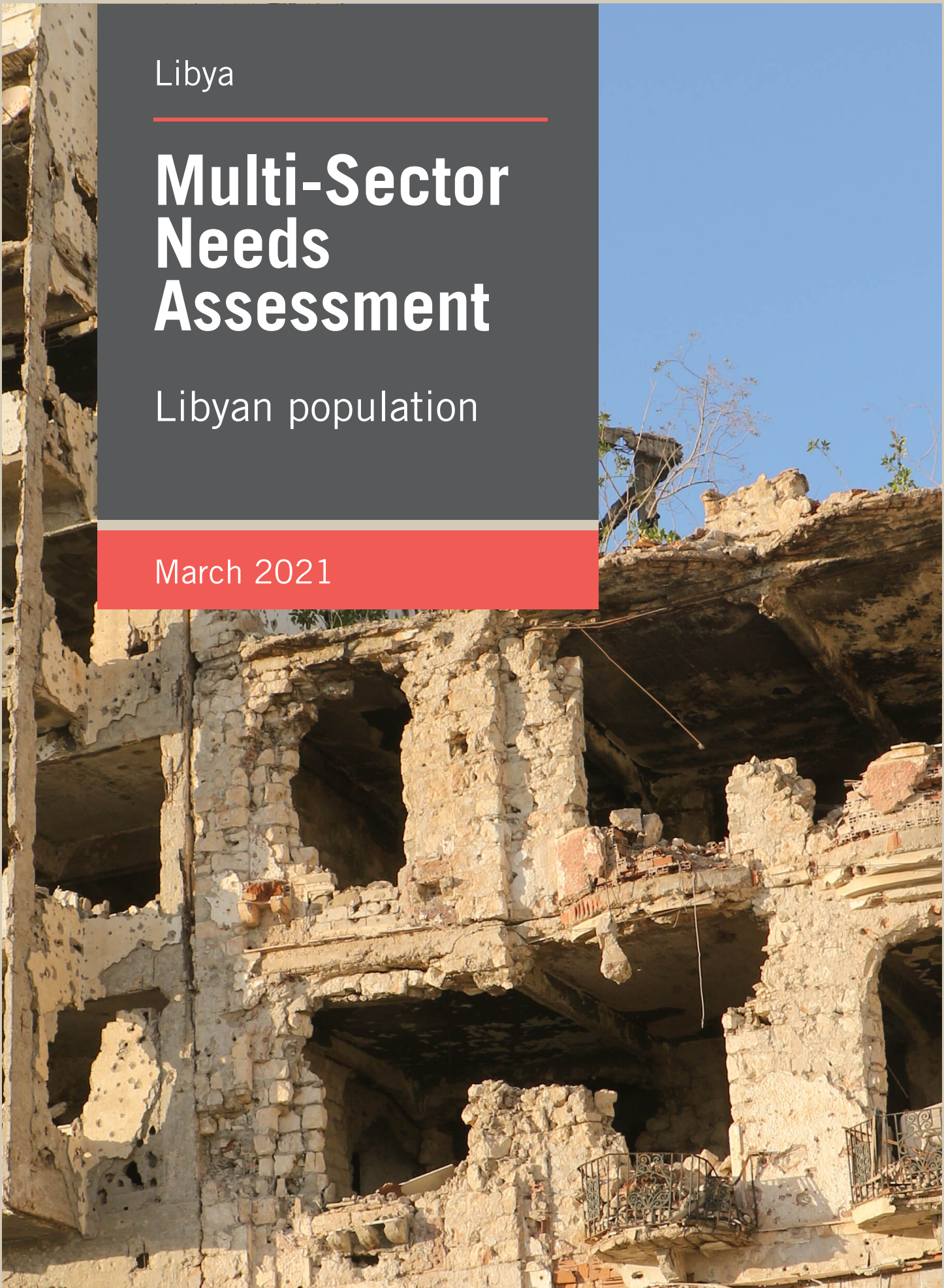
Libya

Multi-Sector Needs Assessment

Libyan population

March 2021



USAID FROM THE AMERICAN PEOPLE

Funded by European Union Civil Protection and Humanitarian Aid

REACH Informing more effective humanitarian action

Assessment conducted in the framework of:

Funded by:

Funded by
European Union
Civil Protection and
Humanitarian Aid

USAID
FROM THE AMERICAN PEOPLE

With the support of:

PLACEHOLDER
WWW.PLACEHOLDER.TN

About REACH and ACTED

REACH is a programme of ACTED. It strengthens evidence-based decision-making by humanitarian actors through efficient data collection, management and analysis in contexts of crisis.

ACTED is an international NGO. Independent, private and non-profit, ACTED respects a strict political and religious impartiality, and operates following principles of non-discrimination and transparency. Since 2011, ACTED has been providing humanitarian aid and has supported civil society and local governance throughout Libya, from its offices in Tripoli, Sebha and Benghazi.

EXECUTIVE SUMMARY

Protracted conflict and related instability continue to dominate in Libya, with shifts in contact lines in 2020 leading to one of the largest displacement spikes documented since 2011.[1] Despite an official ceasefire agreement in October, the situation in several areas such as Sirt remains tense and independent militias continue to be active.[2,3] An oil blockade instated in January and lasting until September deepened the economic crisis in the country, further exacerbating the liquidity shortage that has characterised the Libyan market since conflict in 2014 reduced government revenues and cash flows, and deepened mistrust in the banking system.[4,5] This protracted economic and political crisis has restricted access to cash for households, which in the cash based economy has an impact on the ability of households to meet their basic needs.[6,7] Within this already complex humanitarian context, COVID-19 reached Libya in March, putting additional pressure on the economy, the labour market and a health system particularly susceptible to conflict related violence.[8,9,10] As COVID-19 spread throughout the country, health facilities continued to come under attack, with at least 25 facilities affected by violence by May 2020.[11]

In this context, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) with support from REACH and with extensive input from all active sectors and working groups in Libya, conducted a country wide Multi-Sector Needs Assessment (MSNA) at mantika level (admin level 2) in Libya. The primary purpose of the assessment was to inform 2021 humanitarian response planning and support a targeted and evidence-based humanitarian response. Data from the 2020 MSNA has been used to feed into the 2021 Humanitarian Needs Overview (HNO).

The assessment consisted of a quantitative and a qualitative component. Quantitative data collection took place between 24 June and 14 August 2020 and consisted of 6,061 household surveys. The sample was stratified on mantika and displacement status, with sampling quotas for non-displaced, IDP, and returnee populations for each mantika. Due to the operating environment in light of COVID-19, all household surveys were conducted over the phone. Phone numbers were sourced from respondent referrals and contact lists from organizations active in Libya. The sampling strategy used was a non-probability sampling approach, using minimum quotas per mantika and displacement status. Therefore, the findings cannot be taken as statistically representative at mantika level (admin level 2); as far as possible, biases in the data were identified and mitigated through triangulation with local actors and qualitative data collection, while any outlying data was removed. Qualitative data collection consisted of 93 key informant interviews (KIIs) and took place during November and December. The topic and location of KIIs was informed by findings from the quantitative data. In addition, two focus group discussions (FGDs) with women were conducted in Sebha on the topic of gender-based violence (GBV) by the International Medical Corps (IMC)[12], and a series of online FGDs were conducted in coordination with the Food Security Sector to update the consumption-based coping strategies index (CSI), as part of a complementary output to the MSNA. All findings were contextualized and triangulated with secondary sources.

[1] IOM-DTM, "Libya IDP and Returnee Report: Mobility Tracking Round 30."IOM-DTM, "Libya IDP and Returnee Report: Mobility Tracking Round 31."
[2] International Crisis Group, "Fleshing Out the Libya Ceasefire Agreement" (Rome/Brussels, November 4, 2020).
[3] "ISWN Middle East Conflict Map ," accessed January 26, 2021, https://www.google.com/maps/d/u/0/viewer?mid=1M-_ymjR9xwOK7KMikOcUFSAE1ac&ll=29.407938318018005%2C13.359630906957895&z=6.
[4] Ayman al-Warfali, "Cash Shortage Adds to Weary Eastern Libyans' Woes," Reuters, October 7, 2020, https://www.reuters.com/article/libya-economy/cash-shortage-adds-to-weary-eastern-libyans-woes-idINKBN26S2BY.
[5] REACH and Libya Cash Working Group, "Libya Joint Market Monitoring Initiative (JMMI): 3 - 13 October," 2020.
[6] Jason Pack, "Libya's Liquidity Crunch and the Dinar's Demise: Psychological and Macroeconomic Dimensions of the Current Crisis," 2017.
[7] REACH and Libya Cash Working Group, "Libya Joint Market Monitoring Initiative (JMMI): 6 - 18 November," 2020.
[8] WHO, "Health Response to COVID-19 in Libya: WHO Update #19," 2020, https://reliefweb.int/sites/reliefweb.int/files/resources/libya_covid_update_19_final.pdf.
[9] "Libya - Fuel, PPE and Salary Shortages Impact Health System amid Rising COVID-19 Cases," OCHA , October 14, 2020, https://reports.unocha.org/en/country/libya/card/3RF6JPg8pc/.
[10] Amnesty International, "Libya: Historic Discrimination Threatens Right to Health of Minorities in the South amid COVID-19," April 2020.
[11] International Rescue Committee (IRC), "Second Hospital Attack in Four Days Puts Libya's COVID-19 Response Further at Risk, Warns IRC - Libya," May 14, 2020, https://reliefweb.int/report/libya/second-hospital-attack-four-days-puts-libya-s-covid-19-response-further-risk-warns-irc.
[12] A separate output is forthcoming on GBV in collaboration with the IMC

Key findings

Households in Libya were most **likely to have needs (otherwise referred to as 'living standards gaps') within cash & markets (C&M) followed by food security, and health. The sector where the most households were found to have extreme needs was protection**. This report focuses on: C&M needs, as the thematic area affecting the highest proportion of households; health, given the COVID-19 context and significant added pressure on health systems in 2020; and protection, given the extreme needs found in this area. Overall, returnees were found with more severe needs than other population groups in all areas apart from health, likely driven by poor infrastructure, lacking functional labour markets and prevailing safety and security issues in areas of return. Households with needs in multiple sectors were more likely to be found in the South than any other region (70%), followed by the East (47%), and the West (11%).

In addition to sectoral needs, the MSNA assessed the households' reliance on negative coping strategies (otherwise referred to as 'capacity gaps'), which deplete household resources and weaken the capacity of households to deal with challenges and shocks in the future, such as taking on additional jobs or selling assets. **Over one third of households were found to have been relying on negative coping strategies in the 30 days prior to data collection.**[13] Significant regional variation was found, with the South found to have the highest proportion of respondents reporting to use negative coping strategies (80%), compared to the East (77%) and the West (8%). Returnees were also more likely to report using negative coping strategies (59%), compared to IDPs (41%), and non-displaced populations (33%).

In order to understand how both sectoral needs and capacity gaps manifest at household level, household needs profiles were analysed. **Findings show that needs profiles in Libya are diverse, with over 200 unique needs profiles identified, and most combinations of needs representing less than 1% of the sample**. The most common needs profile was for respondents to have needs only in health (16%) and no other sectors; this is likely to reflect the structural nature of reported challenges accessing healthcare in Libya, affecting more than just the most vulnerable populations.

Regarding living standards gaps, C&M needs were driven by households relying on unstable forms of income and being unable to access key services or commodities due to a lack of financial resources. These issues are closely related to the on-going economic crisis, in particular delays and reductions to public sector salaries since 2014, coupled with a lack of liquidity.[14],[15] This was particularly found to affect returnees, reflecting important livelihood and markets considerations in areas of return, as noted during qualitative data collection.

Health needs in Libya were found to have been driven by a lack of medicines available in health facilities, absence or shortage of health workers, and health facilities being overcrowded. These findings are consistent with documented deterioration of the health system in Libya, especially since 2014, where specialised foreign health workers were expatriated, and health facilities became targets during conflict-related violence. [16],[17] While the drivers of health needs were similar across regions, respondents in the South were more likely than those in other regions to report an absence of healthcare workers as a key healthcare challenge.

Extreme needs in protection were driven by households reporting awareness of safety incidents, such as robberies or assaults, in their baladiya (admin level 3) in the 30 days prior to data collection. More respondents were found to have 'extreme' needs in protection, than in any other sector. Reporting on this indicator differed considerably by region, with the South again found to have the highest proportion of households with extreme needs (31%), compared to the East (13%) and the West (6%). The mantikas with the highest percentage of households reporting safety incidents reported conflict-related violence, robberies, kidnappings, and killings as examples. The overall percentage of households with protection needs varied by displacement status; 19% of returnee households were found to have protection needs, compared to 10% among both non-diplaced and IDP households.

[13] Only negative coping strategies classified as 'crisis' or 'emergency' under the Livelihoods Coping Strategy Index (LCSI) are included in this score. See Annex 8 for an overview of the strategies that fed into the index.
[14] Mahmoud Abdelwahed, "Workers in Libya Struggle under Oil Blockade," *Al Jazeera*, April 3, 2020, https://www.aljazeera.com/news/2020/04/workers-libya-struggle-oil-blockade-200403134618422.html.
[15] al-Warfali, "Cash Shortage Adds to Weary Eastern Libyans' Woes."
[16] WHO, "Humanitarian Crisis in Libya," *Who*, 2015.
[17] Annemarie Ter Veen, "Service Availability and Readiness Assessment (SARA) of the Public Health Facilities in Libya," 2017.

The case study focused on Southern Libya, where findings indicated that humanitarian needs are highly concentrated: overall, 70% of households were found to have unmet needs in at least two sectors or thematic areas, compared to 47% in the East and 11% in the West. It was found that these needs were, to a significant extent, caused by the fragmented security system, the poor electricity supply, and damaged infrastructure. The South has experienced prolonged periods of state underinvestment including in service infrastructure.[18] Poor electricity supply, on the other hand, has consequences for a range of needs including access to water and other services such as banking. Damaged housing, primarily due to poor construction and lack of maintenance, are also prohibiting access to services.

Needs in Libya are extremely diverse. While there are general trends across Libya, such as issues related to access to cash and access to health, needs were found to differ widely across regions, mantikas, and displacement status. Likely more complexity is to be found at lower administrative levels and among other population groups. Due to the sampling strategy and scope of the MSNA, the degree to which these differences can be highlighted within this exercise is limited. To better understand the complexity of needs in Libya, and the local dynamics in which these needs profiles are being shaped, it is important that further assessments are carried out to supplement the findings from the MSNA. Understanding the specific needs and profiles of Libyans is imperative to building an effective and inclusive humanitarian response.

[18] I. Trauthig, "Understanding Libya's South Eight Years After Qaddafi | United States Institute of Peace," November 23, 2019, https://www.usip.org/publications/2019/10/understanding-libyas-south-eight-years-after-qaddafi.

