



DTM
IOM DISPLACEMENT
TRACKING MATRIX
SOUTH SUDAN

URBAN MULTI-SECTOR
NEEDS AND VULNERABILITIES
SURVEY (FSNMS+)

JUBA TOWN



In collaboration with:



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Photo (cover page):

A woman sitting with her children in Juba.

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Aims

Between September and November 2021, the International Organization for Migration's Displacement Tracking Matrix (IOM DTM) undertook its second household-level multi-sector assessment of selected urban areas and camps for internally displaced persons (IDPs) in South Sudan. The assessment aims to:

- Quantify the prevalence of vulnerabilities and humanitarian needs across sectors, with a focus on food security, economic vulnerability and nutrition as well as selected indicators on shelter and non-food items (SNFI), education, health, water, hygiene and sanitation (WASH), protection (including child protection and gender-based violence) and mental health and psycho-social support (MHPSS).
- Generate a better understanding of urban displacement and migration, including return and relocation after displacement in South Sudan or abroad.

This survey is part of the country-wide extended Food Security and Nutrition Monitoring System (FSNMS+) assessment in South Sudan, jointly conducted by IOM, the World Food Programme (WFP), the United Nations Children's Fund (UNICEF), the Food and Agriculture Organization (FAO), the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), REACH and several humanitarian clusters. It was designed to be an independent, crisis-wide and coordinated inter-agency multi-sectoral needs assessment, mandated by the Humanitarian Country Team and endorsed by the Inter-Cluster Coordination Group. Together, the joint findings provide an evidence-base for the Integrated Food Security Phase Classification, the Humanitarian Needs Overview and the Humanitarian Response Plan.

This report presents sectoral findings for the urban area of Juba. Separate profiles will be published for Juba's IDP camps I and III, Wau's urban area and Naivasha IDP camp, the urban area of Bentiu / Rubkona and Bentiu IDP camp, Malakal's urban area and Protection of Civilians (PoC) site and the urban areas of Bor and Yei.

Humanitarian Context in South Sudan

Despite a relative lull in large-scale hostilities since the signature of the Revitalized Peace Agreement for the Resolution of the Conflict in South Sudan (R-ARCSS) in September 2018 and the formation of the Transitional Government of National Unity in February 2020, sub-national and localized conflicts have continued to affect communities and cause new displacement across the country ([IOM DTM Event Tracking¹](#)). Between January and September 2021, 138,637 individuals were displaced due to conflict, and 84,861 individuals were displaced due to communal clashes ([IOM DTM Mobility Tracking Round 11](#)). Although the overall number of casualties has decreased compared to 2020 figures, escalations in violence in Western Equatoria – particularly in Tambura – and Jonglei and Greater Pibor Administrative Area were flagged as concerning ([HRD UNMISS](#)). After two years of severe seasonal flooding, 2021 witnessed another year of extreme flooding, affecting over 835,000 people ([OCHA](#)). Three consecutive years of high levels of flooding have depleted resources and severely increased needs in many communities while simultaneously limiting humanitarian access. In this climate, the economic and health impact of COVID-19, including restrictions cross-border movement ([IOM DTM Flow Monitoring](#)), has further compounded the humanitarian effects of protracted insecurity.

As of September 2021, South Sudan hosts over 2 million IDPs and 1.78 million returnees, with over 400,000 new IDP arrivals² and over 400,000 former IDPs and refugees returning to their areas of habitual residence prior to displacement in the first nine months of 2021 ([IOM DTM Mobility Tracking Round 11](#)). Often, returnees find themselves in conditions of need comparable to those of the displaced population ([IOM DTM Mobility Tracking Round 11 Multi-Sector Location Assessment](#)).

According to the Integrated Food Security Phase Classification (IPC) analysis for February to March 2022, 6.8 million people – more

1 Due to limitations in coverage and access, DTM Event Tracking does not provide a comprehensive picture of displacement events.

2 Including both new displacement incidents and individuals moving to a different location of displacement.

than half of South Sudan's population – are estimated to be facing severe acute food insecurity, with parts of Jonglei and Unity states of extreme concern for food insecurity. The [2022 Humanitarian Needs Overview](#) (HNO) estimates a total of 8.9 million people in need out of a projected population of 12.4 million. In the intersectoral severity of needs analysis, the HNO also classifies five counties – Duk, Fangak, Pibor, Cueibet and Rumbek East – to be in catastrophic need and another 71 counties to be in extreme need.

After the successful conclusion of the [first round of the expanded FSNMS+ assessment in urban areas and IDP sites](#) (FSNMS+ 2020), the second round enlarged its coverage to include the urban areas of Bor and Yei. The assessment took place after the former PoC sites in Juba, Wau and Bentiu transitioned out of their special status under the protection of the United Nations Mission In South Sudan (UNMISS) in 2020 and early 2021. All five targeted camps continue to be affected by congestion and sub-standard living conditions that are only partly mitigated by access to humanitarian services.

Methodology

Sampling Frame Development

South Sudan lacks an updated sampling frame, with the most recent census dating back to 2008, prior to the country's independence and two waves of civil war resulting in mass population displacement. To enable the roll-out of representative household surveys in urban areas within a short timeframe, IOM DTM relied on a combination of remote sensing technology and field mapping by teams of trained enumerators to produce a workable sampling frame. The methodology sought to avoid the need for door-to-door listings, which would have significantly increased costs and could have been mistaken by the local population for a registration exercise, potentially attracting residents from surrounding neighborhoods.

In the initial step, building footprints for the targeted areas were extracted from recent high-resolution satellite imagery from Maxar using automated image-recognition technology. The urban extent of each city was then mapped based on lower-level post-independence

administrative boundaries (bomas) made available by South Sudan's National Bureau of Statistics, the local road and transport network and the extension of built-up areas. Within the urban extent, enumeration areas of approximately equal size were drawn following natural and man-made geographical boundaries, including roads, waterways and the former boma boundaries. Non-residential and destroyed areas were mapped by field teams using mobile GIS software, in consultation with key informants and direct observation for each enumeration area, to derive a layer of likely residential shelters.

In collaboration with South Sudan's National Bureau of Statistics (NBS), the boundaries of the enumeration areas in Juba were then re-adjusted to obtain 227 areas, with an average of 1,000 inhabited shelters. Juba IDP Camps I and III were excluded from the town's sampling frame and assessed independently.³

Sampling Design

In Juba town, the study adopted a stratified two-stage clustered sampling strategy designed to be self-weighting. The sample was distributed between the enumeration areas proportional to the estimated number of inhabited shelters. In the first stage, enumeration areas served as the primary sampling units (PSUs). They were divided into six strata based on presence of informal settlements, shelter density, proximity to one of Juba's four major markets and presence of IDP camps or collective centers. Fifty enumeration areas were sampled with probability proportional to size, reflecting the approximate distribution across strata. The estimated number of residential shelters in each enumeration area was used as the measure of size given the lack of accurate, geographically disaggregated population estimates.

In the second stage, shelters – excluding mapped non-residential and destroyed areas – acted as the secondary sampling units (SSUs), proxying households. Thirteen shelters were drawn by simple random sampling from each targeted enumeration area. Enumerators were provided with georeferenced maps helping them locate the sampled

³ As the technical advisory member of the FSNMS+ Technical Working Group, IOM DTM contributed to the sampling frame development of the rural component based on updated enumeration areas. The 2022 assessment is the first round, in which the country-wide exercise relied on updated enumeration areas as primary sampling units.

shelters on hand-held devices and were instructed to interview the household living in the pinpointed shelter or record it as empty⁴, non-residential or destroyed. Random reserve shelters were used as a replacement in case of non-response or other sampling failure.

For the purposes of the survey, a household was defined as a group of people who regularly eat out of the same pot (sharing food and other resources) and sleep in the same compound most nights of the week, even if living in different structures within the compound and regardless of family relationships. When multiple households lived in the same compound, enumerators used the kobo tool to randomly select one.

The targeted sample size of 650 households from 50 enumeration areas was calculated based on the standard formula for clustered sampling, with a margin of error of 5 per cent on a 95 per cent confidence interval, assuming a design factor of 1.5 and a non-response rate of 10 per cent.

⁴ Before recording a shelter as empty, enumerators had to visit it at least twice at different times of the day and attempt to set up an appointment through neighbors.



Enumerators taking height measurements of a child in Juba town.

Data Collection

Data collection in Juba took place in September and October 2021, and 628 households were successfully interviewed. Challenges included non-response, non-residential, empty and destroyed shelters in some areas, heavy traffic causing delays and an encounter with a youth gang.

To prevent transmission of COVID-19 during the survey, enumerators were instructed to carry out the interviews with sufficient physical distancing outside the respondents' shelters and were provided with masks and hand sanitizer for use during data collection.

Statistical Analysis

Confidence intervals – denoted in the summary text by a ($\pm X.X$) – were calculated using R's survey package⁵ to account for the survey's sampling design (stratified clustering). Descriptive statistics reflect unweighted means and standard errors since the sample was designed to be approximately self-weighting. While non-response and other sampling failure rates differed across enumeration areas, it was not possible to correct for these differences due to lack of reliable,

⁵ Lumey, T. (2020). "Survey: analysis of complex survey samples". R package version 4.0.



Enumerators surveying a mother with her child in Juba town.

geographically disaggregated population estimates and the likelihood of correlation between sampling failure rates and error in the estimated number of residential buildings used as a proxy for population. The following table shows the deviation between sampled households and estimated residential buildings in each stratum.

% SAMPLED HOUSEHOLDS, % ESTIMATED RESIDENTIAL BUILDINGS AND PERCENTAGE POINT DIFFERENCE BY STRATUM [N IN TABLE]

STRATUM	N SAMPLED	% SAMPLED	% EST. RESIDENTIAL	P.P. DIFFERENCE
High Density, At Market	26	4.1	4.7	0.6
High Density, Far From Market	91	14.5	13.3	-1.2
IDP Site	13	2.1	1.7	-0.4
Informal Settlement	7	1.1	1.7	0.6
Low Density, At Market	39	6.2	6.7	0.5
Low Density, Far From Market	452	72	71.9	-0.1

Using the estimates proportion of residential buildings in each stratum as weights results in some difference for vulnerability and need indicators. However, because it is not feasible to identify the cause for sampling failure in certain enumeration areas, weighting estimates may result in the introduction of another bias. All findings are therefore reported without correcting weights.

The impossibility of stratifying based on household attributes constrained the ability to carry out representative sub-group analysis and cross-tabulations of needs and vulnerabilities with sufficient statistical confidence. However, given the importance of this analysis for the humanitarian response, indicative findings have been included where relevant. The subset function from R's survey package was used to accurately compute confidence intervals for sub-group analysis⁶.

⁶ Ibid., p. 55. "Voluntary migrants" and "Refugees" were excluded from the sub-group analysis in this report due to their small sample sizes. "Returnees" and "Relocated persons" were grouped for sub-group analysis.

Confidence intervals are a measure of the statistical uncertainty regarding our estimate. The 95 per cent confidence interval will contain the true quantity of interest 95 per cent of the time over repeated samples. This means that if we were to repeat this survey one hundred times under identical conditions, on average ninety-five of the calculated intervals would contain the true value of our target quantity.

The confidence interval does not account for uncertainty due to systematic biases in the sample, such as that due to sampling bias (systematic under or over-representation of households with certain characteristics in the sample) or reporting bias (systematic under or over-reporting of certain indicators by respondents due to their sensitivity, surrounding stigma or perceived incentives). To the extent possible, these sources of bias were minimized through the survey's sampling design, training and monitoring of enumerators, and appropriate communication of the purposes of the study with respondents. A small number of data anomalies that may be due to reporting bias are flagged in the sectoral narratives.

Urban Vulnerability Index Calculation

The Urban Vulnerability Index uses Principal Component Analysis (PCA) to assess the relative impact of a set of high priority indicators on needs and vulnerabilities of households in urban areas. The index summarizes the variation around the complex drivers of vulnerability, need and re-integration in urban settings, or how multiple categories of vulnerability (displacement, disability, poverty, age, gender, etc.), sectoral needs (SNFI, health, WASH, food security, protection, etc.), and broader distributional and societal factors interact and compound each other.

The index ranges from 0 to 100, with 100 signifying the highest level of needs and vulnerability.

Vulnerability is defined as the set of household characteristics that reduces their resilience to internal and external shocks, or capacity to rely on sustainable coping mechanisms, resulting in a higher level of humanitarian needs and likelihood of adverse outcomes unless the

household can benefit from appropriate mitigation measures, such as access to humanitarian services.

Index indicators:

Population Group	Single-headed Households
Disability	Chronic Illness
Shelter Damage	Shelter Type
Crowding	School Dropout
Access To Sufficient Water	Safe and Timely Access to Water
Access to WASH NFI	Sanitation Facility
Distance to Health Facility	Access to Health Facilities
Security Incidents	Protection Service Availability
GBV Risk	Behavioral Changes in Children
Coping Strategies	Hunger Levels
Livelihoods	

For a detailed definition of the used indicators and importance of components, see the [Urban Vulnerability Index and Intersectoral Analysis section](#).

Population Groups

Displacement and migration status are self-reported by households. Population group definitions are based on IOM DTM Mobility Tracking.

IDPs

Persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized state border⁷. There is no time limit on being an IDP. This status ends when the person is able and willing to return to their original home or makes a free choice to settle in a new location⁸.

⁷ UN OCHA. (2004). [Guiding Principles on Internal Displacement](#). Article 2.

⁸ These conditions for ending IDP status are in line with the Inter-Agency Standing Committee's [Framework on Durable Solutions for Internally Displaced Persons](#) (April 2010).

