



DTM

IOM DISPLACEMENT
TRACKING MATRIX
SOUTH SUDAN



WFP

World Food
Programme

URBAN MULTI-SECTOR NEEDS, VULNERABILITIES AND COVID-19 IMPACT SURVEY (FSNMS+)

JUBA TOWN

August – September 2020

In collaboration with:



Generously supported by funding from:



Funded by
European Union
Humanitarian Aid



USAID
FROM THE AMERICAN PEOPLE



DTM SOUTH SUDAN

 dtm.iom.int/south-sudan

 SouthSudanDTM@iom.int

Publication Date: 31 March 2021
© 2021 International Organization for Migration (IOM)

Photo (cover page):

A woman sits for a portrait at a spontaneous site for internally displaced persons in Juba on 23 June 2019.

© Alex McBride

TABLE OF CONTENTS

AIMS	7
HUMANITARIAN CONTEXT IN SOUTH SUDAN.....	7
METHODOLOGY	8
MEASURES OF COPING AND FOOD INSECURITY	9
F1. % SAMPLED HOUSEHOLDS, % ESTIMATED RESIDENTIAL BUILDINGS AND PERCENTAGE POINTS DIFFERENCE BY STRATUM [N IN TABLE]	9
POPULATION GROUPS	10
DEMOGRAPHICS AND HOUSEHOLD VULNERABILITIES	11
F2. % INDIVIDUALS BY AGE AND GENDER [N HH = 435; N IND = 3,942]	11
F3. % HOUSEHOLDS WITH A PERSON WITH DISABILITY OR WITH A CHRONIC ILLNESS BY TYPE OF DISABILITY [N = 435]	11
F4. % MALE AND FEMALE-HEADED HOUSEHOLDS BY AGE AND EDUCATION [MALE N = 118; FEMALE N = 317]	11
F5. % HOUSEHOLDS BY NATIONALITY [N = 435]	11
F6. % SINGLE-HEADED HOUSEHOLDS [N = 435]	11
DISPLACEMENT AND MIGRATION	12
F7. % HOUSEHOLDS BY DISPLACEMENT/MIGRATION STATUS [N = 435]	12
F8. % HOUSEHOLDS' ARRIVAL YEAR BY DISPLACEMENT/MIGRATION STATUS [N = 130]	12
F9. % IDP HOUSEHOLDS BY REASON FOR DISPLACEMENT [N = 62]	12
F10. % RETURNEE AND RELOCATED HOUSEHOLDS BY RETURN/RELOCATION REASON [N = 27]	12
F11. % IDP HOUSEHOLDS FACING BARRIERS TO RETURN [N = 62]	12
F12. % HOUSEHOLD MEMBERS LIVING ELSEWHERE BY AGE AND GENDER [N HH = 239; N IND = 1,602]	13
F13. % HOUSEHOLDS BY REASON FOR CHILDREN LIVING ELSEWHERE [N = 182]	13
F14. % HOUSEHOLDS POSSESSING IDS [N = 435]	13
F15. % HOUSEHOLDS NOT POSSESSING IDS BY SUB-GROUP [OVERALL N = 435; IDPS N = 62; RET./REL. N = 33]	13
F16. % HOUSEHOLDS WHO CANNOT TRAVEL DUE TO MOBILITY RESTRICTIONS BY TOP THREE TRAVEL PURPOSES [N = 427]	13
F17. % HOUSEHOLDS FACING RISKIER TRAVEL DUE TO MOBILITY RESTRICTIONS BY TOP TREE TRAVEL PURPOSES [N = 427]	13
F18. % HOUSEHOLDS FACING COSTLIER TRAVEL DUE TO MOBILITY RESTRICTIONS BY TOP THREE TRAVEL PURPOSES [N = 427]	13
F19. % HOUSEHOLDS WITH FAMILY MEMBERS STRANDED ELSEWHERE [N = 435]	13
COMMUNITY-DRIVEN ASSISTANCE	14
F20. % HOSTED INDIVIDUALS BY AGE AND GENDER [N HH = 119; N IND = 356]	14
F21. % HOUSEHOLDS BY HOSTING VULNERABLE INDIVIDUALS [N = 435]	14
F22. % HOUSEHOLDS BY PERCEPTION OF IDP/RETURNEE-HOST COMMUNITY RELATIONS [N = 435]	14
F23. % HOUSEHOLDS WORRIED THEY MAY HAVE TO STOP HOSTING WITHIN THREE MONTHS, BY REASON [N = 61]	14
F24. % HOUSEHOLDS RECEIVING AND SENDING REMITTANCES BY SUB-GROUP [N IN TABLE]	14
F25. % HOUSEHOLDS EXPERIENCING CHANGE IN REMITTANCES BY SUB-GROUP [N IN TABLE]	14

SHELTER AND NON-FOOD ITEMS	15
F26. % HOUSEHOLDS BY SHELTER TYPE [N = 435]	15
F27. % HOUSEHOLDS BY SHELTER CONDITION [N = 435]	15
F28. % HOUSEHOLDS WITH A GIVEN NUMBER OF ROOMS IN SHELTER [N = 435]	15
F29. % HOUSEHOLDS INVOLVED IN HLP DISPUTES [N = 435]	15
F30. % HOUSEHOLDS BY PROPERTY STATUS [N = 435]	15
F31. % HOUSEHOLDS BY MAXIMUM NUMBER OF PERSONS SLEEPING IN THE SAME ROOM [N = 435]	15
EDUCATION	16
F32. % CHILDREN ATTENDING SCHOOL FOR THE PAST SCHOOL YEAR BY AGE AND GENDER [N IND = 2,521]	16
F33. % CHILDREN HAVING DROPPED OUT OF SCHOOL IN THE PAST SCHOOL YEAR BY AGE AND GENDER [N IND = 2,521]	16
F34. % CHILDREN NEVER HAVING ATTENDED SCHOOL BY AGE AND GENDER [N IND = 2,521]	16
F35. % HOUSEHOLDS WITH CHILDREN BY SCHOOL ATTENDANCE AND SUB-GROUP [N IND IN TABLE]	16
WASH.....	17
F36. % HOUSEHOLDS WITH ACCESS TO SAFE AND TIMELY WATER BY SUB-GROUP [N IN TABLE]	17
F37. % HOUSEHOLDS BY WATER TREATMENT ACTIVITY [N = 435]	17
F38. % HOUSEHOLDS BY TIME SPENT COLLECTING WATER [N = 435; COMMUNAL WATER SOURCE N = 59]	17
F39. % HOUSEHOLDS FEELING UNSAFE COLLECTING WATER [N = 435]	17
F40. % HOUSEHOLDS BY MAIN WATER SOURCE [N = 435]	17
F41. % HOUSEHOLDS BY REASON FOR LACK OF SOAP [N = 109]	18
F42. % HOUSEHOLDS BY FEMALE SANITARY PRODUCT [N = 435]	18
F43. % HOUSEHOLDS BY WASTE DISPOSAL LOCATION [N = 435]	18
F44. % HOUSEHOLDS WITHOUT A TOILET BY SUB-GROUP [N IN TABLE]	18
F45. % HOUSEHOLDS BY ACCESS TO SANITATION [N = 435]	18
HEALTH	19
F46. % HOUSEHOLDS WITH A GIVEN DISTANCE TO THE CLOSEST HEALTH FACILITY [N = 435]	19
F47. % HOUSEHOLDS EXPERIENCING CHANGE IN ACCESS TO HEALTH SERVICES [N = 435]	19
F48. % MALE AND FEMALE-HEADED HOUSEHOLDS BY BARRIER TO ACCESS TO HEALTH SERVICES [MALE N = 118; FEMALE N = 317]	19
F49. % HOUSEHOLDS WITHOUT ACCESS TO HEALTH SERVICES BY SUB-GROUP [N IN TABLE]	19
COVID-19.....	20
F50. % HOUSEHOLDS RECEIVING COVID-19 MESSAGES BY CHANNEL OF COMMUNICATION ON COVID-19 [N = 430]	20
F51. % HOUSEHOLDS BY TOP PREVENTIVE MEASURES TAKEN AGAINST COVID-19 [N = 435]	20
F52. % HOUSEHOLDS BY POTENTIAL ACTIONS TAKEN IF FAMILY MEMBER SHOWED COVID-19 SYMPTOMS [N = 435]	20
F53. % HOUSEHOLDS BY LIKELIHOOD OF TARGET GROUP BEING STIGMATIZED DUE TO GETTING COVID-19 [N = 435]	20

ECONOMIC VULNERABILITIES AND LIVELIHOODS.....	21
F54. % HOUSEHOLDS BY DEGREE OF CHANGE IN INCOME [N = 435].....	21
F55. % HOUSEHOLDS BY REASONS FOR CHANGE IN INCOME [N = 321].....	21
F56. % HOUSEHOLDS BY ECONOMIC SHOCK EXPERIENCED DUE TO COVID-19 [N = 435]	21
F57. % HOUSEHOLDS BY ASSET OWNERSHIP [N = 435]	21
F58. % HOUSEHOLDS BY FREQUENCY OF USING CREDIT/BORROWING IN LAST THREE MONTHS [N = 435]	22
F59. % HOUSEHOLDS BY REASON FOR USING CREDIT/BORROWING IN LAST THREE MONTHS [N = 235]	22
F60. % HOUSEHOLDS EXPENDITURE PROPORTION ON FOOD [N = 118; FEMALE N = 317]	22
F61. % HOUSEHOLDS BY LIVELIHOOD ACTIVITY [N = 435]	22
FOOD SECURITY	23
F62. AVERAGE NUMBER OF DAYS PER WEEK CONSUMING FOOD GROUPS [N = 435]	23
F63. % HOUSEHOLDS BY FOOD CONSUMPTION GROUP [N = 435]	23
F64. % MALE AND FEMALE-HEADED HOUSEHOLDS BY FOOD CONSUMPTION [MALE N = 118; FEMALE N = 317]	23
F65. % HOUSEHOLDS BY SOURCES FOR FOOD CONSUMPTION GROUPS [N = 435]	23
F66. % HOUSEHOLDS BY HOUSEHOLD HUNGER SCALE [N = 435]	24
F67. % MALE AND FEMALE-HEADED HOUSEHOLDS BY HOUSEHOLD HUNGER SCALE [MALE N = 118; FEMALE N = 317]	24
F68. % HOUSEHOLDS BY HOUSEHOLD HUNGER SCALE AND FOOD CONSUMPTION GROUP [ACCEPTABLE N = 142; BORDERLINE N = 140; POOR N = 153]	24
F69. % HOUSEHOLDS BY HOUSEHOLD HUNGER SCALE AND USAGE OF LIVELIHOOD-BASED COPING STRATEGIES [NONE N = 120 COPING N = 315]	24
COPING STRATEGIES.....	25
F70. % HOUSEHOLDS BY REDUCED COPING STRATEGY INDEX IPC THRESHOLDS [N = 435]	25
F71. % HOUSEHOLDS BY MAXIMUM LIVELIHOOD-BASED COPING STRATEGY [N = 435]	25
F72. % HOUSEHOLDS BY COPING STRATEGIES [N = 435]	25
F73. % HOUSEHOLDS BY MAXIMUM COPING STRATEGY AND POPULATION SUB-GROUP [HC N = 305; IDP N = 62]	25
F74. % MALE AND FEMALE-HEADED HOUSEHOLDS BY MAXIMUM COPING STRATEGY [MALE N = 118; FEMALE N = 317]	25
COMMUNICATION AND SOCIAL COHESION.....	26
F75. % HOUSEHOLDS BY MAIN SOURCE OF INFORMATION [N = 435]	26
F76. % HOUSEHOLDS BY HOUSEHOLD MEMBER OWNING MOBILE PHONE [N = 435]	26
F77. % HOUSEHOLDS BY LEVEL OF FEELING INTEGRATED AND WELCOME IN THE COMMUNITY [N = 435]	26
F78. % HOUSEHOLDS INVOLVED IN SOCIAL GROUPS AND FEELING INTEGRATED AND WELCOME BY SUB-GROUP [N IN TABLE]	26
F79. % HOUSEHOLDS REPORTING WOMEN INVOLVED IN COMMUNITY AND COVID-19 DECISION-MAKING [N = 435]	26
PROTECTION	27
F80. % HOUSEHOLDS ON SERVICE AVAILABILITY [N = 435]	27
F81. % HOUSEHOLDS AFFECTED BY SAFETY OR SECURITY INCIDENT IN PAST MONTH BY SUB-GROUP [N IN TABLE]	27
F82. % HOUSEHOLDS ON SERIOUS PROTECTION CONCERNS [N = 435]	27
F83. % HOUSEHOLDS ON CHANGES IN PROTECTION CONCERN [N = 435]	27

F84. % HOUSEHOLDS BY HOUSEHOLD MEMBER BEING OFFERED TRAVEL OPPORTUNITY RESULTING IN DEBT [N = 435]	28
F85. % HOUSEHOLDS EXPERIENCING PSYCHOLOGICAL DISTRESS BY SUB-GROUP [N IN TABLE]	28
F86. % HOUSEHOLDS REPORTING AT LEAST THREE BEHAVIOURAL CHANGES BY SUB-GROUP [N IN TABLE]	28
F87. % HOUSEHOLDS EXPRESSING BEHAVIOURAL CHANGES IN CHILDREN ¹ BY GENDER [N = 435]	28
F88. % HOUSEHOLDS ON TOP RISKS TO CHILDREN [N = 435]	28
HUMANITARIAN ASSISTANCE	29
F89. % HOUSEHOLDS RECEIVING HUMANITARIAN ASSISTANCE BY POPULATION SUB-GROUP [N IN TABLE]	29
F90. % HOUSEHOLD DEPENDENCY ON HUMANITARIAN SERVICES TO COVER BASIC NEEDS BY SUB-GROUP [N IN TABLE]	29
F91. % HOUSEHOLDS BY TYPE OF ASSISTANCE AND BASIC SERVICES ACCESSED [N = 435]	29
F92. % HOUSEHOLDS REPORTING CHANGE IN ACCESS TO HUMANITARIAN ASSISTANCE AND BASIC SERVICES [N = 435]	29
INTERSECTORAL ANALYSIS	30
F93. % HOUSEHOLDS BY NUMBER OF VULNERABILITIES BY SUB-GROUP [N IN TABLE]	30
F94. % HOUSEHOLDS BY NUMBER OF NEEDS [N = 435]	30
F95. AVERAGE SECTORAL NEEDS PERCENTAGE BY SUB-GROUP [HOST COMMUNITY N = 305; IDPS N = 62; RET. / REL. PERSONS N = 33]	31
F96. CUMULATIVE % HOUSEHOLDS BY NUMBER OF NEEDS BY SUB-GROUP [HOST COMMUNITY N = 305; IDPS N = 62; RET. / REL. PERSONS N = 33]	31
F97. % HOUSEHOLDS BY MOST COMMON SET OF NEEDS [N = 435]	31

AIMS

During the second half of 2020, the International Organization for Migration's Displacement Tracking Matrix (IOM DTM) and the World Food Programme's Vulnerability Analysis and Mapping (WFP VAM) units undertook a joint household-level 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 and economic vulnerability as well as selected indicators on shelter and non-food items, 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.
- Evaluate the impact of the COVID-19 pandemic and related restrictions on human mobility, livelihoods and access to humanitarian services, and gather key information on household awareness and adoption of preventive measures.

The assessment contributed to the extended Food Security and Nutrition Monitoring System (FSNMS+) initiative to pilot a household-level multi-sector needs assessment for South Sudan. In addition to WFP and IOM, the FSNMS+ initiative saw the participation of the United Nations Children's Fund (UNICEF), the Food and Agriculture Organization (FAO), the United Nations Office for the Coordination of Humanitarian Affairs (OCHA), FEWSNET, REACH and several humanitarian

clusters. By expanding FSNMS coverage to key urban areas and IDP camps, the assessment addresses a longstanding information gap for the humanitarian response.

This report presents sectoral findings for Juba's urban area. Separate profiles will be released for Juba IDP camps I and III, Wau's urban area and Naivasha IDP camp, the urban area of Bentiu / Rubkona and Bentiu United Nations Mission In South Sudan (UNMISS) Protections of Civilians (PoC) site, and Malakal's urban area and PoC site.

In Juba, the survey was combined with an epidemiological study of COVID-19 led by South Sudan's Ministry of Health and by the World Health Organization (WHO), mitigating the risk of disease transmission during data collection as the country was experiencing the first wave of the pandemic. Results from the epidemiological study are not included in this report.

