - (1 - p_i)^{n_{ik}}.$$

84. In the second stage, one household was selected from each sampled dwelling. Multiple households may be sharing the same dwelling.[178] For every selected dwelling, one household was sampled for the interview in a simple random draw.[179] In a given sampled dwelling $j(i, k)$ with $m_{j(i,\,k)}$ households, the second-stage selection probability of each household k thus is:

$$p_{2,ik} = \frac{1}{m_{j(i,k)}}$$

85. The weights were adjusted for differences in nonresponse across subcamps. Sampled households sometimes cannot be interviewed, e.g., because repeatedly no knowledgeable person is found in the dwelling or households refuse to participate. Different interview response rates across subcamps

[177] In Kakuma 4, early field trials showed that some initially listed dwellings could not be found, in large part due to tags that had been washed away by rain. This motivated a re-listing of the PSUs; yet the sampling probability was still increased to account for potential persistence of the issue.
[178] This approach assumes that it is not possible for a household to simultaneously share one dwelling with one or more households, and another dwelling with another one or more households. Although it is theoretically possible, allowing for this possibility would make the sampling design overly complex. Judging from the data, at most, 0.8 percent of the interviewed households may have such an arrangement, and they are classified as sharing all dwellings with the same household(s). This may slightly underestimate the implied number of households in Kakuma.
[179] This second sampling stage was implemented during fieldwork with the help of survey software. If an enumerator finds a dwelling that houses more than one household, she is asked to enter the number of households, as well as the first name of each household head. The survey software then randomly selects one of the households and displays the name of its head, instructing the enumerator to only interview this person's household.

introduce an imbalance to the sample, which must be corrected through the sampling weights. With h_i households sampled but only h'_t interviews successfully conducted in subcamp i, the nonresponse adjusted weight is given by:

$$w_{ik} = \frac{1}{p_{1,ik} * p_{2,ik}} * \frac{h_i}{h'_i}$$

86. As part of post-stratification, weights were scaled to the population totals in each subcamp. The weighted household sizes in the sample do not automatically add up to Kakuma population totals. On the one hand, this is because the total number of households in Kakuma was not available to inform the sampling design, as the UNHCR registration system does not group people into households. On the other hand, the different allocations of households to dwellings—as described above—are only imperfectly accounted for in the sampling design. However, a recent UNHCR registration update provides up-to-date population numbers per subcamp, which can be used to adjust weights in post-stratification. Let there be N_i people in subcamp i, then for household k consisting of q_{ik} people the final weights are given by:

$$w'_{ik} = w_{ik} * \frac{N_i}{\Sigma_i(q_{ik} * w_{ik})}.$$

87. Estimates of national averages are calculated using 2015/16 KIHBS from the KNBS. KIHBS data used to obtain estimates of the national averages in this report are downloaded from KNBS. Nationally representative estimates from the KIHBS data are compared to population figures from the Kakuma SES data to enable comparisons of socioeconomic indicators between Kakuma refugees and Kenyans at the national and Turkana level (Table 6). P-values from one-sample t-tests to test for differences between the KIHBS estimates and the refugee population values are shown throughout the main report. Confidence intervals (95 percent) are also provided for figures based on the national estimates.

▶ **TABLE 6:** Sample allocation for KIHBS 2015/16

County	Number of households
Turkana	413
National	21,773

Source: KIHBS 2015/16.

12.3 Rapid consumption module

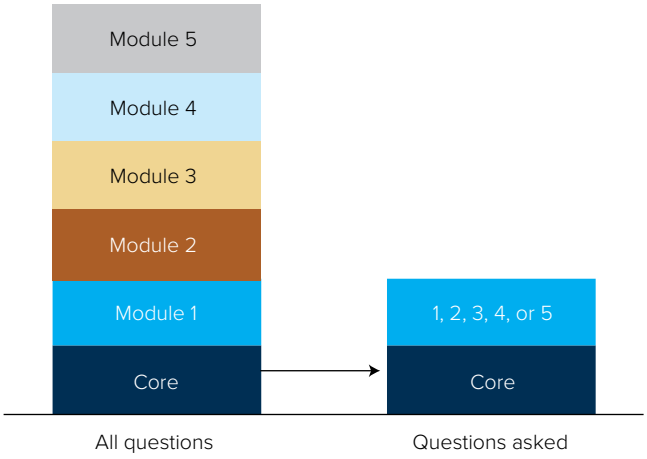
88. Collecting household consumption data is methodologically challenging. Living standards are most widely measured using consumption aggregates constructed from data collected in household surveys.[180] Variation in survey methodology and processing steps has been shown to affect the resulting aggregates, for example through phrasing of questions or deflation of prices.[181] The SES is therefore modeled after the most recent national poverty surveys, the 2015/16 Kenya Integrated Household

[180] Deaton and Zaidi. 2020. "Guidelines for Constructing Consumption Aggregates for Welfare Analysis."
[181] Beegle et al. 2012. "Methods of Household Consumption Measurement through Surveys"; Kilic and Sohnesen. 2019. "Same Question but Different Answer."