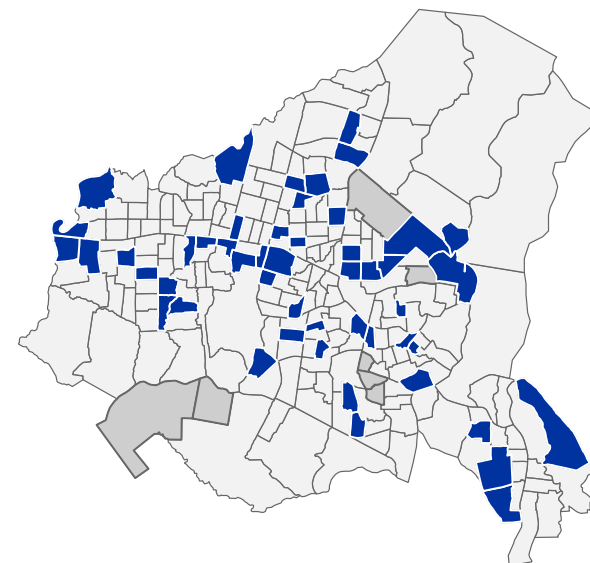
Returnees

Someone who was displaced from their habitual residence either within South Sudan or abroad, who has since returned to their habitual residence. Please note: the returnee category, for the purpose of DTM data collection, is restricted to individuals who returned to the exact location of their habitual residence, or an adjacent area based on a free decision. South Sudanese displaced persons having crossed the border into South Sudan from neighboring countries but who are unable to reach their former home are still displaced and as such not counted in the returnee category.

Relocated Persons

A person who was displaced from their habitual residence either within South Sudan (former IDP) or abroad (former refugee), who has since relocated voluntarily (independently or with the help of other actors) to a location other than their former habitual residence, without an intention to return to their former habitual residence.

ENUMERATION AREAS IN JUBA TOWN SAMPLED FOR ASSESSMENT



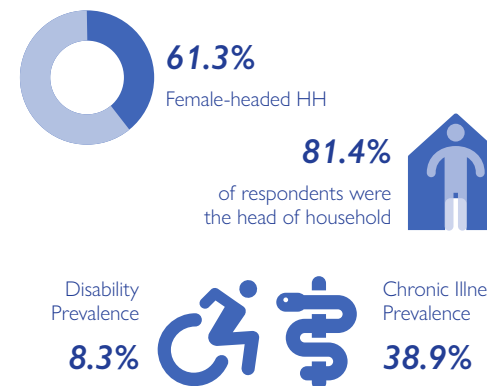
Areas in dark gray indicate enumeration areas that include Juba International Airport and Juba IDP Camps I and III and were thus excluded from the sampling frame.

Demographics and Household Vulnerabilities

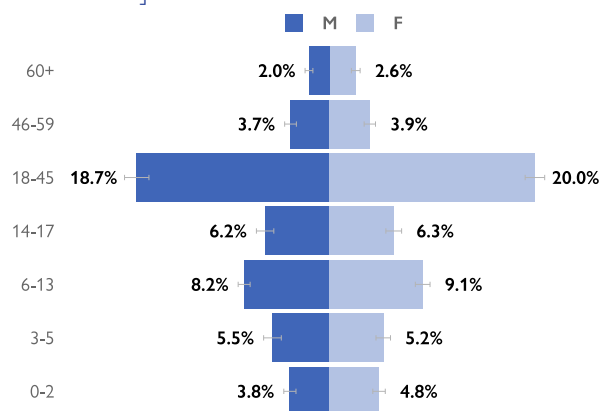
In this assessment, 81.4 (±3.9) per cent of responses are given by heads of household (HoH), while 18.6 (±3.9) per cent of households are represented by some other household member. These respondents tend to be younger members of the household (average age of 28 years compared to 37 years for heads of households responding).

The average household size is 7.9 (±0.4) persons, with a median of 7 persons. The average size of households hosting individuals is 10.3 (±0.9) persons whereas the size of households not hosting any individuals is 7.4 (±0.4) persons. Most households are headed by women (61.3% ±4.6%)¹. Compared to their female counterparts, male heads of household are more likely to be older and have a secondary or university diploma. 19.4 (±1.5) per cent of household members are between the ages 0 and 5, and 29.8 (±1.4) per cent are between the ages of 6 and 17. Only 4.5 (± 0.6) per cent are above the age of 60.

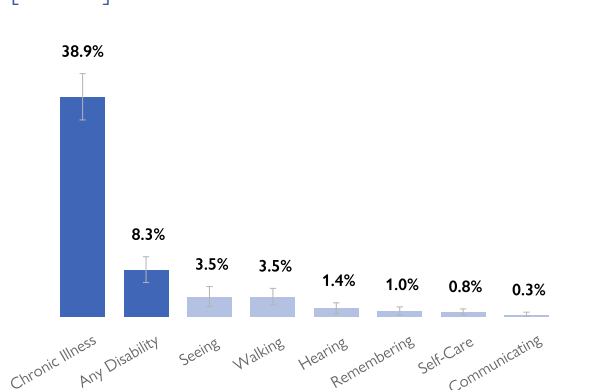
Among all households, 38.9 (±3.3) per cent of households have at least one member with a chronic illness, and 8.3 (±2.3) per cent report to have at least one member with a disability, as measured by the [Washington Group Short Set](#) questions. In comparison to figures from previous assessments and national estimates of the prevalence of persons with disabilities², these figures should be treated as an estimation of the lower bound of the real prevalence.



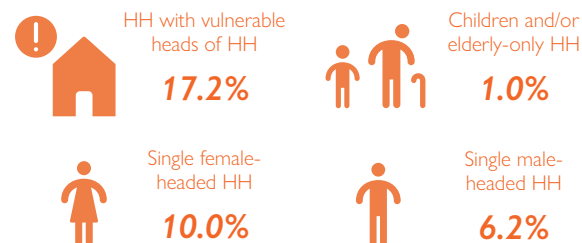
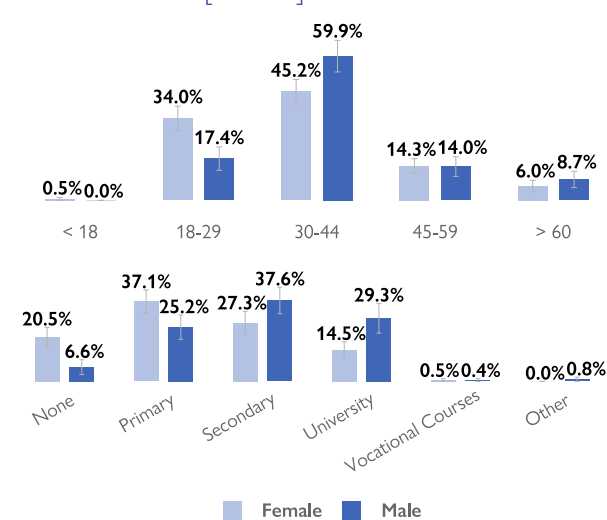
% INDIVIDUALS BY AGE GROUP AND GENDER [N IND. = 4,916; N HH = 620³]



% HH WITH A MEMBER WITH A DISABILITY OR CHRONIC ILLNESS [N = 628]



% MALE AND FEMALE-HEADED HH BY AGE AND EDUCATION LEVEL OF HH HEAD [N = 628]



% HH BY NATIONALITY [N = 628]

NATIONALITY	%	LL	UL
South Sudan	93.6%	91.7%	95.6%
Mixed Foreign	4.0%	2.4%	5.5%
Unknown	1.1%	0.2%	2.0%
Uganda	0.8%	0.1%	1.5%
Sudan	0.5%	0.0%	1.0%

1 One head of household does not specify their gender.
 2 The [2022 Humanitarian Needs Overview](#) applies a standard rate of 15 per cent for their sectoral and inter-sectoral analysis.
 3 Eight households were excluded from the breakdown due to household size anomalies.

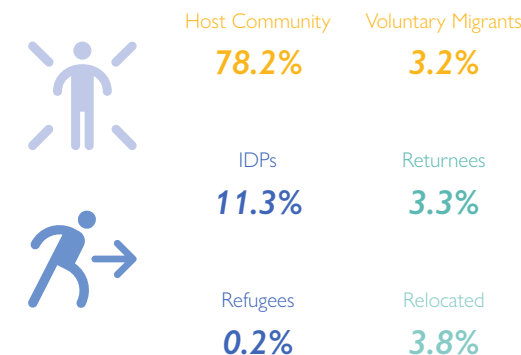
Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Displacement and Migration

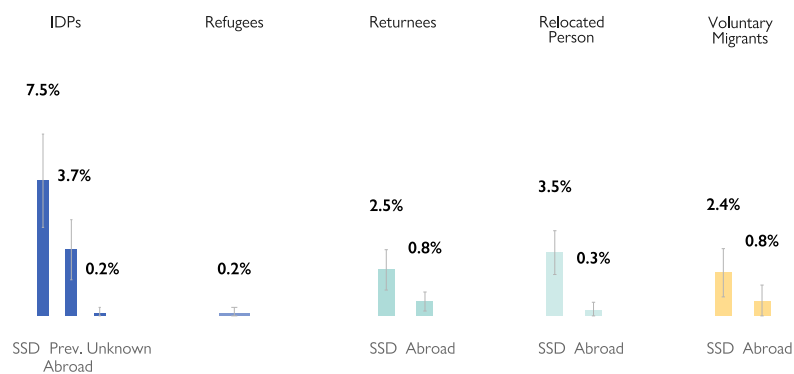
Displaced households come mostly from within Central Equatoria (39.1% ±13.4% of IDP HH), with Juba, Yei and Lainya being the most prominent counties. Significant numbers also come from Upper Nile (12.5% ±7.5%; mainly Malakal) and Jonglei (12.5% ±8.8%; mainly Bor South and Pibor). The main reason for displacement is personal insecurity due to generalized violence (52.1% ±13.0%) after natural disaster destroying their homes (11.3% ±8.9%).

For returned and relocated households, key drivers are improvement of security (46.7% ±14.0%), resolution of communal clashes (33.3% ±12.1%) and access to work and livelihoods (24.4% ±11.4%). Over two thirds of these households (68.9% ±15.0%) are satisfied with their decision to return or relocate, and 26.7 (±14.7) per cent are not satisfied but will remain in their location.

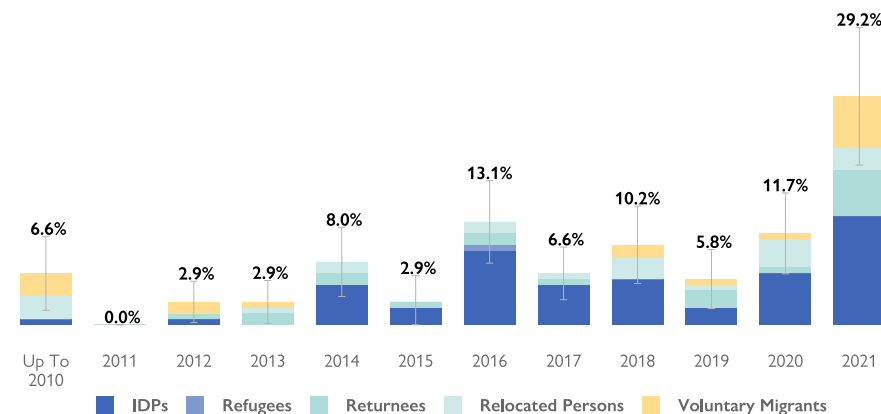
While the largest proportion of IDPs intends to return to their area of habitual residence (42.3% ±10.7%), a substantial proportion anticipates to either remain in their current location (31.0% ±12.5%) or relocate to a different location (2.8% ±3.8%) in the next two years. A fifth of surveyed households are unsure of their plans. Of the displaced households intending to return, 83.3 (±14.0) per cent do not know when exactly to return. Indicatively, 17.8 (±11.1) per cent of returned or relocated households have not reached their final destination where they intend to settle.



% HH BY DISPLACEMENT OR MIGRATION STATUS [N = 628]¹



% HH BY YEAR OF ARRIVAL AND DISPLACEMENT OR MIGRATION STATUS [N = 628]



% IDP HH BY MAIN REASON FOR MOST RECENT DISPLACEMENT (TOP 5) [N = 71]

REASON	%	LL	UL
Personal Insecurity (Generalized)	52.1%	39.1%	65.2%
Natural Disaster Destroyed Home	11.3%	3.3%	19.2%
Conflict / No Access To Livelihoods	8.5%	2.5%	14.4%
Personal Insecurity (Targeted)	8.5%	3.1%	13.8%
Other	7.0%	1.2%	12.9%

% IDP HH BY MAIN REASON NOT INTENDING TO RETURN WITHIN THE NEXT TWO YEARS (TOP 5) [N = 68]

BARRIER	%	LL	UL
Insecurity In Area Of Return (AOR)	59.4%	47.9%	70.9%
No Means	29.7%	19.1%	40.3%
House / Land Destroyed	26.6%	15.8%	37.3%
Lack Of Services In AOR	14.1%	4.5%	23.6%
Lack Of Livelihoods In AOR	14.1%	6.3%	21.8%



1 N for sub-groups: HC n = 491; IDPs n = 71, Refugees n = 1; Returnees n = 21, Relocated persons n = 24, Voluntary migrants n = 20.

Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

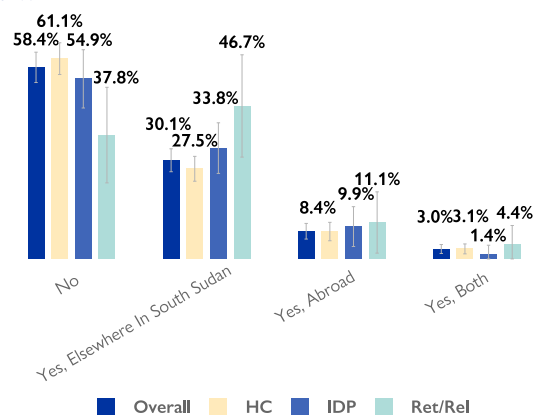
About two in five households (58.4% ±4.6%) have close family members living elsewhere in South Sudan (30.1% ±3.5%), abroad (8.4% ±2.4%) or both (3.0% ±1.4%). 28.0 (± 3.9) per cent of households have children living elsewhere, mostly to attend studies (32.8% ±7.5%) or due to marriage (28.9% ±5.4%).