CONTENTS

List of Acronyms

C&M	Cash and markets
CARI	Consolidated Approach to Reporting Indicators of Food Security
CG	Capacity gap
CFM	Complaints and Feedback Mechanism
CMWG	Cash & Markets Working Group
CSO	Civil Society Organisation
DTM	Displacement Tracking Matrix
ECHO	European Civil Protection and Humanitarian Aid Operations
ETS	Electronic Telecommunication Sector
FCS	Food Consumption Score
FGD	Focus group discussion
GBV	Gender-based violence
GCCG	Global Cluster Coordinators Group
GNA	Government of National Accord
HH	Household
HIC	Health Information Center
HNO	Humanitarian Needs Overview
HRP	Humanitarian Response Plan
IASC	Inter-Agency Standing Committee
IDP	Internally displaced person
IMC	International Medical Corps
(I)NGO	(International) non-governmental organisation
IOM	International Organisation for Migration
JIAF	Joint Inter-Sectoral Analysis Framework
JIAG	Joint Inter-Sectoral Analysis Group
JMMI	Joint Market Monitoring Initiative
KI	Key informant
KII	Key informant interview
LCSI	Livelihood Coping Strategy Index
LNA	Libyan National Army
LSG	Living standard gap
LYD	Libyan dinar
M&E	Monitoring and evaluation
MEB	Minimum expenditure basket
MoH	Ministry of Health
MPI	Multi-dimensional Poverty Index
MSNA	Multi-Sector Needs Assessment
MSO	Medical Supply Organization
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PEV	Pre-existing vulnerabilities
rCSI	Reduced coping strategy index
SARA	Service Availability and Readiness Assessment
SNFI	Shelter & Non-Food Items
SSL	Secure Sockets Layer
ToR	Terms of reference
UNFPA	United Nations Fund for Population Activities
WASH	Water, sanitation, and hygiene
WFP	World Food Programme
WHO	World Health Organization

Geographical Classifications

Region The highest administrative subdivision of Libya below the national level. There are three regions in Libya: the West ("Tripolitania"), the East ("Cyrenaica") and the South ("Fezzan").

Mantika The second administrative subdivision of Libya, or the equivalent of a district. Libya currently has 22 mantikas, which are regionally divided as follows, according to the UN COD[19]:

1. West: Al Jabal Al Gharbi, Al Jfara, Al Margeb, Azzawya, Misrata, Nalut, Sirt, Tripoli and Zwara
2. East: Al Jabal Al Akhdar, Al Kufra, Almarj, Benghazi, Derna, Ejdabia and Tobruk
3. South: Al Jufra, Ghat, Murzuq, Sebha, Ubari and Wadi Ashshati

Baladiya The third administrative subdivision of Libya, or the equivalent of a municipality. Libya currently has 100 baladiyas.[20]

Mahalla The fourth administrative subdivision of Libya, roughly equivalent to a neighbourhood. Libya currently has 667 mahallas.[21]

Map 1: All 22 mantikas in Libya

[19] OCHA, "Libya Common Operational Dataset," 2017.
[20] Ibid.
[21] Ibid.

List of Figures, Tables and Maps

INTRODUCTION

Throughout the last year, the conflict that began in 2011 in Libya continued to fragment the country, leaving thousands displaced and further weakening political and economic institutions. From April to June 2020, over 50,000 people became displaced, primarily due to conflict in the West which brought the total estimated number of displaced populations to 425,714 throughout the country.[22] An oil blockade instated in January and lasting until September deepened the economic crisis in the country, further exacerbating the liquidity shortage that has characterised the Libyan market since conflict in 2014 reduced government revenues and cash flows, and deepened mistrust in the banking system.[23,24] The economic situation in Libya deteriorated further with the onset of COVID-19, which resulted in various restrictive measures that disrupted livelihoods and supply lines.[25]

Renewed efforts to broker peace in Libya were initiated by political talks in Berlin in January, resulting in the creation of the 5+5 Joint Military Commission.[26] In October, this commission reached an official ceasefire agreement, building on an informal ceasefire that had been in effect since August.[27] Additionally, oil production in several oil fields resumed in October after agreements on revenue distribution were reached.[28] In December, the two central banks met for the first time in five years and agreed to unify exchange rates.[29]

Despite the positive developments of the last months, the situation in Libya remains uncertain. The 8-month long oil blockade resulted in losses to the economy that will likely have a lasting impact.[30] The blockade also resulted in problems around the payment of public salaries, threatening the livelihoods and ability to meet needs of many households.[31] A comprehensive peace deal is also not yet in sight and territories remain disputed. The displacement caused by the shift in conflict lines this year may have long-lasting effects for these households.

Libya, like many other countries, continues to struggle with the spread of the COVID-19 virus. The first case in Libya was identified on 24 March 2020.[32] Different measures including regional lockdowns and confinements have been put in place since.[33] The fragmented health system struggles to accommodate the needs of affected people.[34] The spread of COVID-19 in combination with continued violence pose significant threats to the safety and well-being of people in Libya.[35]

In light of the continuing challenges and persistent information gaps on the impact of the protracted conflict and the spread of COVID-19, OCHA, with the support from REACH, and extensive input from all active sectors and working groups in Libya, conducted a MSNA in all mantikas (admin level 2) in Libya. The primary purpose of the assessment is to inform 2021 humanitarian response planning and support a targeted and evidence-based humanitarian response. Data from the 2020 MSNA has been used to feed into the 2021 HNO.

---

[22] IOM-DTM, "Libya IDP and Returnee Report: Mobility Tracking Round 30"; IOM-DTM, "Libya IDP and Returnee Report: Mobility Tracking Round 31."
[23] Ayman al-Warfali, "Cash Shortage Adds to Weary Eastern Libyans' Woes," Reuters, October 7, 2020, https://www.reuters.com/article/libya-economy/cash-shortage-adds-to-weary-eastern-libyans-woes-idINKBN26S2BY.
[24] REACH and Libya Cash Working Group, "Libya Joint Market Monitoring Initiative (JMMI): 3 - 13 October," 2020.
[25] ICRC, "Libya: COVID-19 and Conflict Collide, Deepening Humanitarian Crisis," ICRC, August 20, 2020, https://www.icrc.org/en/document/libya-covid-19-and-conflict-collide-libya-deepening-humanitarian-crisis.
[26] Sami Zaptia, "The Berlin Conference on Libya: Conference Conclusions," Libya Herad, January 19, 2020, https://www.libyaherald.com/2020/01/20/the-berlin-conference-on-libya-conference-conclusions/.
[27] International Crisis Group, "Fleshing Out the Libya Ceasefire Agreement."
[28] Benoit Faucon, "Libya Restarts Oil Production at Biggest Field ," Wall Street Journal, October 11, 2020, https://www.wsj.com/articles/libya-restarts-oil-production-at-biggest-field-11602427799.
[29] "Peace Dividend for Libya Economy, as Oil Flows and Central Bank Unifies Exchange Rate after Years of Deadlock ," UN News, December 16, 2020, https://news.un.org/en/story/2020/12/1080272.
[30] Safa Alharathy, "Boumtari: Oil Blockade Losses Amount to 130 Billion USD," The Libya Observer, October 22, 2020, https://www.libyaobserver.ly/economy/boumtari-oil-blockade-losses-amount-130-billion-usd.
[31] Abdelwahed, "Workers in Libya Struggle under Oil Blockade."
[32] "COVID-19 Infections in War-Torn Libya Rise to 10."
[33] IOM, "Libya — Mobility Restriction Dashboard 8 (1 - 30 September 2020)," IOM Flow Monitoring, October 6, 2020, https://migration.iom.int/reports/libya-—-mobility-restriction-dashboard-8-1-30-september-2020.
[34] Amnesty International, "Libya: Historic Discrimination Threatens Right to Health of Minorities in the South amid COVID-19."
[35] ICRC, "Libya: COVID-19 and Conflict Collide, Deepening Humanitarian Crisis."

This report will outline the methodology of the assessment, followed by a presentation of key findings. The findings section will focus broadly on sectoral needs with an emphasis on the most common sectoral needs. For an overview of all sectoral needs see the sectoral factsheets, and for a more in-depth look at sectoral indicators see the interactive dashboard. The findings section of the report also includes an exploration of needs of key sub-groups, namely women and the prevalence of GBV and Libyans in the South. Finally, the conclusion will highlight the main takeaways of the assessment, as well as remaining information gaps.

In addition to the MSNA regarding the Libyan population presented here, a parallel MSNA was conducted for migrant and refugee populations in Libya. You can find the report and additional outputs for that assessment here.

Objectives and research questions

The aim of the 2020 MSNA was to deliver up-to-date information for humanitarian actors on the severity of humanitarian conditions of Libyan populations across the country, and contribute to a more targeted and evidence-based humanitarian response. In particular, the 2020 MSNA was intended to inform the HNO and the Humanitarian Response Plan (HRP) for 2021.

Primary data collection took place in Libya between June and November 2020. In total, 6,061 household surveys were conducted in all mantikas (admin level 2), from June to August. In addition, 93 KIIs were carried out to allow exploration and triangulation of quantitative household findings where the quantitative findings revealed more severe pockets of need. In addition, two FGDs were conducted in Sebha by the International Medical Corps (IMC), and a series of online FGDs were conducted in coordination with the Food Security Sector. All findings were contextualized and triangulated with secondary sources.

The findings from the MSNA have produced several different outputs: summary results tables, sectoral factsheets and an interactive dashboard presenting all results. The research questions outlined below were used to guide the tool design and the design of different outputs such as the sectoral factsheets, and the dashboard. This report will answer these research questions by focusing in on some key examples, and situating the MSNA findings within the broader dynamics of the Libyan context. In particular, this report will look at the drivers of need, and at population groups where needs are the most severe. The report will additionally draw out some case studies to highlight areas of particular relevance and concern to the humanitarian community.

For more information on the full research design, please refer to the Terms of Reference (ToR) on the REACH resource centre.[36] The research questions guiding the 2020 MSNA were as follows:

1. **Pre-existing vulnerabilities:**[37]

1.1 What proportion of households have pre-existing vulnerabilities (PEVs)? And how do levels of PEVs differ based on mantika and population group?

2. **Impact on people:**

2.1 What is the level of impact that the protracted conflict in Libya has had on people / households? And how does the level of impact differ based on mantika, population group and PEV profile?

3. **Humanitarian conditions (living standards and well-being):**

3.1 What are household needs across each humanitarian sector: Food Security, Cash & Markets, SNFI, Water, sanitation, and hygiene (WASH), Education, Health and Protection (including GBV, Child Protection, and Mine Action); otherwise referred to as Living Standard Gaps (LSGs)? And how do LSGs differ by mantika, population group and PEV profile?

3.2 To what extent do Libyan households with sectoral needs report using different coping mechanisms? And how do those coping mechanisms employed differ by mantika, population group and PEV profile?

4. **The severity of humanitarian needs:**

4.1 What is the overall severity of humanitarian needs within Libya?[38]

[36] REACH, "Research Methodology Note Multi-Sector Needs Assessment 2020 LBY2001a Libya," June 2020, www.reach-initiative.org.
[37] The underlying processes or conditions that influence the degree of the shock and influence exposure, vulnerability or capacity, which would subsequently exacerbate the impact of a crisis on those affected by the vulnerabilities
[38] Severity of humanitarian needs should be in line with thresholds for severity based on responses to different questions in each questionnaire as per consultation with stakeholders and not compared to last year or other contexts than the Libyan. The severity scale is inspired by the draft JIAF, an analytical framework being developed at the global level aiming to enhance understanding of needs of affected populations. The framework measures a progressive deterioration of a household's situation towards the worst possible humanitarian outcome. The severity scale was used to understand the humanitarian needs of households as found in the household survey.

4.2 What proportion of households fall into each severity category?[39] And how does the severity of humanitarian needs differ by mantika, population group and PEV profile?

5. Current and forecasted priority needs/concerns:

5.1 What key factors may affect Libyan households' needs in the future? And how do priority needs/concerns differ by mantika, population group and prePEV profile?

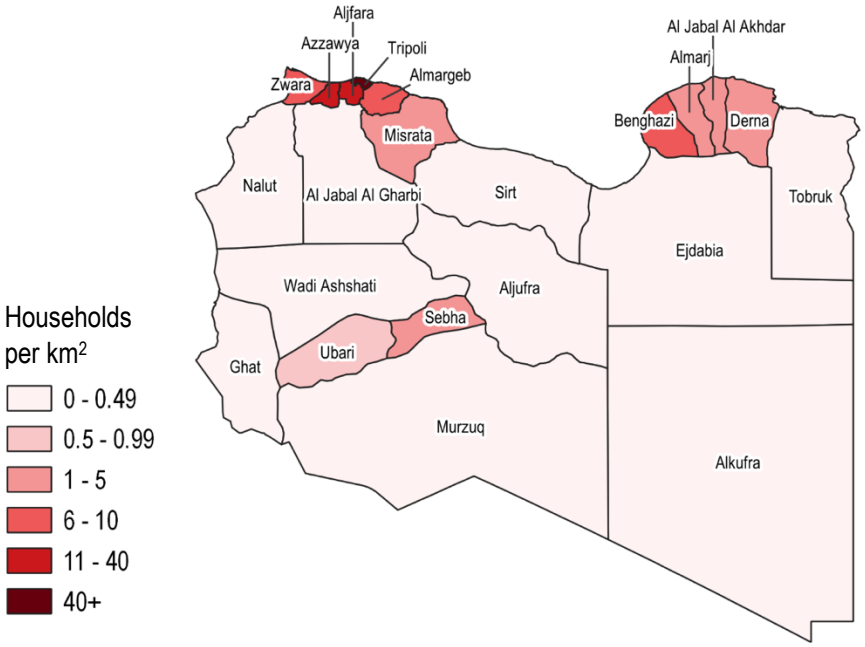
5.2 What are households' self-identified needs and preferences around the provision of humanitarian aid? And how do these needs and preferences differ by mantika, population group and PEV vulnerability profile?

Scope

Geographic Scope

In response to requests from humanitarian stakeholders, the 2020 MSNA expanded its geographical scope to cover all 22 mantikas in Libya (see map 1 below), compared to 17 covered in the 2019 MSNA.[40]

Map 2: Assessed locations by population density[41]



Population groups

Three population groups were sampled for: IDPs, returnees and non-displaced[42] in line with the strata used in the HNO and other humanitarian stakeholders in Libya. For both IDPs and returnees, this MSNA looked specifically at displacement from baladiya of origin since 2011.[43]

[39] The severity scale includes 6 classifications ranging from 1 (none/minimal) to 5 (catastrophic), for the purpose of the MSNA, only a scale of 1 (none/minimal) to 4/4+ (extreme/extreme+) is used. This is because no data has been collected that would directly indicate catastrophic needs, such as increased mortality.

[40] Mantikas represent the second administrative level in Libya, followed by baladiyas (admin level 3) and muhallahs (admin level 4).

[41] Population density calculations were based on the MSNA sampling frame and geodata on surface area.

[42] Classification of population groups – IDPs, returnees and non-displaced were self-identified by respondents. In the cleaning process of the quantitative data collection, we had to reclassify 6% of our sample since some respondents identified themselves as displaced when displaced within baladiya. This however, does not correspond with IOM's displacement definition in Libya. However, the displacement definitions have to be aligned with all actors and following HNO displacement strata.

[43] Based on IOM definition of displacement.

Sampling Strategy

Due to the spread of COVID-19 in Libya and the associated health risks and movement restrictions, data was collected remotely via phone to households throughout Libya. This rendered REACH's typical randomised sampling techniques non-feasible.[44] Alternative randomisation techniques for surveys conducted via phone were also not opted for, in favour of keeping the population group strata needed for the HNO and HRP, and to best support the humanitarian response. [45]

The sampling strategy used was a non-probability sampling approach, using minimum quotas per mantika and displacement status.[46] Contacts were sourced through a mixture of referrals from respondents, and contacts provided by REACH local CSO partner networks, local authorities and and social affairs/crisis committees.[47] In order to ensure as diverse a pool of respondents was selected as possible, reflective of the distribution of the population throughout Libya, quotas at mantika and population group level were further distributed to mahalla level according to their relative population sizes.