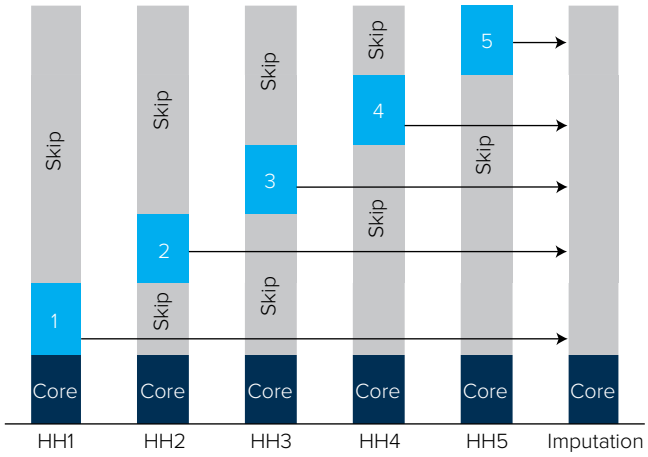
Budget Survey (KIHBS) and the 2018/19 Kenya Continuous Household Survey (KCHS). Given the limitations of operating in the refugee setting, this approach does not include a consumption diary but only an extensive list of items for which households are asked to recall their recent consumption over periods ranging from seven days for food to one year for some durable goods.

89. The Rapid Consumption Methodology (RCM) improves the efficiency of collecting consumption data while delivering robust results. Measuring consumption levels increases questionnaire administering times considerably. The RCM reduces the number of questions in the consumption module, while still providing reliable poverty estimates.[182] The method consists of five steps: First, core consumption items are selected based on their importance for welfare and consumption. Second, the remaining consumption items are partitioned into optional consumption modules (five, in this case). Third, these optional modules are randomly assigned to groups of households, which are then only administered the core module and their respective optional module (Figure 65). Fourth, after data collection, a model imputes the consumption of items contained in the optional modules for all households based on the households' characteristics and their found association with consumption levels (Figure 66). And fifth, the resulting consumption aggregate is used to estimate poverty.[183]

► **FIGURE 65:** Allocation of consumption items using RCM



► **FIGURE 66:** Imputation of total consumption using the RCM



Source: Authors' calculations.

90. To further minimize administration times and reduce enumerator and respondent fatigue, the list of consumption items used in the survey is optimized based on refugee and national consumption patterns.[184] The list of consumption items used in national surveys in Kenya is substantial when compared to other countries. To reduce administration time, those items which occurred infrequently in the national survey were removed. A robustness test estimates the expected impact of this optimization by recalculating the consumption aggregates from the 2015/16 KIHBS consumption data based on

[182] Pape and Mistiaen. 2018. "Household Expenditure and Poverty Measures in 60 Minutes: A New Approach with Results from Mogadishu."
[183] Prices for consumed items that were received for free were replaced with the item-specific median unit value.
[184] The consumption items list was the same used for the Kalobeyei socioeconomic assessment for which national consumption patterns were calculated. UNHCR, United Nations High Commissioner for Refugees and World Bank. 2020. "Understanding the Socioeconomic Conditions of Refugees in Kenya. Volume A: Kalobeyei Settlement. Results from the 2018 Kalobeyei Socioeconomic Profiling Survey."

the reduced list of items. As a result, there is an increase of the national poverty headcount rate by only 0.05 percentage points, and a change in rural and urban poverty of 0.10 and –0.30 percentage points, respectively (Table 7). These impacts are deemed acceptable for the SES given that measurement and sampling errors are generally considerably higher than that. Conversely, ex ante field research uncovered that some items have different common names in the camp as compared to in wider Kenya. These names were adjusted accordingly in the questionnaire to minimize the risk of misunderstandings. The items in the optional modules are distributed such that similar items within categories are included in different modules to ensure orthogonality between groups (Table 8, Table 9). At the same time, items that are more commonly consumed are spread across optional modules, for each module to represent similarly meaningful consumption shares (Table 7).