HUMANITARIAN CONTEXT IN SOUTH SUDAN

Despite a relative lull in large-scale hostilities since the signature of the Revitalised Peace Agreement for the Resolution of the Conflict in South Sudan in September 2018 and the formation of the Transitional Government of National Unity in February 2020, sub-national and localised conflicts have continued to affect communities and cause new displacement across the country ([IOM DTM Event Tracking](#)¹). In 2020, escalations in violence in Jonglei and Greater Pibor, Central Equatoria, Lakes, Warrap, Unity and Western Bahr El Ghazal ([OHCHR](#)) have been a particular cause for concern. Two years of exceptionally severe seasonal flooding in 2019 and 2020, affecting over one million people between July and December 2020 ([OCHA](#)), and the economic and health impact of COVID-19, including

restrictions on certain businesses and border closures ([IOM DTM Flow Monitoring](#)), have compounded the humanitarian effects of protracted insecurity.

As of September 2020, South Sudan hosted over 1.61 million IDPs and 1.67 million returnees, with over 261,000 new IDP arrivals² and 258,000 former IDPs and refugees returning to their areas of habitual residence prior to displacement during the first nine months of 2020 ([IOM DTM Mobility Tracking Round 9](#)). Often, returnees find themselves in conditions of need comparable to those of the displaced population ([IOM DTM Mobility Tracking Round 8 Multi-Sector Location Assessment](#)).

According to the [December 2020 South Sudan IPC results](#), 6.35 million people – over half of the country's population – are estimated to have been facing severe acute food insecurity from October to November 2020, and this figure is expected to rise to 7.24 million during the lean season between May and July 2021. An [IPC global review committee](#) classified parts of Pibor county as famine likely and identified populations in IPC phase 5 (Catastrophe) in five other counties. The [2021 Humanitarian Needs Overview](#) estimates a total of 8.3 million people in need out of an estimated population of 12.1 million.

Systematic, household-level data on humanitarian needs in urban areas was lacking prior to the current assessment. Location-level data on IDPs and returnees indicates that, while needs are generally most severe in less accessible rural areas, they remain significant in urban centres ([IOM DTM Mobility Tracking Round 8 Multi-Sector Location Assessment](#)). The assessment took place as the former PoC

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.

sites in Juba and Wau transitioned out of their special status under the protection of the UNMISS. All four 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 crowds from surrounding neighbourhoods.

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 for each enumeration area, to derive a layer of likely residential shelters. In Juba, the boundaries of the enumeration areas were then re-adjusted to obtain 233 areas, each containing roughly 1,000 likely residential shelters. The process was carried out in consultation with South Sudan's National Bureau of Statistics, which endorsed the enumeration areas (see the [published map](#)).

Sampling Design

In Juba, the study adopted a two-stage stratified clustered sampling strategy designed to be self-weighting. In the first stage, the enumeration areas served as the primary sampling units. They were divided into five strata based on shelter density as a proxy for the possible presence of slums³, location near one of Juba's four major markets⁴, and presence of IDP camps or collective centres⁵. 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, proxying households. Eleven shelters were drawn by simple random sampling from each targeted enumeration area. Enumerators were provided with georeferenced maps helping them locate the sampled shelters

on hand-held devices and were instructed to interview the household living in the pinpointed shelter or record it as empty⁶, 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 a simple paper draw to randomly select one.

The targeted sample size of 550 households from 50 enumeration areas was calculated based on Bennett et al.'s formula for the individual-level epidemiological study carried out in parallel with the survey⁷. At the household level, this would have corresponded to a 5.4 per cent margin of error on a 95 per cent confidence interval using the standard formula, assuming a design factor of 1.5 and a non-response rate of 10 per cent. While a higher sample size had initially been considered to enable further sub-group analysis, this was ruled out due to the increased risk of COVID-19 transmission, considering the impossibility of expanding the epidemiological study further.

Data collection challenges

Data collection in Juba's urban area took place in August and September 2020. Due to delays resulting from access

3 A shelter density raster was computed for the whole urban area as the kernel estimate for cells of 100x100m. The top 20 per cent of enumeration areas by their maximum density estimate were considered high density.

4 Gudele 2, Custom, Konyo Konyo and Libya.

5 Data on IDP sites was taken from IOM DTM, Mobility Tracking Round 8. Juba IDP camps I and III (former UNMISS PoC sites) were excluded from the sampling frame for Juba's urban area and treated as an independent sample whose results will be published in a separate profile.

6 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 neighbours.

7 Bennett S, Woods T, Liyanage WM, Smith DL. A simplified general method for cluster-sample surveys of health in developing countries. *World Health Stat Q* Rapp Trimest Stat Sanit Mond. 1991;44(3):98–106.

challenges⁸ and higher than expected non-response, non-residential and empty shelter rates in some areas, only 435 households were successfully interviewed out of the targeted 550.

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 sanitiser for use during data collection.

Statistical analysis

Confidence intervals were calculated using R's survey package⁹ to account for the survey's sampling design (clustering and first stage stratification). 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, 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. F1 shows the deviation between sampled households and estimated residential buildings by stratum. Using the estimated proportion of residential buildings in each stratum as weights did not result in meaningful differences for key vulnerability and need indicators.

F1. % SAMPLED HOUSEHOLDS, % ESTIMATED RESIDENTIAL BUILDINGS AND PERCENTAGE POINTS DIFFERENCE BY STRATUM [N IN TABLE]

STRATA	N SAMPLED HH	% SAMPLED HH	% EST RES BUILDINGS	% DIFFERENCE
High density, near major market	31	7.1	5.3	1.8
High density, far from major market	73	16.8	14.6	2.2
Low density, near major market	28	6.4	6.7	-0.2
Low density, far from major market	298	68.5	71.9	-3.4
IDP Sites (exc. PoC sites)	5	1.1	1.6	-0.4

The limited sample size for the study and 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 analysis¹⁰.

Confidence intervals are a measure of the statistical uncertainty of an estimate. There is a 95 per cent chance that the value of the quantity of interest that would be obtained by doing

a full population census lies within the confidence interval. While they provide a measure of statistical uncertainty due to random sampling error, they do not account for 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.

MEASURES OF COPING AND FOOD INSECURITY

Food Consumption Score

The Food Consumption Score (FCS) is a proxy indicator of households' food access and is used to classify households into different groups based on the frequency and dietary diversity of foods consumed during the seven days prior to the survey. There are standard weights for each of the eight food groups that comprise the FCS. The eight food groups and weights used in the calculation of FCS are cereals/roots/tubers (2), pulses (3), dairy/milk (4), vegetables (1), fruits (1), meat and fish (4), sugar (0.5) and oil (0.5). The score for each household is attained by multiplying the number of days the food group was consumed by the weight and then summing the scores for all food groups. A household can attain a maximum FCS of 112, which implies that each of the food groups was consumed every day for the last seven days. The FCS is classified into three thresholds as follows: Poor food consumption (0 to 21); Borderline food consumption (21.5 to 35) and Acceptable food consumption (over 35).

⁸ Three sampled enumeration areas inhabited by families of military personnel had to be randomly replaced due to denied access, with part of a fourth enumeration area also affected. Teams in other enumeration areas faced delays due to lengthy access negotiations with local community leaders.

⁹ Lumey, T. (2020). "Survey: analysis of complex survey samples". R package version 4.0.

¹⁰ Ibid., p. 55.

Coping Strategy Index

The Coping Strategy Index (CSI) is often used as a proxy indicator of household food insecurity and is based on a list of coping strategies. There are two types of CSI: food-based coping strategies and livelihood-based coping strategies.

Food-based coping strategies

The Reduced Coping Strategy Index (rCSI) is based on a short list of five food-related coping strategies employed by households during the seven days prior to the survey. It is calculated by combining the frequency of each strategy with a severity weight. A higher rCSI indicates a worse and a lower rCSI a better food security situation.

It has been observed that the rCSI corresponds to the food security situation of households in the onset of a crisis. In situations of protracted severe food shortages, households may not be able to continue applying these coping strategies, providing an impression of better food security than the reality ([FSL Indicator Handbook](#)).

Livelihood-based strategies

The Livelihood Coping Strategies (LCS) indicator is derived from a series of questions regarding the household's experience with livelihood stress and asset depletion during the 30 days prior to the survey. Responses are used to understand the stress and insecurity faced by households and describe their capacity to cope with regards to future productivity. There are three levels of livelihood-based coping strategies: stress, crisis and emergency strategies. Stress strategies, such as spending savings, imply a reduced capacity to deal with future shocks due to a current reduction in available funds. Crisis strategies, such as selling productive assets, directly reduce future productivity. Emergency strategies, such as selling a

piece of land, affect future productivity and are more difficult to reverse. Households not engaging in such economic activities are generally found to be food secure.

Economic vulnerability

Economic vulnerability is measured using the share of household expenditure on food. This indicator is based on the premise that the greater the share of a household's overall budget spent on food, the more economically vulnerable the household. The food expenditure share indicator is constructed by dividing the total food expenditure by the total household expenditures. The economic vulnerability indicator is concerned with comparing a household's consumption of food with that of other non-food items. The share of expenditure on food is classified in four groups: Low (under 50%), Medium (50% to 65%), High (65% to 75%) and Very high (over 75%).

Household Hunger Scale

The Household Hunger Scale (HHS) is a proxy indicator of food access. It is constructed around three questions about a household's perception of experienced hunger within the 30 days prior to the survey. The perception of the degree of hunger is based on questions about having been short of any kind of food due to a lack of resources, having gone to bed at night hungry due to inadequate food consumption and having spent an entire day and night without eating in the 30 days prior. The responses to these questions range from Never (zero times) to Rarely/Sometimes (one to ten times) to Often (more than ten times) and have a score of 0, 1 and 2 respectively. The HHS is derived by summing the responses to the three perception-based questions, computing the total HHS value ranging from zero to six. The thresholds for HHS are as follows: None (0), Slight (1), Moderate (2 to 3), Severe

Emergency (4) and Severe Catastrophe (5 to 6).

POPULATION GROUPS

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 border. 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 location.

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 neighbouring countries but who are unable to reach their former home are still displaced and as such not counted in the returnee category.

Relocated

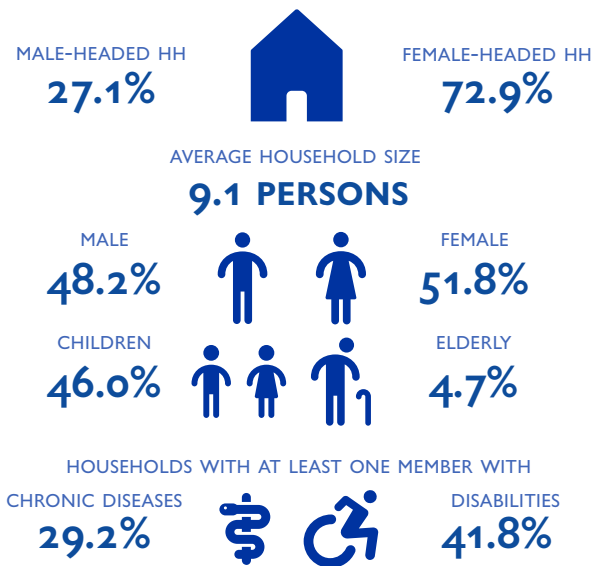
A person who was displaced from their habitual residence either within South Sudan (former IDP) or abroad (former refugee), who has since relocated voluntarily (independently or with the help of other actors) to a location other than their former habitual residence, without an intention to return to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

DEMOGRAPHICS AND HOUSEHOLD VULNERABILITIES

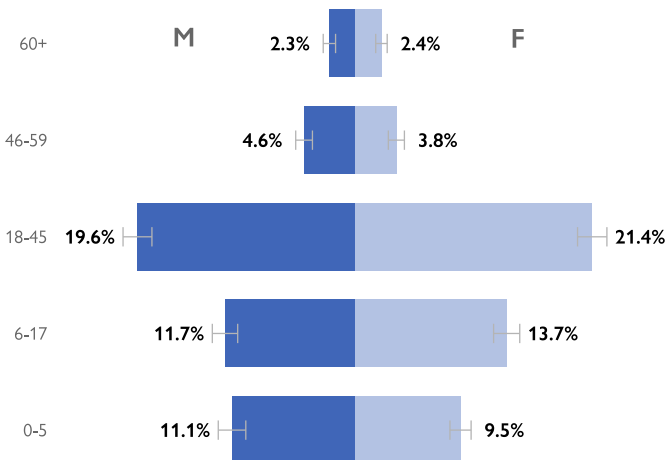
The average household size is 9.1 (± 0.5) persons, with a median of 8 persons. The size of households hosting individuals is 10.8 (± 1.1) persons whereas the size of households not hosting any individuals is 8.4 (± 0.5) persons. Most households are headed by women (72.9% ± 4.4 %), and the average age for head of household is 35 years. Indicatively, male heads of households are more likely to be older and have a secondary or university diploma. 20.6 (± 1.1) per cent of household members are between the ages 0 and 5, and 25.4 (± 1.3) per cent are between the ages of 6 and 17. Only 4.7 (± 0.5) per cent are above the age of 60.

29.2 (± 6.7) per cent of households have at least one member with a chronic disease, and 41.8 (± 5.4) per cent have at least one member with a disability, as measured by the [Washington Group Short Set](#) of questions. Among disabilities, visual difficulties rank highest with 24.1 (± 4.4) per cent.

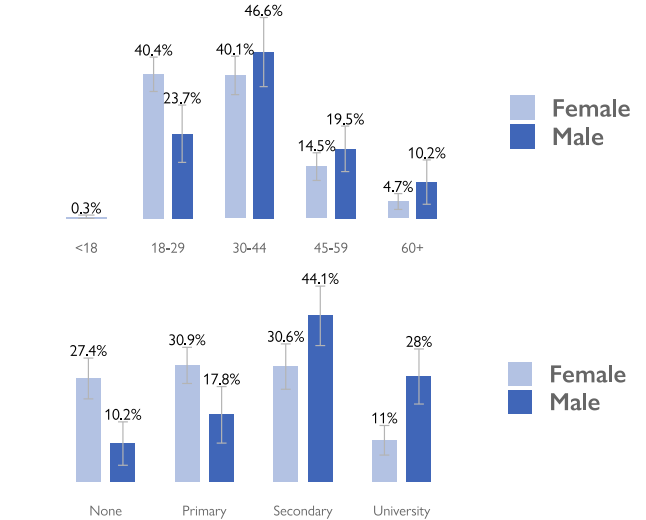
2.8 (± 1.8) per cent of all households are foreign nationals.



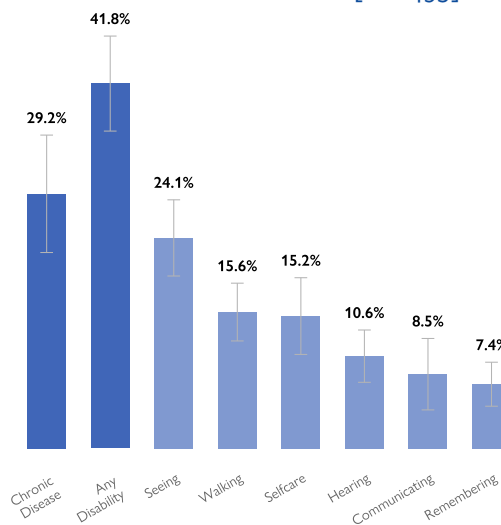
F2. % INDIVIDUALS BY AGE AND GENDER [N HH = 435; N IND = 3,942]



F4. % MALE AND FEMALE-HEADED HOUSEHOLDS BY AGE AND EDUCATION [MALE N = 118; FEMALE N = 317]



F3. % HOUSEHOLDS WITH A PERSON WITH DISABILITY OR WITH A CHRONIC ILLNESS BY TYPE OF DISABILITY [N = 435]



F5. % HOUSEHOLDS BY NATIONALITY [N = 435]

COUNTRY	%	CI
South Sudan	97.2	95.4 - 99.1
Foreign Country	2.8	0.2 - 4.7
Uganda	1.4	0.3 - 2.4
Kenya	0.5	0 - 1.1
Sudan	0.5	0 - 1.4

F6. % SINGLE-HEADED HOUSEHOLDS [N = 435]

HOH	%	CI
Single Female	4.6	2.6 - 6.6
Single Male	4.4	2.4 - 6.4
Children / Elderly Only	1.8	0.2 - 3.4

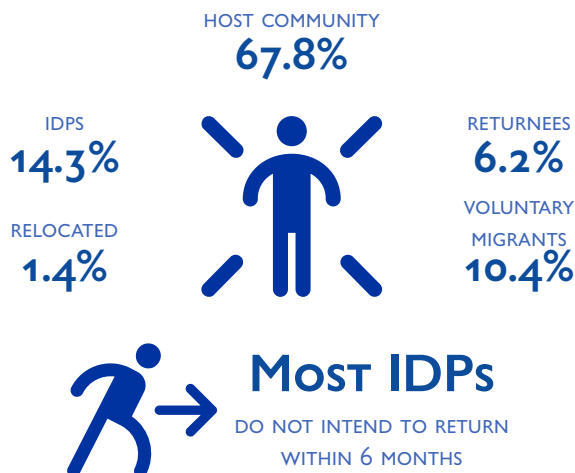
Note: The error bars and CI column in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

DISPLACEMENT AND MIGRATION

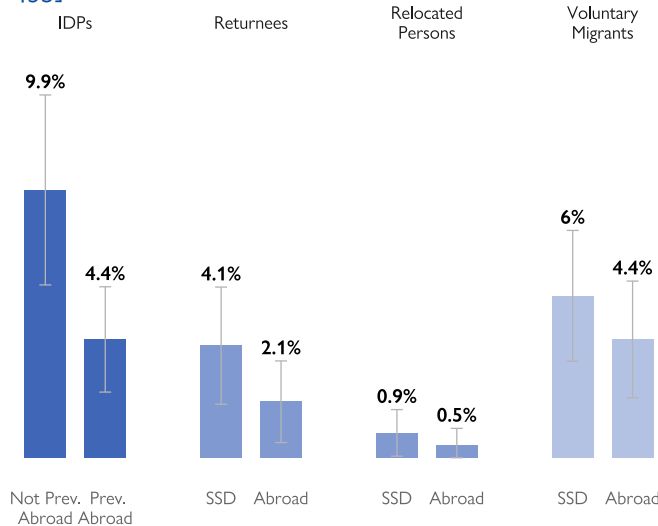
The host community makes up 67.8 (± 5.6) per cent of the population, while 32.2 (± 5.6) per cent is displaced, has returned, relocated or migrated. This population is further disaggregated into IDPs (14.3% ± 4.0%), returnees (6.2% ± 2.7%), relocated persons (1.4% ± 1.0%) and voluntary migrants (8.0% ± 3.0%). Of the IDPs, 10.4 (± 3.2) per cent intend to return to their area of origin within six months. Indicatively, about a third of returnees (37.0% ± 23.0%) have not yet reached their final destination.