Only one in five households (21.8% ±4.4%) possesses identification documents for all their members. In 67.8 (±4.7) per cent of households some members have IDs, and in 8.6 (±3.0) per cent none of the members do. Displaced (and indicatively, returned and relocated) households are more likely to lack IDs compared to host community households (18.3% ±10.3% vs 6.9% ±2.4%). Of the households who have children, only 29.4 (±4.7) per cent have access to birth notifications for all their children, 40.0 (±4.7) per cent for some children and 24.8 (±4.2) per cent for none of their children.

More than one in five households have experienced challenges in the 12 months preceding the assessment affecting their ability to travel safely within South Sudan (16.9% ±3.0%), abroad (2.5% ±1.4%) or both (1.4% ±0.8%). Households facing challenges cite insecurity due to conflict (45.8% ±9.9%), insecurity due to crime (45.0% ±9.4%) and increase in cost (31.3% ±7.7%) as the main reasons. Respondents also note climate-related challenges (34.4% ±8.3%) – including flooding and impassable roads during the rainy season – and COVID-19 restrictions (11.5% ±5.6%).



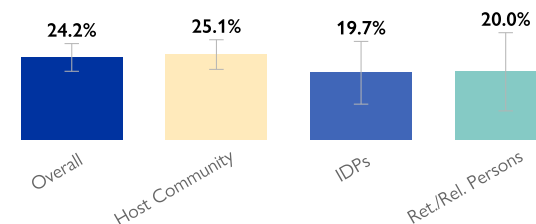
% SUB-GROUP HH WITH CLOSE FAMILY CURRENTLY LIVING ELSEWHERE



% HH WITH CHILDREN LIVING ELSEWHERE BY REASON [N = 180]

REASON	%	LL	UL
Attend Studies	33.0%	25.4%	40.5%
Married	28.4%	23.1%	33.7%
Visit Family Elsewhere	22.7%	16.4%	29.0%
Sent To Relatives	21.6%	15.8%	27.4%
Seek Employment	15.3%	10.1%	20.6%
Missing (Left And No News)	4.0%	0.8%	7.2%
Other	3.4%	0.5%	6.4%
Joined Army / Armed Groups	0.6%	0.0%	1.7%
Kidnapped	0.6%	0.0%	1.7%

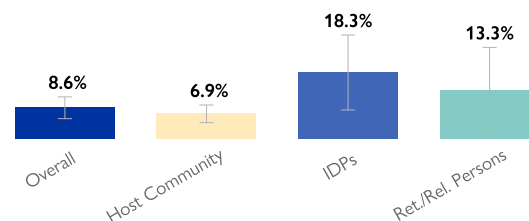
% SUB-GROUP HH WITH CHILDREN WITHOUT ACCESS TO BIRTH NOTIFICATIONS FOR ALL CHILDREN



% HH WITH ADULT FAMILY MEMBERS LIVING ELSEWHERE BY REASON (TOP 5) [N = 231]

REASON	%	LL	UL
Join Family / Relatives	38.1%	30.9%	45.2%
Looking For Work	23.9%	18.6%	29.1%
Education	13.7%	8.5%	18.9%
Displaced By Insecurity	10.6%	7.1%	14.2%
Looking For A Different Lifestyle	2.7%	0.7%	4.6%

% SUB-GROUP HH WITHOUT ACCESS TO VALID IDENTITY DOCUMENTATION FOR ALL MEMBERS



% HH FACING TRAVEL CHALLENGES (INTERNAL AND ABROAD) IN THE PAST 12 MONTHS BY CHALLENGE (TOP 5) [N = 131]

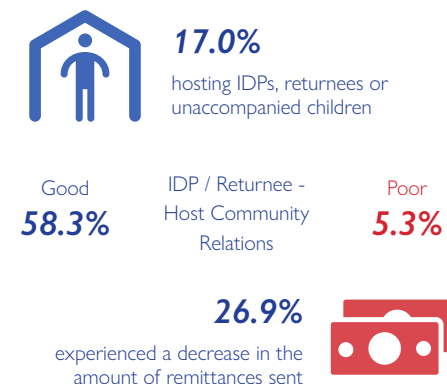
CHALLENGE	%	LL	UL
Insecurity Due To Conflict	45.8%	35.9%	55.7%
Insecurity Due To Crime	45.0%	35.6%	54.5%
Increase In Cost	31.3%	23.6%	39.0%
Roads Impassable	23.7%	15.6%	31.7%
Flooding	13.0%	6.8%	19.2%

Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Community-driven Assistance

Overall, 17.0 (±2.8) per cent of households host IDPs (8.1% ±2.1%), returnees (6.8% ±2.2%) or unaccompanied, separated or orphaned children (11.9% ±2.7%). IDP households (39.4% ±11.9%) are significantly more likely to host individuals compared to host community (13.4% ±2.7%) or returned or relocated (15.6% ±10.0%), underlining the increased burden on households in displacement. Over two thirds of households hosting others are worried that they may have to stop hosting some or all of them over the next three months while they still need support (69.2% ±9.8%), indicatively citing high costs and a lack of space as the main reasons.

In the 12 months preceding the assessment, more households were sending remittances to support friends or relatives living elsewhere (16.6% ±3.1%) than households receiving remittances (7.5% ±1.9%). Most households sending remittances did not see any changes in the amounts they sent in the past six months (52.9% ±7.4%) although 17.3 (±6.2) per cent note a slight decrease and 9.6 (±6.0) per cent a substantial decrease in the amount. Indicatively, households receiving remittances are more likely to report a decrease in the amount received in the past six months, with 27.6 (±12.6) per cent noting a slight and 17.0 (±11.7) percent a significant decrease in the amount. Indicatively, returned or relocated households were more likely to send remittances than host community or displaced households.



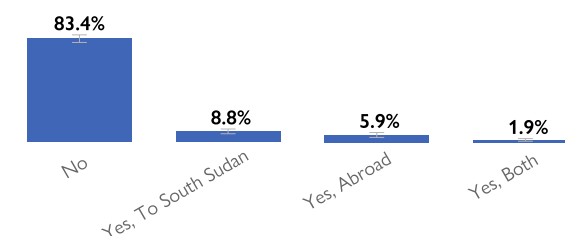
% HH BY HOSTING IDPS, RETURNEES OR UNACCOMPANIED / SEPARATED CHILDREN [N = 628]

HOSTING	%	LL	UL
Any individuals	17.0%	14.2%	19.9%
IDPs	8.1%	6.0%	10.3%
Returnees	6.8%	4.7%	9.0%
Unaccompanied children	11.9%	9.2%	14.6%

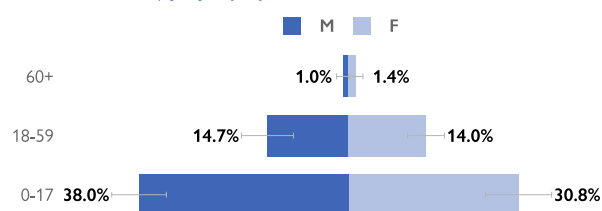
% HH WORRIED ABOUT STOPPING HOSTING INDIVIDUALS IN THE NEXT THREE MONTHS BY REASON [N = 66]

REASON	%	LL	UL
No Longer Able To Bear The Cost	93.6%	91.7%	95.6%
Not Enough Space	4.0%	2.4%	5.5%
Too Ill To Continue Hosting	1.1%	0.2%	2.0%

% HH SENDING REMITTANCES TO SUPPORT FRIENDS / RELATIVES IN LAST 12 MONTHS [N = 628]

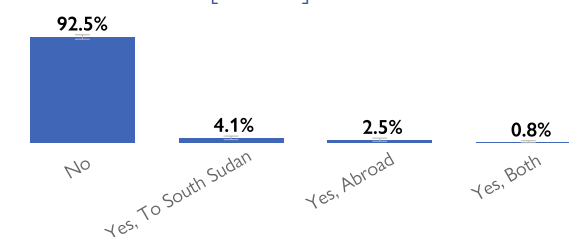


% HOSTED INDIVIDUALS BY AGE AND GENDER [N HH = 102; N IND = 292]



Sending remittances **16.6%** Receiving remittances **7.5%**

% HH RECEIVING REMITTANCES TO SUPPORT FRIENDS / RELATIVES IN LAST 12 MONTHS [N = 628]



% HH SENDING REMITTANCES TO SUPPORT FRIENDS / RELATIVES BY CHANGE IN AMOUNT IN LAST SIX MONTHS [N = 104]

CHANGE	%	LL	UL
Increased Slightly	13.5%	7.0%	19.9%
Increased Substantially	3.8%	0.1%	7.6%
Same	52.9%	45.5%	60.3%
Decreased Slightly	17.3%	11.1%	23.6%
Decreased Substantially	9.6%	3.6%	15.6%
Not Applicable	2.9%	0.0%	6.0%

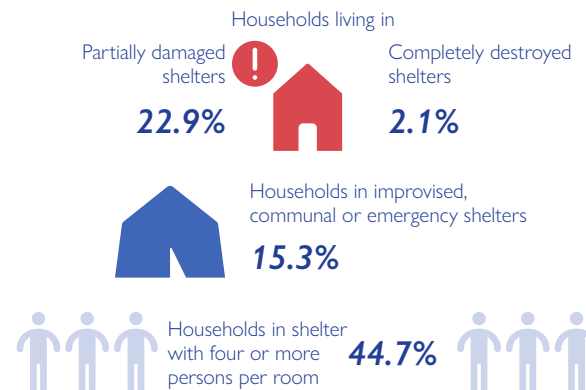
Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Shelter and Non-Food Items

Two in five households (40.0% ±5.8%) live in shacks built with local materials (rakooba), while 22.5 (±4.1) per cent live in permanent semi/concrete buildings and 21.8 (±4.9) per cent live in traditional mud huts with thatched roofs (tukuls). Among those most in need, 14.3 (±3.9) per cent live in improvised shelters and 1.0 (±0.8) per cent in communal shelters, community buildings or emergency shelters provided by humanitarian partners. Overall, a quarter of all households (25.0% ±4.0%) lives in partially damaged or destroyed shelters. Displaced households are more likely to live in partially or completely damaged shelters (40.8% ±11.5%) than host community households (23.2% ±4.3%).

26.6 (±5.1) per cent of households are involved in open disputes relating to their current housing and/or property, although the sensitivity of this issue in the context of South Sudan may result in under-reporting. Indicatively, the most common issues leading to open disputes are disputed ownership (13.7% ±4.6%). Over a quarter of affected households did not answer how they attempted to resolve these disputes, while 35.6 (±5.6) per cent report that they did not take any action. Only 12.1 (±3.7) per cent report using formal dispute resolution mechanisms.

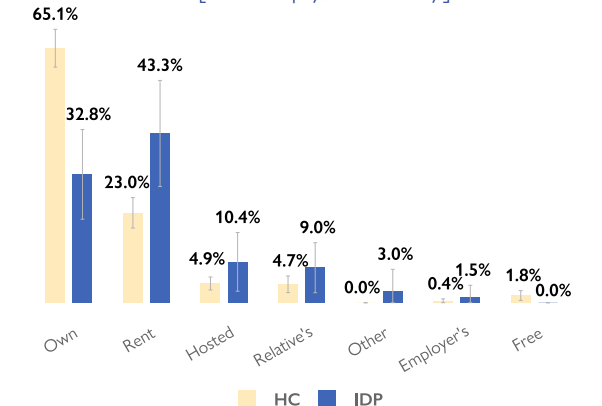
16.4 (±3.5) per cent of households live in shelters made of only one room. 25.3 (±4.5) per cent do not have security risk mitigation measures (such as doors, locks or lighting) in place.



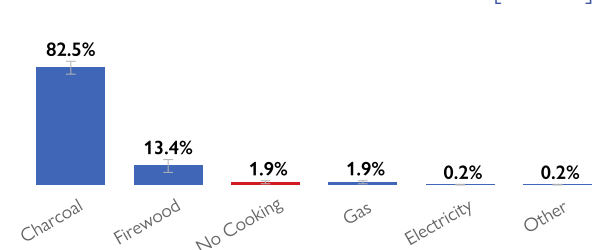
% HH BY SHELTER TYPE [N = 628]

SHELTER TYPE	%	LL	UL
Rakooba	40.0%	34.2%	45.8%
Permanent Semi/Concrete Building	22.5%	18.4%	26.5%
Tukul	21.8%	16.9%	26.7%
Improvised Shelter	14.3%	10.4%	18.2%
Communal Shelter	0.5%	0.0%	1.0%
Other	0.5%	0.0%	1.2%
Emergency Shelter By UN/NGO	0.3%	0.0%	0.9%
Community Building (Church, School, Etc.)	0.2%	0.0%	0.5%

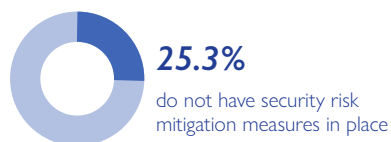
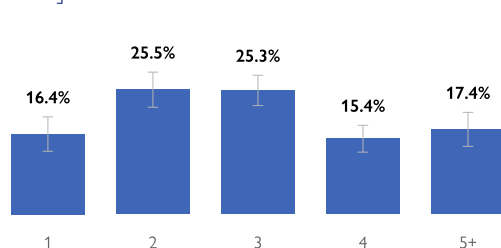
% HC AND IDP HH LIVING IN INDIVIDUAL SHELTERS BY OWNERSHIP STATUS [HC N = 487; IDP N = 67]



% HH BY MAIN SOURCE OF ENERGY FOR COOKING [N = 628]



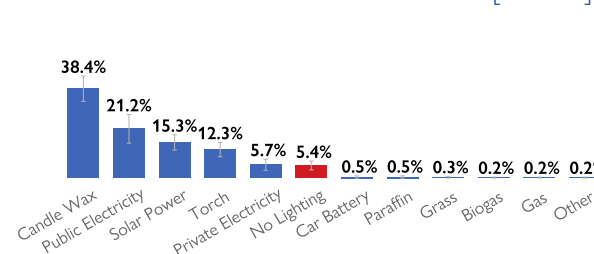
% HH BY NUMBER OF ROOMS / PARTITIONED SPACES IN SHELTER [N = 628]



HLP DISPUTE INVOLVEMENT



% HH BY MAIN SOURCE OF ENERGY FOR LIGHTING [N = 628]



1 Damaged include those reported as "partially damaged" and "completely destroyed".

Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Education

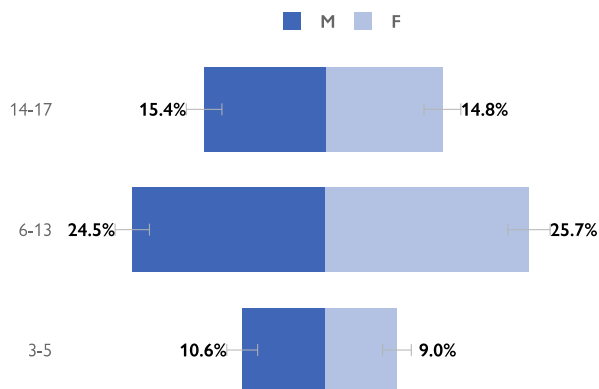
With an attendance rate of 52.1 (±3.2) per cent, almost half of all children did not regularly attend formal school in the current school year (2021-2022), defined as attending an institution within a system of full-time education developed by and overseen by the National Ministry of Education. 13.8 (±2.3) per cent of children dropped out of school in the 2021-2022 school year. Comparing attendance rates between host community, IDP and returnee households, displaced and returned households are slightly less likely to have children attending school. However, the difference is not statistically significant.