▶ **TABLE 7:** Robustness check of consumption item removal: poverty headcount rates comparison

	KIHBS 2015/16 (n = 489) (%)	Low-share items removed (n = 368) (%)
National	36.1	36.2
Rural	40.1	40.3
Urban	29.4	29.1
Peri-urban	27.5	28.3

Source: Authors' calculations.

91. Allocation of items into the RCM modules is also informed by national consumption shares. The consumption items of the SES questionnaire are allocated into one core module and five optional modules, which allows sufficient reduction of items for individual households while still producing reliable poverty estimates. The allocation is informed by consumption shares retrieved from the KIHBS 2015/16.[185] The accuracy of the allocation based on KIHBS 2015/16 shares was tested using the full consumption module, and an accompanying pilot using the RCM. Both yield statistically indistinguishable estimates for poverty. Therefore, the SES consumption module is comparable to the KIHBS 2015/16 consumption module.

▶ **TABLE 8:** Food and nonfood items distribution

Module	Food items	Nonfood items
Core	12	11
1	30	40
2	30	40
3	30	40
4	30	39
5	30	39
Total	162	209

Source: Authors' calculations.

[185] The food and nonfood items lists are comparable to the Kenya Integrated Household Budget Survey (2015/16) and the ongoing Kenya Continuous Household Survey.

▶ **TABLE 9:** Consumption items list

Food items		Nonfood items	
Module	**Item**	**Module**	**Item**
Core	Broken white rice (aromatic or nonaromatic)	Core	Mobile phone airtime
Core	Maize grain—loose	Core	Baby oil
Core	Beans	Core	Body lotion
Core	Yellow peas (adis)	Core	Comb/toothbrush
Core	Omena	Core	Laundry soap/bar soap
Core	Cooking oil	Core	Broom/mop/duster
Core	Onion—bulbs	Core	Match box
Core	Cabbages	Core	Boy's trousers/shorts
Core	Tomatoes	Core	Boy's shirt/T-shirt
Core	Sugar	Core	Women's rubber sandals/slippers
Core	Common salt	Core	Buckets/basins
Core	Tea leaves	1	Gardener—full/part-time
1	Maize flour—loose	1	Barber services
1	Maize flour—sifted	1	Hair dressing
1	Wheat flour—brown	1	Beauty services
1	Fortified wheat flour (packed)	1	Nail polish
1	Sesame seeds/simsim	1	Lipstick/balm
1	Fortified porridge flour (packed)	1	Toilet paper/tissue paper
1	Green grams (ndengu)	1	Purses/wallets
1	Brown bread	1	Handbags (ladies)
1	Beef—with bones	1	Baby carriage
1	Beef—without bones	1	Detergents
1	Chicken meat (broiler, kienyeji)	1	Dish washing paste/liquid
1	Sausages/smokies/hot dog	1	Air freshener
1	Dried/smoked fish (excluding omena)	1	Cold tablets/cough syrup/tonic
1	Fresh flavored packeted cow milk	1	Anti-malaria drugs
1	Milk sour—packeted mala	1	Boda boda fares (bicycle)
1	Fortified cooking fat	1	Courier services
1	Lard (from butcheries)	1	Toys and games
1	Melons	1	Pets purchases
1	Loquats	1	Museum, game park, historical
1	Courgettes/squash/marrow	1	Photocopying/scanning/typing
1	Capsicums (pilipili hoho)	1	Material for children's clothing
1	Aubergines—eggplant (biringanya)	1	Thread/buttons/zips/cuff links
1	Potatoes (Irish)	1	Laundry/dry-cleaning
1	Cassava	1	Men's coat
1	Sweets	1	Men's shirt
1	Pilau masala	1	Men's vests