In order to limit the overrepresentation of respondents with similar profiles, a range of contact sources were selected, and continuously monitored throughout data collection in order to maintain diversity of contact lists.[48] Contact lists and their likely affect on the bias of the sample will be explored in the limitations section. The breakdown of phone number sources by region can be found in Annex 3.

Sampling for the KIIs in the qualitative phase was purposive. Experts and participants were found through REACH Libya's local partner network of Civil Society Organisations (CSOs) and international non-governmental organisations (INGOs) with experience working in Libya. The location and profile of respondents was determined based on the quantitative findings. Key variables from the quantitative data were selected in conjuction with humanitarian sector coordinators for Libya. For each variable, a threshold was set to capture all outlying results at either mantika or mantika and population group level. If a threshold was passed in a certain location, this would trigger a qualitative assessment. Respondents were sampled in line with this triggered approach after quantiative data collection had finished. Key informants (KIs) were selected based on expertise and were typically community or CSO leaders, healthcare or education professionals, or municipality employees. The thresholds and triggers can be found in Annex 5.

Data Collection Methods

Household Survey

The household survey constitutes the quanititative part of the MSNA. Surveys took place between the 24th of June and the 14th of August. The tool was developed through consultation with sector and working group leads, REACH field staff and local partners and networks. The tool was validated by assessment specialists at IMPACT Initiative

[44] In previous Libyan MSNAs, households have been randomly selected based on their proximity to randomly distributed GPS points throughout Libya. For further details, please see REACH, "2019 Multi-Sector Needs Assessment," 2020, https://www.impact-repository.org/document/reach/2099bb1b/2019-Libya-MSNA-Report.pdf.

[45] Telecommunications directories or random dialing would not allow for survey results to be disaggregated by displacement status or mantika, given that neither contact source contain details on these relevant strata.

[46] Population data was sourced from the 2017 United Nations Fund for Population Activities (UNFPA) population projections for the non-displaced population data and from Round 29 of IOM DTM (January-February 2020) for IDP and returnee populations. Each minimum quota was increased by a buffer of 20% to ensure that no sub-groups or geographic locations were underrepresented in the final sample. To compensate for any biases that might be created by over- or under-sampling, weights were applied to all data analysis. The sampling framework for the quantitative phase can be found in Annex 4.

[47] In order to mitigate potential bias from contacts sourced through referrals, a 'Respondent Driven Sampling' (RDS) trial was launched in the initial phase of data collection. Sampling for these initial respondents followed RDS network-based methodology, which seeks to account for potential bias of close networks through a series of questions asked to the respondent to help estimate the resulting bias of each successful referral, and diversity in initial contact selection. A separate output is due to be published in March 2021, with the full details of the RDS pilot in Libya, and its implications for use in the humanitarian assessment field.

[48] Households registered on local authorities' social affairs and crisis committee lists were those households registered with the municipality, which objective is to register all IDPs and returnees arriving in the municipality for monitoring purposes as well as facilitate access to general public services such as healthcare facilities or shelter. Respondents on CSO lists ranged from recipients of food and cash in-kind assistance to those participating in awareness raising or vocational training sessions.

HQ as well as all active sectors and working groups in Libya. The starting point for the tool was the global draft Joint Inter-Sectoral Analysis Framework (JIAF) indicator list.[49] The tool can be found in Annex 1.

Prior to data collection, enumerators were trained on the assessment objectives, data collection modalities and tool. Trainings took place using an online learning platform, with short quizzes on the contents of the presentations and close monitoring of enumerator participation. Field staff or data collection focal points quizzed enumerators over the phone to make sure all training materials were understood.The complete training agenda can be found in Annex 13. Before data collection began, a pilot was conducted to test the tool and make any final adjustment to the tool and the operational plan. All data collection was completed by REACH through its local partners.

Key Informant Interviews and FGDs

KIIs were used to triangulate and contextualize the quantitative findings, and to better understand the specific humanitarian needs of vulnerable population groups that could not be accounted for in the sampling frame, such as women. As outlined above, the themes for the KIIs were set in cooperation with the sectors based on a triggered approach in response to the quantitative results, designed in coordation with sector and working group leads. The tools for the qualitative assessment were similarly devised with input from local partner networks of CSOs and INGOs with experience working in Libya, and were also validated by assessment specialists at IMPACT Initiatives headquarters. The tools can be found in Annex 1.

Training consisted of two components – one component took place through the same platform as the quantitative training, while the second part took place in smaller groups over Skype with REACH staff based in Tunis and throughout Libya, to ensure that enumerators understood when to engage with follow-up questions. The complete training agenda can be found in Annex 14.

In addition to the KIIs, an FGD platform was developed in partnership with a Tunisian technology start-up, Placeholder, to facilitate FGDs in line with COVID-19 restrictions of gathering groups of people. The FGD platform was piloted and used to update the consumption-based Coping Strategies Index (CSI) to reflect current beahviours in Libya. For more information on the CSI update, please refer Annex 15. Two additional in-person FGDs were conducted by IMC, who partnered with REACH for this assessment.

Translation of Tools and Transcripts

All tools were originally developed in English and subsequently translated to Arabic. All translation was carried out by REACH staff in Tunis. Translation was checked by Libyan field staff in multiple regions across Libya to check and amend any terminology and dialect differences between regions.

Analysis

The quantitative analysis consist of three core elements, PEV, LSGs, and CG**,** which faciliate our analysis by highlighting the households that are already vulnerable to shocks, face unmet needs within a given sector, and/or use negative and unsustainable coping strategies. The analytical framework and severity scale of needs were inspired by the draft JIAF, a global analytical framework being developed to enhance understanding of needs of affected populations. The framework measures a progressive deterioration of a household's situation towards the worst possible humanitarian outcome. The draft JIAF has shaped the analysis through both the selection of indicators in the quantitative questionaire as well as in the categorisation of responses in the questionnaire, which can be grouped into relevant sectoral 'living standards gaps' (LSGs).

Living Standards Gap

One overall living standards gap (LSG) score was calculated for each of the following sectors: C&Ms, Food Security & Livelihoods, WASH, Health, SNFI, Education, and Protection. The purpose of the LSG scores is to identify the proportion of households that cannot meet their basic needs in the relevant sector, and the severity of these needs. The LSG composite indicators provide a measure of the accessibility, availability, quality, use and awareness of essential goods and services. Each household is classified according to their severity of needs (none/minimal,

[49] The JIAF have been developed by the Joint Inter-Sectoral Analysis Group (JIAG). Led by OCHA and the Global Cluster Coordinators Group (GCCG), the JIAF aims to assist with identification of inter-linkages between various drivers, underlying and contributing factors, sectors and humanitarian conditions. The JIAF seeks to enable humanitarian actors to arrive at a common understanding of who, and how many people face humanitarian needs, and which needs are most critical.

stress, severe, extreme), based on their answers to the households survey. Every household with an LSG severity score of "severe" or "extreme" is considered to have an unmet need (i.e. an LSG) in that specific sector. For more explanation see Annex 7.

Capacity Gap

The CG score is based on the Livelihoods Coping Strategy Index (LCSI), which is an indicator that measures the use of negative coping strategies in the 30 days prior to data collection. These coping strategies range from borrowing money to household members above 18 years engaging in degrading or illegal income activities. All such coping strategies diminish the capacity of households to deal with future shocks. Therefore, while the CG may not indicate immediate need, it does signal eroded resilience. This is particularly relevant to understand in Libya, given the protracted and complex nature of the humanitarian context. For more information on the identification of CGs, please refer to Annexes 7 and 8.

Pre-Existing Vulnerabilities

The household vulnerability classification highlights those households who may be affected more than others by humanitarian shocks, as a result of their household level characteristics – these include: female-headed households, an age dependency ratio above 0.49,[50] an income below the Minimum Expenditure Basket (MEB)[51], IDP or returnee households that have been displaced more than once since 2011, and/or IDPs or returnee households that have been displaced in the 6 months prior to data collection. If a household met three of these indicators, they were classified as having a PEV. A detailed description of how each vulnerability classification was calculated may be found in Annex 8.

Qualitative analysis

The qualitative data analysis software NVivo was chosen as tool for the qualitative analysis. NVivo allowed for an iterative yet structured approach to qualitative data analysis. Firstly, a preliminary codebook with coding hierarchy and descriptions to each code were created. In the first stages of the analysis multiple team members coded the same KII transcripts to compare the coding hierarchy, where diverting from the codebook. Coding of different topics and discussion points followed codebook structures but remained flexible for new insights and diverting discussion points across regions. Lastly, codes and summaries were exported from NVivo into a data saturation grid and main points summarized. The qualitative analysis followed IMPACT Initiatives' Data Saturation and Analysis Guidelines.

Box 1: The previous MSNAs & why findings cannot be compared

The 2019 MSNA drew on similar analytical concepts. However, the methodology for identifying LSGs, households with multi-sector needs, and other components has been modified based on lessons learned. In addition, compared to the previous round, there have been some necessary changes to the sampling strategy and data collection to prevent the spread of COVID-19. **As a consequence, comparability with 2019 findings is limited and can only be considered as indicative of broader trends. Comparison with 2019 data sets is therefore not covered in detail in this report.**

Ethical considerations

As in previous and all assessments, REACH considered and investigated the ethical implications of data collection and information dissemination. A "do not harm" analysis was conducted during the design stage. Extensive steps were taken to ensure all data collection was securely protected including training of enumerators on survey ethics, data protection, and complaint and response mechanisms. See annex 13 for full details on the training of enumerators. Additionally, all data collection exercises required informed consent. All data collection participants were also provided with the Complaint and Feedback Mechanism (CFM) phone number. Finally, a short M&E

[50] The age dependency ratio was calculated as the number of household members between 18 and 60, divided by the number of household members outside of this age range.

[51] The MEB is the expected minimum value of expenditures to meet basic needs on a monthly basis, including food and hygiene items, as well as rent. The value is based on regular price monitoring as part of the Joint Market Monitoring Initiative (JMMI) led by REACH. Separate values were used in the PEV score calculations for the South and the other regions, due to the relatively high cost of living in the South.

survey was conducted after quantitative data collection. For more details on the ethical considerations and steps taken, see Annex 6.

Challenges and limitations

Phone modality of surveys

Two primary challenges arose due to the remote nature of the data collection. Firstly, the survey had to be cut in length, as it is typically harder to keep respondents' attention over the phone. This meant that the quantitative survey was able to cover fewer topics that the 2019 MSNA. The qualitative component has been used to try to compensate for cut questions. Secondly, the ability to conduct surveys was dependent on mobile network connectivity. This posed particular difficulties in Sirt and in the South. Certain population groups and locations may be less well-connected, leading to underrepresentation of these groups or locations. Again, this limitation was mitigated to some extent by dedicated outreach to expert KIs during the qualitative phase, who were able to speak to the needs of otherwise underrepresented groups.

Sampling of households

Given the selection of respondents through referrals and contact lists provided by local authorities and CSOs working in humanitarian aid and service delivery, there is a chance that more vulnerable groups are overrepresented this year, in comparison to previous years where respondents were randomly selected. However, as there is no exact record of aid recipients in Libya per mantika and by displacement status, it is not possible to estimate the degree to which the sample deviates from the real distribution within the Libyan population.[52] MSNA data from 2019 gives some suggestion of the overall profile of the sample; in 2019, 8% of respondents reported having received aid in the 6 months prior to data collection, compared to 19% in 2020. On the other hand, the PEV scores of this year are largely comparable to last year, 6% of assessed households were found to have PEVs in the 2020 MSNA compared to 7% in the 2019 MSNA. This suggests that the degree to which more vulnerable populations were included this year is limited. However, given the different sampling approaches, findings are indicative only. Especially in Benghazi, triangulation exercises indicated the quantitative findings may be exaggerated, see Annex 3 for more information.

Several mitigation measures were adopted to account for any potential bias in the sample. During data collection, respondent sourcing lists were recorded and monitored by assessment specialist teams, who noted areas where respondents were sourced from to identify in real time any areas where respondent profiles were likely concentrated around one vulnerability group. Where possible, contact lists were diversified. Where not possible, these locations were prioritized during the qualitative follow up exercise, in order to ensure that results were triangulated and contextualized. During data analysis, key outliers were identified by assessment teams by checking results against 2019 data, with local field teams and against any other relevant secondary information. These results were then highlighted during a dedicated triangulation session held with INGOs. In all presentations and discussions of the findings with humanitarian stakeholders, areas where results may be presenting the needs of a particularly vulnerable respondent profile were highlighted and clearly identified, to avoid any misreading of the data.

Limitations arising from interviewing the head of household

The 2020 MSNA household survey interviewed the head of household. Since the household is the unit of analysis, intra-household dynamics (including for instance intra-household power relations across gender, age, disability) cannot be captured. Data on the individual level was reported by proxy by the head of household (or someone acting on behalf of the household head) per household, rather than by the particular individual household members themselves, and therefore might not accurately reflect lived experiences of individual household members, who also might be more vulnerable. This also meant that the final sample consisted of only 13% women. The qualitative

[52] While data does exist in 4Ws submitted by active INGOs and UN Agencies in Libya, beneficiary information is estimated only; it does not account for potential duplication, or for assistance provided by local CSOs and NGOs.

phase served to follow-up on needs and priorities of sub-groups not captured by interviewing the head of household – such as women.

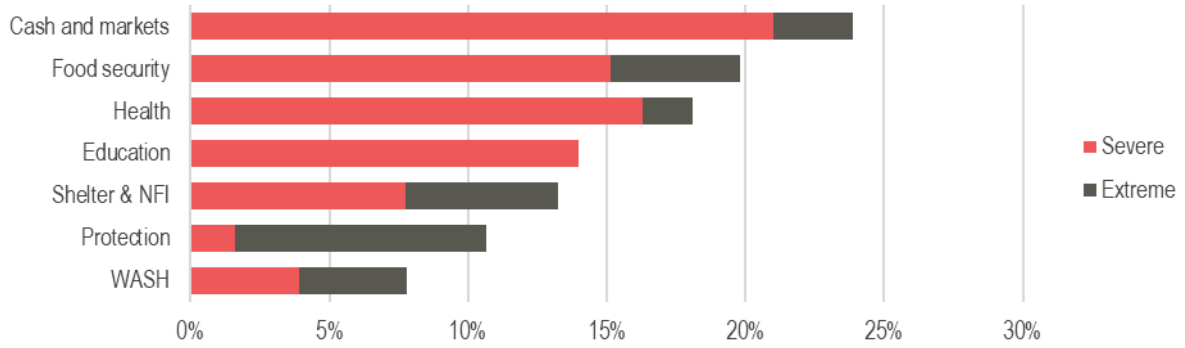
This section aims to summarize humanitarian needs in Libya by looking firstly at which needs were found to be most severe according to sectoral and other thematic groupings[53] – referred throughout this report as a 'living standards gap' (LSG). Secondly, this section looks at where needs profiles overlap to understand the complexity of needs, focusing on the population where needs across multiple sectors and themes were found. Finally, this section looks at how needs present themselves amongst population groups of particular concern – those with PEVs, such as low income, recent displacement status, and female heads of household. Differences between groups along sampling strata (mantika and displacement status), will be mentioned where relevant. These findings should be read as complementary to the individual sectoral factsheets and the online interactive dashboard, which summarise the full data sets.