IDP households come from all ten states. Indicatively, over half come from within Central Equatoria, with Juba and Yei being the most prominent counties, and significant numbers come from Upper Nile, Western Equatoria and Jonglei.

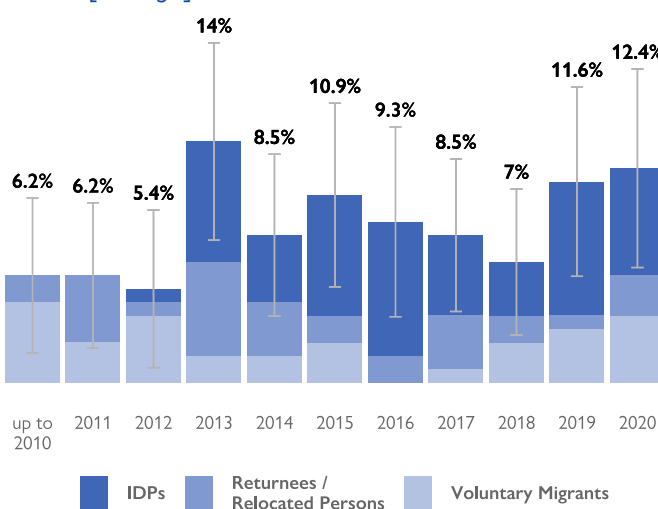
The most frequently given reason for displacement is personal insecurity (41.9% ± 16.2% of IDP households). For returnee and relocated households, drivers for movement are improvement of security (75.8% ± 15.8%), services (66.7% ± 15.0%) and livelihoods (51.5% ± 16.3%).



F7. % HOUSEHOLDS BY DISPLACEMENT/MIGRATION STATUS [N = 435]



F8. % HOUSEHOLDS' ARRIVAL YEAR BY DISPLACEMENT/MIGRATION STATUS [N = 130]



F9. % IDP HOUSEHOLDS BY REASON FOR DISPLACEMENT [N = 62]

REASON FOR DISPLACEMENT	%	CI
Personal Insecurity Due To Generalised Violence / Armed Conflict	41.9	25.8 - 58.1
Natural Disaster Destroyed Home	12.9	3.4 - 22.4
Personal Insecurity Due To Targeted Violence / Persecution	12.9	5.2 - 20.6
Conflict Interrupted Access To Livelihoods	12.9	4.4 - 21.4
Communal Clashes	8.1	1.7 - 14.4

F10. % RETURNEE AND RELOCATED HOUSEHOLDS BY RETURN/RELOCATION REASON [N = 27]

REASON FOR RETURN / RELOCATION	%	CI
Security Improvement	75.8	59.9 - 91.6
Service Improvement	66.7	51.7 - 81.6
Livelihood Improvement	51.5	35.2 - 67.9

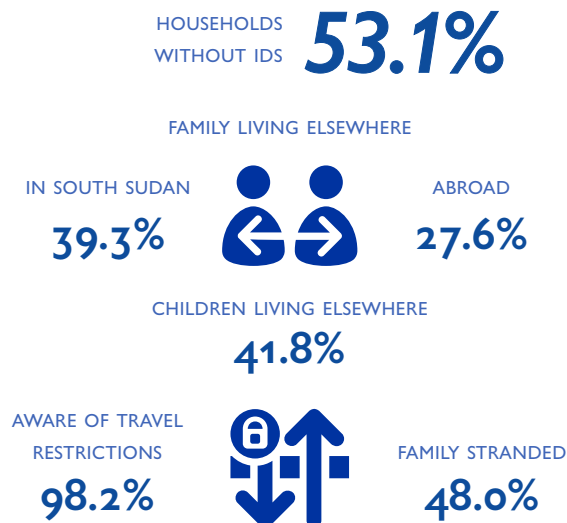
F11. % IDP HOUSEHOLDS FACING BARRIERS TO RETURN [N = 62]

BARRIER	%	CI
No Financial Means	56.7	37.3 - 76
Insecurity	33.3	11.9 - 54.7
Lack Services	30.0	11.2 - 48.8
Lack Livelihood	26.7	11.8 - 41.6
Discrimination	6.7	0 - 15.8

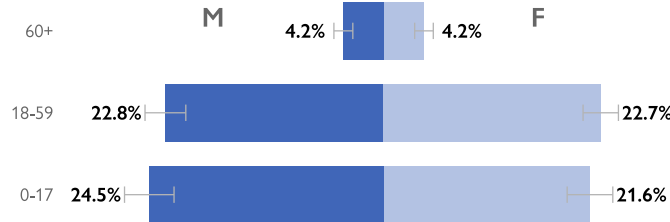
Note: The error bars and CI column in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

A majority (54.9% ± 7.5%) has family members who migrated elsewhere in South Sudan (39.3% ± 6.3%) and/or abroad (27.6% ± 6.7%). 41.8 (± 6.9) per cent of households had children living elsewhere, mostly to study (45.6% ± 9.2%) or to temporarily visit relatives (44.0% ± 6.7%). 53.1 (± 8.5) per cent of all households do not possess IDs, with IDP households faring worse (66.1% ± 15.2%).

COVID-19-related mobility restrictions have affected the population significantly in various ways. Households aware of these restrictions (98.2% ± 1.3%) reported they cannot travel to access education (58.8% ± 7.6%) or to relocate (56.4% ± 8.3). IDP and voluntary migrant households reported that they cannot travel to return to their former area of habitual residence (66.0% ± 13.6%). They also face riskier travel to visit family (45.0% ± 7.6%), relocate (39.1% ± 5.7%) or access health care (38.9% ± 6.9%). 48.0 (± 7.2) per cent¹ of households had family members stranded elsewhere due to mobility or travel restrictions at the time of data collection.



F12. % HOUSEHOLD MEMBERS LIVING ELSEWHERE BY AGE AND GENDER [N HH = 239; N IND = 1,602]



F13. % HOUSEHOLDS BY REASON FOR CHILDREN LIVING ELSEWHERE [N = 182]

REASON	%	CI
Study	45.6	36.4 - 54.8
Temporary Visit To Relatives	44.0	37.3 - 50.6
Seek Employment	23.1	16.3 - 29.8
Joined Army / Armed Groups	2.7	0.6 - 4.9
Arbitrarily Detained	0.5	0 - 1.6

F14. % HOUSEHOLDS POSSESSING IDS [N = 435]

ID	%	CI
Yes, In Our Possession	45.3	36.9 - 53.7
Yes, But They Are Not In Our Possession	9.7	5.5 - 13.8
No, Some HH Members Are Missing IDs	31.3	24.1 - 38.5
None Have A Valid ID Or Passport	12.2	7.8 - 16.6
Don't Know	1.6	0.2 - 3.1

F15. % HOUSEHOLDS NOT POSSESSING IDS BY SUB-GROUP [OVERALL N = 435; IDPS N = 62; RET./REL. N = 33]

ID	%	CI
Overall	53.1	44.6 - 61.6
IDPs	66.1	50.9 - 81.3
Returnees / Relocated persons	39.4	16.7 - 62.1

F16. % HOUSEHOLDS WHO CANNOT TRAVEL DUE TO MOBILITY RESTRICTIONS BY TOP THREE TRAVEL PURPOSES [N = 427]

PURPOSE	%	CI
Return (IDPs And Voluntary Migrants Only)	66.0	52.4 - 79.5
Education	58.8	51.2 - 66.3
Relocation	56.4	48.4 - 64.5

F17. % HOUSEHOLDS FACING RISKIER TRAVEL DUE TO MOBILITY RESTRICTIONS BY TOP TREE TRAVEL PURPOSES [N = 427]

PURPOSE	%	CI
Family	45.0	37.4 - 52.5
Relocation	39.8	34.1 - 45.5
Health	38.9	32 - 45.8

F18. % HOUSEHOLDS FACING COSTLIER TRAVEL DUE TO MOBILITY RESTRICTIONS BY TOP THREE TRAVEL PURPOSES [N = 427]

PURPOSE	%	CI
Business	40	34.8 - 45.3
Family	40	33.6 - 46.5
Health	37	31.8 - 42.2

F19. % HOUSEHOLDS WITH FAMILY MEMBERS STRANDED ELSEWHERE [N = 435]

STRANDED	%	CI
South Sudan	20.0	15.3 - 24.7
Abroad	19.5	14.9 - 24.2
Both	8.5	5.1 - 11.9

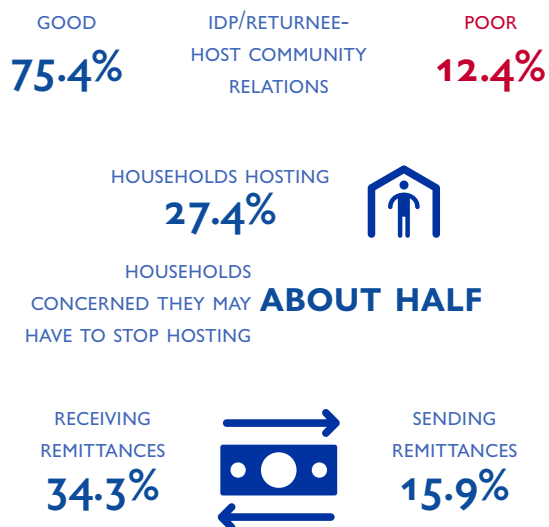
Note: The error bars and CI column in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

¹ The high rate may be a result of a broader interpretation of the question by respondents.

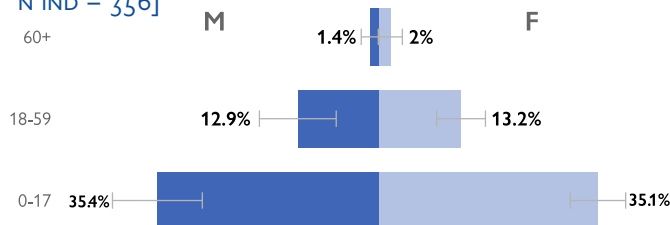
COMMUNITY-DRIVEN ASSISTANCE

Overall, 27.4 (± 6.6) per cent of households host vulnerable individuals. 17.2 (± 5.5) per cent of households host IDPs while 13.8 (± 4.7) per cent host children and 13.3 (± 4.7) per cent host returnees. About half of these households are worried that they may have to stop hosting these individuals (46.2% ± 14.0%), indicatively citing a lack of space and high costs as the main reasons.

34.3 (± 5.6) per cent of households receive remittances, of which 79.9 (± 21.8) per cent saw a decrease and 8.8 (± 6.1) per cent an increase in the amount received since April 2020. 15.9 (± 5.8) per cent send remittances, of which 52.2 (± 14.5) per cent saw a decrease in general and 33.3 (± 12.9) per cent saw a substantial decrease in the amount sent since April 2020.



F20. % HOSTED INDIVIDUALS BY AGE AND GENDER [N HH = 119; N IND = 356]



F21. % HOUSEHOLDS BY HOSTING VULNERABLE INDIVIDUALS [N = 435]

HOST	%	CI
Any	27.4	20.8 - 33.9
IDPs	17.2	11.7 - 22.8
Returnees	13.3	8.6 - 18.1
Children	13.8	9.1 - 18.5

F22. % HOUSEHOLDS BY PERCEPTION OF IDP/RETURNEE-HOST COMMUNITY RELATIONS [N = 435]

RELATIONS	%	CI
Good	75.4	69.3 - 81.5
Neutral	5.1	2.6 - 7.5
Poor	12.4	6.9 - 17.9
There Are No IDPs/Returnees	4.1	2.1 - 6.2
I Do Not Know/Want To Answer	3.0	0.9 - 5.1

F23. % HOUSEHOLDS WORRIED THEY MAY HAVE TO STOP HOSTING WITHIN THREE MONTHS, BY REASON [N = 61]

REASON	%	CI
Space	63.9	47 - 80.9
Cost	54.1	29.1 - 79.1
COVID-19	3.3	0 - 7.7

F24. % HOUSEHOLDS RECEIVING AND SENDING REMITTANCES BY SUB-GROUP [N IN TABLE]

REMITTANCES	N	%	CI
Received			
Overall	435	34.3	28.7 - 39.8
Host community	295	33.6	27.4 - 39.8
IDP population	62	29	15.8 - 42.3
Sent			
Overall	435	15.9	10.1 - 21.7
Host community	295	15.6	8.8 - 22.3
IDP population	62	14.5	4.6 - 24.4

F25. % HOUSEHOLDS EXPERIENCING CHANGE IN REMITTANCES BY SUB-GROUP [N IN TABLE]

CHANGE	%	CI
Received [n = 149]		
Decreased Slightly	37.6	27.8 - 47.4
Decreased Substantially	42.3	30.3 - 54.2
Increased Slightly	8.1	3.3 - 12.8
Increased Substantially	0.7	0 - 2
Sent [n = 69]		
Decreased Slightly	33.3	20.4 - 46.2
Decreased Substantially	52.2	37.7 - 66.6
Increased Slightly	0	NA
Increased Substantially	0	NA

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

SHELTER AND NON-FOOD ITEMS

17.0 (± 4.8) per cent of households live in improved shelters (permanent semi/concrete buildings), while 26.7 (± 6.9) per cent live in traditional mud huts with thatched roofs (Tukuls) and 31.5 (± 6.5) per cent in shacks built with local materials (Rakooba). Among those in need, 17.0 (± 4.8) per cent live in improvised shelters and 6.2 (± 4.6) per cent in communal ones. Overall, 6.9 (± 3.6) per cent of households live in partially damaged or destroyed shelters, most of which are Rakooba or Tukuls.

4.6 (± 2.3) 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 issue leading to open disputes is land grabbing, followed by boundary disputes. Affected households tend to rely on community leaders or traditional courts to resolve open disputes rather than on formal institutions.

7.8 (± 2.7) per cent of households live in shelters made of only one room. 15.4 (± 4.4) per cent do not have security risk mitigation measures (such as locks) in place.