Food items		Nonfood items	
Module	Item	Module	Item
1	Squashes	1	Belts/cap
1	Food from canteen/kiosks	1	Boy's socks
1	Food from vendors	1	Girl's dress
1	Vodka	1	Girl's night dress/night wear
2	Aromatic unbroken rice (pishori/ basmati, etc.)	1	Infant's clothing
2	Green maize (fresh)	1	Bibs
2	Wheat grain	1	Men's shoe—plastics
2	Millet flour	1	Men's sports shoes
2	Cashew nuts	1	Women's gumboot
2	Cakes	1	Boy's rubber sandals/slippers
2	Biscuits	1	Curtains and accessories
2	Pasta (spaghetti, macaroni, noodles, e.g., indomie)	1	Pillows
2	Fresh fish	1	Cups/glasses
2	Uht—long life milk	2	Water—water service provider
2	Milk sour—unpacketed mala	2	Hair oil/cream
2	Mangoes	2	Face makeup
2	Passion	2	Shampoo/conditioner
2	Plums	2	Deodorant
2	Apples	2	Sanitary towels/tampons/cotton wool
2	Lemons	2	Sunglasses
2	Cucumber	2	Candles
2	Beetroot	2	Balms (healing ointments, e.g., Robb)
2	Pepper—pilipili	2	Fever/pain killers, e.g., paracetamol
2	Pumpkins/butternut	2	Car wash
2	Tinned/packeted vegetables	2	Club membership fees
2	Sweet potato	2	Foodstuff for pets
2	Ginger—tangawizi	2	Sports/games/gymnasium/fitness
2	Crisps	2	TV subscription fees (private)
2	Energy/health drink	2	Gambling/lottery tickets/casino
2	Wine (e.g., cider, Kingfisher, etc.)	2	Newspapers
2	Traditional beer	2	Tailoring cost for clothes/rep
2	Tobacco pipe/raw (snuff)	2	Men's suit
2	Miraa (khat)	2	Men's trousers
3	Popcorn	2	Men's underwear/boxers
3	Fortified maize flour	2	Men's socks
3	Cost of milling	2	Ties/scarves/bow tie/cravat/T
3	Millet grain	2	Shorts (Bermuda)
3	Sorghum flour	2	Women's skirts
3	Chickpeas	2	Women's blouses (top)
3	Mutton/goat meat	2	Women's stockings

continues

▶ **TABLE 9:** *Continued*

Food items		Nonfood items	
Module	**Item**	**Module**	**Item**
3	Camel meat	2	Women's slip (kamisi) (petticoat)
3	Offals (matumbo)	2	Women's vest (camisole)
3	Goat milk	2	Women's kitenge (African dress)
3	Yogurt	2	Kanga/kikoi
3	Eggs—exotic/kienyenji	2	Women's tight clothing
3	Butter	2	Vest
3	Oranges	2	Men's shoes—leather
3	Pineapples	2	Men's gumboot
3	Pears	2	Women's shoe—plastics
3	Tangerines	2	Girl's shoes—leather
3	Tree tomato	2	Girl's sports shoes
3	Spinach	2	Girl's sandals (akalas)
3	Kale—sukuma wiki	2	Table cloth/mats
3	French beans (fresh—green long beans)	3	Garbage and refuse collection
3	Peas (green peas: garden, snap, snow)	3	Watchman
3	Traditional vegetables (okra, pumpkin leaves, kunde, murenda, matembele, etc.)	3	Napkins/diapers/pullups for infants
3	Cooking bananas	3	Petroleum jelly
3	Arrow roots—nduma	3	Perfume
3	Chocolate bar	3	Lighters
3	Chili sauce	3	Umbrellas
3	Food eaten outside the household (e.g., hotels, restaurants, vendors, and kiosks)	3	Contraceptives
3	Cafe and take-aways: prepared	3	Driving license (renewal)
3	Chang'aa	3	Taxi fare
4	Wheat flour—white (not packed)	3	Entry fees (cinema, disco/nightclub)
4	Cassava flour	3	Material for women's clothing
4	Sorghum grain	3	Knitting wool
4	Mixed porridge flour (not packed)	3	Men's' overcoat, apron, dustcoat
4	Soya flour	3	Men's sweater, cardigan, jersey
4	Breakfast cereal/oats	3	Men's pajamas
4	Dolicos (njahi)	3	Men's traditional dress
4	White bread	3	Women's suits
4	Frozen fish fillets	3	Women's jacket
4	Fresh unpacketed cow milk/fresh cream	3	Women's sweaters
4	Ghee	3	Women's brassiers (bra)
4	Paw paws	3	Women's T-shirts
4	Avocado	3	Boy's suit