Overall, 28% of households were found to have at least two LSGs. Hence, it is relatively uncommon for households to have more than one LSG. The majority of households have either no (44% of households) or one sectoral LSG (28% of households). These findings vary significantly across the assessed regions, with a particularly large majority of households in the South having at least two LSGs (70% of households in the South). A dedicated case study of the humanitarian needs in the South can be found in this report, highlighting and exploring the needs profiles of the key population subsets.

In general, households were most likely to have needs on indicators relating to C&M. C&M is one of the most active Working Groups in Libya, established in 2016 to provide a community of practice around a modality based approach to humanitarian response.[54] In addition to the C&M working group, the Livehoods Working Group has also been involved in designing the questions for this theme. The C&M findings cover topics of income, expenditures, employment, ability to meet needs due to financial resources and access to marketplaces. While needs in C&M are inter-sectoral, they are summarised below as a standalone section due to the significance of the economic dimension to the Libyan context, where income, liquidity and access to resources have become a defining feature of the conflict environment, and are of crucial importance to humanitarian actors. See dedicated C&M sub-section below for further details.

The graph below shows the overall prevalence of all sectoral needs, alongside those needs highlighted under C&M indicators. See Annex 7 for an overview of how the LSGs are calculated and Annex 8 for details on the indicators that have fed into the LSG scores.

Figure 1: % of households with sectoral and thematic LSGs

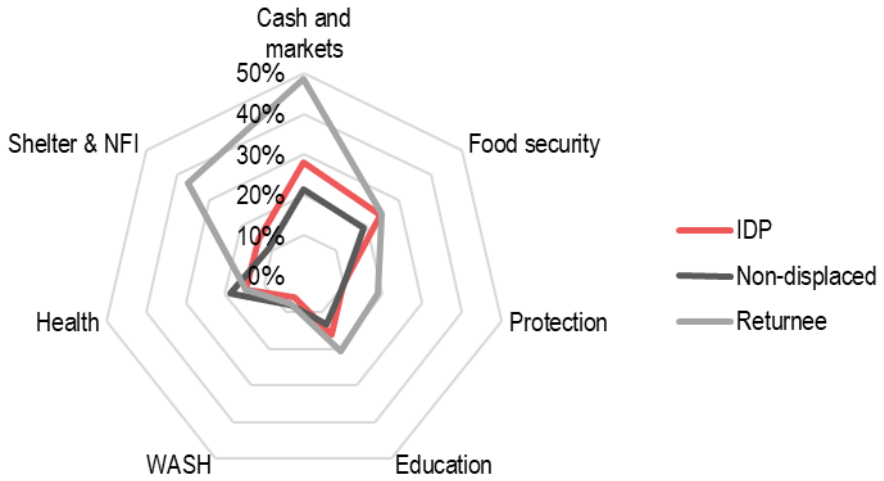


The second most common needs were found in relation to food security. Just under 20% of households were found to have food security needs, primarily due to low and borderline food consumption socres (FCS) (53% of households with unmet food security needs).[55] Food security needs differed quite signficantly per region, with 49% of households in the South having food security needs, compared to 23% in the East and 13% in the West. Food security needs in the South are likely especially high due to vast landscapes and their relation to agriculture and access to markets. As mentioned above, these needs will be further explored in the South case study.

[53] The findings cover the six sectors active in Libya (food security, health, education, shelter and NFI, protection, and WASH) and one thematic area (Cash & Markets). For the purpose of analysis and comparison, questions falling under the 'Cash and Markets' category are also grouped under a dedicated LSG.
[54] Libya Cash & Markets Working Group (CMWG), "Terms of Reference (ToR)," February 27, 2017.
[55] See Annex 8 for details on the FCS indicator and how it is calculated.

While C&M and food security related needs were prominent amongst all sampled groups, key drivers of need otherwise differed depending on displacement status; returnees in particular appeared to have more severe needs than other groups in all sectors, with the exception of health.[56] The different trends among population groups can be seen in figure 2 below. These findings are largely consistent with the pattern of returns in 2020, where returns occurred to former frontlines in and around the southern neighbourhoods of Tripoli, where shelters were damaged and NFIs were likely to have been looted, explaining more severe needs for SNFI and access to sufficient financial resources to cover essential services and commodities.[57,58]

Figure 2: % of households with sectoral and thematic LSGs, per population group



Capacity Gaps

In addition to sectoral and thematic needs, 36% of households were found to have a CG. As mentioned in the methodology section, the CG indicates that households have diminished capacity to deal with shocks due to their use of negative, unsustainable coping strategies to meet their needs in the 30 days prior to data collection. The use of these negative coping strategies differs significantly across regions. As can been seen in the figure below, households in the West are significantly less likely to engage in these strategies than households in the rest of Libya. In other words, the households in the East and South were found to be less able to deal with shocks or challenges in the future as these households have already exhausted most of the coping capacities available to them.

Figure 3: % of households with a CG, by region

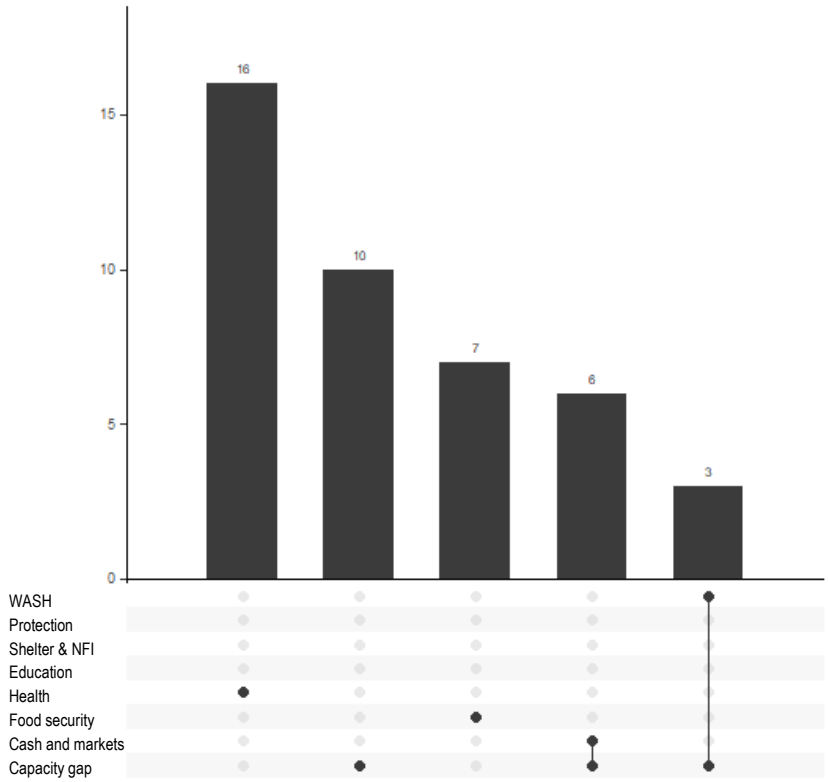
Co-occurrence of need

The figure below shows the most common needs profiles: the LSG classifications and/or use of negative coping strategies (CGs) of each household were calculated on the basis of household reporting. The graph below shows sectors in which needs tend to co-occur or occur independently; this visualisation is intended to provide humanitarian actors with an understanding of the complexity of individual household level needs profiles, and to support coordinated response planning.

[56] Many of the questions relating to health only appeared in the survey if the respondent had confirmed that they sought out care in the three months prior to data collection. See more on the indicators feeding in to the health LSG and their results in the health section below.
[57] International Committee of the Red Cross, "Libya: Returnees to Southern Tripoli Face Destruction on All Levels," November 26, 2020, https://reliefweb.int/report/libya/libya-returnees-southern-tripoli-face-destruction-all-levels-enar.
[58] International Committee of the Red Cross, "Libya: People Caught between Bullets, Bombs and Now COVID-19," *ICRC*, April 12, 2020.

Importantly, the graph does not visualise the severity of needs. Instead, it shows the prevalence of needs across sectors and C&M. Only the five most common needs profiles are featured. Each household is represented once in the graph, reflecting their needs profile, which is comprised of their responses on questions feeding into LSGs and the CG. The vertical bars show the total percentage of households with that specific combination of needs. For example, out of all households with an LSG in one or more sectors or thematic area and/or a CG, 10% had only a CG (i.e. no LSGs), and 16% had an LSG only in health (i.e. no other LSGs nor a CG). For a more detailed explanation of how to understand the multi-sector bar graph see Annex 12.

Figure 4: Most common combinations of one or more LSG(s), among households with an LSG in one or more sectors or thematic area and/or a CG



The most common needs profile was a health LSG only, as 16% out of all households with an LSG in one or more sectors or thematic area and/or a CG only had a health LSG. This does not mean that health was the most common need, but rather that households with health needs were not likely to have additional needs in other sectors. The figure also highlights that households who have a CG are also likely to have an LSG; this profile was more likely to occur than any co-occurrence of need between other sectors. Overall, however, there is no profile that dominates in Libya. Instead, over 200 unique needs profiles were identified. The large majority of profiles represent less than 1% of the population. This indicates that needs in Libya are complex and highly localized. The next section will therefore present and summarise this complex context through the use of case studies and an analysis of key drivers, using qualitative data to explore these dynamics further.

Accountability to Affected Populations

In addition to questions meant to establish humanitarian needs, the household survey also included questions on the provision of humanitarian aid: **19% of households in the MSNA household survey reported having received assistance in the six months prior to data collection**. Of those reporting to have received assistance, 72% reported having access to functioning feedback mechanisms. The most commonly received form of assistance was **in-kind assistance**, such as food or medication (85%). In terms of communication, the preferred modalities for receiving information about assistance were over the phone through call or SMS (53% of households) and to a lesser extent through social media (10%).

Key drivers of needs

This section will focus on protection, C&M, and health. Protection was found to be the sector with the highest percentage of households with an extreme LSG. C&M was found to be the area with the highest percentage of households with a severe or extreme LSG. Finally, health was found to be of particular interest due to the onset and development of the global health pandemic COVID-19. Globally, the additional pressure on health systems is a potential threat to the ability of health systems to meet needs. The functioning of the health system and the state of health needs in Libya is therefore explored in more detail in this section.

Cash and markets

Since 2014, political conflict, sustained closures of oil fields, and a dysfunctional banking system have reduced government revenues and cash flows to the banks coupled with deeply rooted mistrust in the banking system.[59,60] This protracted liquidity crisis has complex implications for humanitarian actors and for assessing humanitarian needs. Firstly, the lack of Libyan dinar (LYD) in circulation has led to a functioning shadow economy, dealing in foreign currencies. The two market systems are subject to frequent price fluctuations, which can drive up prices of basic goods and reduce purchasing power.[61] Second, the liquidity crisis makes it hard for households to access their income due to individual's inabiltiy to withdraw cash from the banks,[62] including for the large majority of the working force employed in the public sector.[63] This complicates vulnerability assessments, as households may officially have an income source but their inability to access it still puts them in a vulnerable position. Third, the difficulties in obtaining cash from banks leads households to search for alternative methods to meet their needs, such as selling assets for cash or resort to alternative payment modalities such as paying checks with up to 40% mark-up fee, hence lossing up to 40% of the value of their checks[64]. These alternative methods may weaken the capacity of the household to meet their needs in the long term and deal with shocks.

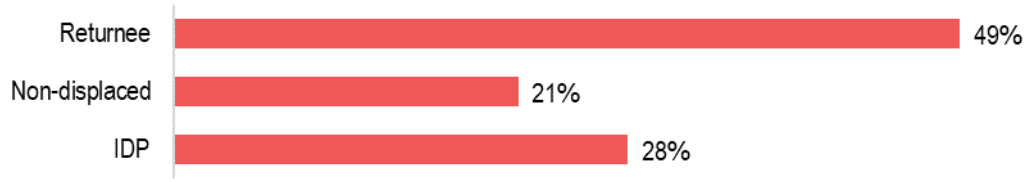
In the household survey, households were most likely to have needs on C&M-related indicators. The C&M findings cover topics of income, expenditures, employment, ability to access sufficient financial resources to access needed services and commodities, and access to marketplaces. Overall, 24% of assessed households were found to have needs relating to C&M (i.e. an LSG score of 3 or 4). This was primarily driven by households relying on unstable income sources (58% of households with C&M needs)[65,66], which classifies them as having a severe LSG. Only 12% of households with C&M needs reported to have no income source, classifying those households exclusively as having an extreme LSG (3% of households overall). Other key drivers of needs in this area were found to be an inability to cover at least one essential service in the 30 days prior to data collection due to lack of resources (94% of households with C&M needs),[67] and challenges accessing the marketplace (46% of households with C&M needs).[68] This indicates that the large majority of Libyan households have some source of income, however, this is often unstable or insufficient to cover all their basic needs. This finding is also supported by qualitative data, gathered through 25 KIIs with community representatives about the state of livelihoods and income in their region. The majority of KIs noted that households were forced to employ coping strategies in order to meet their needs. For example, a female KI from Ubari reported that women often had to sell assets such as gold or take on additional jobs to cover their basic needs; selling of assets commonly signals a deteriorated ability to deal with future shocks.

The proportion of households with a C&M need differs among displacement status as shown in figure 8 below. Findings indicated that displaced populations were especially likely to have C&M needs. A KI from Almarj noted that displaced households may have a harder time meeting their needs because they have additional expenses,

[59] al-Warfali, "Cash Shortage Adds to Weary Eastern Libyans' Woes."
[60] Pack, "Libya's Liquidity Crunch and the Dinar's Demise: Psychological and Macroeconomic Dimensions of the Current Crisis."
[61] W. A. Wan Omar and N. O. Al-Towati, "The Impact of the Credit Crunch and Shadow Economy on Economic Growth in Libya: Evidence from ARDL," Saudi Journal of Economics and Finance 4, no. 1 (January 2020), https://doi.org/10.36348/sjef.2020.v04i01.00X.
[62] REACH and Libya Cash Working Group, "Libya Joint Market Monitoring Initiative (JMMI): 3 - 13 October."
[63] World Bank, "Labor Market Dynamics in Libya" (Washington DC, 2015).
[64] REACH and Libya Cash Working Group, "Libya Joint Market Monitoring Initiative (JMMI): 6 - 18 November."
[65] Unstable income sources include humanitarian aid and income from daily labour. See the sections below for further explanation of the indicators and see Annex 1 for links to the tools.
[66] 15% of all households reported reliance on unstable income sources. Unreliable income sources include humanitarian aid and government subsidies.
[67] 50% of all households reported inability to cover at least one essential service financially.
[68] 14% of all households reported issues accessing the marketplace.