The top barrier that boys and girls face to accessing education are financial issues (55.1% ±5.1% for boys; 52.5% ±4.4% for girls). Notably, 6.1 (±2.1) per cent of households also indicate that marriage and/or pregnancy are one of the top three barriers to girls. More than a third of households (34.1% ±4.6%) report that it takes between 30 minutes and 1 hour by foot to reach the nearest functional education facility, while 24.4 (±4.2) per cent report that they travel more than an hour by foot.

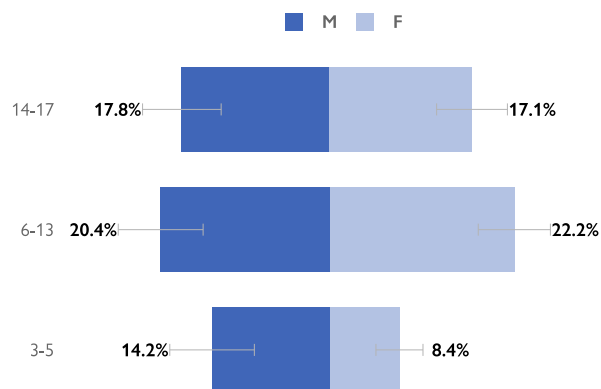
Estimates of attendance and dropout rates were calculated based on the total number of children reported in the household demographics section.



% CHILDREN ATTENDING SCHOOL FOR THE PAST SCHOOL YEAR BY AGE AND GENDER [N IND = 1,077]



% CHILDREN HAVING DROPPED OUT OF SCHOOL IN THE PAST SCHOOL YEAR BY AGE AND GENDER [N IND = 275]



Financial Issues
52.5% (Girls)
55.1% (Boys)



Distance
11.5% (Girls)
12.3% (Boys)

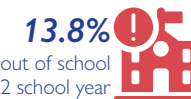


Closure due to COVID-19
8.9% (Girls)
10.2% (Boys)

Top barriers to education girls and boys face



47.9% of children did not attend formal school in the 2021-2022 school year



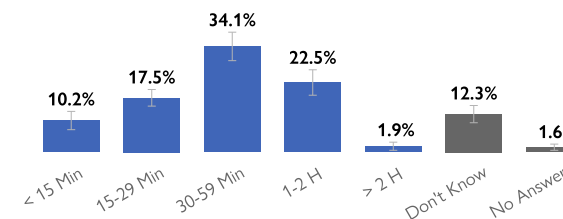
13.8% of children dropped out of school in the 2021-2022 school year



19.6% of households received training in the past 12 mo.

Top trainings:
Vocational Business Skills

% HH BY WALKING DISTANCE TO NEAREST FUNCTIONAL EDUCATION FACILITY [N = 628]



% HH RECEIVING TRAINING IN THE LAST 12 MONTHS BY TYPE OF TRAINING [N = 123]

TRAINING	%	LL	UL
Vocational Training	45.5%	36.5%	54.6%
Business Skills Training	22.8%	14.4%	31.1%
Other	10.6%	1.4%	19.8%
Nutrition	8.1%	4.1%	12.2%
Agriculture	7.3%	2.7%	11.9%
Childcare	4.1%	0.0%	8.2%
Functional Adult Literacy (FAL)	1.6%	0.0%	3.9%

Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Water, Sanitation and Hygiene (WASH)

Overall, 85.2 (± 3.6) per cent lack access to a safe and timely water source¹, with host community households indicatively faring worse than other sub-groups. This is mostly driven by the fact that the main water source for households is bought water from tanks or trucks (71.0% ±6.6%), as only 8.8 (±2.8) per cent of households need more than half an hour to collect water. 93.5 (±2.0) per cent of households do not have sufficient amounts of water, defined as 15 liters per household member per day.

The main water sources for households are bought water from tanks or trucks (71.0% ±6.6%) and deep boreholes or protected wells (14.8% ±4.6%). Most households do not treat their water (69.4% ±4.8%), while 17.7 (±4.1) per cent use chlorine. 16.3 (±4.3) per cent report having felt unsafe collecting water from their main water source in the two weeks prior to the interview, with IDP households indicatively being more likely to be affected (22.9% ±10.5%).

The survey did not include questions about the cost of water but asked about the change in the price experienced by households in the past six months. Nearly three in five households (59.9% ±5.6%) report that the price of water has increased, with 12.6 (±3.2) per cent reporting a substantial increase.



85.2%

lack access to a safe and timely water source

23.1%

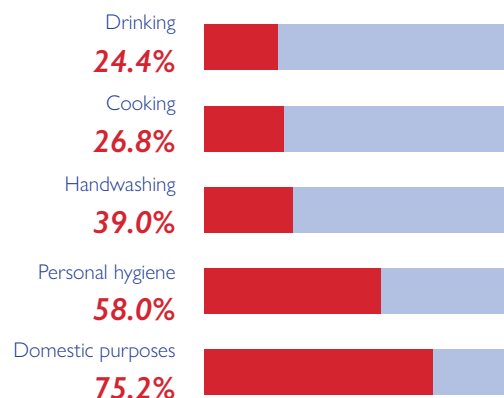
cannot meet any of their water needs



Main drinking water source:

BOUGHT WATER FROM TANK / TRUCK

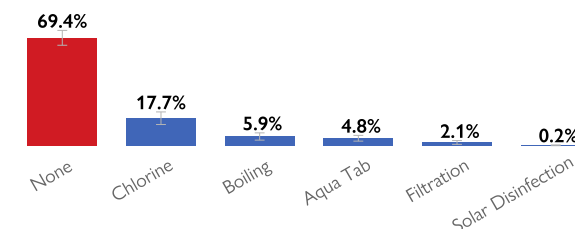
Households not having enough water to meet needs:



% SUB-GROUP HH WITH ACCESS TO SAFE AND TIMELY WATER

GROUP	N	%	LL	UL
Overall	628	14.8%	11.2%	18.4%
Female HoH	385	14.5%	10.1%	19.0%
Male HoH	242	15.3%	10.4%	20.2%
Host Community	491	13.4%	9.6%	17.3%
IDPs	71	19.7%	9.5%	30.0%
Ret./Rel. Persons	45	17.8%	6.0%	29.6%

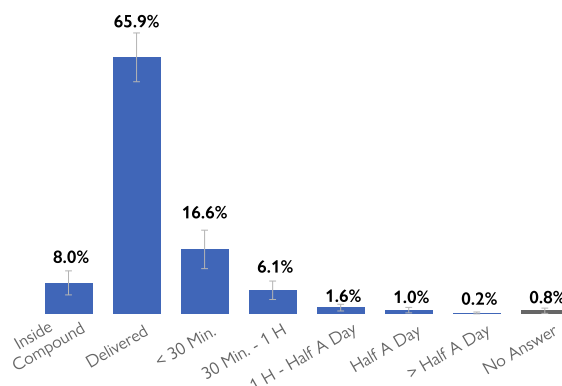
% HH BY MOST COMMON WATER TREATMENT [N = 628]



% HH BY MAIN SOURCE OF DRINKING WATER [N = 628]

SOURCE	%	LL	UL
Buy Water From Tank / Truck	71.0%	64.4%	77.6%
Deep Borehole / Protected Well	14.8%	10.2%	19.4%
Public Tap Serving (>5 HH)	4.0%	1.9%	6.1%
Bottled Water	3.0%	1.5%	4.5%
Tap Stand Serving (<5 HH)	2.2%	1.1%	3.4%

% HH BY TIME TAKEN TO COLLECT WATER [N = 628]



% SUB-GROUP HH FEELING UNSAFE COLLECTING WATER

GROUP	N	%	LL	UL
Overall	628	16.3%	12.0%	20.5%
Female HoH	385	17.7%	12.7%	22.7%
Male HoH	242	14.0%	8.9%	19.2%
Host Community	491	15.3%	10.4%	20.2%
IDPs	71	22.9%	12.4%	33.3%
Ret./Rel. Persons	45	17.8%	5.6%	29.9%

¹ "Access to safe and timely water" is fulfilled by the following criteria: the main water source is either deep borehole / protected well, tapstand serving no more than five households, public tapstand serving more than five households, bottled water or piped water into the house; households do not feel unsafe when collecting water; and households need less than 30 minutes to collect water.

Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

63.9 (±4.6) per cent of households do not have access to basic WASH NFIs, including at least two jerrycans in good conditions and soap. 16.1 (±3.9) per cent of households do not have solid, liquid or powder soap at home. Of the households without soap, more than two thirds (69.4% ±10.3%) state that they cannot afford soap or detergent.

Most households (79.3% ±3.5%) report that women use sanitary pads in dealing with menstruation. 1.9 (±1.2) per cent report that women use nothing.

The majority (78.3% ±5.7%) reports having access to family latrines, with traditional or open pits being the most common (44.9% ±5.2%). 3.5 (±1.8) per cent rely on buckets, bushes or open spaces for defecation. Indicatively, displaced households are more likely to lack access to a toilet. Of households with children under 5, over half (52.5% ±6.0%) indicate that children use household latrines although about a quarter (24.6% ±4.3%) states that their children defecate openly.

For disposing waste, most households burn their solid waste (71.2% ±5.1%) while 8.3 (±3.0) per cent discard theirs in rivers, canals or drainages.

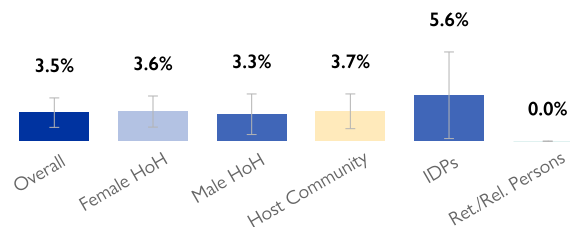
63.9%
of households do not have access to WASH NFI

Households not using soap **16.1%**

Main reason for not using soap **CANNOT AFFORD IT**

Main female hygiene product: **SANITARY PADS**

% SUB-GROUP HH WITHOUT A TOILET



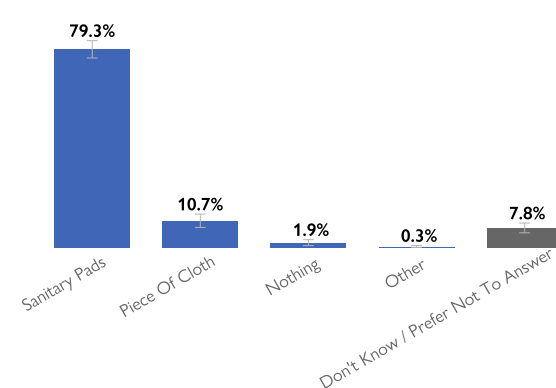
% HH BY TIMES WHEN THEY USUALLY WASH HANDS [N = 628]

TIMING	%	LL	UL
Before Eating	96.5%	94.8%	98.2%
After Defecation	80.4%	77.0%	83.8%
Before Cooking	74.2%	70.3%	78.2%
Before Breastfeeding	27.3%	23.6%	31.1%
Before Feeding Children	20.1%	15.9%	24.4%
After Handling A Child's Stool	16.7%	13.1%	20.3%
After Interacting With People	7.2%	4.5%	9.8%
After Coughing / Sneezing	6.2%	4.3%	8.1%
Other	0.0%	0.0%	0.0%
No Answer	0.5%	0.0%	1.2%

% HH BY WASTE DISPOSAL LOCATION [N = 628]

LOCATION	%	LL	UL
Burn	71.2%	66.1%	76.3%
River / Canal / Drainage	8.3%	5.3%	11.2%
Garbage Pit	6.5%	3.7%	9.3%
Solid Waste Truck Collection	6.1%	3.4%	8.7%
On The Street	5.3%	3.2%	7.3%
Garbage Bin	2.7%	1.3%	4.1%

% HH BY PRODUCT/MEASURE FOR DEALING WITH MENSTRUATION [N = 628]



% HH BY ACCESS TO SANITATION [N = 628]

LOCATION	%	LL	UL
Family Latrine - Traditional Pit Latrine / Open Pit	44.9%	39.7%	50.1%
Family Latrine - Improved Pit Latrines With Concrete Slab	17.0%	13.0%	21.1%
Family Latrine - Water-seal / Pour-flush Latrine	16.4%	12.2%	20.6%
Communal Latrine - Traditional Pit Latrine / Open Pit	9.4%	5.5%	13.3%
Communal Latrine - Water-seal / Pour-flush Latrine	5.9%	3.6%	8.2%
No Toilet / Bush / Open Space	3.3%	1.6%	5.1%
Communal Latrine - Improved Pit Latrines With Concrete Slab	2.1%	0.9%	3.2%
Other	0.8%	0.1%	1.5%
Bucket	0.2%	0.0%	0.5%

Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Healthcare and COVID-19

Two thirds of households (64.3% ±4.0%) had a health problem and needed to access healthcare in the past three months, of which most were unable to do so (70.6% ±4.4%). Indicatively, female-headed households are more likely to lack access to healthcare compared to male-headed households (72.3% ±4.9% vs 68.0% ±9.4%). Of the households that could access health care, 44.1 (±7.3) per cent needed more than one hour by foot to reach the nearest functional health facility. This highlights the difficulty of households to access timely health services when they need them.