Food items		Nonfood items	
Module	Item	Module	Item
4	Coconut	3	Boy's underwear
4	Onion—leeks	3	Girls coats/jackets
4	Mushrooms, and Asian vegetables	3	Girl's suit
4	Yams	3	Men's rubber sandals/slippers
4	Sugarcane	3	Women's shoes—leather
4	Jaggery (sukari nguru)	3	Women's sports shoes
4	Magadi (sodium bicarbonate)	3	Boy's shoe—plastics
4	Food seasoning (e.g., Royco, Knorr, etc.)	3	Boy's gumboot
4	Yeast	3	Girl's shoe—plastics
4	Cocoa and cocoa products	3	Repair of footwear
4	Soya drink	3	Blankets
4	Mineral water	3	Bed sheets/bed covers/pillow cases
4	Fruit juice	3	Mosquito net
4	Whiskey	3	Towels
4	Beer (lagers, stouts)	3	Knives/spoons/forks/cooking sticks
4	Cigarettes/cigar	3	Torches
5	Nonaromatic (unbroken) white rice	3	Batteries (dry cells)
5	Brown rice	4	Facial serviettes/pocket tissues
5	Green maize—loose	4	Aftershave lotion
5	Groundnuts	4	Nail cutter/files
5	Cowpeas	4	Insecticide
5	Wheat buns/scones	4	Shoe polish/cream
5	Pork	4	Dewormers
5	Offals (liver and kidney)	4	Vaccines
5	Fresh packeted cow milk	4	Cod/halibut liver oil
5	Camel milk	4	Vitamins
5	Condensed/powder milk	4	City bus/matatu fares (town and environs)
5	Margarine	4	Country bus/matatu fare (town)
5	Fortified margarine	4	Post office private rental box
5	Peanut butter	4	Repair of radio, TV, computer
5	Cooking fat	4	Religious books
5	Ripe bananas	4	Men's jacket
5	Guavas	4	Women's dress
5	Lime	4	Buibui
5	Carrots	4	Headsquare/headscarf/hijabu
5	Coriander leaves (dania)	4	Boy's coats/jackets
5	Jam	4	Girls trousers/shorts
5	Honey	4	Girl's shirt/blouse
5	Chewing gum	4	Girl's skirts
5	Tomato sauce	4	Sweater

continues

▶ **TABLE 9:** *Continued*

Food items		Nonfood items	
Module	**Item**	**Module**	**Item**
5	Baking powder/bicarbonate	4	Girl's socks
5	Coffee	4	Plastic pants
5	Sodas	4	Socks
5	Hotel and restaurant beverages	4	Men's sandals (akalas)
5	Hotel and restaurant cakes	4	Women's shoes—canvas/rubber
5	Brandy	4	Sandals (akalas)
		4	Boy's shoes—canvas/rubber
		4	Boy's sports shoes
		4	Girl's shoes—canvas/rubber
		4	Girl's rubber sandals/slippers
		4	Girl's gumboot
		4	Mattresses
		4	Carpets and mats
		4	Plates/bowls
		4	Cooking sufurias/cooking pots
		4	Mobile money transfer charges
		5	Water—vendors
		5	House servants—full/part-time
		5	Manicure, pedicure, and facial
		5	Hair drier
		5	Manual shavers and razors
		5	Toilet soap
		5	Weaves, wigs, and hairpiece
		5	Baby powder
		5	Handkerchiefs/hand serviettes
		5	Toothpaste/mouthwash
		5	Jewelry
		5	Watches/clocks
		5	Suit/briefcase and travel bags
		5	Disinfectant
		5	Anti-typhoid, amoebicides
		5	Antibiotics
		5	Parking fees
		5	Boda boda bares (motorcycle)
		5	Tuk tuk fares
		5	Ferry/boat fares
		5	Postage fee—parcel/letter
		5	Artificial/natural flowers
		5	Material for men's clothing
		5	Shorts (kinyasa, kaptula, kipa)
		5	Men's T-shirts

Food items		Nonfood items	
Module	Item	Module	Item
		5	Women's trousers
		5	Women's' overcoat, apron, dust
		5	Women's underpants/bikers
		5	Women's night dress
		5	Girl's slips
		5	Girls underwear
		5	Rompers
		5	Sweaters/jackets
		5	Men's shoes—canvas/rubber
		5	Boy's shoes—leather
		5	Boy's sandals (akalas)
		5	Frying pans
		5	Mobile handset—basic/smartphones
		5	Calculators

Source: Kakuma (2019).