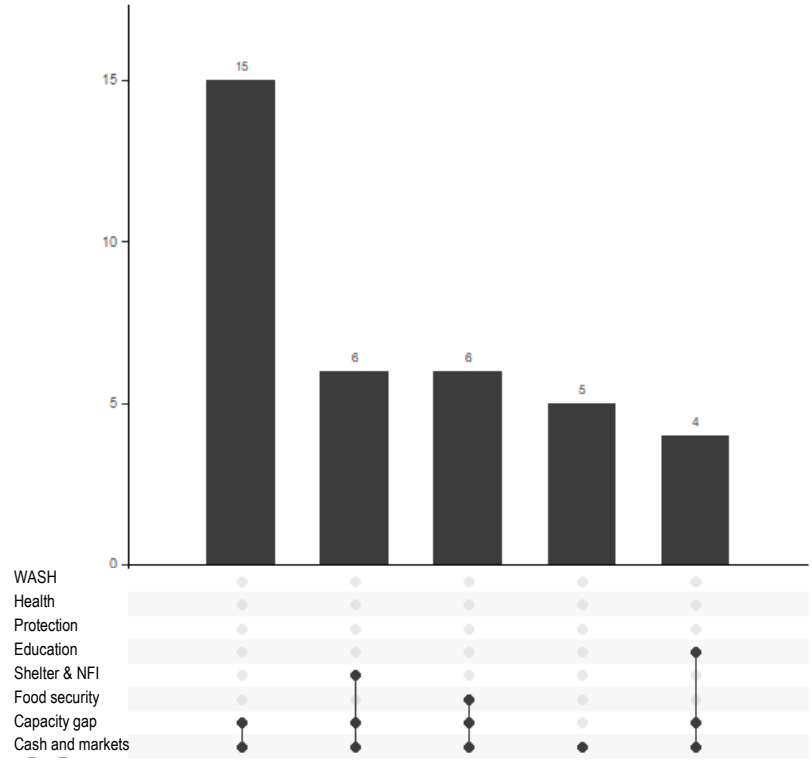
for example to replace lost assets. Additionally, several KIs noted that the insecure job situation of displaced households may make it harder to cover their needs. KIs in the East were especially likely to refer to displaced populations when asked about how different groups were affected. In addition, a KI in Aljufra suggested that returnees and displaced households more commonly carry the additional financial burden of rent, as they do not usually own their accommodations. This is reflected by the quantitative data; 68% of IDP households and 20% of returnee households reported renting their accommodation, compared to 14% of non-displaced respondents. In addition, for returnee households, unstable income sources were the primary driver of their C&M needs (62% of returnee households with C&M needs).[69]

Figure 5: % of households with a C&M LSG, per population group



Among those households with a C&M LSG, it was found to be common for households to have other LSGs and/or a CG. The figure below shows the most common needs profiles among those with a C&M LSG. Only 5% of households with a C&M LSG only have a C&M LSG. This indicates that C&M needs are likely to be closely related to other sectoral needs. The diversity of needs profiles among households with a C&M need additionally indicates the complexity of needs and interactions between needs. This in turn poses issues for how these needs may be addressed. Among the top five most common combinations, there are consistent overlaps with the use of negative coping strategies (i.e. CGs). This is to be expected as the CG is driven by households using negative coping strategies to meet basic needs, and a C&M LSG is a sign of an inability to cover basic needs with existing financial resources. The liquidity crisis and its consequences for income and access to cash may lead to further use of negative coping strategies among Libyan households, further diminishing their stocks and capacity to deal with potential humanitarian crises in the future.

Figure 6: Most common combinations of one or more LSG(s) among households with a C&M LSG (24%)



[69] 32% of all returnee households reported reliance on unstable income sources.

Understanding the drivers of C&M need

The C&M LSG is based on five indicators. See Annex 7 for an overview of how the LSGs are calculated and Annex 8 for details on how the different C&M indicators were classified and influence the overall LSG score. Three indicators primarily drove needs, and can be grouped under two themes: sufficiency of financial resources to cover self-reported needs (such as ability to purchase phone credit or being able to afford essential transportation), and employment and income. This section will highlight the key findings for these two themes.

Ability to afford essential services

In the MSNA household survey, respondents were asked if there were any essential needs and services from a list of five categories that they were unable to afford in the 30 days prior to data collection. These categories were health services, education services or related commodities, transportation services, rental or other associated accommodation costs, and communication services.[70] Overall, 50% of households reported having at least one essential service they were in need of that they were unable to cover. The most commonly reported service that households struggled to cover were health costs (27% of households). The figure below shows the proportion of households per displacement status that were unable to afford these services in at least one category.

Figure 7: % of households reporting being unable to afford at least one essential service

The causes and consequences of the inability to meet these needed services were further explored during the qualitative phase of data collection. All of the consulted KIs across the country reported that households regularly had to use different kinds of coping strategies in order to meet their needs. The most commonly mentioned coping strategy among KIs was taking on an additional job. For example, a KI in Murzuq noted that it was common for men to find a private sector job next to their public sector job to meet needs. Private sector jobs mentioned were in agriculture and trade, or for example in car maintenance. Taking on additional jobs may be necessitated by low government salaries, as was noted by a KI from Ejdabia, who provided the example of a teacher in a public school who was forced to take an additional job as a vendor in a local shop. A KI from Almarj offered a similar example of a teacher who worked in a public school in the morning, a private school in the afternoon, and as a taxi driver in the evening. For women, it was more commonly reported that they resorted to selling assets or homemade jewelry or baked goods.

A majority of KIs additionally noted that negative coping strategies could have serious effects on the mental well-being of people.[71] For example, two KIs from Sebha reported that the long hours that household members work in various jobs creates significant stress for them, in turn affecting their productivity and earning potential. KIs in Almarj expressed concerns about an increasing number of family separations and even suspected cases of child abuse as a result of economic pressures on households. These concerns hint at the potentially far-reaching consequences for wellbeing of an inability to afford basic needs in the Libyan context. As highlighted before, the use of negative coping strategies also reduces the capacity of households to deal with shocks in the future, placing them in a vulnerable position.

Income and employment

According to the quantitative data, 75% of assessed households with working household members (85% of households reported at least one working household member) primarily rely on public sector salaries as their main source of income. This is is consistent with 2015 data published by the World Bank, which showed that 85% of the active labour force was employed in the public sector.[72] In contrast to many other contexts, government payroll in Libya is not necessarily a stable or reliable income source. Public sector salaries are largely funded by oil

[70] These categories were selected in discussion with the Cash and Markets Working Group (CMWG). Households could also indicate other essential services not in the list. The question emphasized that it was about affording needs with existing financial resources in the household, not about any other challenges that may impede access to meeting these needs (such as lack of infrastructure).
[71] The KIs mentioned in this section were selected as community representatives by data collection partners and where asked directly about the effects of economic hardship and coping strategies on mental health and wellbeing.
[72] World Bank, "Labor Market Dynamics in Libya."

revenues.[73] As a result, these salaries have suffered in the last year due to the oil blockades. As mentioned earlier, oil blockades imposed since January have reduced government revenues, with 5 billion USD.[74] Reduced revenues have meant that authorities have been struggling to provide all employees with their due salary.[75] In September 2020, the National Oil Corporation announced that oil production would resume.[76] In October, production at Libya's largest oil field, Sharara, restarted, which may indicate that public sector salaries may soon be paid in full again.[77] Significant debts and Gross Domestic Product (GDP) losses caused by the blockades, however, remains at the time of data collection.[78] The issues faced by the public sector have significant consequences for the income and livelihood of Libyans, especially considering the large proportion of households relying on public sector salaries.

Livelihoods expert KIs[79] in all regions reported that insufficient salary was a key reason for resorting to negative coping strategies. KIs in Benghazi were especially likely to report this, with one KI noting that salary was especially unpredictable from public institutions. The apparent prevalence of this issue in the East may be related to the fact that the authorities in the East, have no direct access to the (albeit limited) oil revenues in order to pay public salaries.[80] Problems of insufficient salary were commonly reported alongside high prices and lack of liquidity, resulting in a general inability to meet needs with the household's main source of income. It also reflects how the liquidity crisis interacts with the oil crisis to create a precarious situation for households. This situation has most likely been further complicated in light of COVID-19, where the MEB as of November 2020 were 16% more expensive compared to pre-COVID-19 levels in March 2020[81]; 17% of households reported changes in their work situation due to the spread of the virus. The most commonly reported change was that the workplace closed, which was reported by 19% of households that relied on public sector salaries (85% of households reported at least one working household member).

In addition to unreliable payments from public sector salaries, there are also some areas where a relatively high percentage of households reported relying on unstable income sources, including temporary and daily labour. As mentioned earlier, 3% of households reported having no source of income whatsoever. An additional 9% of households reported relying only on humanitarian aid, government subsidies and/or savings, rising to 39% in Wadi Ashshati and 38% in Sirt. The remaining 88% of households overall reported having at least one household member working. Among those households, reliance on temporary and daily labor also fed into the C&M LSG, as these income sources are considered similarly unstable. While just 6% of households with at least one household member working reportedly relied on temporary or daily labour (with little deviation per population group), there was signficiant deviation across regions. In the South, 22% of households relied on temporary or daily labour, compared to 1% in the West and 13% in the East. This may reflect the different labour market and economic infrastructure in each regions, and is a strong indication of higher economic vulnerability in the South, especially compared to the West.[82]

Beyond differentiation between regions, KIs also highlighted significant gender-based differences in the labour market. All livelihoods KIs were purposively sampled to either speak to the experience of women or men in the Libyan labour market, and report on how these experiences may or may not differ. The KIs highlighted a clear occupational segregation between men and women in the Libyan labour market. Men were reported to have access to employment opportunities in a long list of sectors, from retail to transportation to education. Employment sectors reported for women, on the other hand, were far less diverse. KIs throughout Libya reported that women are pressured to go into professions in the health and education sectors, for public or private institutions. Other sectors

[73] Abdelwahed, "Workers in Libya Struggle under Oil Blockade."
[74] Mucahit Aydemir, "Libya Oil Production Comes to Halt, Affects Economy," Anadolu Agency, June 1, 2020, https://www.aa.com.tr/en/middle-east/libya-oil-production-comes-to-halt-affects-economy-/1860775.
[75] Abdelwahed, "Workers in Libya Struggle under Oil Blockade."
[76] Salma El Wardany and Paul Wallace, "Here's What to Watch as Libya's Oil Industry Starts Up Again - Bloomberg," Bloomberg, September 21, 2020, https://www.bloomberg.com/news/articles/2020-09-21/here-s-what-to-watch-as-libya-s-oil-industry-starts-up-yet-again.
[77] Faucon, "Libya Restarts Oil Production at Biggest Field ."
[78] World Bank Group, "Libyan Macro Poverty Outlook," 2020; Libya Business News, "Libyan Central Bank Warns of Financial Collapse ," Libya Business News, October 9, 2020, https://www.libya-businessnews.com/2020/10/09/libyan-central-bank-warns-of-financial-collapse/.
[79] Livelihoods KIs are members of the community selected by local data collection partners, who they felt could speak on behalf of the wider community about income, employment, and coping strategies. These representatives were often CSO workers, municipality representatives, and local council members.
[80] Gupte, "Distribution of Oil Revenues Dominate Talks to Restart Libyan Output: Sources ."
[81] REACH and Libya Cash Working Group, "Libya Joint Market Monitoring Initiative (JMMI): 6 - 18 November."6-18
[82] IOM; WFP, "Hunger , Displacement and Migration: A Joint Innovative Approach to Assessing Needs of Migrants in Libya," 2019.

mentioned to a lesser extent were sewing, bride decoration, and pastry making. The root causes of the apparently limited opportunities for women are many, including political and legal factors.[83,84] In addition to limited access to many sectors, when women do have their own businesses such as in sewing or pastry making, these are often not officially registered.[85] These additional challenges faced by women in the labour market indicate that humanitarian needs with regards to C&M may be more severe than the quantitative data suggests, as women were underrepresented in the sample.[86]

Protection

In 2020, Libya's protracted conflict continued to pose protection risks to the Libyan population. Clashes and fighting continued around Tripoli with the conflict shifting towards Sirt and Aljufra in June.[87] Following the shifting frontlines, civilian mass graves were discovered in Tarhuna highlighting the risk Libyan civilians face in and around conflict areas.[88] Similarly, on 25 May, improvised explosive devices, landmines and explosive remnants of war were found in and around Tripoli killing or wounding civilians.[89,90] In October, a formal ceasefire agreement was reached.[91] However, the situation remains tense and volatile in light of a growing foreign armed interference, alongside international efforts to de-escalate the conflict.[92] Additionally, fighting continues between smaller factions and militias active in Libya.[93] As a result, Libyans continued to face protection risks in 2020, driving limited access to safety for civilians as well as triggering new waves of displacement.[94]

Overall, 11% of households were found to have an unmet need in protection (i.e. extreme or severe LSG scores). Those households classified as having an 'extreme' protecion LSG were those reporting that safety incidents had happened in their baladiya (admin level 3) in the 30 days prior to data collection (85% of households with protection needs).[95] Severe LSGs were mostly driven by missing forms of personal documentation (35% of households with protection needs) and safety concerns (69% of households with protection needs).[96] The proportion of households with a protection LSG differed between population groups, as shown in the figure below, where assessed returnee households were more commonly found to have a protection LSG than other assessed population groups. This difference appeared to be largely driven by a higher proportion of returnee households reporting safety incidents in their baladiya in the 30 days prior to data collection (19% of all returnee households) compared to 10% of IDP and 10% of non-displaced households.

Figure 8: % of households with a protection LSG, per population group

Households with protection needs were likely to have complex needs profiles; there was no dominant pattern or needs profile among those households with protection needs. Among households with a protection LSG, the most

[83] Hala Bugaigis and Mohamed Tantoush, "Women in the Libyan Job Market: Reality and Challenges," 2017, https://doi.org/10.1126/science.181.4104.990-b.
[84] UN Women, "The Economic and Social Impact of Conflict on Libyan Women," 2020.
[85] Jusoor Center for Studies & Development, "Building an Inclusive Economy in Libya: Challenges and Opportunities," 2017.
[86] The MSNA did not sample for women. Women made up 13% of the MSNA sample.
[87] OCHA, "Humanitarian Needs Overview," 2021.
[88] International Criminal Court, "Statement of ICC Prosecutor, Fatou Bensouda, on the Discovery of Multiple Alleged Mass Graves and Continued Violence in Libya: 'I Will Not Hesitate to Expand My Investigations and Potential Prosecutions to Cover Any New Instances of Crimes,'" 2020, https://www.icc-cpi.int/Pages/item.aspx?name=200622-otp-statement-libya.
[89] UNSMIL, "UNSMIL Condemns the Use of Improvised Explosive Devices against the Civilians in Ain Zara and Salahudin in Tripoli," May 25, 2020, https://unsmil.unmissions.org/unsmil-condemns-use-improvised-explosive-devices-against-civilians-ain-zara-and-salahudin-tripoli.
[90] UNICEF and UNMAS, "Joint Statement Condemning the Use of Improvised Explosive Devices against Civilians," May 28, 2020, www.unicef.org.
[91] International Crisis Group, "Fleshing Out the Libya Ceasefire Agreement."
[92] International Crisis Group: Crisis Group Libya, "Crisis Group Libya Update #2," December 24, 2020; Protection Sector Libya, "Libya Protection Sector Strategy 2020-2021," 2020.
[93] Protection Sector Libya, "Libya Protection Sector Strategy 2020-2021."
[94] OCHA, "Humanitarian Needs Overview."
[95] 10% of all households reported security incidents in the 30 days prior to data collection.
[96] 20% of all households reported missing documentation, and 20% of all households reported safety concerns.

common profile were those with only a protection LSG (8% of households with a protection LSG) or with both a protection LSG and a CG (8% of households with a protection LSG).