**SHELTER
DAMAGED¹**
6.9%

**COMMUNAL OR
IMPROVISED SHELTERS**
23.2%

**SHELTERS WITH
4+ PERSONS /
ROOM**
24.1%



**INVOLVED IN HLP
DISPUTES**
4.6%



**SECURITY MEASURES
NOT IN PLACE**
15.4%

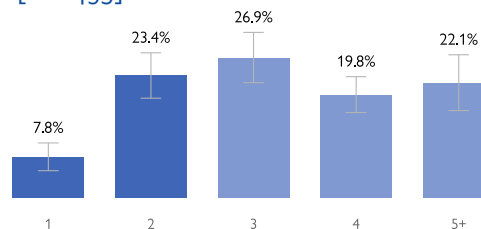
F26. % HOUSEHOLDS BY SHELTER TYPE [N = 435]

SHELTER	%	CI
Rakooba	31.5	25 - 38
Tukul	26.9	20 - 33.8
Permanent Semi/ Concrete Building	18.2	13.7 - 22.7
Improvised Shelter	17.0	12.2 - 21.8
Communal Shelter	6.2	1.6 - 10.8
Other	0.2	0 - 0.7

F27. % HOUSEHOLDS BY SHELTER CONDITION [N = 435]

CONDITION	%	CI
In Good Condition	70.6	64.3 - 76.9
Very Minimally Damaged	22.5	16.8 - 28.3
Partially Damaged	6.7	3.2 - 10.1
Completely Destroyed	0.2	0 - 0.7

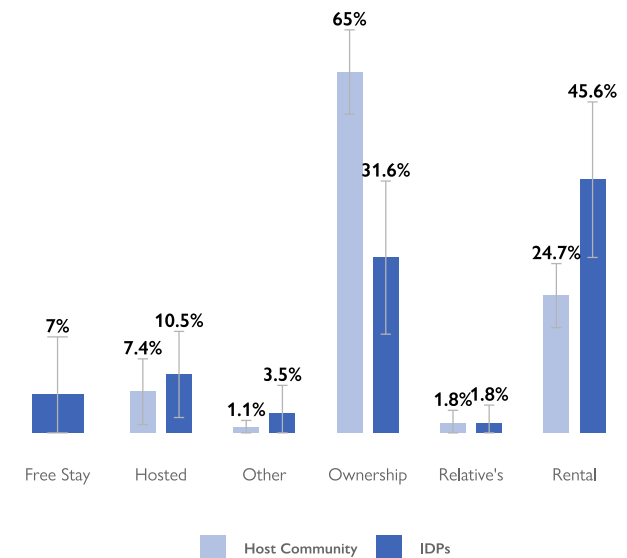
F28. % HOUSEHOLDS WITH A GIVEN NUMBER OF ROOMS IN SHELTER [N = 435]



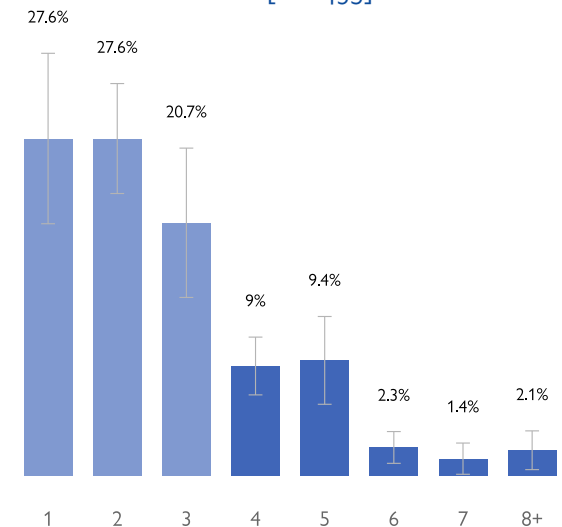
F29. % HOUSEHOLDS INVOLVED IN HLP DISPUTES [N = 435]

INVOLVEMENT	%	CI
Yes	4.6	2.3 - 6.9
No	92.9	90.3 - 95.5
Prefer Not To Answer	2.5	0.7 - 4.3

F30. % HOUSEHOLDS BY PROPERTY STATUS [N = 435]



F31. % HOUSEHOLDS BY MAXIMUM NUMBER OF PERSONS SLEEPING IN THE SAME ROOM [N = 435]



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

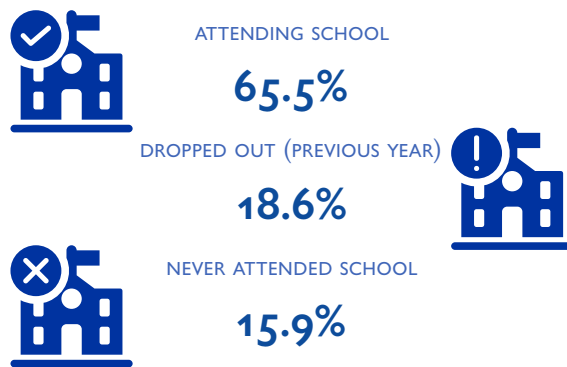
¹ Damaged include those reported as "partially damaged" and "completely destroyed".

EDUCATION

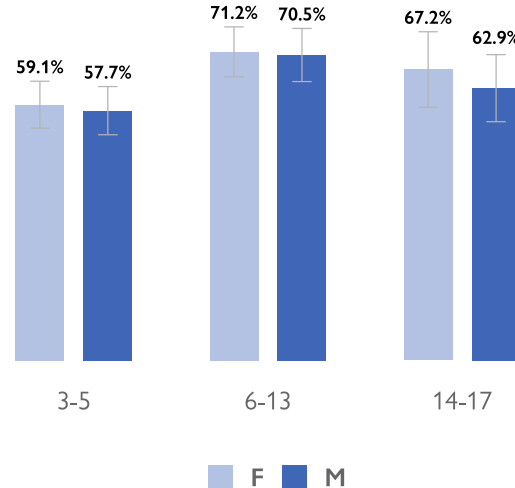
With a rate of 65.5 (± 5.1) per cent, most households' children attended formal school in the past school year (February to December 2019), defined as attending an institution within a system of full-time education developed by and overseen by the National Ministry of Education. 18.6 (± 4.4) per cent of children dropped out from school in the past year while 15.9 (± 4.9) per cent have never attended school at all.

Comparing attendance rates between the host community and the IDP population, the displaced households consistently fare worse than the host community, with higher rates of children never having attended school and lower rates of current attendance. However, due to limited sample size, the difference is not statistically significant.

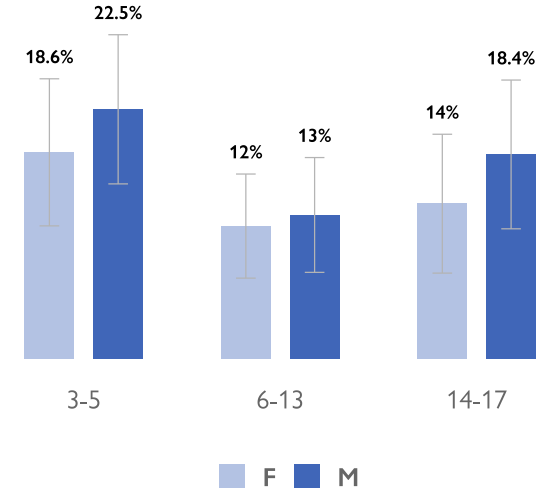
Due to government-mandated school closures in response to the COVID-19 pandemic, the school attendance and dropout indicators refer to the school year before the assessment. This caused some confusion among respondents, resulting in inconsistencies between the number of children reported in the education section and in the demographic section. To minimize error, estimates of attendance and dropout rates were calculated based on the total number of children reported in the education section.¹



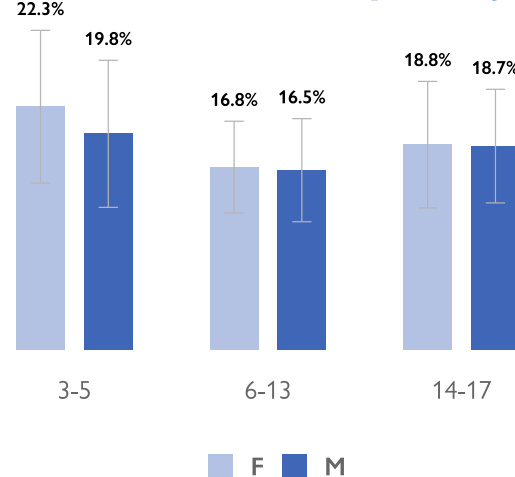
F32. % CHILDREN ATTENDING SCHOOL FOR THE PAST SCHOOL YEAR BY AGE AND GENDER [N IND = 2,521²]



F34. % CHILDREN NEVER HAVING ATTENDED SCHOOL BY AGE AND GENDER [N IND = 2,521]



F33. % CHILDREN HAVING DROPPED OUT OF SCHOOL IN THE PAST SCHOOL YEAR BY AGE AND GENDER [N IND = 2,521]



F35. % HOUSEHOLDS WITH CHILDREN BY SCHOOL ATTENDANCE AND SUB-GROUP [N IND IN TABLE]

ATTENDANCE	N	%	CI
Attending			
Host Community	1632	69.9	64.3 - 75.4
IDPs	429	52.4	37.7 - 67.2
Never			
Host Community	1632	10.8	7.8 - 13.9
IDPs	429	26.6	12.5 - 40.7
Dropped Out			
Host Community	1632	19.3	14.4 - 24.2
IDPs	429	21.0	11.5 - 30.5

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

¹ The above approach results in the three indicators artificially summing to 100 per cent, since it is not possible to estimate the number of children who dropped out in previous years. Due to different age brackets between the demographic section (0-5 and 6-17) and the education section (3-5, 6-13 and 14-17), the two sections are not perfectly comparable. Ignoring children under the age of 6, a conservative estimate for children between the ages of 6 and 17 can be calculated by taking the maximum number of children in this age range from the demographic and education sections. The estimates are the following: 61.2 (± 4.9) per cent having attended, 15.6 (± 3.7) per cent having dropped out (previous year) and 12.4 (± 4.8) per cent having never attended school. Accordingly, 10.8 per cent of children aged 6 to 17 dropped out in previous years and are not currently attending school, despite having achieved some schooling in the past.

² n F 3-5 = 403; n M 3-5 = 378; n F 6-13 = 560; n M 6-13 = 509; n F 14-17 = 329; n M 14-17 = 342.

WASH

Overall, 12.9 (\pm 4.1) per cent of households have access to a safe and timely water source¹, with returnees, relocated persons and voluntary migrants indicatively faring worse. While 86.4 (\pm 5.6) per cent of households have access to sufficient² amounts of water, only 9.4 (\pm 3.7) per cent have sufficient access to safe and timely water. The majority of households (78.9% \pm 6.0%) need no more than one hour to collect water.

16.1 (\pm 5.3) per cent report having felt unsafe collecting water from their main water source in the two weeks prior to the interview. Among households in the lowest wealth quintile, 34.1 (\pm 15.1) per cent report having felt unsafe.

The main water source for households is bought water from tanks or trucks (72.0% \pm 7.6%). Most households do not treat their water (34.3% \pm 9.0%) or use chlorine (34.3% \pm 7.0%).

While the survey did not include questions about the cost of water, this varies depending on the level of treatment, source and neighbourhood. Tank water costs between 1.5 and 4.5 SSP per litre of water². Treated drinking water is significantly more expensive, costing about 30 SSP per litre (Dec. 2020, REACH). 23.7 (\pm 14.7) per cent of households report that the price of water has increased slightly since April 2020, while 1.7 (\pm 3.3) per cent report a significant increase in price.

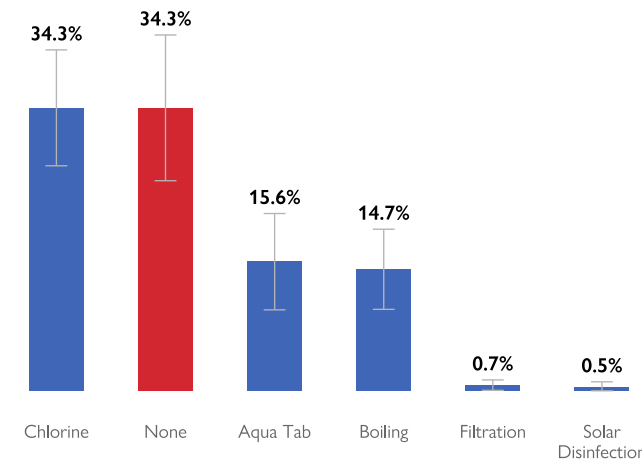


Water quality testing was not conducted as part of this survey. However, laboratory results from WHO's 'Water Quality Control Testing and Monitoring Summary Report for 2018-2020' which assessed the quality of drinking water showed 47 per cent contamination and 53 per cent negative in Juba.

F36. % HOUSEHOLDS WITH ACCESS TO SAFE AND TIMELY WATER BY SUB-GROUP [N IN TABLE]

GROUP	N	%	CI
Overall	435	12.9	8.8 - 17
Male HoH	118	12.7	5.8 - 19.6
Female HoH	317	12.9	8.5 - 17.4
Host Community	295	13.9	9.2 - 18.6
IDPs	62	16.1	7 - 25.2
Returnees / Relocated Persons	33	3.0	0 - 9.1
Voluntary Migrants	45	8.9	0.6 - 17.1

F37. % HOUSEHOLDS BY WATER TREATMENT ACTIVITY [N = 435]



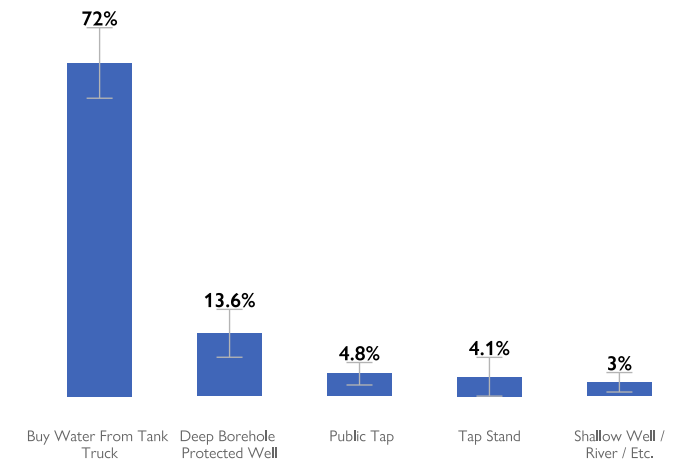
F38. % HOUSEHOLDS BY TIME SPENT COLLECTING WATER [N = 435; COMMUNAL WATER SOURCE⁴ N = 59]

TIME	OVERALL		COMMUNAL	
	%	CI	%	CI
Up to 30 min	78.4	72.4 - 84.4	65.0	52.2 - 77.8
Up to 1h	78.9	72.8 - 84.9	67.5	54.7 - 80.3
More than 1h	21.1	15.1 - 27.2	32.5	19.7 - 45.3
More than 2h	2.1	0.4 - 3.7	6.2	1.1 - 11.4

F39. % HOUSEHOLDS FEELING UNSAFE COLLECTING WATER [N = 435]

FEELING UNSAFE	%	CI
No	81.4	76.3 - 86.4
Yes	16.1	10.8 - 21.4
I Don't Know Or Don't Want To Answer	0.5	0 - 1.1
Don't Collect Any	2.1	0.5 - 3.6

F40. % HOUSEHOLDS BY MAIN WATER SOURCE [N = 435]



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

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.

² IOM DTM and WASH teams local knowledge.

³ 6.5 litres per person per day.

⁴ "Communal water sources" are defined as deep boreholes and public tapstands serving more than five households.

52.9 (± 7.9) per cent of households have access to basic WASH NFIs, including at least two jerrycans in good conditions and soap. Among the 25.1 (± 6.9) per cent that do not have access to soap, 81.7 (± 10.6) per cent state that they cannot afford soap or detergent. Further, 80.6 (± 6.9) per cent of households report that women use sanitary pads in dealing with menstruation.

Overall, the majority of households use family latrines. 27.6 (± 8.5) per cent use traditional pit latrines or open pits, 26.4 (± 6.1) per cent use improved pit latrines with concrete slabs, and 18.2 (± 8.6) per cent use water-seal or pour-flush latrines. 14.5 (± 9.8) per cent of IDP households have no toilet and use bushes or open spaces, however.

For disposing waste, most households burn their solid waste (57.5% ± 9.4 %) while 20.0 (± 6.4) per cent discard theirs in rivers, canals or drainages.