13. Determinants of Welfare

92. A welfare model is used to test the robustness of the identified characteristics of poor refugees. To determine the main predictors of welfare, the following model is estimated:

$$Y_i = \alpha + \beta X_i + \varepsilon_i$$

Where Y_i is consumption expenditure on core items and X_i is a vector of household characteristics for household i while ε_i is a normally and independently distributed error term with zero mean. The welfare model is estimated using ordinary least squares (OLS). Expenditure on "core" items is used to measure welfare. The full consumption aggregates are calculated using the RCM imputation method described above, utilizing a modeling approach where households' characteristics are used to impute the optional consumption modules for the remaining households. Thus, by design, household characteristics are correlated with the total imputed consumption. Using the total imputed consumption as a dependent variable would therefore lead to spurious correlations.

93. To select the variables for the welfare model, a regression analysis was run on all potential determinants of welfare and a means of a backward stepwise selection, in which a significance level of 1 percent was chosen for removal from the model. Applying a forward stepwise selection with the same significance value gave similar results. The selected variables were used to build the full model (Table 10). As a robustness check, the asset index was also used to determine welfare. The asset index is calculated through the Principal Component Analysis (PCA) using information on about 20 assets (radio, tv, mobile phone, fridge, bicycle, motorbike, car, generator, solar panel, charcoal jiko, wheelbarrow, table, satellite, mosquito net, fan, bed, mattress, fencing, animals, and kerosene stove, Table 10).

▶ **TABLE 10:** Determinants of welfare

	Expenditure model			Asset model		
	Backward	Forward	Full model	Backward	Forward	Full model
Age of head (base: under 35 years)						
35–54 years	−0.033 (0.033)	−0.029 (0.032)	−0.027 (0.032)	0.009 (0.046)	0.005 (0.046)	0.026 (0.050)
55 years and above	−0.050 (0.062)	−0.026 (0.057)	0.009 (0.052)	0.142 (0.097)	0.117 (0.098)	0.171 (0.102)
Female head	0.049 (0.033)	0.048 (0.032)	0.034 (0.032)	−0.126** (0.043)	−0.102* (0.043)	−0.080 (0.048)
Country of origin of head (base: South Sudan)						
Somalia	−0.008 (0.046)	−0.006 (0.045)	−0.011 (0.048)	0.216** (0.080)	0.216** (0.080)	0.254** (0.083)
Ethiopia	−0.064 (0.069)	−0.056 (0.069)	−0.040 (0.062)	0.140 (0.114)	0.152 (0.114)	0.176 (0.116)
Burundi	−0.057 (0.073)	−0.068 (0.071)	−0.059 (0.067)	−0.054 (0.077)	−0.034 (0.076)	−0.049 (0.080)
DR Congo	0.081 (0.050)	0.077 (0.050)	0.087 (0.050)	0.394*** (0.083)	0.395*** (0.083)	0.399*** (0.090)
Sudan	0.092 (0.054)	0.095 (0.053)	0.133* (0.053)	0.124 (0.072)	0.106 (0.071)	0.112 (0.076)
Other	0.053 (0.142)	0.064 (0.138)	0.078 (0.121)	0.314 (0.268)	0.323 (0.269)	0.289 (0.270)
Subcamp (base: Kakuma 1)						
Kakuma 2	−0.114** (0.041)	−0.119** (0.041)	−0.101* (0.042)			−0.044 (0.067)
Kakuma 3			−0.032 (0.035)	−0.142** (0.049)	−0.132** (0.049)	−0.146** (0.055)
Kakuma 4			0.007 (0.050)			−0.025 (0.072)
Household size (base: 1–2 persons)						
3–4 Persons	−0.389*** (0.053)	−0.369*** (0.053)	−0.380*** (0.055)			−0.104 (0.095)
5–6 Persons	−0.701*** (0.053)	−0.698*** (0.052)	−0.638*** (0.058)			−0.038 (0.105)
7+ Persons	−0.980*** (0.051)	−0.971*** (0.051)	−0.911*** (0.060)	0.144** (0.047)	0.179*** (0.043)	0.099 (0.106)
Crowding index (base: more than 3 individuals per room)						
Less than 1 individual per room	0.261** (0.100)	0.270** (0.100)	0.309** (0.111)			
1–2 individuals per room			0.098* (0.049)			
2–3 individuals per room	−0.123*** (0.034)	−0.121*** (0.034)	−0.090** (0.033)			
Education level of head (base: none)						
Some or complete primary			0.018 (0.034)			0.078 (0.051)
Some or complete secondary	0.085* (0.039)	0.085* (0.039)	0.071 (0.042)			0.125 (0.069)

Note: Significance level: 1% (***), 5% (**), and 10% (*).