Among households with unmet healthcare needs, the main barriers to access are unaffordable treatment costs (54.0% ±7.1%), unaffordable consultation costs (36.6% ±7.2%) and required services being unavailable (26.6% ±6.1%). 22.3 (±3.5) per cent have attempted to access ante-natal care services.

While most households aware of COVID-19 know that washing hands with soap is a prevention measure against the transmission of COVID-19 (97.3% ±1.6%), only 69.1 (±4.9) per cent know of using hand sanitizer frequently and 61.1 (±3.7) per cent of avoiding contact with sick people. Less than half know of other preventive measures, such as staying at home, social distancing or using masks, and only 1.1 (±0.9) per cent know of vaccination.

Experienced health issues in past 3 mo.

64.3%



Needing care who were unable to access

70.6%

Accessed ante-natal care services

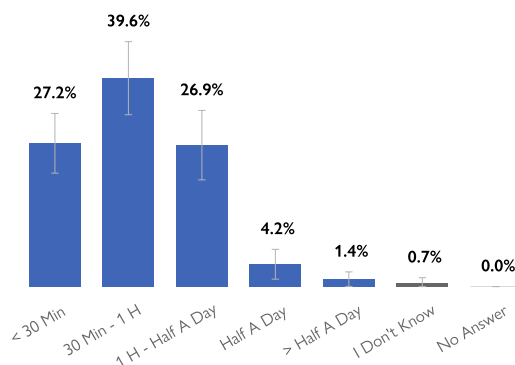
22.3%



Ante-natal care services not available

1.0%

% HH BY WALKING DISTANCE TO NEAREST FUNCTIONAL HEALTH FACILITY [N = 628]



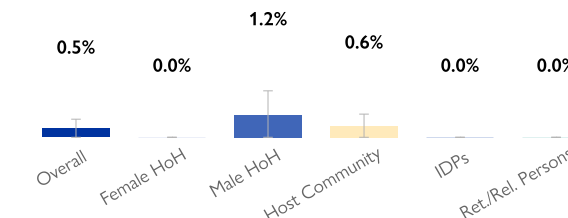
% SUB-GROUP HH WITH HEALTH ISSUES UNABLE TO ACCESS HEALTH CARE WHEN NEEDED IN THE PAST THREE MONTHS

GROUP	N	%	LL	UL
Overall	404	70.5%	66.2%	74.9%
Female HoH	256	72.3%	67.1%	77.4%
Male HoH	147	68.0%	58.6%	77.4%
Host Community	308	70.5%	65.3%	75.6%
IDPs	57	73.7%	62.2%	85.1%
Ret./Rel. Persons	27	70.4%	52.1%	88.7%

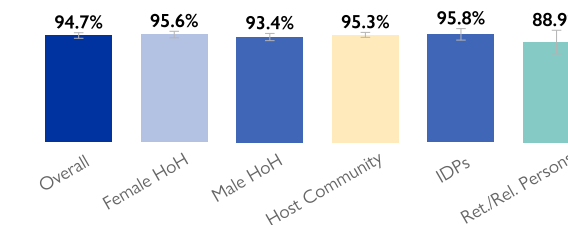
% HH WITH UNMET HEALTH CARE NEEDS BY BARRIER TO ACCESS IN THE PAST THREE MONTHS [N = 285]

BARRIER	%	LL	UL
Unaffordable Treatment Cost	54.0%	47.0%	61.1%
Unaffordable Consultation Cost	36.6%	29.4%	43.8%
Specific Service Needed Unavailable	26.6%	20.5%	32.7%
Long Waiting Time	18.0%	13.4%	22.5%
Unaffordable Transportation Cost	16.8%	12.0%	21.7%
Only Accessible At Certain Times	11.2%	7.8%	14.7%
No Functional Facility Nearby	10.6%	5.8%	15.4%
None	10.5%	6.7%	14.3%
Distance	7.4%	3.8%	10.9%
No Means Of Transport	5.6%	3.0%	8.2%
Did Not Need To Access	1.8%	0.3%	3.2%
Disability	0.7%	0.0%	1.7%
Insecurity	0.7%	0.0%	1.6%
Incorrect Medications	0.7%	0.0%	1.7%
Lack Of Staff	0.7%	0.0%	1.7%
Wait For Improvement	0.4%	0.0%	1.0%
Worried About Infection At Facility	0.4%	0.0%	1.0%
Other	0.4%	0.0%	1.0%

% SUB-GROUP HH UNAWARE OF COVID-19



% SUB-GROUP HH TAKEN ACTION AGAINST COVID-19



Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Economic Vulnerabilities and Livelihoods

Two in five households (41.9% ±5.6%) report a decrease in their income level or amount during the past six months, with 13.5 (±3.3) per cent reporting a substantial decrease. Households experiencing a decrease in income levels are more likely to be engaged in casual work or petty trading than households not experiencing a decrease (31.9% ±6.3% vs 23.8% ±3.7%). Indicatively, female-headed and displaced households were more likely to experience a decrease than male-headed and host community households.

Casual work or petty trade (27.2% ±3.6%), skilled labor (26.4% ±3.4%) and salaried work (18.8% ±4.5%) are the top three sources of livelihoods. Indicatively, the largest proportion of displaced households report to have relied on own agricultural production prior to displacement, most of whom had to adapt to the urban environment and reskilled to engage in casual work or petty trading.

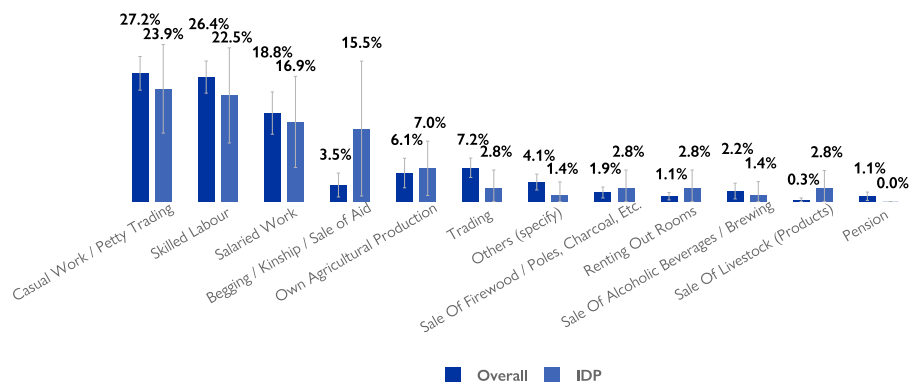
Overall, 44.6 (±4.8) per cent of households have experienced difficulties or shocks in the six months prior to the assessment. Female-headed households are significantly more likely to be affected than male-headed households (49.1% ±4.9% vs 37.2% ±5.5%).



Top economic shocks experienced in the past 6 mo.

- Unusually high food prices**
- Unusually high non-food prices**
- Loss / reduced employment**

% HH BY MOST IMPORTANT ACTIVITY FOR GETTING FOOD AND INCOME IN LAST THREE MONTHS [N = 628; IDP N = 71]



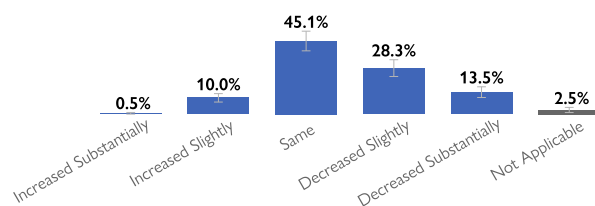
Most important livelihood activity pre-displacement:

- Petty Trading **16.8%**
- Salaried Work **16.8%**
- Own Agricultural Production **13.1%**

% HH BY ASSETS OWNED (TOP 15) [N = 628]

ASSET	%	LL	UL
Bed	90.9%	87.2%	94.7%
Mattress	88.4%	85.0%	91.8%
Chairs	87.3%	84.4%	90.1%
Kitchen Utensils	81.7%	78.6%	84.8%
Phone	72.6%	67.8%	77.4%
Tables	68.2%	63.2%	73.1%
Sleeping Mat	63.9%	59.4%	68.3%
Mosquito Net	54.6%	50.0%	59.3%
Stove	40.8%	35.3%	46.3%
Radio	37.1%	33.0%	41.2%
Blanket	28.5%	24.7%	32.3%
Mask For COVID-19	27.5%	22.8%	32.3%
TV	23.6%	18.5%	28.6%
Flat Iron	22.3%	16.9%	27.7%
Lighting Tools	18.3%	14.5%	22.1%

% HH BY INCOME LEVEL CHANGE DURING THE PAST SIX MONTHS [N = 628]



% HH BY DIFFICULTIES OR SHOCKS EXPERIENCED IN PAST SIX MONTHS (TOP 5) [N = 628]

SHOCK	%	LL	UL
No Shock Experienced	55.4%	50.6%	60.3%
Unusually High Food Prices	22.0%	17.5%	26.5%
Unusually High Non-food Prices	8.8%	5.2%	12.3%
Loss Or Reduced Employment	6.4%	4.5%	8.3%
Currency Fluctuations	5.6%	3.3%	7.8%

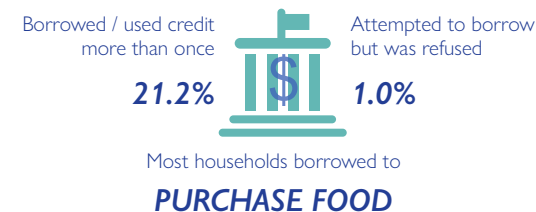
Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

28.8 (±3.7) per cent of households spend at least 65 per cent of their total household expenditure on food alone in the past three months while 19.7 (±3.5) per cent spend over 65 per cent of their expenditure on cereals and pulses only on average per month – these households are particularly vulnerable to market shocks. 7.0 (±2.3) per cent of households use over three quarters of their expenditure on food. High to very high expenditure (over 65%) on food affects male-headed households significantly more than female-headed households (35.1% ±5.2% vs 24.7% ±5.2%).

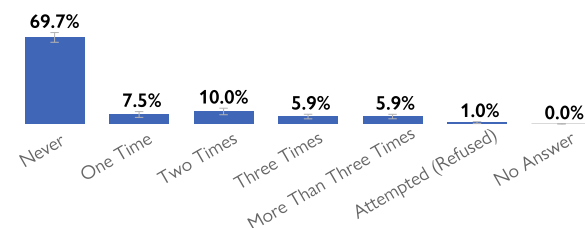
More than half of all households (54.0% ±4.9%) need to walk over 30 minutes to their nearest operational marketplace or grocery store, with 16.4 (±3.5) per cent needing more than one hour. Indicatively, female-headed households are slightly more likely to need more than 30 minutes compared to male-headed households (55.8% ±6.3% vs 51.2% ±6.7%), highlighting the potential risks women can face during long travels for essential daily activities.

Almost three in ten households (29.5% ±3.9%) attempted to use or used credit or borrowed money in the three months prior to the assessment, with over 21.2 (±3.5) per cent having used credit or borrowed money more than once. Of these households, most did so to purchase food (55.7% ±7.1%), pay for healthcare (20.0% ±6.7%) or pay for tuition fees (17.3% ±4.6%).

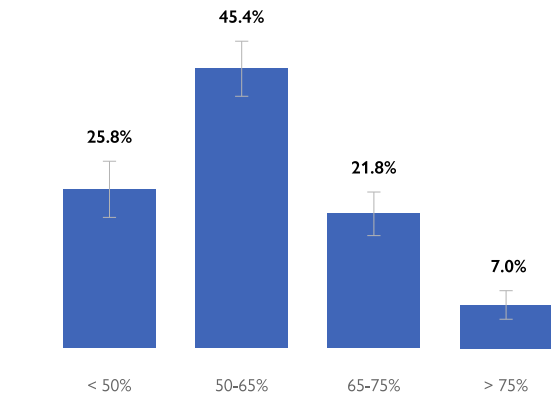
Despite living in an urban area, 14.8 (±3.5) per cent have access to land for cultivation, and 13.9 (±3.2) per cent own livestock or farm animals.