F41. % HOUSEHOLDS BY REASON FOR LACK OF SOAP [N = 109]

REASON	%	CI
Cannot Afford Soap / Detergent	81.7	71.1 - 92.2
Ran Out Of Soap / Detergent / Used It All	11.0	2.2 - 19.8
Other (specify)	2.8	0 - 5.8
Soap / Detergent Is Unnecessary	1.8	0 - 4.3
Soap / Detergent Is Unavailable / Cannot Find Soap Where I Live	0.9	0 - 2.6
Don't Like Using Soap / Detergent	0.9	0 - 2.7
Washing Hands With Soap / Detergent Is Not Our Cultural Practice	0.9	0 - 2.7

F42. % HOUSEHOLDS BY FEMALE SANITARY PRODUCT [N = 435]

MEANS	%	CI
Sanitary Pads	80.6	73.7 - 87.6
Piece Of Cloth	14.3	7.6 - 21
Nothing	2.5	0.9 - 4.2
I Don't Know Or Don't Want To Answer	2.5	0.9 - 4.2

F43. % HOUSEHOLDS BY WASTE DISPOSAL LOCATION [N = 435]

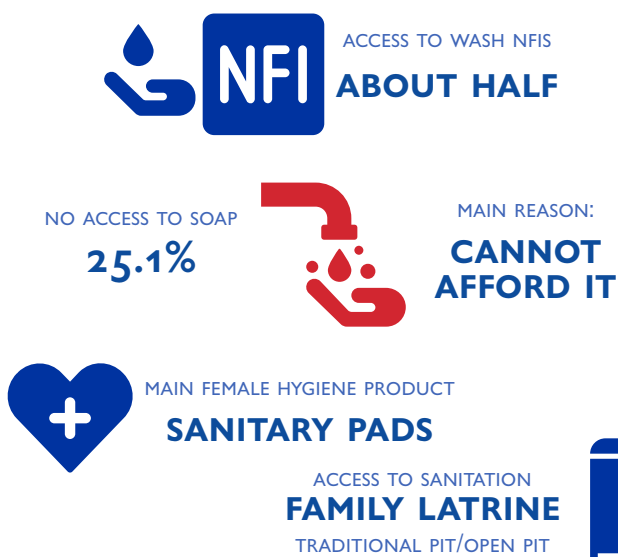
LOCATION	%	CI
Burn	57.5	48.9 - 66.1
River / Canal / Drainage	20.0	13.6 - 26.4
On The Street	6.2	3.3 - 9.1
Garbage Bin	6.0	1.1 - 10.9
Garbage Pit	5.5	3.2 - 7.8

F44. % HOUSEHOLDS WITHOUT A TOILET BY SUB-GROUP [N IN TABLE]

POPULATION GROUP	N	%	CI
Overall	435	10.1	5.9 - 14.3
Male HoH	118	4.2	0.7 - 7.8
Female HoH	317	12.3	6.9 - 17.7
Host Community	295	10.8	6.1 - 15.6
IDPs	62	14.5	5.7 - 23.3
Returnees / Relocated Persons	33	6.1	0 - 13.5
Voluntary Migrants	45	2.2	0 - 6.5

F45. % HOUSEHOLDS BY ACCESS TO SANITATION [N = 435]

LOCATION	%	CI
Family Latrine - Improved Pit Latrines With Concrete Slab	27.6	19.1 - 36.1
Family Latrine - Traditional Pit Latrine / Open Pit	26.4	20.3 - 32.6
Family Latrine - Water-seal / Pour-flush Latrine	18.2	10.8 - 25.5
Communal Shared Latrine - Traditional Pit Latrine / Open Pit	10.3	6.2 - 14.5
No Toilet / Bush / Open Space	10.1	5.9 - 14.3
Communal Shared Latrine - Improved Pit Latrines With Concrete Slab	3.2	0.9 - 5.6
Other (specify)	3.0	0.6 - 5.4
Communal Shared Latrine - Water-seal / Pour-flush Latrine Family Latrine	1.1	0 - 2.3



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

HEALTH

While 28.7 (± 7.8) per cent of households indicated that they were unable to access health care services when needed in the past six months, about the majority of households stated that they could reach their nearest health care facility within an hour (70.5% ± 9.6). The main barrier to access was cost (52.8% ± 18.2), while female-headed households also reported a lack of health facilities nearby as a key barrier (54.6% ± 17.0). This finding is corroborated by the fact that 43.2 (± 15.9) per cent of households in the lowest wealth quintile (lowest 20%) were unable to access health care when needed.

30.6 (± 8.1) per cent have attempted to access Ante-Natal Care services.

NO ACCESS TO A HEALTH
FACILITY WITHIN LAST 6
MONTHS
28.7%



1H+ TO CLOSEST HEALTH
FACILITY
29.5%



COST

MAIN BARRIERS TO ACCESS



NO FACILITY



NO MEDICINE

ATTEMPTED ANC ACCESS

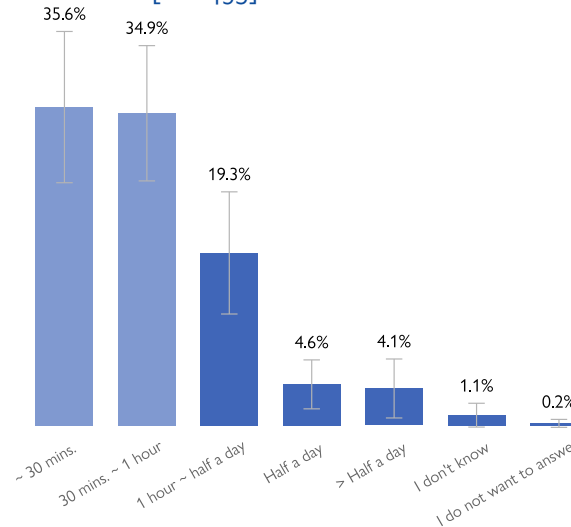
30.6%



ANC SERVICES NOT AVAILABLE

5.3%

F46. % HOUSEHOLDS WITH A GIVEN DISTANCE TO THE CLOSEST HEALTH FACILITY [N = 435]



F47. % HOUSEHOLDS EXPERIENCING CHANGE IN ACCESS TO HEALTH SERVICES [N = 435]

CHANGE IN ACCESS	%	CI
Same	32.0	25.4 - 38.5
Decreased Slightly	22.3	17.2 - 27.4
Decreased Substantially	17.9	11.5 - 24.3
Increased Slightly	17.5	11 - 24
Increased Substantially	5.7	3 - 8.5
Never Been Able To Access	3.2	1.4 - 5.1
Prefer Not To Answer	1.4	0.3 - 2.4

F48. % MALE AND FEMALE-HEADED HOUSEHOLDS BY BARRIER TO ACCESS TO HEALTH SERVICES [MALE N = 118; FEMALE N = 317]

BARRIER	MALE HOH		FEMALE HOH	
	%	CI	%	CI
Cost (Too Expensive)	53.6	30.6 - 76.6	52.6	33.2 - 71.9
No Nearby Facility	46.4	22.4 - 70.4	54.6	37.7 - 71.6
No Drugs	14.3	1.2 - 27.4	10.3	3.6 - 17
No Transportation	10.7	0 - 21.6	6.2	0.5 - 11.9
Discrimination	7.1	0 - 17.1	2.1	0 - 5
Unsafe	3.6	0 - 10.4	0.0	NA
Fear Of Illness	3.6	0 - 10.3	4.1	0.2 - 8.1
Personnel	3.6	0 - 10.7	4.1	0.1 - 8.2
Opening Time	3.6	0 - 10.1	5.2	0.8 - 9.5

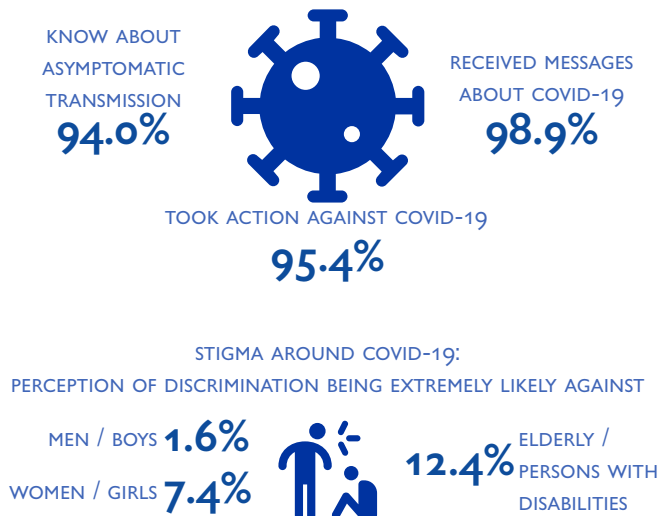
F49. % HOUSEHOLDS WITHOUT ACCESS TO HEALTH SERVICES BY SUB-GROUP [N IN TABLE]

GROUP	N	%	CI
Overall	435	28.7	20.9 - 36.5
Male HoH	118	23.7	14.1 - 33.3
Female HoH	317	30.6	21.9 - 39.3
Host Community	295	26.8	19 - 34.6
IDPs	62	37.1	21.2 - 53
Returnees / Relocated Persons	33	36.4	19.8 - 52.9
Voluntary Migrants	45	24.4	9.3 - 39.6

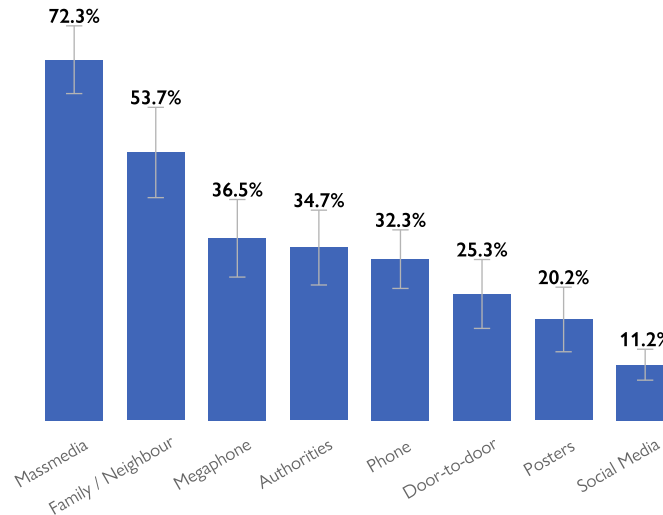
COVID-19

All households reported to be aware of COVID-19, and 98.9 (± 1.2) per cent indicated receiving messages about COVID-19. The main sources of this information were mass media (72.3% ± 6.8), family or neighbours (53.7% ± 9.1) and megaphones (36.5% ± 7.8). The vast majority were either very satisfied (56.0% ± 7.1) or satisfied (41.4% ± 6.7) with receiving these messages. 98.9 (± 2.0) per cent of households consider preventing the spread as important while 94.0 (± 3.0) per cent know about the possibility of asymptomatic transmission.

While 95.4 (± 2.4) per cent of households reported having taken action against COVID-19, the presence of the Ministry of Health teams carrying out COVID-19 testing for an epidemiological study in parallel with this survey may have affected respondents' answers by causing social desirability bias.



F50. % HOUSEHOLDS RECEIVING COVID-19 MESSAGES BY CHANNEL OF COMMUNICATION ON COVID-19 [N = 430]



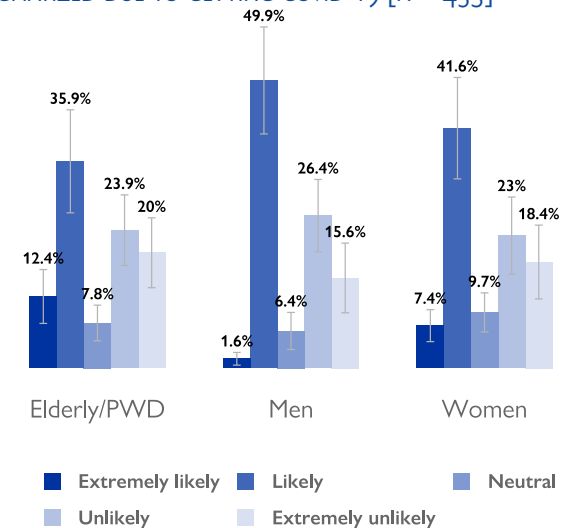
F52. % HOUSEHOLDS BY POTENTIAL ACTIONS TAKEN IF FAMILY MEMBER SHOWED COVID-19 SYMPTOMS [N = 435]

ACTION	%	CI
Call The Coronavirus Hotline	85.5	81.8 - 89.2
Seek The Hospital Or Health Unit	34.3	28 - 40.5
Stay In Quarantine / Isolation In My Home	20.2	14.2 - 26.2
Seek A More Experienced Relative For Advice	13.8	8.4 - 19.2
Seek Neighbourhood Nurse Or Health Worker	8.0	4.5 - 11.6

F51. % HOUSEHOLDS BY TOP PREVENTIVE MEASURES TAKEN AGAINST COVID-19 [N = 435]

MEASURE	%	CI
Wash Hands With Soap And Water	89.7	84.2 - 95.1
Put Distance Between Yourself And Other People	80.2	73.5 - 87
Avoid Close Contact With People Who Are Sick	77.7	70.7 - 84.7
Stay At Home As Much As Possible	73.1	65 - 81.2
Use Hand Sanitizer Frequently	72.6	65.5 - 79.7
Cover Face With Mask When Around Others	65.7	58.6 - 72.9
Cough / Sneeze Into Tissue / Elbow	34.3	27.7 - 40.8
Report Suspected Cases To Hotline	14.3	8.3 - 20.2

F53. % HOUSEHOLDS BY LIKELIHOOD OF TARGET GROUP BEING STIGMATIZED DUE TO GETTING COVID-19 [N = 435]



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

ECONOMIC VULNERABILITIES AND LIVELIHOODS

Four in five households (86.2% \pm 4.7%) reported a change in their sources of income after the introduction of COVID-19-related restrictions in April 2020. Some 73.8 (\pm 5.1) per cent of households indicated a decrease in their level of income, with 39.1 (\pm 6.5) per cent stating a slight and 34.7 (\pm 7.0) per cent a substantial decrease.

Some 78.8 (\pm 7.4) per cent of male-headed households reported a decrease in the level of income compared to 71.9 (\pm 5.4) per cent of female-headed households.

Among severely food insecure¹ households, 89.5 (\pm 9.8) per cent of households reported a decrease in the level of household income.

F54. % HOUSEHOLDS BY DEGREE OF CHANGE IN INCOME [N = 435]

CHANGE	%	CI
Decreased Slightly	39.1	32.6 - 45.6
Decreased Substantially	34.7	27.7 - 41.8
Same	11.7	7.6 - 15.9
Increased Slightly	10.3	6.7 - 14
Increased Substantially	2.1	0.2 - 3.9
Not Applicable	2.1	0.5 - 3.6

F56. % HOUSEHOLDS BY ECONOMIC SHOCK EXPERIENCED DUE TO COVID-19 [N = 435]

SHOCKS	%	CI
Reduced Income	44.4	36.5 - 52.3
Loss / Reduced Employment	43.9	36.1 - 51.7
Unusually High Food Prices	43.4	35.6 - 51.3
Depreciation	32.0	24.3 - 39.6
Unusually High NFI Prices	26.9	20.5 - 33.3
Foodshortage	26.4	20.5 - 32.4
Insecurity	4.4	2.4 - 6.4
None	3.4	1.5 - 5.4
Disease	2.5	0.9 - 4.2
Illness	2.1	0.5 - 3.6

HOUSEHOLDS WITH
INCOMES THAT DECREASED
SUBSTANTIALLY
34.7%



MAIN REASON FOR
DECREASE:
**CHANGE IN
MARKET &
INFLATION**

COVID-19-INDUCED SHOCKS:

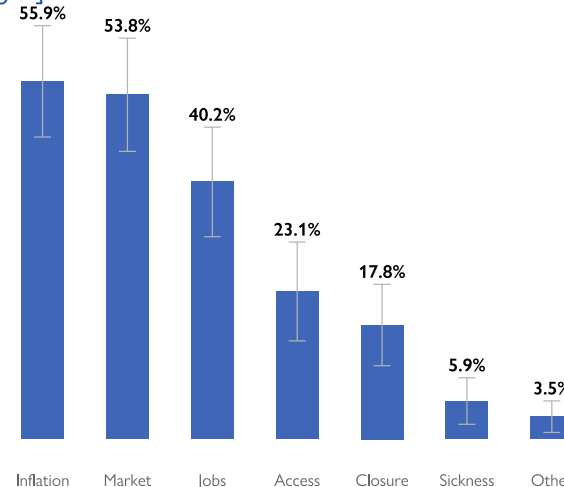
UNUSUALLY HIGH FOOD
PRICES



REDUCED INCOME

LESS / REDUCED
EMPLOYMENT

F55. % HOUSEHOLDS BY REASONS FOR CHANGE IN INCOME [N = 321]



F57. % HOUSEHOLDS BY ASSET OWNERSHIP [N = 435]

ASSETS	%	CI
Mattress	92.4	89.3 - 95.5
Mat	89.7	85.4 - 93.9
Chairs	87.6	82.5 - 92.7
Bed	79.3	73.4 - 85.3
Table	74.3	68 - 80.5
Kitchen Utensils	55.6	47.1 - 64.1
Radio	49.9	42.3 - 57.5
Mosquito Net	40.0	33.8 - 46.2
Blanket	34.5	28.2 - 40.8
TV	12.9	9.1 - 16.7

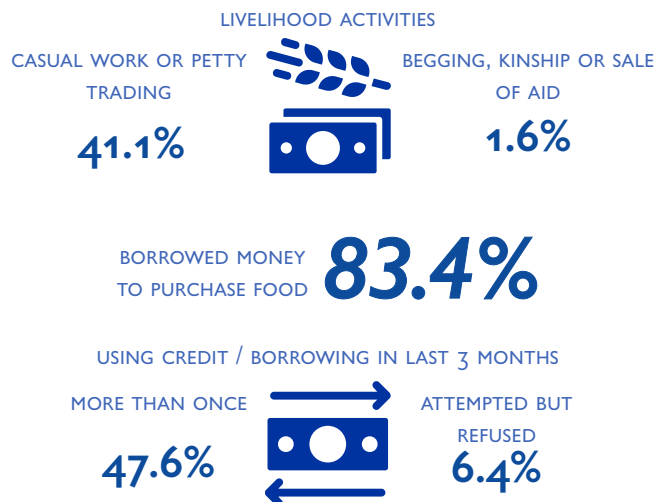
Note: The error bars and CI column in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

¹ Severe food insecurity implies extreme food consumption gaps or extreme loss of livelihood assets will lead to food consumption gaps. This indicator refers to the most extreme category of the Consolidated Approach for Reporting Indicators of Food Security (CARI) based on the household's current status of food security and their coping capacity.