	Expenditure model			Asset model		
	Backward	Forward	Full model	Backward	Forward	Full model
Technical/vocational			−0.026 (0.080)	0.254* (0.125)	0.247* (0.125)	0.333* (0.131)
Higher			0.093 (0.167)	0.293 (0.177)		0.366* (0.177)
Other	−0.303* (0.144)	−0.303* (0.142)	−0.337** (0.125)			0.272 (0.189)
Type of activity in the last 7 days by head						
Business				0.300*** (0.079)	0.308*** (0.079)	0.306*** (0.079)
Unpaid job				0.218* (0.094)	0.220* (0.094)	0.208* (0.095)
Apprentice/intern	0.464*** (0.132)	0.469*** (0.132)	0.473*** (0.121)	0.379* (0.151)	0.374* (0.153)	0.360* (0.156)
Type of foof (base: unimproved)						
Improved material				0.179* (0.077)	0.179* (0.078)	0.181* (0.079)
Type of floor (base: unimproved)						
Improved material	0.074* (0.034)	0.086* (0.034)	0.084** (0.031)	0.239*** (0.055)	0.238*** (0.055)	0.233*** (0.055)
Source of cooking energy (base: collected firewood)						
Purchased firewood	0.114*** (0.031)	0.112*** (0.031)	0.100*** (0.030)			−0.027 (0.050)
Charcoal			0.082 (0.043)	0.250*** (0.074)	0.252*** (0.074)	0.233** (0.074)
Other			−0.203 (0.280)			0.125 (0.381)
Sanitation (base: unimproved)						
Improved	−0.215** (0.072)	−0.211** (0.070)	−0.102** (0.037)	0.146 (0.081)	0.142 (0.081)	0.149 (0.082)
Type of wall (base: unimproved)						
Improved				−0.134* (0.055)	−0.133* (0.054)	−0.132* (0.056)
Source of lighting (base: no lighting)						
Firewood						−0.136 (0.107)
Lamp/candle/torch				0.428*** (0.058)	0.424*** (0.058)	0.362*** (0.073)
Solar/biogas				0.785*** (0.070)	0.784*** (0.070)	0.718*** (0.083)
Electricity/generator				1.170*** (0.099)	1.173*** (0.099)	1.101*** (0.108)
Asset						
Asset index	0.065*** (0.009)	0.065*** (0.009)	0.065*** (0.009)			

continues

▶ **TABLE 10:** *Continued*

	Expenditure model			Asset model		
	Backward	Forward	Full model	Backward	Forward	Full model
Year of displacement (base: since 2015)						
2012–2014	−0.076 (0.048)	−0.091 (0.047)	−0.014 (0.042)	0.173** (0.058)	0.161** (0.058)	0.157** (0.059)
2008–2011	−0.053 (0.048)	−0.066 (0.048)	0.007 (0.045)	0.157* (0.070)	0.149* (0.070)	0.139 (0.072)
Before 2008	−0.054 (0.051)	−0.078 (0.050)	−0.026 (0.047)	0.364*** (0.071)	0.356*** (0.071)	0.336*** (0.074)
Reduced coping strategies (base: high food security)						
Medium food insecurity	−0.021 (0.044)	−0.022 (0.044)	−0.055 (0.041)	0.167* (0.067)	0.155* (0.067)	0.162* (0.068)
Low food insecurity	−0.150* (0.073)	−0.142* (0.069)	−0.100 (0.066)	0.400** (0.134)	0.389** (0.135)	0.393** (0.133)
Proportion of children less than 15 years (base: none)						
0–50%				0.233*** (0.056)	0.138** (0.042)	0.237** (0.082)
50%–75%				0.126* (0.058)		0.133 (0.084)
75%+					−0.184* (0.084)	−0.080 (0.113)
Having a family/relative resettled				0.177** (0.062)	0.181** (0.063)	0.172** (0.063)
Remittance				0.176* (0.084)	0.177* (0.083)	0.175* (0.084)
N	1,629	1,663	1,967	1,662	1,662	1,662
Adjusted R^2	38.1	38.1	36.1	40.8	40.8	40.8

Source: Authors' calculations.


UNHCR
The UN Refugee Agency


WORLD BANK GROUP
Poverty & Equity