Extreme LSG scores were found to be primarily based on households reporting safety incidents in their baladiya in the 30 days prior to data collection (10% of all households). The percentage of households that reported safety incidents varied considerably across regions and mantikas. Among households in the South, 31% reported safety incidents, as opposed to 6% in the West and 13% of households in the East. In the four mantikas with the highest proportion of households with a protection LSG, namely Ubari (54% of households with a protection LSG), Ejdabia (39%), Sebha (33%), and Alkufra (30%), households reporting safety incidents was the primary driver of protection needs. None of these mantikas were in or around the changing frontlines in 2020. However, these findings may be reflected by the fact that the de-escalation of the protracted conflict since 2014 has also caused more localised forms of community-based fighting in certain areasClashes, coupled with a weak rule of law, have led to an unstable protection environment for civilians.[97] The high percentages of households reporting safety incidents indicate the protection risks associated with localized violence and overall deterioration of rule and order.[98,99]

Safety concerns were more commonly reported than safety incidents, as 20% of households overall reported at least one safety concern while 9% of households reported incidents in their baladiya. Notably, households in the East were more likely to report safety concerns than safety incidents, compared to the South and West, where the percentage of households with concerns match proportionally with the percentage of incidents reported. This could indicate a higher level of stress and anxiety among households in these areas. Especially households in Al Jabal Al Akhdar (54%), Alkufra (61%), Ejdabia (69%), and Tobruk (96%) more commonly reported having safety and security concerns, but only in Alkufra (25%) and Ejdabia (19%), households reported safety incidents.

The only exception to this pattern in the West was the baladiya Sirt, with 44% of households reportedly having concerns, while only 6% knew about incidents in their baladiya. Considering the changing front line in and around Sirt during June and July 2020,[100] when quantitative data collection took place, this relatively high proportion of households with safety and security concerns was to be expected. This was confirmed by the four KIs interviewed on the topic of safety and security in Sirt. The KIs in Sirt highlighted increased safety and security concerns over the 6 months prior to data collection due to COVID-19 as well as the increased military presence in the city.[101] The majority of KIs in Sirt mentioned a concern for increased conflict and tribal-related violence as well as concerns of unexploded ordanances when interviewed in November. Female KIs in Sirt, in contrast to male KIs, reported concerns of domestic violence as well as conflict-related violence.

Among all assessed households, the most commonly reported types of safety concerns were robberies (8%), conflict-related violence (7%), and environmental hazards (5%). While the most commenly reported incidents in the the 30 days prior to data collection were robberies (6%), followed by conflict-related violence (2%), and kidnappings (2%). These findings were supported by qualitative findings; half of KIs in the South and East reported a prevalence of robberies and related issues. One male KI in Aljufra reported the robberies to be a negative coping strategy for people being unable to meet their daily needs due to the general deterioration of the economic situation. As noted above, KIs more often referenced incidents of conflict-related violence with reference to localised tribal violence during the qualitative assessment, rather than conflict along contact lines, especially in AlKufra, Ejdabia, Murzuq, Ubari and Wadi Ashati.

[97] Protection Sector Libya, "Libya Protection Sector Strategy 2020-2021."
[98] Reuters, "Libya Frontline Pullback Puts Eastern Offensive in Question," May 20, 2020, https://www.reuters.com/article/us-libya-security-idUSKBN22V3BB.
[99] UN Security Council, "As Foreign Interference in Libya Reaches Unprecedented Levels, Secretary-General Warns Security Council 'Time Is Not on Our Side', Urges End to Stalemate," July 8, 2020, https://www.un.org/press/en/2020/sc14243.doc.htm.
[100] Ayman al-Warfalli, "On Libya's Front Lines, Sirte Is Focus for Regional Rivalries," Reuters, August 20, 2020, https://uk.reuters.com/article/uk-libya-security-sirte-idUKKBN25G1SJ.
[101] KIs profiles in Sirt included a previous member of the municipality board, a school director, a university dean, mosque imam and community leader, head of social affairs, as well as a local community leader.

Explosive hazards

Numerous international organizations have documented and condemned the planting of explosive devices in Libya, especially in areas in around contact lines. MSNA quantitative data is not necessarily well-suited to provide more insights into the issue of explosive hazard contamination, as it is only indicative at mantika level and does not sample for locations where fighting has taken place. Therefore, a pilot qualitative assessment with KIIs was launched in Ain Zara (Tripoli), Benghazi, and Sirt based on interests from the United Nations Mine Action Service (UNMAS) and mine action partners DanChurchAid, Free Fields Foundation, and HALO Trust. In Sirt, 17 households that reported awareness or concerns of explosive hazards during the household survey were contacted to be interviewed. However, none were willing to discuss issues related to explosive hazards in a KII, potentially due to fear of retribution considering the tense situation in Sirt. During additional KIIs conducted in Sirt with community members on the topic of safety in general, three out of four KIs did indicate that explosive hazards were a key security concern, but did not provide any additional details.

KIIs were also conducted in Ain Zara and Benghazi with respondents who had expressed concerns or awareness of explosive hazards in their area during the household survey. In Benghazi, the KIs were in Bu Atnai, Bu Fekhra, and Al Guouarcha. In Benghazi, all KIs reported that explosive hazards were an important concern in 2014-2017, but indicated that they considered their area safe at the time of data collection. The KI from Bu Fekhra noted: "*Most of the areas where there was a war and conflict, which lasted three years, from 2014 until about mid-2017, were stashed with the remnants of war that* [the group known as] *ISIS used when they fled Benghazi; they planted these mines, targeted the army forces, killed many young people*." This KI, as well as the others, were now under the impression that all had been removed. KIs in Ain Zara also reported that their area was currently safe from explosive hazards. They noted that the explosive devices from June and July of this year had been removed. At the time of data collection, however, mine clearing activities were still underway in Ain Zara. All six KIs were aware of phone numbers that could be used to inform the military or independent de-mining actors of the presence of explosive hazards. In Ain Zara, KIs had also noticed awareness raising campaigns in their area. Overall, there appears to be a reasonable awareness of explosive hazards as a potential threat. Whether the areas discussed are indeed as safe as believed is unclear and inconclusive from this data. For future assessments, it will be important to directly target households in areas where fighting has taken place, and to combine this data with field visits and secondary data where possible.

Women and gender-based violence

Only 1% of households in the MSNA household survey reported sexual harrassment or violence as a main safety and security concern. This percentage was significantly higher amongst households in Al Kufra (42%), Murzuq (34%), Ejdabia (22%), Ubari (18%), Al Jabal Al Akhdar (14%), and Sebha (11%). Given that a small minority of respondents were female (13%), there is a strong likelihood that these concerns are largely underrepresented for women. To better understand these concerns and capture the needs of women in Libya, female KIs in the East and South of Libya were interviewed about safety and security concerns and who is responsible for women's safety in the community. Female KIs in Sirt were included to understand how the moving frontlines this year have impacted women. Most female KIs were CSO workers involved with civil rights and women's issues. KIIs were also conducted with female health care workers, teachers, and women employed in the private sector. In addition to KIIs, the IMC conducted two FGDs with women in Sebha on the topic of GBV in partnership with REACH.[102]

Female KIs in Sirt reported concerns of domestic violence as well as conflict-related violence. One female KI highlighted how the COVID-19 measures have reduced women's already restricted freedom of movement, further exacerbating domestic violence and lack of access to safe spaces: "*Imposing a ban on everyone traveling between cities, and inside the city, means that some women are prevented from going to a safe place to avoid domestic violence. This forces women to remain under that violence and for long periods of time to remain inside the house*." Similarly, in the South of Libya, a female doctor in Ubari as well as a male municipality representative and a female nurse in Sebha, specifically raised concerns of a perceived increase in cases of domestic violence among households due to COVID-19 restrictions. As the municipality representative in Sebha reported: "*The problems of violence [*including beatings*] against women have increased because some husbands are forced to stay at home*

[102] A dedicated output is under development with the GBV sub-sector, which will present these findings in more detail. Publication forthcoming 2021.

for longer hours during the lockdown." These findings reflect global trends linking restrictive measures such as lockdowns during the pandemic and incidences of GBV.[103]

Reflecting on recourses available in cases of GBV, KIs noted that instances of domestic violence are most likely dealt with within the community, and are not reported to the police.[104] During two FGDs in Sebha with women on the topic of domestic violence, it was commonly mentioned that women will often not report GBV because of fear of social backlash and lack of punishment for perpetrators. A female doctor in Ejdabia noted that the restrictive measures due to COVID-19 have made it even less likely that women will report such issues, while another reported:"*Battered women keep silent about the crimes committed against them, such as murder, kidnapping, or violence in all its forms, and their problems are solved in a customary way*". This finding is reflected by rights organisations such as Amnesty International, who have repeatedly highlighted the issues women face in Libya.[105]

Health

The health sector in Libya is an example of how public systems have suffered from protracted conflict. In 2017, the World Health Organization (WHO) and the Health Information Center (HIC) of the Libyan Ministry of Health (MoH) conducted the Service Availability and Readiness Assessment (SARA) in Libya. They found that 19% of health service facilities were closed at the time. These facilities included hospitals, primary health care facilities, and other specific health services. The primary reasons for closure found in the assessment were required maintenance, inaccessibility due to conflict, and damage.[106] These closures have reportedly remained in the years following the assessment.[107,108] Since the SARA was conducted, the health system has continued to face challenges. First, in 2014, it was reported that the Libyan health system was close to collapse due to the expatriation of health workers after renewed wave of clashed in 2014, leading to a serious effect on health response capacity and functionality.[109] Second, health facilities have become a target in conflict. In April 2020, OCHA reported that 23 attacks on health facilities had taken place in the last year.[110] In May, two more attacks were registered within four days, in Tripoli and Benghazi.[111] Third, in this context, the first COVID-19 case was confirmed in Libya in March, representing a new challenge for the health system.[112] In light of these continued pressures and shocks to the health system in Libya, it is important to understand the impact on health needs among the Libyan population.

[103] Amber Peterman and Megan O'donnell, "COVID-19 and Violence against Women and Children: A Third Research Round Up for the 16 Days of Activism," December 2020.
[104] This is echoed in a recent report by UN Women on the topic: UN Women, "The Economic and Social Impact of Conflict on Libyan Women."
[105] Amnesty International, "Silenced Voices: Libyan Women Human Rights Defenders Under Attack," 2018, https://www.refworld.org/pdfid/5b6abc764.pdf.
[106] Ter Veen, "Service Availability and Readiness Assessment (SARA) of the Public Health Facilities in Libya."
[107] OCHA, "Humanitarian Needs Overview Libya," 2020.
[108] WHO, "Annual Report Libya," 2019, https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/who_libya_annual_report_2019.pdf.
[109] WHO, "Humanitarian Crisis in Libya."
[110] Alharathy, "OCHA Documents 23 Attacks on Health Facilities."
[111] International Rescue Committee (IRC), "Second Hospital Attack in Four Days Puts Libya's COVID-19 Response Further at Risk, Warns IRC - Libya," May 14, 2020, https://reliefweb.int/report/libya/second-hospital-attack-four-days-puts-libya-s-covid-19-response-further-risk-warns-irc.
[112] Health Sector Libya, "Health Sector Bulletin."

COVID-19 in Libya

The first case of COVID-19 in Libya was confirmed on 24 March.[113] At the time, the Health Sector Preparedness and Response Plan expressed concerns about the Libyan health system, reporting that "*preparedness and response activities in South Libya are basically non-existent*."[114] Additionally, actors in Libya warned for the potential effects on the provision of regular health services in an already weakened health system.[115] The effects of COVID-19 were expected to most negatively affect those populations already marginalized and affected by the ongoing conflict.[116,117] Cases have continued to rise since March, with a clear exponential increase since July.[118] Various measures have been put in place, including regional lockdowns and movement restrictions between areas.[119] The exact impacts on the health system and the most vulnerable remain largely unknown, in part because those most affected are typically hard to reach and may be underrepresented in the MSNA sample. Additionally, the household survey does not capture information about health infrastructure.

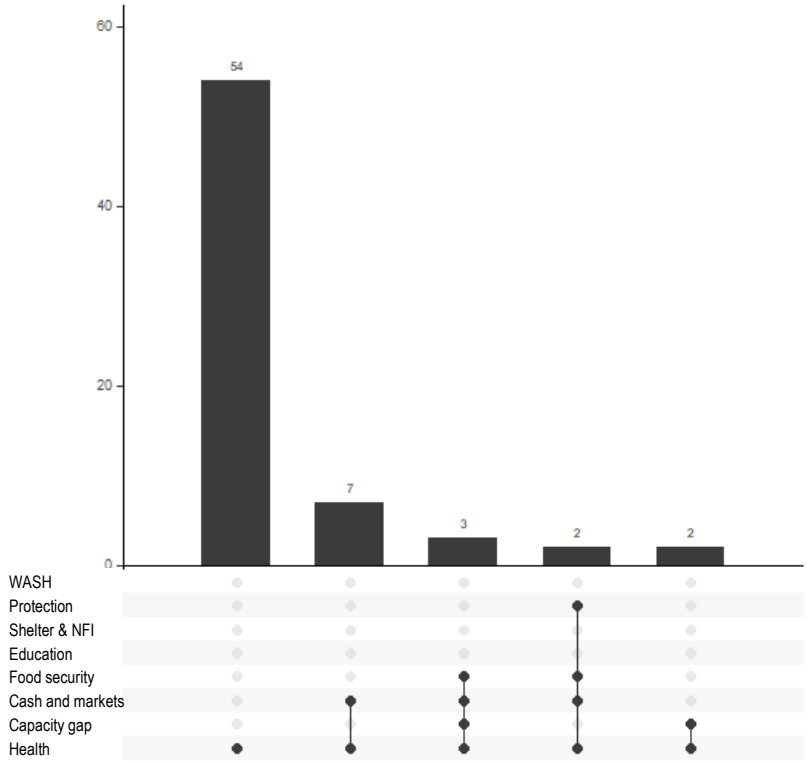
From a livelihoods perspective, 20% of households with working household members reported negative changes in their work situation due to COVID-19, while 27% of households reported being unable to financially cover all health needs in the 30 days prior to data collection. KIs in all regions were asked about the impact of COVID-19 on the security environment. Several KIs in each region reported the security situation had worsened due to COVID-19. These KIs all referred to the impact of confinements on the economy, which in turn impacted the security environment. For example, according to a female CSO worker in Aljufra, the consequences for the labour market have led to an increase in instances of theft and petty crime. Additional impacts of the pandemic surely exist, and need to be explored in more detail to understand its influence on the humanitarian context.

Overall, 18% of households were found to have health needs (i.e. an LSG in health). A minority of households with health needs (10%) reported having been unable to access healthcare when needed in the three months prior to data collection, classifying them as having an extreme LSG (2% of households overall). Health needs were found to be driven by reported difficulties faced when accessing healthcare in the three months prior to data collection (99% of households with health needs),[120] and the need to travel over one hour to the nearest health facility (89% of households with health needs).[121] Overall, 22% of households in the West, 18% of households in the South, and 9% of households in the East were found to have health needs. Higher needs in the West were primarily driven by households reporting the need to travel over one hour to the nearest health facility; 98% of households with health needs in the West compared to 67% in the East and 48% in the South.