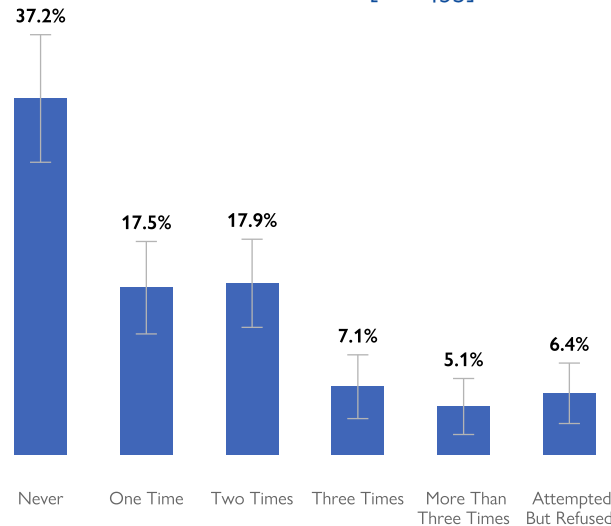
Salaried work (26.7% \pm 5.3%), skilled labour (16.1% \pm 5.0%) and casual waged labour related to construction (12.4% \pm 3.8%) are the top three sources of livelihoods. 73.3 (\pm 9.3) per cent of salaried workers, 70.0 (\pm 12.2) per cent of skilled labourers, 75.9 (\pm 16.3) per cent of petty traders and 74.3 (\pm 9.5) per cent of all casual labour wage earners reported a decrease in the level of income.

While male-headed households are mostly engaged in salaried employment (38.1% \pm 8.8%), casual wage labour (16.1% \pm 6.4%) and skilled labour activities (14.4% \pm 6.8%), the livelihoods of female-headed households are based on salaried work (22.4% \pm 5.7%), skilled labour (16.7% \pm 6.1%) and petty trading (14.8% \pm 5.7%).

24.1 (\pm 6.7) per cent of households spend at least 65 per cent of their total household expenditure on food alone and are thus vulnerable to market shocks. 6.4 (\pm 3.3) per cent of households used over three quarters of their expenditure on food. High to very high expenditure (over 65%) on food affects 76.3 (\pm 16.3) per cent of severely food insecure households.



F58. % HOUSEHOLDS BY FREQUENCY OF USING CREDIT/ BORROWING IN LAST THREE MONTHS [N = 435]



F59. % HOUSEHOLDS BY REASON FOR USING CREDIT/BORROWING IN LAST THREE MONTHS [N = 235]

REASON	%	CI
Purchase Of Food	83.4	77.9 - 88.9
Health Care	7.7	4.2 - 11.1
Investment In Business / Shop	3.0	0.5 - 5.5
Rent	2.1	0.3 - 4
Prefer Not To Answer	1.7	0 - 3.7

F60. % HOUSEHOLDS EXPENDITURE PROPORTION ON FOOD [N = 118; FEMALE N = 317]

PROPORTION	%	CI
Male		
Less Than 50%	29.7	19.4 - 40
50 To 65%	44.9	35.3 - 54.6
65 To 75%	18.6	11.7 - 25.5
>75%	6.8	1.4 - 12.1
Female		
Less Than 50%	30.0	23.7 - 36.2
50 To 65%	46.4	40.3 - 52.4
65 To 75%	17.4	10.5 - 24.2
>75%	6.3	3.1 - 9.6

F61. % HOUSEHOLDS BY LIVELIHOOD ACTIVITY [N = 435]

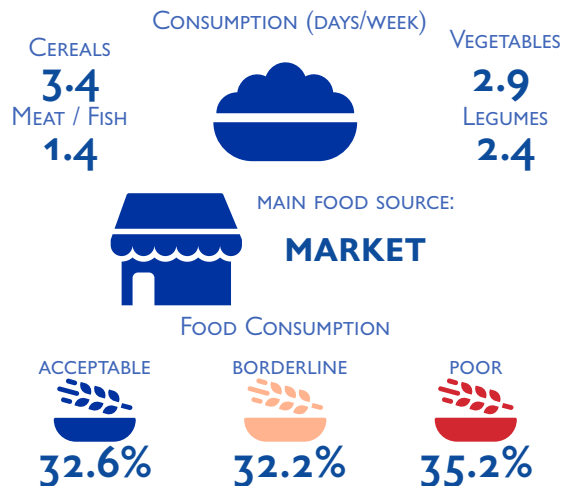
LIVELIHOOD	%	CI
Salaried Work	26.7	21.4 - 31.9
Skilled Labour	16.1	11.1 - 21.1
Casual Labour (Construction)	12.4	8.6 - 16.2
Petty Trading / Self-Employed	12.4	7.7 - 17.1
Trader / Shop Owner / Commerce	10.6	7.3 - 13.9
Casual Labour (Agriculture)	9.7	6.2 - 13.2
Other Casual Labour	3.9	1.4 - 6.4
Others	3.0	0.7 - 5.3
Sale Of Firewood / Poles, Charcoal, Stones	2.8	1.1 - 4.4
Begging, Kinship Or Sale Of Aid	1.6	0.5 - 2.7
Sale Of Alcoholic Beverages / Brewing	0.7	0 - 1.5
Renting Out Rooms / Apartments	0.2	0 - 0.7

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

FOOD SECURITY

The food consumption of 67.4 (± 6.6) per cent of households in Juba is inadequate, implying an insufficient diet and nutrients intake. Broken down according to the Food Consumption Groups, 35.2 (± 8.1) per cent have poor and 32.2 (± 5.1) per cent have borderline food consumption. This indicator serves as a proxy indicator of household caloric availability, showing that the high proportion of households with poor and borderline food consumption entails that most households are consuming less nutritionally dense diets, consisting mostly of cereals and vegetables.

On average, households consumed cereals for 3.4 (± 0.1) days, vegetables for 2.9 (± 0.1) days and legumes for 2.4 (± 0.1) days per week. Households with poor food consumption ate cereals 2.2 (± 0.2) days, vegetables 2.1 (± 0.3) and legumes for 1.7 (± 0.1) days per week, while all other food groups were consumed less than one day per week. A higher proportion of female-headed households (70.0% ± 7.5 %) are facing poor or borderline food consumption than their male counterparts (60.2% ± 10.8 %) although this difference is not statistically significant.



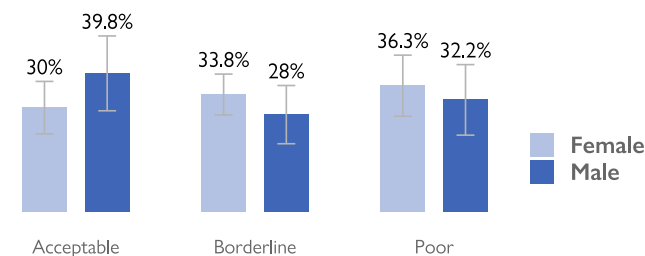
F62. AVERAGE NUMBER OF DAYS PER WEEK CONSUMING FOOD GROUPS [N = 435]

FOOD GROUP	CONSUMPTION	CI
Cereals	3.4 (days/week)	3.3 - 3.6
Veggies	2.9 (days/week)	2.8 - 3
Legumes	2.4 (days/week)	2.4 - 2.5
Oil	1.9 (days/week)	1.7 - 2.1
Sugar	1.9 (days/week)	1.6 - 2.1
Meat	1.4 (days/week)	1.3 - 1.5
Dairy	1.2 (days/week)	1.1 - 1.3
Fruits	1 (days/week)	0.9 - 1.1

F63. % HOUSEHOLDS BY FOOD CONSUMPTION GROUP [N = 435]

FCG	%	CI
Poor	35.2	27.1 - 43.3
Borderline	32.2	27.1 - 37.2
Acceptable	32.6	25.2 - 40.1

F64. % MALE AND FEMALE-HEADED HOUSEHOLDS BY FOOD CONSUMPTION [MALE N = 118; FEMALE N = 317]



F65. % HOUSEHOLDS BY SOURCES FOR FOOD CONSUMPTION GROUPS [N = 435]

SOURCE	%	CI
Cereals		
Market (Purchase Cash / Credit)	96.4	94.6 - 98.2
Own Crop / Garden Production	2.4	1 - 3.8
Legumes		
Market (Purchase Cash / Credit)	96.9	95.4 - 98.4
Own Crop / Garden Production	2.1	0.9 - 3.3
Dairy		
Market (Purchase Cash / Credit)	97.5	95.4 - 99.7
Meat		
Market (Purchase Cash / Credit)	99.0	98 - 100.1
Veggies		
Market (Purchase Cash / Credit)	92.5	89.7 - 95.3
Own Crop / Garden Production	7.2	4.6 - 9.8
Fruits		
Market (Purchase Cash / Credit)	96.4	94.2 - 98.7
Own Crop / Garden Production	2.2	0.4 - 4.1
Oil		
Market (Purchase Cash / Credit)	98.4	96.8 - 100
Food Assistance	1.0	0 - 2
Sugar		
Market (Purchase Cash / Credit)	93.7	89.9 - 97.5
Own Crop / Garden Production	4.4	0.8 - 8
Support From Neighbours / Relatives	1.1	0 - 2.4

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

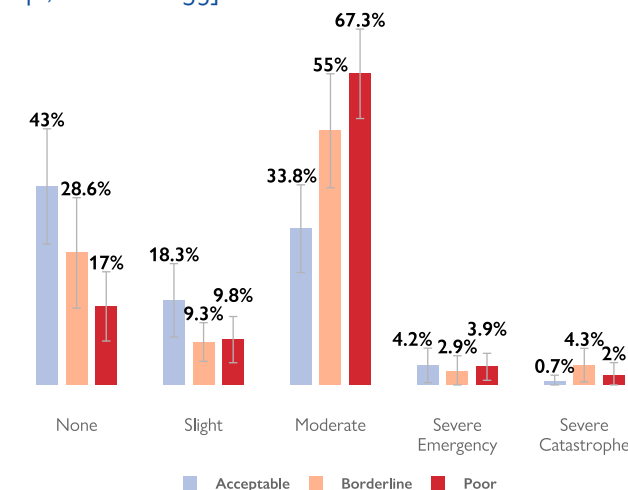
Households' perception of food deprivation as measured by the Household Hunger Scale (HHS) shows that about half of all households (52.4% \pm 7.9%) experienced moderate hunger. The prevalence of Severe Emergency and Severe Catastrophe was 3.7 (\pm 2.0) per cent and 2.3 (\pm 1.9) per cent respectively. 80.7 (\pm 15.7) per cent of households who reported Severe Emergency and Severe Catastrophe saw a decrease in income since April 2020, while only 7.7 (\pm 10.8) per cent of households noted an increase in income.

There are no significant gender differences in levels of hunger according to the HHS. Borderline and Poor food consumption groups as well as the adoption of coping strategies are correlated with higher levels of hunger according to the HHS.

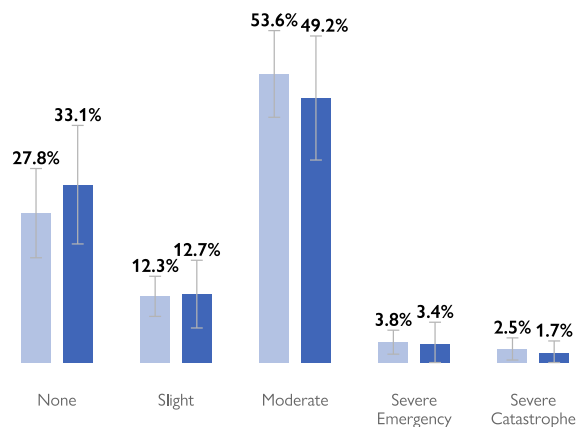
F66. % HOUSEHOLDS BY HOUSEHOLD HUNGER SCALE [N = 435]

HHS	%	CI
None	29.2	21.1 - 37.3
Slight	12.4	9.1 - 15.7
Moderate	52.4	44.5 - 60.3
Severe Emergency	3.7	1.7 - 5.7
Severe Catastrophe	2.3	0.4 - 4.2

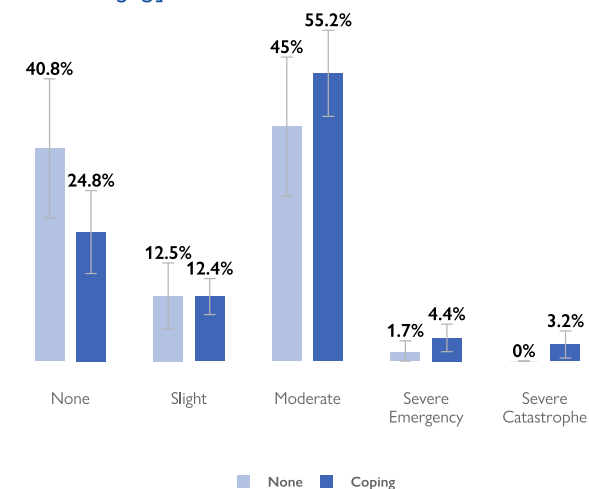
F68. % HOUSEHOLDS BY HOUSEHOLD HUNGER SCALE AND FOOD CONSUMPTION GROUP [ACCEPTABLE N = 142; BORDERLINE N = 140; POOR N = 153]



F67. % MALE AND FEMALE-HEADED HOUSEHOLDS BY HOUSEHOLD HUNGER SCALE [MALE N = 118; FEMALE N = 317]



F69. % HOUSEHOLDS BY HOUSEHOLD HUNGER SCALE AND USAGE OF LIVELIHOOD-BASED COPING STRATEGIES [NONE N = 120; COPING N = 315]

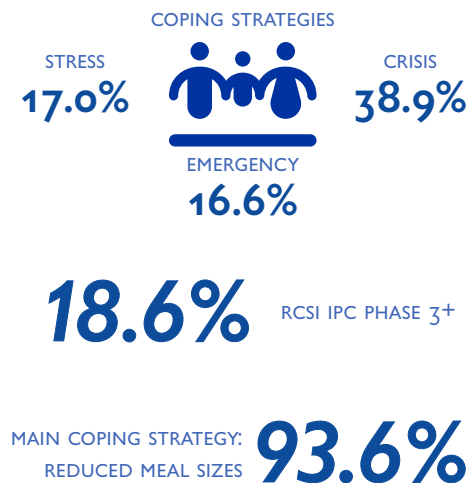


Note: The error bars and CI column in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

COPING STRATEGIES

Households with greater food access challenges are more likely to have a higher score in the reduced coping strategy index than households that have adequate access to food. Overall, more than nine in ten households (95.2% \pm 2.3%) used food-based coping strategies during the week prior to the survey. 93.6 (\pm 2.6) per cent of households reduced meal portion sizes while 87.4 (\pm 3.5) per cent relied on less preferred or less expensive foods to deal with food consumption gaps. There are no statistically significant differences in coping strategies between male and female-headed households.

With regards to livelihood-based coping strategies, more than 50 per cent of households are either engaged in crisis (38.9% \pm 7.5%) or emergency coping strategies (16.6% \pm 4.6%) which compromises their capacity to cope with shocks in future and reduce their future productive capacity.