% HH BY FREQUENCY USING CREDIT OR BORROWING MONEY IN THE LAST THREE MONTHS [N = 628]



% HH BY PROPORTION OF EXPENDITURE GOING TO FOOD IN THE LAST THREE MONTHS [N = 628]



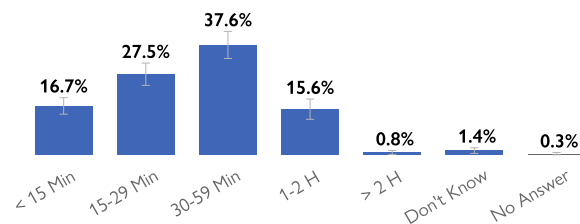
% HH BY CHALLENGES EXPERIENCED DURING TRAVEL TO MARKET IN THE LAST MONTH [N = 628]

CHALLENGE	%	LL	UL
Distance	40.9%	36.1%	45.8%
Heat (Outside Temperature)	34.7%	28.7%	40.7%
None	34.1%	29.5%	38.6%
Floods	13.9%	10.3%	17.4%
Robberies / Crime	9.9%	6.2%	13.6%
Lack Of Shelter On The Way	6.5%	4.3%	8.8%
Lack Of Water / Food On The Way	2.5%	1.4%	3.7%
Children Have To Join	2.1%	0.9%	3.3%
Conflict / Violence	1.8%	0.5%	3.0%
Checkpoints	1.8%	0.6%	2.9%
Unsafe	1.4%	0.6%	2.3%
Struggle To Carry All Purchases	0.6%	0.0%	1.2%
Market Damaged / Destroyed	0.5%	0.0%	1.0%

% HH USING CREDIT OR BORROWING MONEY IN THE LAST THREE MONTHS BY REASON [N = 185]

REASON	%	LL	UL
Purchase Of Food	55.7%	48.6%	62.8%
Health Care	20.0%	13.3%	26.7%
Payment Of Tuition Fees	17.3%	12.7%	21.9%
No Answer	2.2%	0.0%	4.3%
Other	1.6%	0.0%	3.4%
Rent	1.1%	0.0%	2.6%
Investment In Business	0.5%	0.0%	1.6%
Repair Or Improve House / Shelter	0.5%	0.0%	1.6%
Livestock Purchase	0.5%	0.0%	1.6%

% HH BY WALKING DISTANCE TO NEAREST OPERATIONAL MARKET/GROCERY STORE [N = 628]



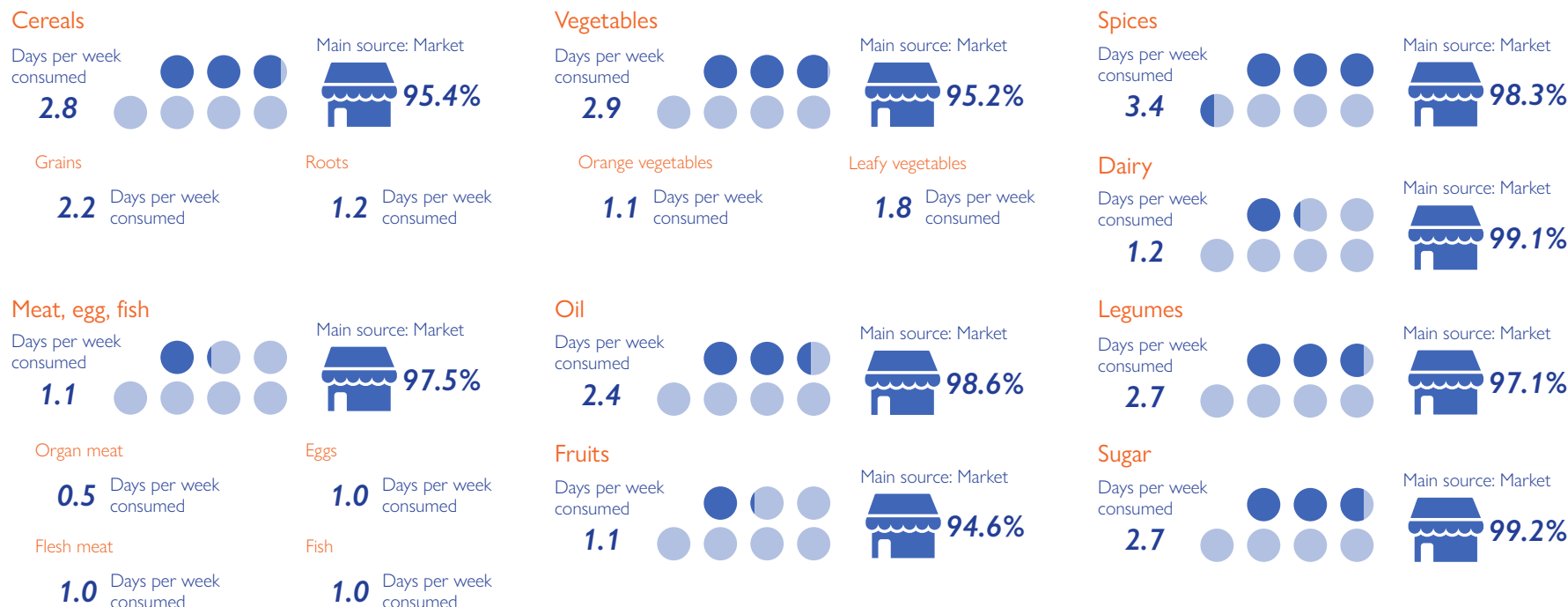
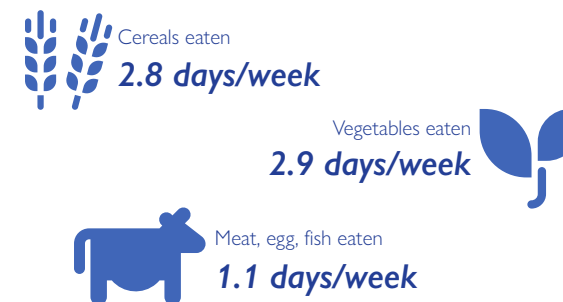
Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Food Security

On average, households consume spices on 3.4 (±0.4) days, vegetables on 2.9 (±0.2) days, cereals on 2.8 (±0.2) days, sugar on 2.7 (±0.3) days, legumes on 2.7 (± 0.1) days and oil on 2.4 (±0.3) days per week. All other food groups are consumed less than two days per week. Indicatively, male-headed household consume all food groups except for vegetables and legumes on more days than female-headed households.

Households' main source for these foods in the last seven days are markets, with very few also relying on food assistance and their own production.

The majority purchases their staple foods from the local market within the neighborhood (61.8% ±4.4%), while 16.4 (±3.3) per cent rely on markets adjacent to their neighborhood and 12.6 (±2.9) per cent do not purchase any staple foods at all. Of households that buy their staple foods, households spend the most in cash or credit on maize (flour or grain; 56.6% ±3.6%), beans (janajaro; 47.4% ±4.5%) and meat (40.4% ±5.2%).



Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

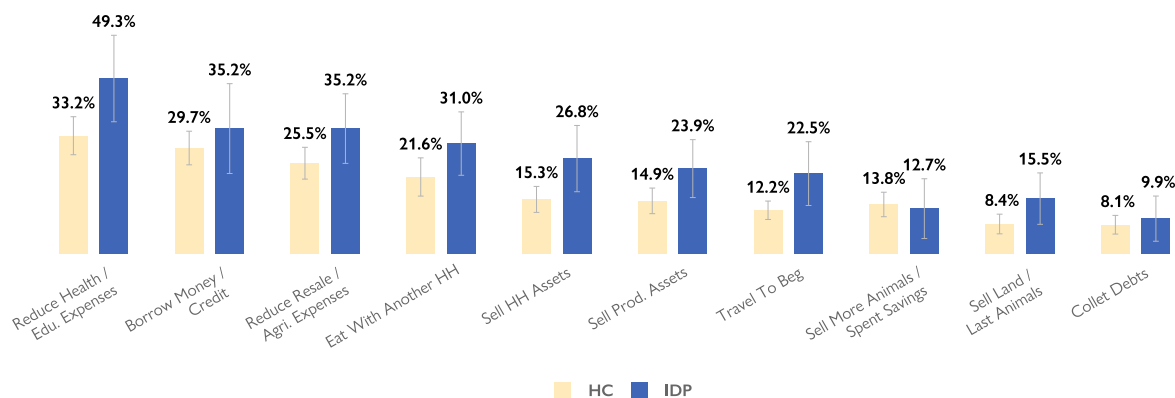
Coping Strategies

Livelihood-based coping strategies illustrate households' capacity to cope with future shocks and maintain productivity. The majority (54.1% ±4.3%) engaged in at least one type of livelihood-based coping strategy in the 30 days prior to the interview. Most report reducing health and education expenses (35.7% ±4.5%), followed by borrowing money or purchasing food on credit (30.9% ±4.5%), reducing expenses on goods for resale (26.9% ±3.9%) and sending household members to eat with another household (22.1% ±4.4%) because of a lack of food or money for food. 14.8 (±2.8) per cent indicate engaging in emergency coping, the most severe category of coping strategies.

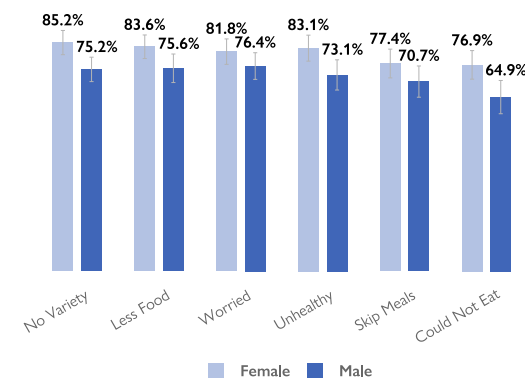
Overall, 88.4 (±3.2) per cent of households report to have used food-based coping strategies during the 12 months prior to the survey. Over 81.4 (±3.9) per cent ate only few kinds of foods while 80.6 (±4.0) per cent ate less than they thought they should because of a lack of resources to obtain food. More than two in three households (68.0% ±4.8%) went to sleep at night hungry because there was not enough food in the past 12 months, of which 85.0 (±3.7) per cent did so within four weeks prior to the interview. About three in five households (59.1% ±4.7%) went for a whole day and night without eating anything at all because there was not enough food, of which 83.8 (±3.8) per cent did so within four weeks prior to the interview.



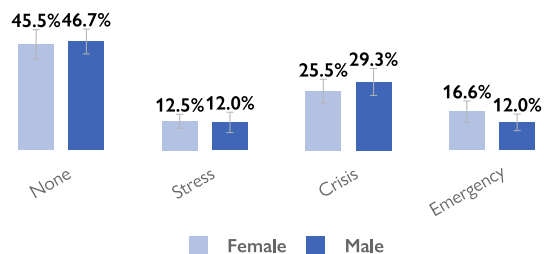
% IDP AND HC HH BY LIVELIHOOD-BASED COPING STRATEGIES IN THE PAST 30 DAYS [N = 628]



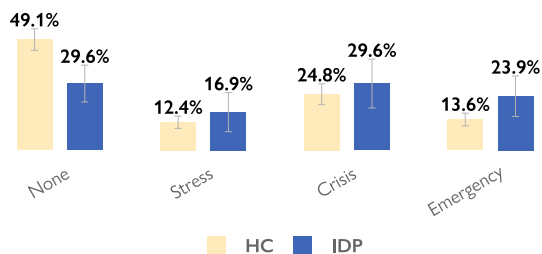
% FEMALE AND MALE-HEADED HH BY FOOD-BASED COPING STRATEGIES IN THE PAST 4 WEEKS [N = 628]



% FEMALE AND MALE-HEADED HH BY MAXIMUM LIVELIHOOD-BASED COPING STRATEGIES IN THE PAST 30 DAYS [N = 628]



% IDP AND HC HH BY MAXIMUM LIVELIHOOD-BASED COPING STRATEGIES IN THE PAST 30 DAYS [N = 628]



1 Breakdown of livelihood coping strategies by actions taken within 30 days prior to assessment due to a lack of food or money to buy food: **Stress coping strategies:** sent household members to eat with another household, sold more animals than usual for this time of the year or spent savings, borrowed money or purchased food on credit more than usual during this time of year, sold household assets / goods; **Crisis coping strategies:** reduced expenses on goods for resale or on business / petty trade or agricultural inputs, reduced expenses on health and education, sold productive assets or means of transport; **Emergency coping strategies:** sold house or land or sold or slaughtered the last of their cows and goats, traveled back to the village / out of town to look for / search for (begging) food or other resources, used community leaders or local court to collect debts or bride wealth / dowry or engaged in illegal income activities.

Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Communication and Social Cohesion

Radio is the most common main source of information of households (41.7% ±3.8%) followed by word of mouth (29.9% ±4.3%). 87.1 (±3.8) per cent of households have at least one member owning a functioning mobile phone that is reliably charged, with adult women (71.8% ±3.7%) and men (65.4% ±4.7%) being the most likely owners.

Although only 17.7 (±3.1) per cent of households have members who participate in social groups, the majority (81.2% ±4.5%) feels welcomed and accepted in their current community. Indicatively, displaced households are less likely to feel welcome or accepted in their community (69.0% ±12.2%) compared to host community (81.5% ±4.7%) or returned or relocated households (91.1% ±8.3%). Of the households that participate in social groups, over four in five (84.7% ±6.4%) report that women are members while only one in five (21.6% ±7.5%) report that men are members.

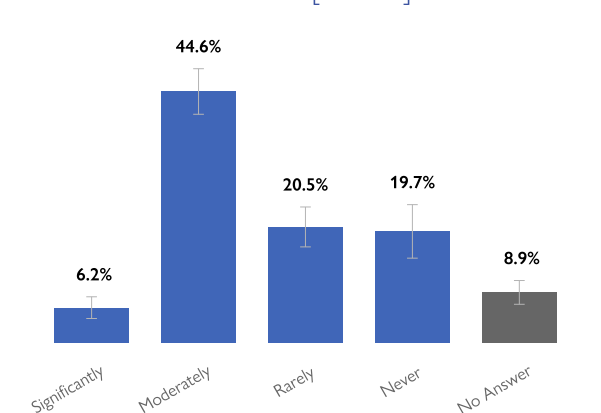
Most households report that women are either significantly involved (6.2% ±1.9%) or moderately involved (44.6% ±4.0%) in community decision-making. 19.7 (±4.8) per cent state that women never partake in decision-making.