Figure 11 illustrates that those with a health LSG were not likely to have co-occurring needs in any other sectors or thematic areas; 54% of households with a health LSG only have a health LSG. In comparison, of people with an LSG in other sectors, approximately 10% only have one specific LSG. This indicates that, compared to households with needs in other sectors or thematic areas, those with needs in health are less likely to have other needs. This reflects the fact that many of the drivers of health needs are primarily infrastructural, such as distance to health facilities, which are likely to affect the wider population – and not just those with other cross-cutting vulnerabilities.

[113] Health Sector Libya.
[114] Health Sector Libya, "Coronavirus Disease 2019 (COVID-19) Preparedness and Response Plan for Libya," 2020, https://reliefweb.int/sites/reliefweb.int/files/resources/health_sector_libya_covid-19_response_plan.pdf.
[115] Mahmoud Abdelwahed, "COVID-19 Puts Libya's Health Service in Danger of Collapse," *Al Jazeera*, April 6, 2020.
[116] Amnesty International, "Libya: Historic Discrimination Threatens Right to Health of Minorities in the South amid COVID-19."
[117] ICRC, "Libya: COVID-19 and Conflict Collide, Deepening Humanitarian Crisis."
[118] Health Sector Libya, "Coronavirus Disease 2019 (COVID-19) Preparedness and Response Plan for Libya."
[119] IOM, "Libya — Mobility Restriction Dashboard 8 (1 - 30 September 2020)."
[120] 50% of all households reported difficulties when accessing healthcare in the three months prior to data collection
[121] 39% of all households reported the need to travel over one hour to the nearest health facility

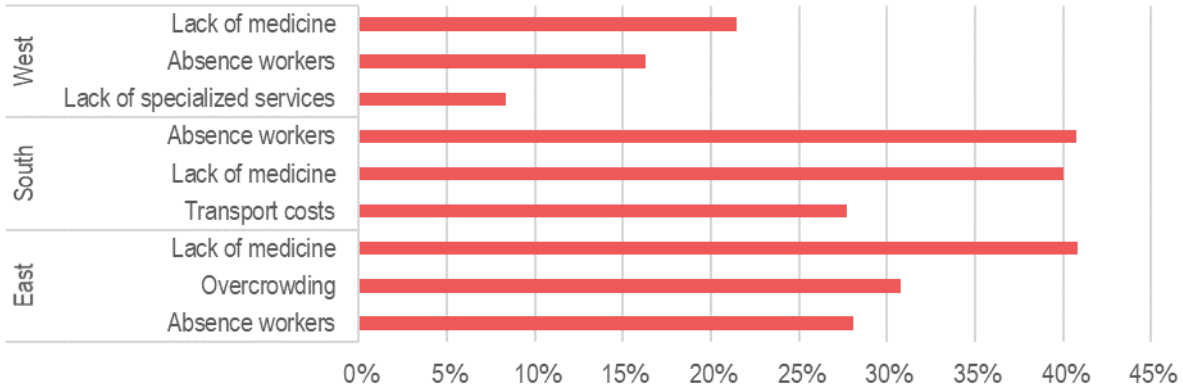
Figure 9: Most common combinations of one or more LSG(s) among households with a health LSG (18%)



During the household survey, households were asked if they encountered any difficulties accessing healthcare in the three months prior to data collection; 50% of households (overall) reported having faced at least one kind of issue.[122] The most commonly reported issues were lack of medicines at the health facilities (29% of households), absence or shortage of health workers (22%), and health facilities being overcrowded (15%). The SARA identified similar issues, as health facilities were found to have insufficient supplies of basic medication, a poor inpatient bed density score, and a shortage of specialized health workers[123] The figure below shows the regional variation in the most commonly reported issues. A lack of medicine and personnel were commonly reported in all regions, yet their relative prevalence per region differs. Additionally, in the West, the third most commonly reported issue was lack of specialized services, in the South it was transport costs, and in the East overcrowding was commonly reported. These differences indicate different priorities per region. In the West, for example, the lack of specialized services being commonly reported indicates issues with the quality of healthcare, whereas overcrowding in the East suggest an issue of capacity of health facilities. In the South, problems beyond the health care facilities themselves and rather related to financial and economic issues are key to understanding health needs. These differences further illustrate the regional specificities of health needs in Libya.

[122] Households that reported issues in this question were not immediately qualified as having a health need. However, if they reported an issue in this question and were found to have a need in another health indicator (e.g. if a household has to travel for over an hour to the nearest health facility) then they were classified as having a health need (LSG). See Annexes 7 and 8 for more information about the calculation of needs/LSGs and the indicators that fed into the LSG scores.
[123] Ter Veen, "Service Availability and Readiness Assessment (SARA) of the Public Health Facilities in Libya."

Figure 10: Overall, top three most commonly reported issues accessing healthcare in the three months prior to data collection, by % of households per region



These findings were echoed by KIs. Questions on access and quality of health care were part of a larger interview on access to services in general. KIs were selected to speak to this broad topic, and the sample encompassed people working with CSOs, municipality representatives, community leaders, council leaders, education professionals, and health care workers. In line with the quantitative findings, lack of medicines, medical equipment, and shortage of health care professionals were mentioned by the majority of KIs in the East, South, and West. Female KIs in the South also specifically highlighted the lack of specialized services such as obstetrics. A nurse in Wadi Ashshati mentioned that: "*The medicines are no longer available in hospitals, and to get them, they have to be bought from pharmacies, and not all the drugs are available. Some are expensive and not available at all, such as special medications for diabetics, blood pressure drugs, neurology drugs, heart drugs, antibiotics* (Pascal, Fortaline, cold and congestion drugs)."

The lack of medicines was an issue mentioned by all interviewed KIs. KIs reported how the public primary health care facilities lack medicines, and how the same medicines were available in the private pharmacies at a high price. Some KIs mentioned how people go to the private pharmacy and purchase the medicine to then go to the hospital for their procedure with the needed medicines. One female CSO worker in Murzuq reported that the quantity of medication delivered to public hospitals is not sufficient, and that the high prices for medication in private pharmacies in combination with the difficulties obtaining cash cause significant problems for those in need. The Medical Supply Organization (MSO) is responsible for import of pharmaceuticals to health centers and hospitals in Libya, while pharmacies also acquire pharmaceuticals through private importers.[124] The testimonies of Libyan households and the KIs suggest a distribution problem of medicines in Libya, causing financial barriers to accessing basic healthcare.

In addition, access to health services was reported by KIs to not always be inclusive or needs-based. In Alkufra, KIs working with local CSOs mentioned that access to health services was dependent on tribal affiliation. KIs in Al Jabal Al Akhdar mentioned that access to health care was often based on personal relationships with health workers, as well as tribal relationships. In Aljufra, KIs associated with CSOs reported that IDPs typically have more difficulties accessing services due to the economic challenges associated with displacement. A hospital administrator in Ghat additionally mentioned high costs as a common barrier to access. During the household survey, 27% of household reported they were not able to financially cover all health needs in the 30 days prior to data collection. In addition to issues related to capacity and infrastructure, these findings indicate the importance of socio-economic dimensions to understand health needs.

According to a KI interviewed for the 2019 MSNA, *"the accumulation of years of war has had a negative effect on Libyans' mental health, and that Libyans are coping with these effects through risky practices*."[125] This was echoed in the 2020 findings, where all KIs mentioned concern for the increased stress and anxiety that households have

[124] REACH, "Market Systems in Libya: Assessment of the Wheat Flour, Insulin, Tomato and Soap Supply Chains," November 2017, www.reach-initiative.org,.
[125] REACH, "2019 Multi-Sector Needs Assessment," 32.

been facing due to COVID-19 measures such as confinement and curfews. These findings are also supported by the WHO's October – November 2020 situation report of COVID-19 in Libya, where a core concern expressed was anxiety and psychological stress in a country with "non-existent mental health services".[126] KIs interviewed for the MSNA confirmed that there is both a lack of mental health care services available for households to seek help from, and significant social stigma associated with those who seek mental health support.[127] A municipality representative KI in Aljufra expressed the stigma people face when needing mental healthcare in the following way: "*the community's view of those who seek mental health support – their discrimination and rejection – prevents people from asking for psychological assistance.*" While a female KI from Al Jabal Al Akhdar highlighted additional risk for women in seeking out mental healthcare facilities: "*Mental health support is given discreetly because of the risk of social harm; patients are seen as 'crazy', which can cause additional mental stress. If anyone knew that a woman was frequently seeing a psychiatrist, no one would marry her, and she would be excluded from the community.*" In general, the findings show that Libyans face many pressures related to mental health, but that there are significant challenges both in building infrastructure to address such issues and in de-stigmatizing mental health.

Pre-existing vulnerabilities

In addition to sectoral LSGs, the PEV composite indicator was designed to identify households that possess characteristics that put them in a particularly vulnerable position. The indicators feeding into the composite are based on MSNAs from previous years, consultations with field staff, and secondary literature research. The MSNA indicators chosen for inclusion in this composite indicator are cross-sectoral, meaning that they represent household-level conditions that may influence the households' ability to access services and fulfil basic needs across all sectors. The table below shows the indicators as well as the proportion of households that have that vulnerability profile and have at least one LSG.

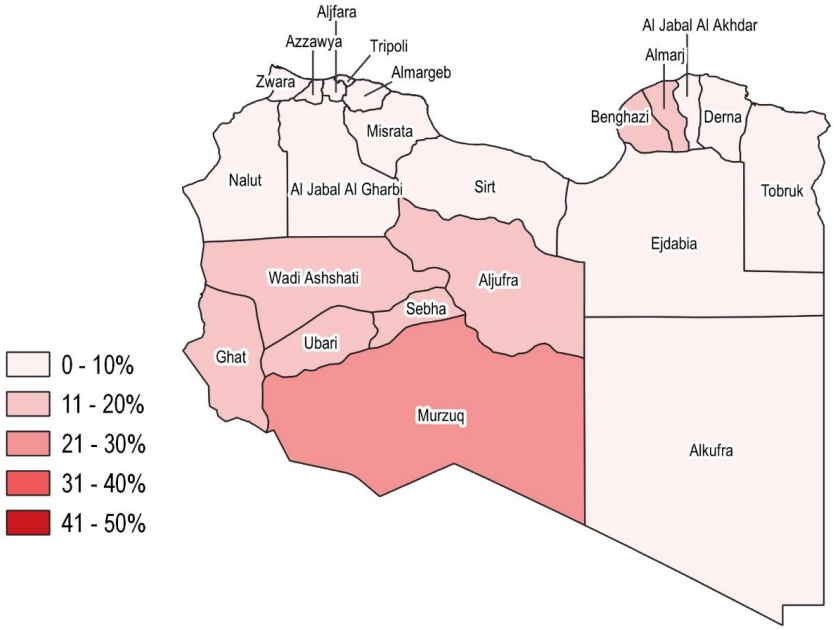
Table 1: % of households with specified vulnerability profile and at least one LSG

Indicator/vulnerability profile	% of households with the specified vulnerability profile and at least one LSG
Households with an age-dependency ratio of 0.5 or higher[128]	50%
Households with an income that is lower than the MEB) in the 30 days prior to data collection[129]	38%
Households with a female head of household[130]	7%
Households who have been displaced more than once	3%
Households who have been displaced in the six months prior to the data collection.[131]	1%

If a household possesses any three out of the five characterstics, they are classified as having a PEV. Overall, 6% of households were classified as having PEVs, the majority of whom (87%) also had at least one LSG. The map below shows that large proportions of households with PEVs and sectoral needs were concentrated primarily in the South. These households may be less able to meet their needs and deal with these LSGs. For example, if a female-headed household is affected by the crisis, the household may be less able to recover because the additional challenges faced by women attaining jobs, as highlighted in the C&M section.

[126] WHO, "Health Response to COVID-19 in Libya: WHO Update #19."
[127] The KIs informing on healthcare services and mental healthcare challenges were CSO workers, municipality representatives, and healthcare workers
[128] The age dependency ratio is calculated as the number of household members between 18 and 60, divided by the number of household members outside of this age range.
[129] The MEB is the expected minimum value of expenditures to meet basic needs on a monthly basis, including food and hygiene items, as well as rent. The value is based on regular price monitoring as part of JMMI led by REACH. Separate values were used in the pre-existing vulnerability score calculations for the South and the other regions, due to the relatively high cost of living in the South.
[130] The 2019 MSNA qualitative data suggested that Libyan women and girls face challenges that Libyan men and boys do not, leading female-headed households might face additional challenges in meeting their daily needs compared to male-headed households
[131] Note that PEV are assumed or expected pre-determinants of vulnerability due to external circumstance; our findings indicate that across most indicators returnees were found to have higher needs than IDPs. This suggests that returnees may be more vulnerable than IDPs in the Libyan context. However, returnee vulnerability is likely more so dependent on area of return, whereas a general level of vulnerability can be assumed for IDPs that have had to abandon assets and stability.

Map 3: % of households with pre-existing vulnerabilities and at least one LSG, per mantika



Case study

This section will present one case study in order to highlight and explore the needs profiles of key subsets in Libya. The selected subsets are households living in Southern Libya. The Southern case study was selected because of the high percentage of households with two or more LSGs (70% of households in the Southern region), which hints at the especially complex and urgent humanitarian needs in this region compared to the East and West.