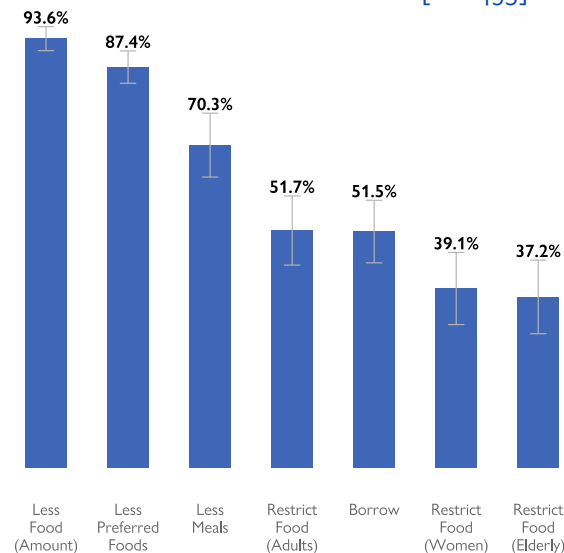
F70. % HOUSEHOLDS BY REDUCED COPING STRATEGY INDEX IPC THRESHOLDS [N = 435]

IPC PHASE	%	CI
1	15.2	10.5 - 19.8
2	66.2	59.9 - 72.5
3+	18.6	12.1 - 25.1

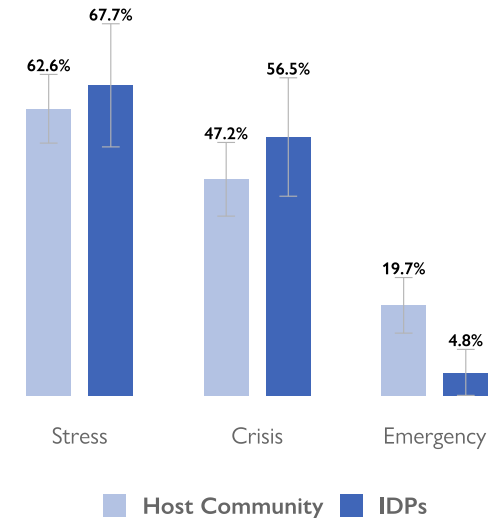
F71. % HOUSEHOLDS BY MAXIMUM LIVELIHOOD-BASED COPING STRATEGY [N = 435]

STRATEGY	%	CI
None	27.6	21.3 - 33.9
Stress Coping	17.0	12.1 - 21.9
Crisis Coping	38.9	31.3 - 46.4
Emergency Coping	16.6	12 - 21.1

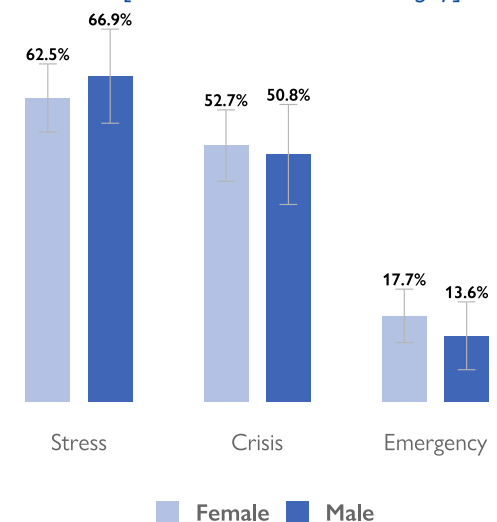
F72. % HOUSEHOLDS BY COPING STRATEGIES [N = 435]



F73. % HOUSEHOLDS BY MAXIMUM COPING STRATEGY AND POPULATION SUB-GROUP [HC N = 305; IDP N = 62]



F74. % MALE AND FEMALE-HEADED HOUSEHOLDS BY MAXIMUM COPING STRATEGY [MALE N = 118; FEMALE N = 317]

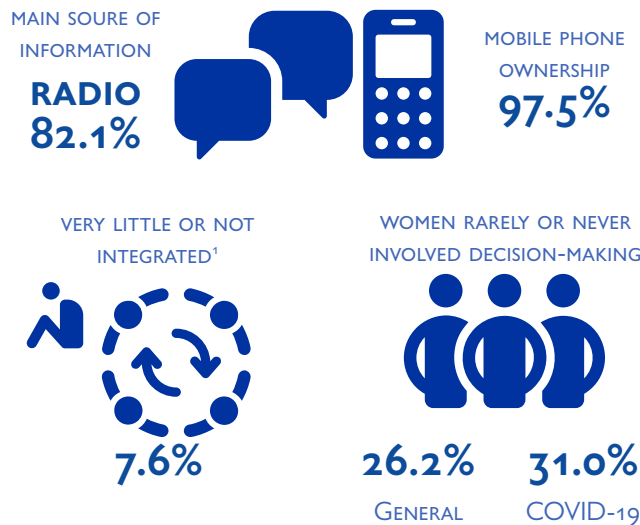


Note: The error bars and CI column in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

COMMUNICATION AND SOCIAL COHESION

Radio is the most common main source of information of households (82.1% \pm 4.1%) followed by public announcements (4.6% \pm 2.0%). 97.5 (\pm 1.7) per cent of households have at least one member owning a mobile phone, with adult women (80.2% \pm 4.6%) and men (74.5% \pm 5.6%) being the most likely owners.

While only 21.1 (\pm 6.7) per cent of households participate in social groups, the majority (81.1% \pm 5.2%) feels welcomed and accepted in their current community. Broken down different population groups (see F77), more than 70 per cent of all sub-groups feel integrated. The majority of households report that women are either significantly involved (28.5% \pm 6.0%) or moderately involved (38.9% \pm 5.9%) in community decision-making. The figures are similar when asked about COVID-19-related decision-making (27.8% \pm 6.1% and 33.8% \pm 5.7% respectively).



F75. % HOUSEHOLDS BY MAIN SOURCE OF INFORMATION [N = 435]

SOURCE	%	CI
Radio	82.1	78 - 86.2
Public Announcements	4.6	2.6 - 6.6
Television	3.9	1.7 - 6.1
Social Media (WhatsApp, Facebook)	3.7	1.6 - 5.7
Word Of Mouth	3.0	1.3 - 4.6

F76. % HOUSEHOLDS BY HOUSEHOLD MEMBER OWNING MOBILE PHONE [N = 435]

HH MEMBER	%	CI
Women	80.2	75.7 - 84.8
Men	74.5	68.9 - 80.1
Girls	10.3	6.5 - 14.2
Boys	8.7	4.8 - 12.7
No Answer	2.1	0.5 - 3.6

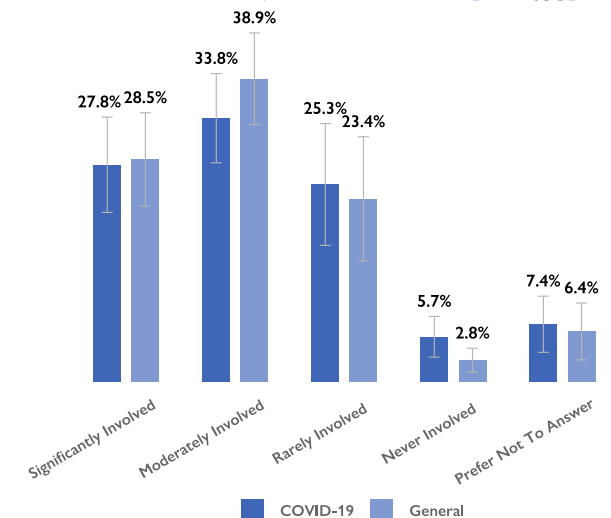
F77. % HOUSEHOLDS BY LEVEL OF FEELING INTEGRATED AND WELCOME IN THE COMMUNITY [N = 435]

INTEGRATION	%	CI
A Lot	38.6	31.9 - 45.3
Moderately	43.2	36.9 - 49.5
A Little	6.9	3.7 - 10
Not At All	0.7	0 - 1.5
Prefer Not To Answer	10.6	7 - 14.1

F78. % HOUSEHOLDS INVOLVED IN SOCIAL GROUPS AND FEELING INTEGRATED AND WELCOME BY SUB-GROUP [N IN TABLE]

	N	GROUP		INTEGRATED	
		%	CI	%	CI
Overall	435	21.1	14.4 - 27.9	81.8	76.6 - 87
Male HoH	118	24.6	14.7 - 34.5	89	82.3 - 95.7
Female HoH	317	19.9	13.2 - 26.5	79.2	73.7 - 84.7
Host Comm.	295	21.7	12.9 - 30.5	82.7	76.8 - 88.6
IDPs	62	16.1	5.4 - 26.8	75.8	63.6 - 88
Ret. / Rel. Persons	33	15.2	4.3 - 26	97	90.9 - 103
Voluntary Migrants	45	28.9	17.1 - 40.6	73.3	59.2 - 87.5

F79. % HOUSEHOLDS REPORTING WOMEN INVOLVED IN COMMUNITY AND COVID-19 DECISION-MAKING [N = 435]



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

¹ 12.8% preferred not to answer.

PROTECTION

34.0 (± 7.7) per cent state that they are not aware of any protection services in their area. More than half do not have access to the police (52% ± 7.4 %), and only 13.8 (± 2.8) per cent are able to access GBV health services.

14.3 (± 4.4) per cent of households report to have been affected by a safety or security incident in the past month. Discrimination (26.4% ± 7.7 %), labour exploitation (25.5% ± 6.2 %) and GBV or sexual harassment (21.6% ± 4.8 %) are the most commonly cited serious protection concerns. Indicatively, compared to host community households, more IDP households report serious protection concerns. In particular, a higher number of IDP households express concerns regarding GBV-related issues and targeted and inter-communal violence.

Among the 1.7 (± 1.4) per cent households offered an arranged marriage, girls and women are most prone to them although under-reporting is highly likely.

NO PROTECTION SERVICES
AVAILABLE

34.0%



AFFECTED BY SECURITY
INCIDENT

14.3%

TOP FOUR MOST SERIOUS PROTECTION CONCERNS



DISCRIMINATION



LABOUR EXPLOITATION

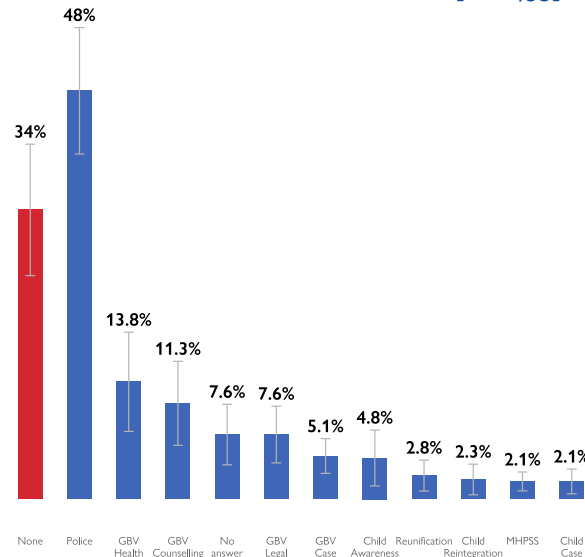


GBV



SEXUAL EXPLOITATION

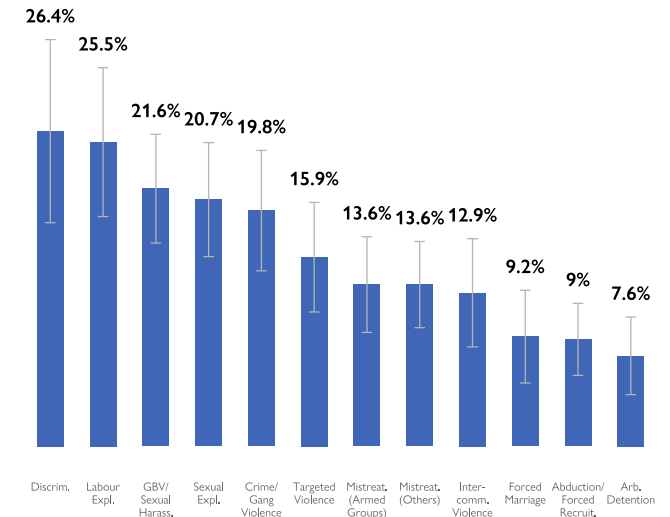
F80. % HOUSEHOLDS ON SERVICE AVAILABILITY [N = 435]



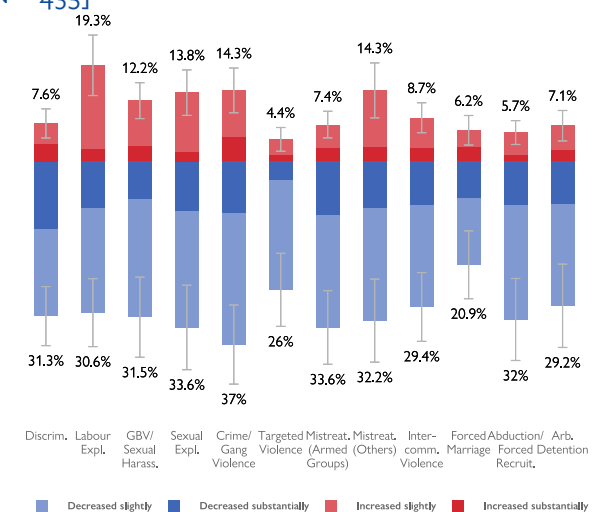
F81. % HOUSEHOLDS AFFECTED BY SAFETY OR SECURITY INCIDENT IN PAST MONTH BY SUB-GROUP [N IN TABLE]

GROUP	N	%	CI
Overall	435	14.3	9.9 - 18.7
Male HoH	118	11.9	4.6 - 19.1
Female HoH	317	15.1	10.1 - 20.2
Host Community	295	11.5	7.2 - 15.9
IDPs	62	6.5	0 - 12.9
Returnees / Relocated Persons	33	54.5	39.6 - 69.5
Voluntary Migrants	45	13.3	2.2 - 24.5

F82. % HOUSEHOLDS ON SERIOUS PROTECTION CONCERNS [N = 435]



F83. % HOUSEHOLDS ON CHANGES IN PROTECTION CONCERN [N = 435]

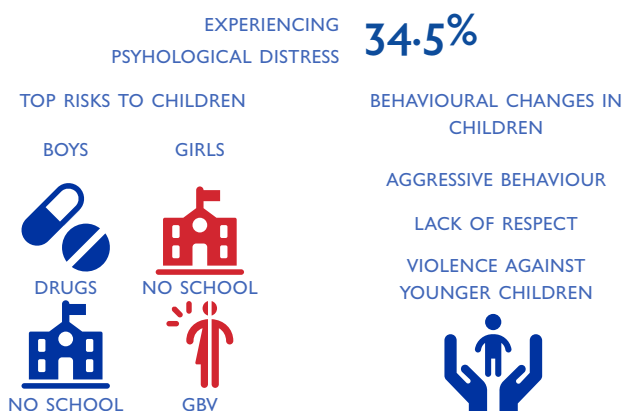


Note: The error bars and CI column in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

5.5 (± 2.0) per cent of households were offered travel opportunities during the three months before the assessment, of which about a third was offered opportunities resulting in debt – an indicator of exposure to trafficking risk.

34.5 (± 8.2) per cent of households include at least one member reporting symptoms of psychological distress that are severely impacting their daily life. Indicatively, IDPs, returnees and relocated persons experience above-average levels of psychological distress.

Households report boys to be most at risk to alcohol and drug abuse (59.5% ± 7.7%), lack of access to education (54.7% ± 7.0%) and involvement in youth gangs (47.6% ± 6.6%) while they see girls at risk of lack of access to education (52.6% ± 7.3%), GBV or sexual exploitation (48.3% ± 7.4%) and labour exploitation (40.7% ± 7.4%). One third of households (35.9% ± 6.7%) considers forced marriage a major risk factor for girls. 42.6 (± 8.4) per cent of households reported seeing behavioural changes in their children during the month before the assessment, with similar proportions of households reporting changes in boys (40.9% ± 8.4%) and girls (44.4% ± 8.3%). The most common behavioural changes are aggression and disrespectfulness.