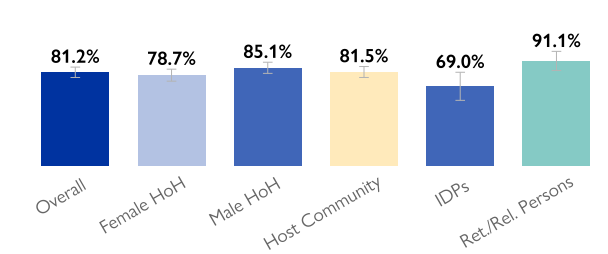
% HH BY MAIN SOURCE OF INFORMATION [N = 628]

SOURCE	%	LL	UL
Radio	41.7%	37.9%	45.6%
Word Of Mouth	29.9%	25.7%	34.2%
Television	8.9%	6.1%	11.8%
Social Media	5.9%	3.7%	8.1%
Public Announcements	4.8%	2.8%	6.8%
Church Authorities	2.7%	1.5%	3.9%
Local Authorities	2.7%	1.3%	4.1%
Online News / Websites	1.3%	0.4%	2.2%
Other	1.0%	0.1%	1.8%
Newspapers	0.6%	0.0%	1.2%

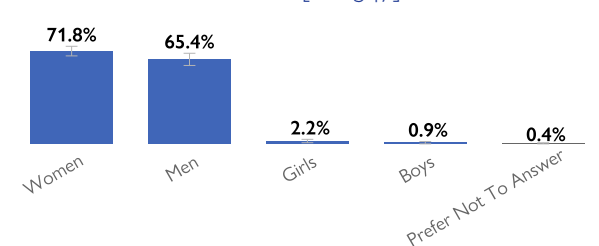
% HH BY EXTENT TO WHICH WOMEN ARE INVOLVED IN COMMUNITY DECISION-MAKING [N = 628]



% SUB-GROUP HH FEELING INTEGRATED AND WELCOME IN CURRENT COMMUNITY



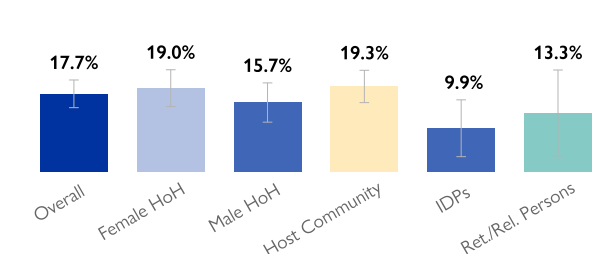
% HH WITH MOBILE PHONES BY MAIN OWNER OF FUNCTIONAL AND CHARGED MOBILE PHONE [N = 547]



% HH BY EXTENT TO WHICH FEEL WELCOMED IN CURRENT COMMUNITY [N = 628]

FEELING INTEGRATED	%	LL	UL
A Lot	33.1%	29.0%	37.3%
Moderately	48.1%	43.5%	52.7%
A Little	5.9%	3.6%	8.2%
Not At All	10.7%	8.0%	13.4%
No Answer	2.2%	0.7%	3.7%

% SUB-GROUP HH INVOLVED IN SOCIAL GROUPS



Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Protection

Over one in five households (22.6% ±4.5%) state that they are not aware of any protection services in their area.¹ While most households (67.0% ±5.2%) are aware of police services being available, only very few (less than 3%) are aware of any other protection services related to GBV, child protection, housing land and property, and others. 8.8 (±2.8) per cent report to have been affected by a safety or security incident in the past month, with male household members being more likely to be affected than female members (78.2% ±10.2% vs 67.3% ±14.1% of affected HH).

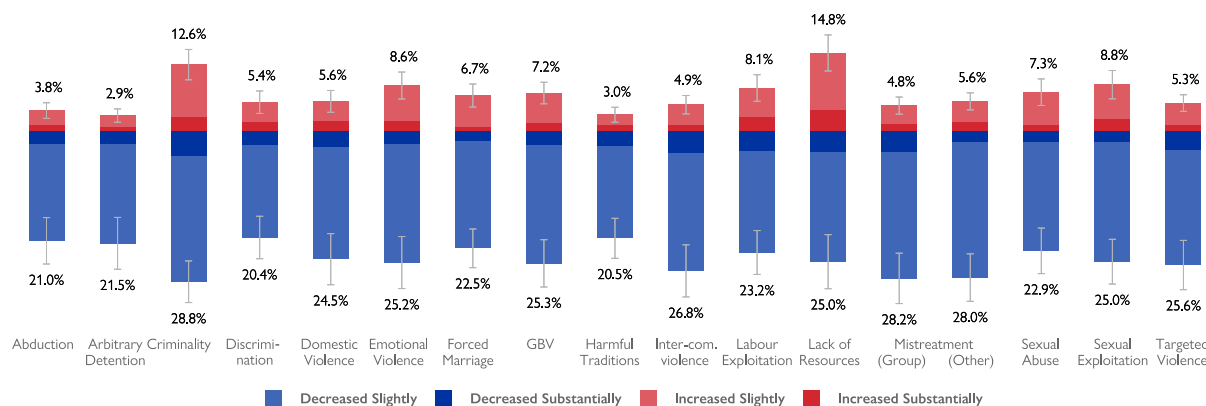
Households cite harmful traditional practices (29.5% ±4.8%), criminality, extortion or gang-related violence (28.3% ±4.1%), domestic violence (17.2% ±3.2%) and discrimination (17.2% ±3.3%) as the most serious protection concerns in their community at the time of assessment. The top concerns differ between the genders of the head of household. Female-headed households are more likely to view harmful traditional practices, lack of resources, discrimination, domestic violence, forced marriage and sexual exploitation as serious concerns while male-headed households are more likely to report targeted, domestic, inter-communal and emotional violence as serious concerns.



Top three protection issues of serious concern:



% HH BY CHANGE IN LIKELIHOOD OR FREQUENCY OF PROTECTION ISSUES IN COMMUNITY OVER THE PAST SIX MONTHS [N = 628]



% HH WITH TRAVEL OFFER IN THE PAST THREE MONTHS BY MEMBER RECEIVING OFFER [N = 23]

MEMBER	%	LL	UL
Men	56.5%	35.4%	77.6%
Girls	21.7%	6.1%	37.3%
Women	17.4%	2.7%	32.1%
Boys	17.4%	0.7%	34.1%
No Answer	0.0%	0.0%	0.0%

% HH BY AWARENESS OF AVAILABLE PROTECTION SERVICES IN AREA (TOP 5) [N = 628]

SERVICE	%	LL	UL
Police	67.0%	61.8%	72.3%
None	22.6%	18.1%	27.1%
Referrals	2.9%	1.4%	4.3%
Legal Aid (HLP)	2.5%	1.0%	4.1%
Health Services (GBV)	2.1%	0.9%	3.3%

% HH BY CURRENT PROTECTION ISSUES THAT CAUSE SERIOUS CONCERN (TOP 5) [N = 628]

CONCERN	%	LL	UL
Harmful Traditions	29.5%	24.7%	34.2%
Criminality	28.3%	24.3%	32.4%
Domestic Violence	17.2%	14.0%	20.4%
Discrimination	17.2%	13.9%	20.5%
Lack Of Resources	16.6%	13.0%	20.1%

% SUB-GROUP HH AFFECTED BY A SECURITY INCIDENT IN THE LAST 30 DAYS

GROUP	N	%	LL	UL
Overall	628	8.8%	6.0%	11.5%
Female HoH	385	9.4%	5.7%	13.0%
Male HoH	242	7.9%	4.3%	11.4%
Host Community	491	9.8%	6.4%	13.1%
IDPs	71	4.2%	0.0%	8.8%
Ret./Rel. Persons	45	8.9%	0.8%	17.0%

¹ This question was posed to all respondents, regardless of potential protection services needs.

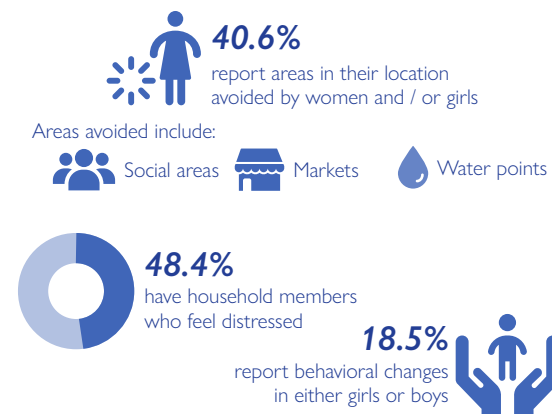
Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Two in five households (40.6% ±5.1%) report that there are areas in their location that women and / or girls avoid because they feel unsafe. The main areas avoided are social areas (18.0% ±4.7%), markets (14.8% ±4.3%) and water points (10.0% ±2.9%), underlining the challenges women face when conducting daily, essential tasks.

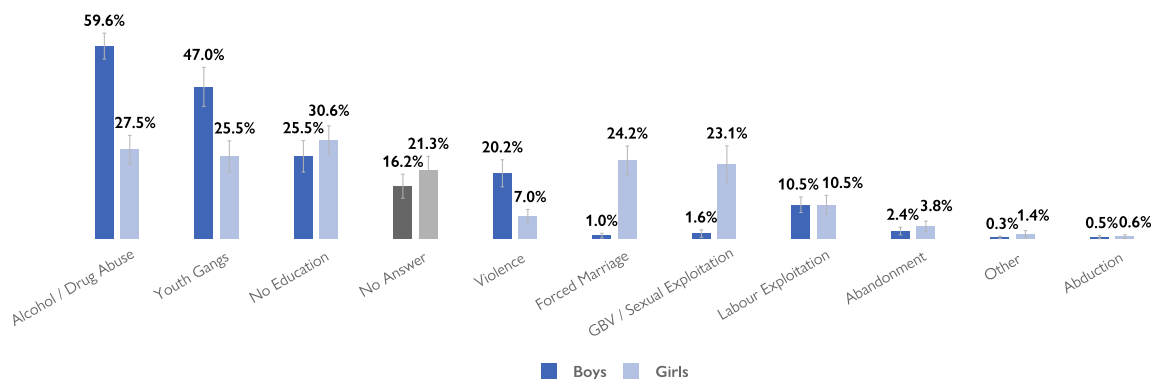
Almost half of all households (48.4% ±4.8%) include at least one member who feels distressed to the extent that they have a lot of difficulty to work or perform daily routine activities. Indicatively, displaced and returned and relocated households experience above-average levels of psychological distress.

Households report boys and girls to be most at risk to substance abuse (59.6% ±4.0% for boys and 27.5% ±4.4% for girls), involvement in youth gangs (47.0% ±6.0% and 25.5% ±4.8%) and lack of access to education (25.5% ±4.9% and 30.6% ±4.3%). In addition, they see girls particularly at risk of forced or arranged marriage (24.2% ±4.5%) and GBV or sexual exploitation (23.1% ±5.6%).

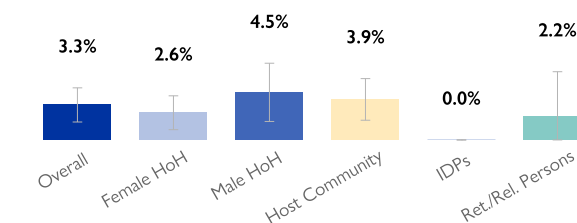
18.5 (±3.7) per cent of households report seeing behavioral changes in their children during the month before the assessment, with households being slightly more likely to see changes in boys than girls (17.4% ±3.6% vs 13.5% ±3.6%). The most common behavioral changes are disrespectful behavior in the family (6.5% ±1.8% for girls and 10.4% ±2.6% for boys), substance abuse (2.7% ±1.7%) and having nightmares (2.5% ±2.0%) for girls, and committing crimes (4.6% ±2.0%) and more aggressive behavior (4.0% ±2.0%) for boys.



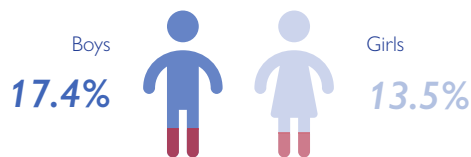
% HH BY PERCEIVED BIGGEST RISKS CHILDREN UNDER 18 ARE EXPOSED TO IN COMMUNITY [N = 628]



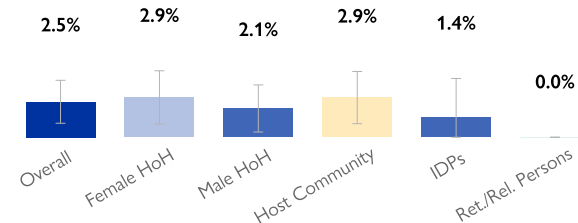
% SUB-GROUP HH OBSERVING THREE OR MORE BEHAVIORAL CHANGES IN BOYS IN THE LAST MONTH



% HH OBSERVING BEHAVIORAL CHANGES IN CHILDREN IN THE LAST MONTH



% SUB-GROUP HH OBSERVING THREE OR MORE BEHAVIORAL CHANGES IN GIRLS IN THE LAST MONTH



% SUB-GROUP HH WITH HH MEMBERS FEELING DISTRESSED

GROUP	N	%	LL	UL
Overall	628	48.4%	43.6%	53.2%
Female HoH	385	46.5%	40.8%	52.2%
Male HoH	242	51.2%	44.0%	58.5%
Host Community	491	45.4%	40.0%	50.8%
IDPs	71	63.4%	52.2%	74.5%
Ret./Rel. Persons	45	57.8%	42.0%	73.6%

Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Humanitarian Assistance

During the three months preceding the assessment, 4.9 (±2.5) per cent of households received some form of humanitarian assistance, most of them receiving general food for all (22.6% ±14.7%) and cash for work or training (22.6% ±15.0%). 4.5 (±2.3) per cent report to be dependent on humanitarian services to cover basic needs such as food, WASH, health and education.