F84. % HOUSEHOLDS BY HOUSEHOLD MEMBER BEING OFFERED TRAVEL OPPORTUNITY RESULTING IN DEBT [N = 435]

OFFERED	%	CI
Girls	1.1	0 - 2.3
Women	1.1	0 - 2.3
Boys	0.7	0 - 1.7
Men	0.7	0 - 1.7

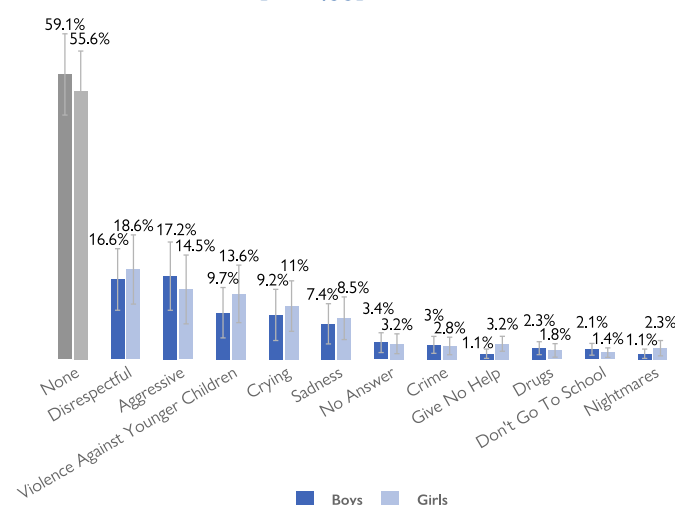
F85. % HOUSEHOLDS EXPERIENCING PSYCHOLOGICAL DISTRESS BY SUB-GROUP [N IN TABLE]

GROUP	N	%	CI
Overall	435	34.5	26.3 - 42.7
Male HoH	118	37.3	26.4 - 48.2
Female HoH	317	33.4	24.3 - 42.6
Host Community	295	31.2	22.7 - 39.6
IDPs	62	41.9	24.6 - 59.3
Returnees / Relocated Persons	33	63.6	46.6 - 80.7
Voluntary Migrants	45	24.4	9.1 - 39.8

F86. % HOUSEHOLDS REPORTING AT LEAST THREE BEHAVIOURAL CHANGES BY SUB-GROUP [N IN TABLE]

GROUP	N	BOYS		GIRLS	
		%	CI	%	CI
Male HoH	118	10.2	4.4 - 16	12.7	6.2 - 19.3
Female HoH	317	12.6	6.8 - 18.5	12.6	6.3 - 18.9
Host Comm.	295	8.1	4 - 12.3	9.5	5 - 14
IDPs	62	19.4	7.7 - 31	14.5	3.5 - 25.6
Ret. / Rel. Persons	33	30.3	11.9 - 48.7	39.4	20.4 - 58.4
Vol. Migrants	45	13.3	1.9 - 24.7	11.1	0.2 - 22

F87. % HOUSEHOLDS EXPRESSING BEHAVIOURAL CHANGES IN CHILDREN¹ BY GENDER [N = 435]



F88. % HOUSEHOLDS ON TOP RISKS TO CHILDREN [N = 435]

RISK	BOYS		GIRLS	
	%	CI	%	CI
Alcohol / Drugs Abuse	59.5	51.8 - 67.3	29.0	23.9 - 34
Lack Of Access To Education	54.7	47.7 - 61.7	52.6	45.9 - 59.4
Involvement In Youth Gangs	47.6	41 - 54.2	33.8	28 - 39.5
Labour Exploitation	46.4	38.8 - 54	40.7	33.3 - 48.1
Abandonment / Neglect	31.3	25.8 - 36.8	16.1	11.8 - 20.4
Violence / Beating	26.7	19.4 - 33.9	31.0	24.2 - 37.9
Abduction / Trafficking	16.8	11.6 - 22	12.2	8.6 - 15.8
GBV / Sexual Exploitation	12.4	7.8 - 17	48.3	40.9 - 55.7
Forced Marriage	3.7	1.4 - 6	35.9	29.2 - 42.5
Other	0.7	0 - 1.5	0.5	0 - 1.1

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

¹ Only behavioural changes where the sum of percentages of households reporting a given change in girls and in boys reached a threshold of 3 per cent are shown. Other answer choices not shown are "wanting to join armed groups", "anti-social behaviour (withdrawal / isolating themselves)" and "other".

HUMANITARIAN ASSISTANCE

5.5 (± 2.5) per cent of households received some form of humanitarian assistance during the three months preceding the assessment, with 4.3 (± 2.5) per cent dependent on humanitarian services to cover basic needs such as food, WASH, health, education.

A slightly higher proportion of female-headed households (6.0% ± 3.3%) received humanitarian assistance compared to their male counterparts (4.2% ± 3.6%) although the difference is not statistically significant. Indicatively, displaced households (9.7% ± 10.1%) also received more humanitarian assistance as compared to host community households (4.3% ± 2.5%).

F89. % HOUSEHOLDS RECEIVING HUMANITARIAN ASSISTANCE BY POPULATION SUB-GROUP [N IN TABLE]

GROUP	N	%	CI
Overall	435	5.5	3 - 8.1
Male HoH	118	4.2	0.7 - 7.8
Female HoH	317	6	2.7 - 9.3
Host Community	295	4.4	1.8 - 7
IDPs	62	9.7	0 - 19.8
Returnees / Relocated Persons	33	0	NA
Voluntary Migrants	45	11.1	2.5 - 19.8

F91. % HOUSEHOLDS BY TYPE OF ASSISTANCE AND BASIC SERVICES ACCESSED [N = 435]

ASSISTANCE	%	CI
WASH	37.5	16.1 - 58.9
General Food Distribution	29.2	7.1 - 51.3
Nutrition	20.8	0 - 48.6
Shelter Materials	8.3	0 - 18.2
Food For Assets	8.3	0 - 18
Medicines	8.3	0 - 17.6
Cash For Work	4.2	0 - 12.4
No Answer	4.2	0 - 12
Seeds	4.2	0 - 12.5
Other	4.2	0 - 12.4



MAIN TYPES OF ASSISTANCE / SERVICES ACCESSED

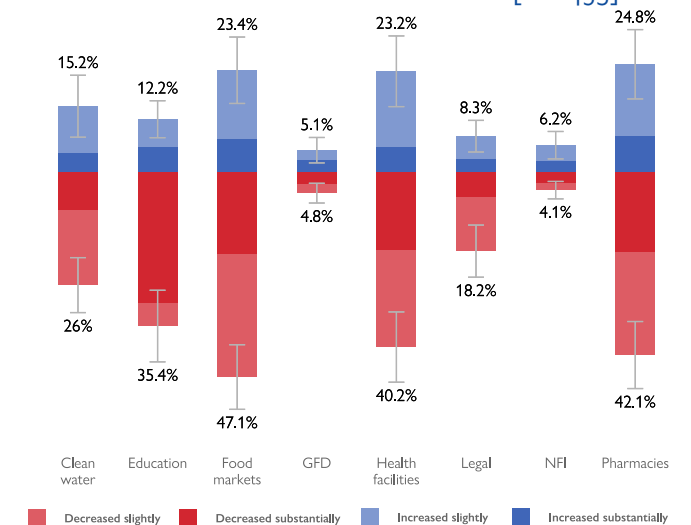


CHANGE IN ASSISTANCE / SERVICES ACCESSED
DECREASING

F90. % HOUSEHOLD DEPENDENCY ON HUMANITARIAN SERVICES TO COVER BASIC NEEDS BY SUB-GROUP [N IN TABLE]

DEPENDENCY	N	%	CI
Overall	435	3.9	1.4 - 6.4
Male HoH	118	1.7	0 - 4
Female HoH	317	4.7	1.3 - 8.1
Host Community	295	3.7	1.1 - 6.4
IDPs	62	6.5	0 - 16
Returnees / Relocated Persons	33	0	NA
Voluntary Migrants	45	4.4	0 - 10.3

F92. % HOUSEHOLDS REPORTING CHANGE IN ACCESS TO HUMANITARIAN ASSISTANCE AND BASIC SERVICES [N = 435]



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

INTERSECTORAL ANALYSIS

70.6 (± 5.1) per cent of households suffer from at least one type of household vulnerability, with female-headed households (73.2% ± 5.6 %) characterized with more vulnerabilities than male-headed households (63.6% ± 9.0 %).

Almost all households have at least one type of need, with an average of 6.0 (± 0.4) needs per household. Displaced households and returned or relocated households fare consistently worse, with 6.7 (± 0.8) and 8.1 (± 1.0) needs per household respectively. Indicatively, returnee households have more needs than the other population sub-groups in the MHPSS, protection, education and health sectors while having less needs in the SNFI sector. Overall, households have particularly high needs in the WASH sector due to a lack of access to safe and timely water as most households rely on water from tanks or trucks (72.0% ± 7.6 %) which is not considered a safe water source.

Breakdown of Household Vulnerabilities:

- *Population group:* IDPs, returnees, relocated households
- *Single-headed households:* Single female, single male, children only or elderly only households
- *Disabilities:* At least one member with a type of functional disability defined by [Washington Group Short Set of Questions](#)
- *Chronic illness:* At least one member with a chronic illness
- *Integration:* Household feels little integrated or not integrated at all in the community

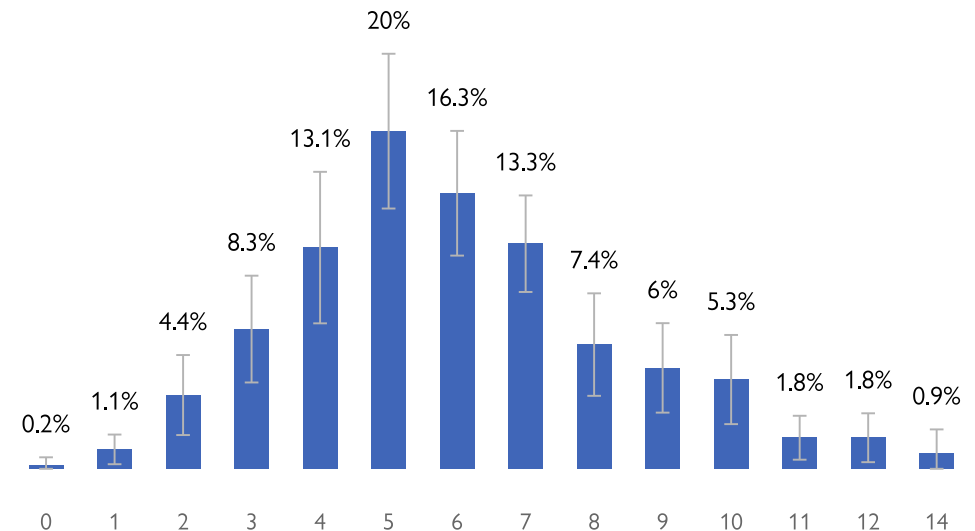
Breakdown of Household Needs:

- *SNFI*
 - Shelter damage: Partially or completely damaged
 - Crowding: More than three persons sleeping in busiest room
 - Shelter type: Improvised or communal shelter
- *Education*
 - Children dropped out of school in past school year
 - Children never attended school
- *WASH*
 - Access to water: Not safe or timely access
 - Access to water: Not sufficient amount of water
 - Sanitary facility: No toilet
 - Access to WASH NFI: No access to soap or two jerrycans
- *Health*
 - Access to facility: No access
 - Distance to facility: More than one hour
- *Protection*
 - Services: No services available
 - Safety: Suffered from security incident in last month
 - Child protection: Behavioural changes
 - GBV risk: GBV and sexual exploitation
- *MHPSS*
 - Distress: Experienced psychological distress
- *FSL*
 - Food Consumption Score: "Poor"
 - HHS: "Severe Emergency" or "Severe Catastrophe"
 - Maximum LCS: "Crisis" or "Emergency"
 - Livelihood: Kinship, begging, food/NFI assistance

F93. % HOUSEHOLDS BY NUMBER OF VULNERABILITIES BY SUB-GROUP [N IN TABLE]

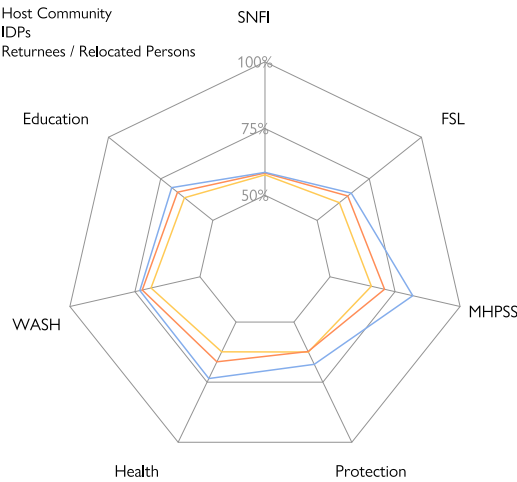
NO. OF VULNERABILITIES	0	1	2	3	4
Overall [n = 435]					
%	29.4	38.4	24.8	6.2	1.1
CI	24.3 - 34.5	33.6 - 43.1	20.3 - 29.4	3.6 - 8.9	0.2 - 2.1
Male HoH [n = 118]					
%	36.4	37.3	17.8	7.6	0.8
CI	27.5 - 45.4	29.6 - 45	10.7 - 24.9	2.7 - 12.6	0 - 2.5
Female HoH [n = 317]					
%	26.8	38.8	27.4	5.7	1.3
CI	21.3 - 32.4	32.8 - 44.8	22.2 - 32.7	2.8 - 8.6	0.1 - 2.4

F94. % HOUSEHOLDS BY NUMBER OF NEEDS [N = 435]

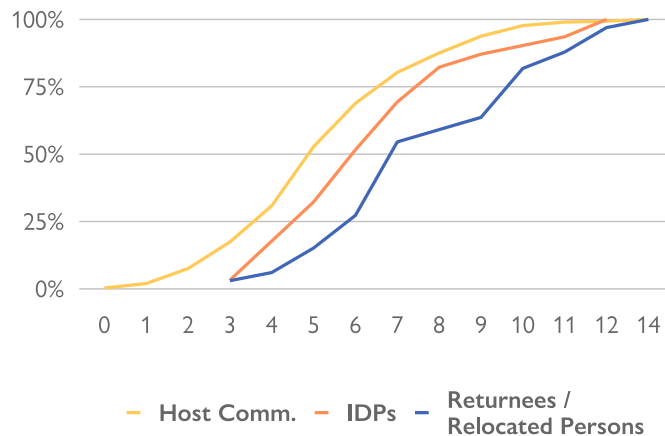


Note: The error bars and CI column in the summary tables indicate 95% confidence intervals. Percentages may not sum to 100 due to rounding error.

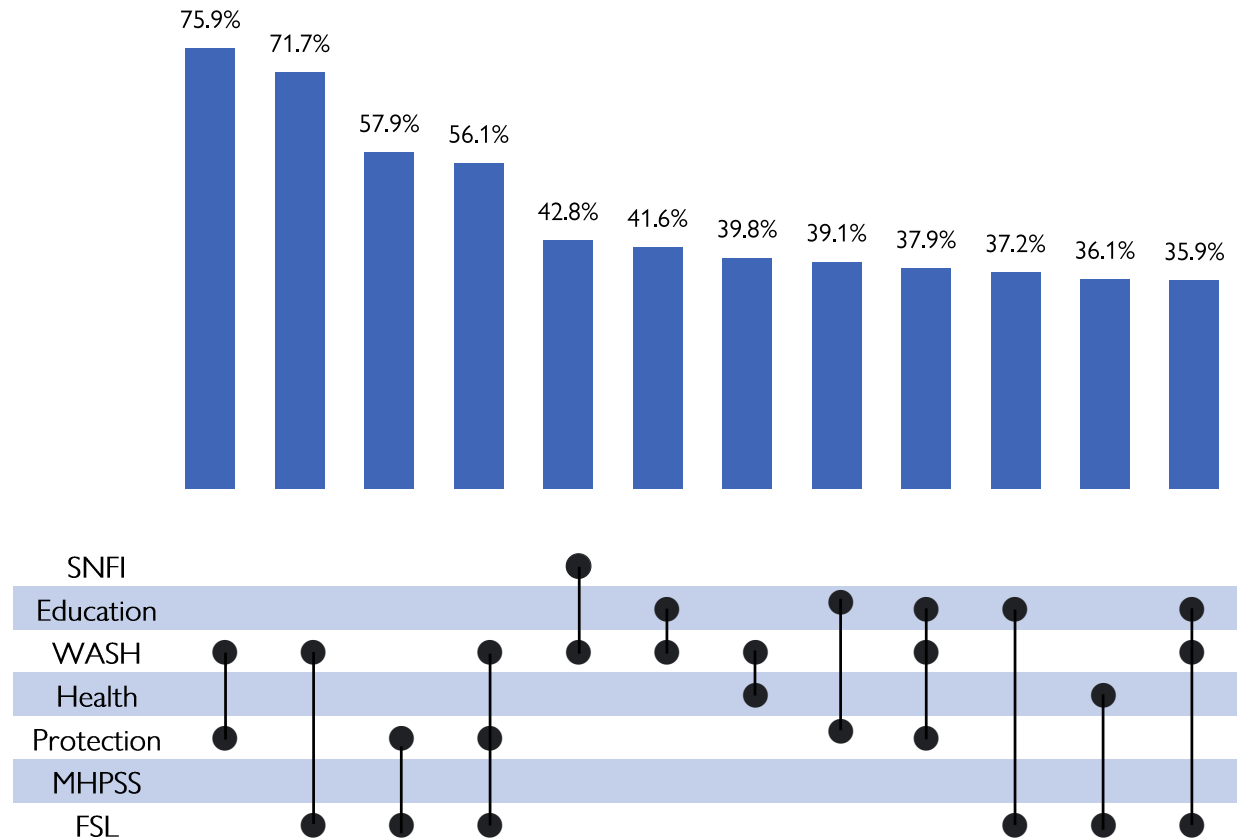
F95. AVERAGE SECTORAL NEEDS PERCENTAGE¹ BY SUB-GROUP
[HOST COMMUNITY N = 305; IDPS N = 62; RET. / REL. PERSONS
N = 33]



F96. CUMULATIVE % HOUSEHOLDS BY NUMBER OF NEEDS BY SUB-GROUP [HOST COMMUNITY N = 305; IDPS N = 62; RET. / REL. PERSONS N = 33]



F97. % HOUSEHOLDS BY MOST COMMON SET OF NEEDS [N = 435]



¹ 100% indicates that households have answered positively to all indicators in a given sector.