More than seven in ten households (71.0% ±3.6%) indicate that they do not receive adequate information about the different available humanitarian services. Displaced and returned or relocated households are more likely to lack this information than host community households (81.7% ±11.8% and 80.0% ±12.5% vs 68.8% ±4.5%). The large discrepancy between the shares of households obtaining and access to information about humanitarian assistance indicates that many households in need of assistance are not receiving any.

As top priority needs for their household, respondents name food (79.9% ±4.4%), shelter or housing (68.2% ±4.6%), healthcare (42.4% ±4.2%) and education (33.0% ±3.9%).



Most accessed assistance / basic service in last 3 months

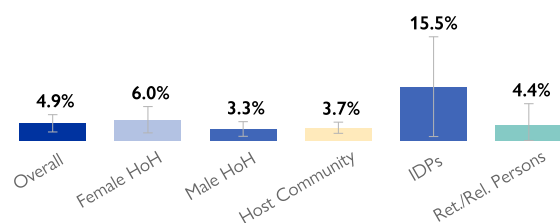
GENERAL FOOD



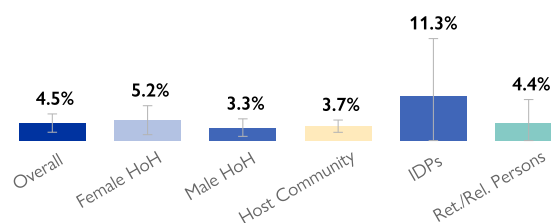
In the last 6 months, access to humanitarian services / basic needs has generally

INCREASED

% SUB-GROUP HH RECEIVING HUMANITARIAN ASSISTANCE IN THE PAST THREE MONTHS



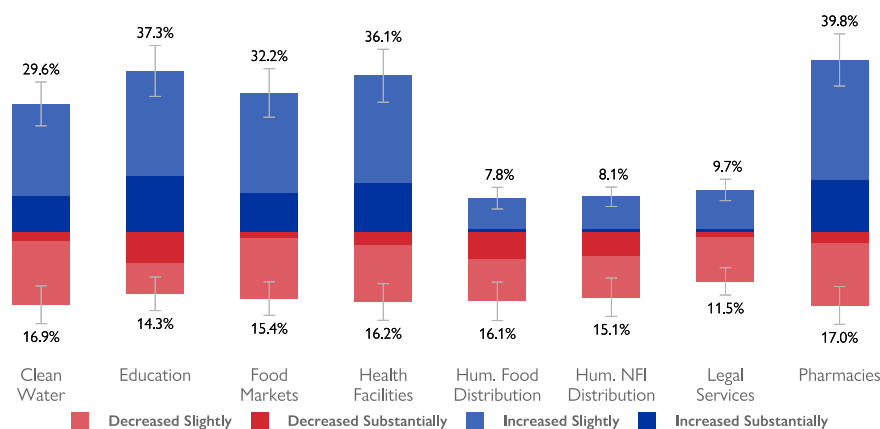
% SUB-GROUP HH DEPENDENT ON HUMANITARIAN SERVICES TO COVER BASIC NEEDS



% HH WHO HAVE ACCESSED ASSISTANCE OR BASIC SERVICES IN THE PAST THREE MONTHS BY TYPE [N = 31]

ASSISTANCE	%	LL	UL
General Food For All	22.6%	7.8%	37.3%
Cash For Work / Cash For Training	22.6%	5.6%	39.6%
Other	19.4%	4.6%	34.1%
Unconditional Cash / Voucher Transfer	9.7%	0.0%	24.7%
Food For Assets	6.5%	0.0%	13.4%
Nutrition	6.5%	0.0%	13.0%
Agricultural Inputs	6.5%	0.0%	15.0%
Agricultural Tools	6.5%	0.0%	15.0%
Food For School Children	3.2%	0.0%	9.5%
School Fees / Uniforms	3.2%	0.0%	9.7%
Shelter Material	3.2%	0.0%	9.7%
WASH Materials	3.2%	0.0%	8.2%
Health / Medicines	0.0%	0.0%	0.0%

% HH BY CHANGE IN ABILITY TO ACCESS HUMANITARIAN OR BASIC SERVICES OVER THE PAST SIX MONTHS [N = 628]



Note: The error bars and LL/UL columns in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

Urban Vulnerability Index and Intersectoral Analysis

The Urban Vulnerability Index (UVI) uses Principal Component Analysis (PCA) – a dimensionality reduction technique. In this usage, PCA aggregates and simplifies the various component indicators into a single index that reflects the greatest variation in needs and vulnerability. The technique weights more highly indicators for which the data displays greater variance, and weights lower on indicators for which we see little variation. The computed weights of the indicators are used to calculate the vulnerability score of each assessed household, ranging from 0 to 100 (maximum vulnerability).

Overall, the largest proportion of households fall in the third range (41% - 60% or medium vulnerability) of the UVI (35.4% of HH), closely followed by the fourth range (61% - 80% or high vulnerability; 32.0% of HH). As the population's most vulnerable category, one in ten households fall into the highest range (81% - 100% or maximum vulnerability; 9.2% of HH). Comparing different sub-groups, female-headed households tend to score higher on the UVI than male-headed households, with a higher proportion of households falling into the two highest ranges (46.0% of which 10.9% in the maximum vulnerability class, vs 33.9% of which 6.6% in the in the maximum vulnerability class). Although these interpretations are only indicative due to the small sample size by population sub-group, the UVI indicates that displaced, returned, relocated and voluntarily migrated households fare worse than host community households. Displaced households stand out with over 26.8 per cent in the maximum range compared to the proportions of other sub-groups in the same range, which span from 6.1 to 19.0 per cent.

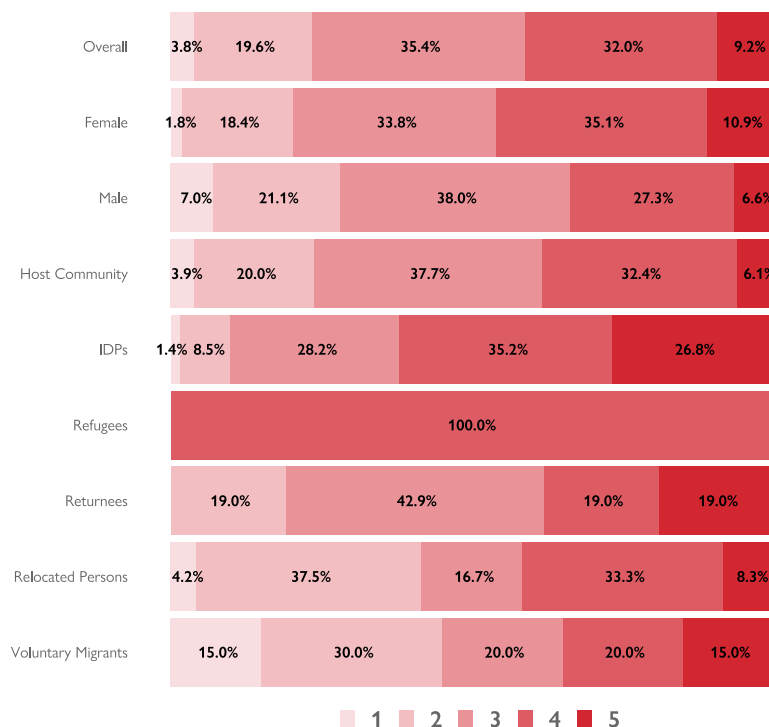
UVI Indicators with largest weights:

Sufficient Water
48.6%

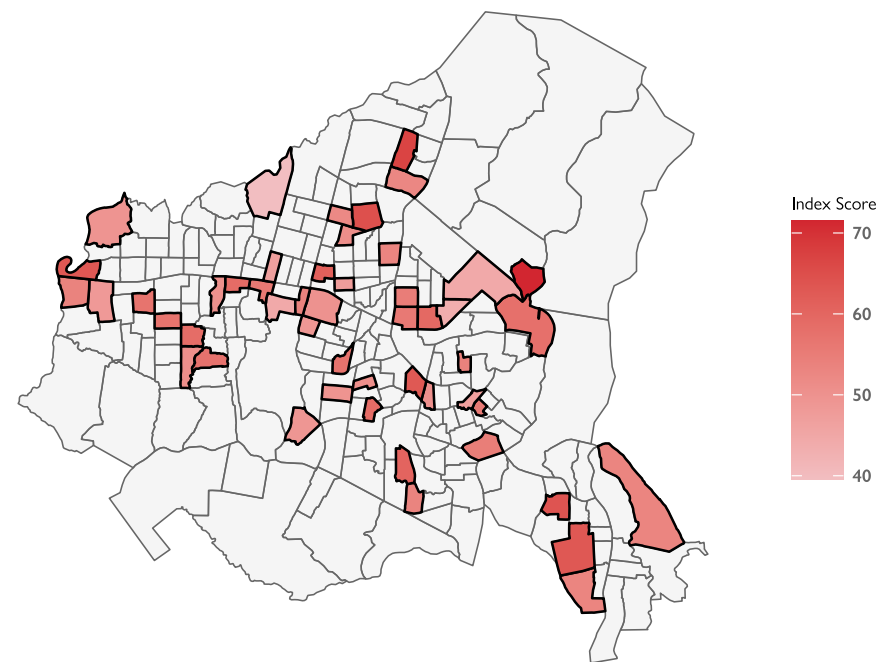
Safe and Timely Water
46.8%

Hunger
34.1%

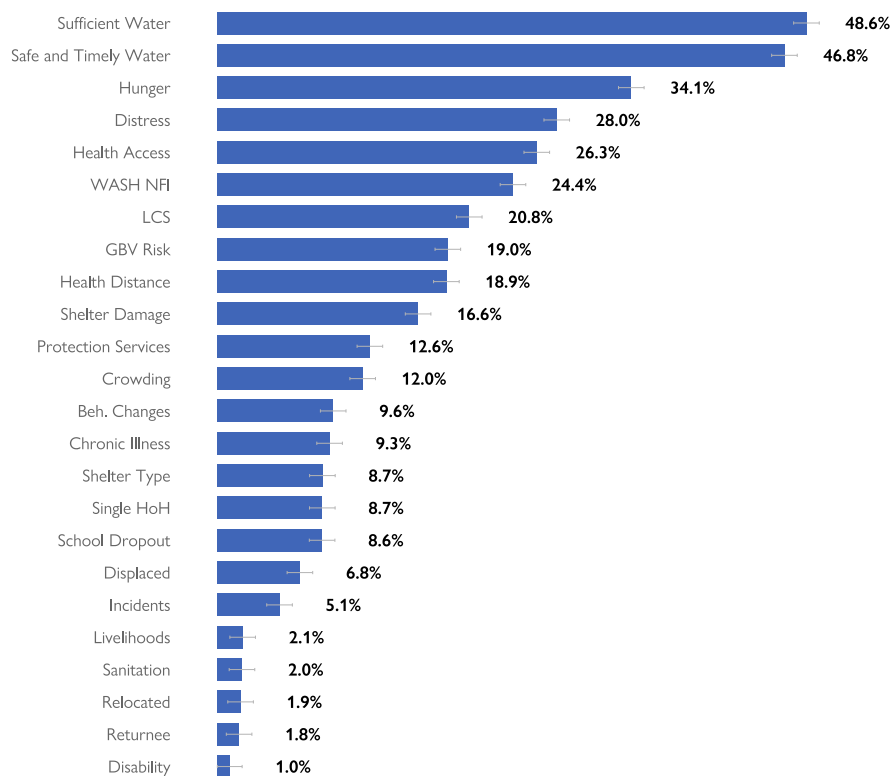
% HH BY VULNERABILITY INDEX SCORE RANGE (MINIMUM TO MAXIMUM) BY SUB-GROUP



AVERAGE INDEX SCORE BY ASSESSED ENUMERATION AREA IN JUBA TOWN



VULNERABILITY INDEX SCORE WEIGHT BY SELECTED INDICATORS



METHODOLOGY ANNEX I: PRINCIPAL COMPONENT ANALYSIS - IMPORTANCE OF COMPONENTS

MEASURE	PC ₁	PC ₂	PC ₃	PC ₄	PC ₅	PC ₆	PC ₇	PC ₈
Standard deviation	18.816	5.382	5.193	4.910	4.614	4.390	4.160	3.858
Proportion of Variance	0.584	0.048	0.044	0.040	0.035	0.032	0.029	0.025
Cumulative Proportion	0.584	0.632	0.676	0.716	0.751	0.783	0.812	0.836

METHODOLOGY ANNEX II: PRINCIPAL COMPONENT ANALYSIS - INDICATOR DEFINITIONS

INDICATOR	SCORE RANGE
<i>Household Vulnerabilities</i>	
Displaced household	0 - 1
Returned household	0 - 1
Relocated household	0 - 1
Single-headed household or elderly / children-only household	0 - 1
Number of household members with a disability	0 - Inf
Number of household members with a chronic illness	0 - Inf
<i>SNFI</i>	
Shelter damage	0 - 3
Number of persons in most crowded room	1 - Inf
Shelter type	0 - 2
<i>Education</i>	
Number of children in household having dropped out of school	0 - Inf
<i>WASH</i>	
Access to safe and timely water	0 - 1
Access to sufficient water	0 - 1
Access to latrines	0 - 1
Access to WASH NFIs	0 - 1
<i>Health</i>	
Access to health facility when needed	0 - 1
Availability of health facility within 30 min. walking distance	0 - 1
<i>Protection</i>	
Protection services available	0 - 1
Household affected by security incident	0 - 1
Behavioral changes in children observed	0 - 1
Concerns about GBV or sexual exploitation issues	0 - 4
Households with members feeling distressed	0 - 1
<i>Food Security and Livelihoods</i>	
Begging, Kinship or Sale of Aid as main livelihood	0 - 1
Whole day and night spent hungry in last 4 weeks	0 - 1
Livelihood-based Coping Strategy employed	0 - 3

Note: All indicators were demeaned and rescaled before PCA was run.



International Organization for Migration (IOM)

The UN Migration Agency