Southern Libya

Southern Libya, also known as the Fezzan region, encompasses the following mantikas: Aljufra, Ghat, Murzuq, Sebha, Ubari, Wadi Ashshati. The region is of particular interest when discussing humanitarian needs for several reasons. Firstly, the area has historically been neglected by political and economic actors; it was the poorest and least developed region prior to 2011 partly as a result of that neglect.[132] Households in the South continue to have generally lower incomes, as 84% of households reported to have had less than 950 LYD income in the 30 days prior to data collection, whereas this was the case for 62% of households in the East and just 6% in the West.[133] Compounded with lower incomes, households also face higher prices for basic goods, with the MEB in the South recorded at 961.1 LYD compared to 663.2 LYD in the West and 680.9 LYD in the East at the time of MSNA data collection.[134,135] This shows that 84% of households in the South earned less than was required to afford the estimated minimum basket of key food and hygiene items. Secondly, after the outbreak of conflict in 2011, formal institutions in place largely collapsed and created a political vacuum that was filled with a patchwork of governments, tribal groups, criminal groups, and militias. This has led to a facilitating environment for human trafficking and smuggling networks in some areas, and has prevented much large scale government investment into state infrastructure.[136,137] This lack of investment has resulted in relatively weak public services, particularly the

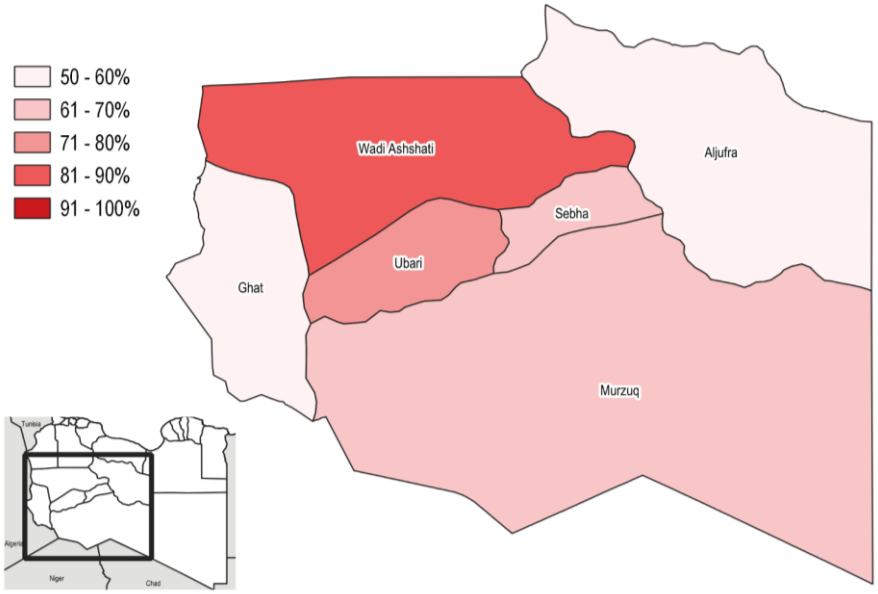
[132] Sherine El Taraboulsi-McCarthy et al., "Protection of Displaced Libyans: Risks, Responses and Border Dynamics," 2019.
[133] See Annex 10 for comparison of income distribution data by region.
[134] REACH and Libya Cash Working Group, "Libya Joint Market Monitoring Initiative (JMMI): 1 - 9 July," 2020.
[135] See Annex 11 for MEB trajectory for 2020.
[136] Frederic Wehrey, "Insecurity and Governance Challenges in Southern Libya," 2017.
[137] Fransje Molenaar et al., "The Status Quo Defied: The Legitimacy of Traditional Authorities in Areas of Limited Statehood in Mali, Niger and Libya," September 2019, www.clingendael.org/cru.

health care system, making the region more vulnerable to the COVID-19.[138] Thirdly, the South also houses much of the country's oil reserves and is therefore also host to forces vying for control.[139] Lack of central political control and high rates of criminality have made the region unstable, and poses obvious challenges to safety and service provision.[140] The precarious security environment in the South is further reflected in MSNA sectoral findings; 31% of households were found to have protection LSG in the South, compared to 14% in the East and 6% in the West.

The South also stands out in the MSNA quantitative findings as the region with the highest concentration of households with needs in more than one sector or thematic area. The figure below shows the percentage of households with more than one LSG to illustrate this regional variation. These households are under additional stress and are affected by the crisis in various ways. In the South, the large majority of households had at least two LSGs, reflecting the complexity of the context and the extent to which the population has been affected by the protracted conflict and political instability. Despite the high percentage of households with needs in the South, the region has less active humanitarian partners than the West (37 compared to 48). While, for example, 23% of households in the West were reached by general protection activities as of December 2020, only 8% of households in the South were reached by these activities.[141] This disparity is likely due to the relatively small population in the South and the low population density, which makes it harder to reach large numbers of households.

Figure 11: % of households with two or more LSGs, by region

Map 4: % of households with at least two sectoral LSGs in the South, by mantika



[138] Amnesty International, "Libya: Historic Discrimination Threatens Right to Health of Minorities in the South amid COVID-19."
[139] REACH Libya, "Effects of the Tripoli Conflict on South Libya," 2019.
[140] Wehrey, "Insecurity and Governance Challenges in Southern Libya."
[141] "3W & 4W - Libya 2020," Humanitarian Response, December 2020, https://www.humanitarianresponse.info/en/operations/libya/humanitarian-operational-presence-and-reached-population-interactive-map.

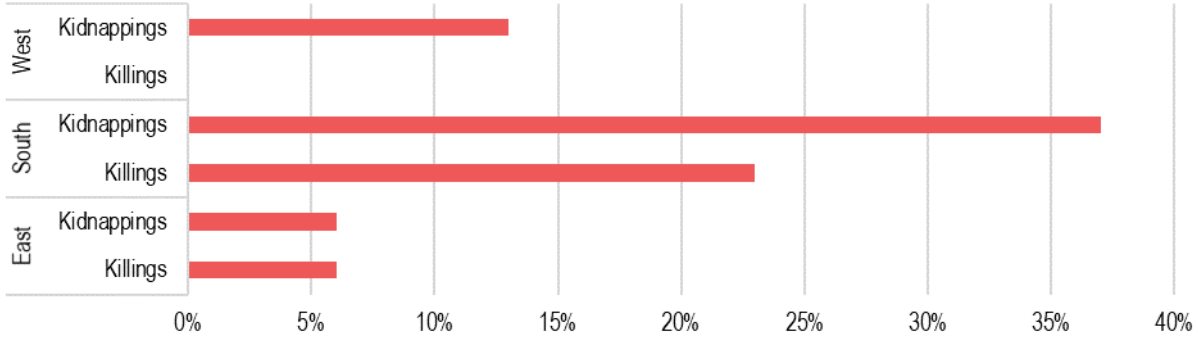
As the humanitarian situation in the South is multi-sectoral in nature, it is important to look at the underlying dynamics aggravating the impacts of the conflict. Three trends emerged from the quantitative, qualitative and secondary data that can help explain the magnitude of humanitarian needs in the South: the safety and security landscape influencing protection needs, lacking power infrastructure influencing WASH needs, and damage to buildings influencing shelter needs. This section will continue to discuss these three trends and how they contribute to the overall picture of humanitarian needs in the South.

Safety and security landscape: Implication for Protection

The safety and security landscape in the South is characterized by a lack of central control and a complex tribal landscape that plays a significant role in community forming and establishment of political alliances.[142] The collapse of the government in 2011 led to multiple groups in the South gaining more control over local governance systems.[143] In the years that followed, these actors became important in ensuring the safety of their communities, in the absence of a central or dominant law enforcement agency.[144] With the increasing power of independent actors after 2011, also came increasing strife between groups with different affiliations.[145] The gaps within this fragmented network have left space for the development of smuggling and criminality in the region.[146] These gaps have additionally led to a proliferation of militias, weakening the safety of local communities.[147]

These issues were reflected in the household survey: 31% of households were found to have a protection need in the South, compared to 11% nationwide. This was largely because 31% of households reported to be aware of safety incidents in their baladiya in the 30 days prior to data collection. Among those households, the most commonly reported incidents were robberies (82%), kidnappings (37%), and killings (23%).[148] Especially these last two incidents were far more commonly reported in the South than in the other regions, and indicate serious protection concerns. The figure below shows the regional differences for these two types of incidents.

Figure 12: Among households who reported safety incidents, % of households who reported kidnappings and killings, per region[149]



The qualitative data reflects the importance of local actors when it comes to community safety. KIs in Aljufra, Murzuq, and Ubari reported that the tribe was a key agent, in this regard. While official law enforcement agencies such as the police were still reported as the main security agent, the tribe was noted as having an important role in conflict resolution and maintaining stability. In terms of key concerns, KIs in the South were more likely to report forms of localized conflict than KIs in the East and West. As one KI in Murzuq noted, it is especially the fear of clashes between local powerful groups that occupies many households in the region. A KI in Sebha also connected this fear of conflict to the fear of kidnapping in the region. In Aljufra, KIs expressed concerns about militias that had recently entered the area, and were reportedly responsible for recent kidnappings and killings. The overall picture

[142] Al-Hamzeh Al-Shadeedi and Nancy Ezzeddine, "Libyan Tribes in the Shadows of War and Peace," February 2019, https://data.
[143] Al-Shadeedi and Ezzeddine, "Libyan Tribes in the Shadows of War and Peace."
[144] Eaton, "Libya ' s War Economy: Predation , Profiteering and State Weakness."
[145] Al-Shadeedi and Ezzeddine, "Libyan Tribes in the Shadows of War and Peace."
[146] Eaton, "Libya ' s War Economy: Predation , Profiteering and State Weakness."
[147] El Taraboulsi-McCarthy et al., "Protection of Displaced Libyans: Risks, Responses and Border Dynamics."
[148] Respondents could provide more than one example of safety incidents, so the percentages do not add up to 100%.
[149] Graph applies to subset of population that reported safety incidents: 31% in the South, 13% in the East, and 6% in the West.

that emerges from these data sources is an unstable and volatile situation, with various armed actors vying for power, directly influencing the safety of households.

Electricity infrastructure and power supply: Implication for WASH

Electricity supply is a significant issue in the South, which impacts many other services, most notably water.[150,151] The electricity infrastructure in Libya has suffered in the last nine years during the protracted conflict. This has caused frequent blackouts and cuts in the West and South.[152] Several transmission lines and substations have been destroyed or damaged since the civil war in 2014, cutting off several areas and breaking up the network. Parts of the South are entirely disconnected from the main grid.[153]

KIIs were conducted in several locations in the South, during which KIs were asked directly about the occurrence and impact of the unstable and unreliable electricity connection. All KIs agreed that cuts were frequent and had significant ramifications for access to basic services[154]. Consequences for access to cash via banking systems, health services, communication and internet were all noted, amongst others. Especially relevant for humanitarian actors were concerns raised with access to water. During the household survey, households assessed in the south were more commonly found to rely on the electricity-dependent public water systems than households from the East or the West (52%; see figure below for regional comparison).

Figure 13: % of households who reported to rely primarily on the public water network for drinking water

In addition, 55% of households from the South reported during the household survey that they were unable to access sufficient drinking water in the 30 days prior to data collection. This was also a commonly reported issue in the East (53%) but much less so in the West (4%). In case of these shortages, households have to rely on water trucking, bottled water, and wells. It is unclear whether these wells are typically protected, but both unprotected wells and water trucking are considered unsafe sources of drinking water by the WHO.[155] Bottled water was reported by KIs as an alternative often used, but as an unsuitable and unsustainable alternative to the public water network. A KI from Ubari noted that bottled water is too expensive for many households to buy regularly, especially in the summer when prices are higher than usual because of more common water shortages. A KI from Ghat proposes better alternatives should be developed more widely such as clean drinking wells and desalination services. In the absence of affordable and available alternatives to drinking water, continued power cuts could lead to increased humanitarian need. This is especially true in the South, as incomes are generally lower and prices generally higher than in other regions, as discussed in the introduction of this case study. Forced reliance on bottled water can further deplete the resources of households, making it harder to meet needs across sectors.

A solution widely suggested by KIs in the South is the provision of generators, either to individual households or to communities. When asked during the household survey, 82% reported they were in urgent need of a generator.[156]

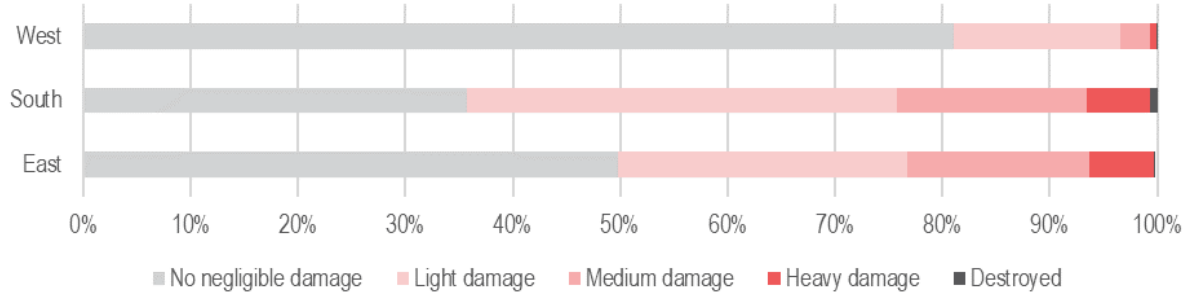
[150] REACH Libya, "Effects of the Tripoli Conflict on South Libya."
[151] Matthew Brubacher, "Why Libya Should Be Soaking up the Sun," Chatham House, December 5, 2019, https://www.chathamhouse.org/publications/the-world-today/2019-12/why-libya-should-be-soaking-sun.
[152] Reuters, "Libyans Face Painful Power Cuts as Years of Chaos Hit Grid," July 24, 2020, https://www.reuters.com/article/us-libya-security-blackouts-idUSKCN24P141.
[153] Labib Daloub, "Conflict Damage and Reconstruction," T&D World, May 1, 2017, https://www.tdworld.com/overhead-transmission/article/20969595/conflict-damage-and-reconstruction.
[154] Forthcoming REACH Libya Area Based Assessment in Sebha
[155] World Health Organization, "Water Sanitation Hygiene - Key Terms," WHO (World Health Organization, 2016), http://www.who.int/water_sanitation_health/monitoring/jmp2012/key_terms/en/.
[156] Note that this was not self-reported, households were asked directly if they were in need of generator.

In Murzuq, Aljufra, and Wadi Ashshati, KIs noted that, while generators were a potential solution, high prices and occasional shortages of fuel bars many households from using them. Instead, KIs argued for the development of solar power in the South, and for the distribution of solar-powered generators. A KI in Ghat, for example, noted the sustainability of solar power and the suitability of the Southern mantika for solar or wind power plants. Such alternative energy solutions could be cost effective and aid access to water as well as service provision in health centers, according to the KI. The potential for solar power in Southern Libya has also been more widely acknowledged in academic literature.[157,158] In March 2020, the Eastern government started construction on a solar power plant in Alkufra, in South-East Libya.[159] In October, the Western government announced a similar project in Tajoura, near Tripoli.[160] Solar power plants have the potential to improve access to water and other services in the South as well. Unfortunately, the fragmented control of the region may limit efforts to develop the necessary infrastructure.

Building damage and shelter needs

Infrastructure damage was commonly reported by households and KIs in the South. During the household survey, 64% of households in the South reported having some damage to their house or accommodation, with 7% reporting heavily damaged or completely destroyed accommodation. This was significantly higher than in the other regions, as shown in the figure below. Households in the South were also the most likely to report enclosure issues (62%): leaks (50%) and insulation issues (20%).[161] KIs explained that this damage is commonly due more to poor construction and maintenance than to conflict. For example, KIs note 'old age' as a key reason for damage as well as heat and rain causing problems. Lack of maintenance and poor construction may be linked to the lack of investment in the South mentioned earlier.[162] Such issues are compounded by households struggling to obtain materials and tools to fix damage; KIs from Ghat, Murzuq, and Sebha have noted that building materials are often very expensive and unaffordable for many.

Figure 14: % of households reporting damage to their shelter, by self-reported degree of damage and per region



Damage is not only reported to houses, but also to public buildings such as schools and hospitals. A KI from Ghat noted that government buildings were often more than 50 years old, which affects the quality of services provided. In Murzuq and Wadi Ashshati, KIs reported damage to school buildings that has forced classes to stop during heavy rains, for example. According to KIs asked directly about damage, these damages to buildings are closely related and most often caused by poor construction and lack of maintenance. These damages are therefore likely to worsen

[157] Basim Belgasim et al., "The Potential of Concentrating Solar Power (CSP) for Electricity Generation in Libya," *Renewable and Sustainable Energy Reviews* 90 (July 1, 2018): 1–15, https://doi.org/10.1016/j.rser.2018.03.045.
[158] Youssef Kassem, Hüseyin Çamur, and Ramzi Aateg Faraj Aateg, "Exploring Solar and Wind Energy as a Power Generation Source for Solving the Electricity Crisis in Libya," *Energies* 13, no. 14 (July 18, 2020): 3708, https://doi.org/10.3390/en13143708.
[159] Jean Marie Takouleu, "LIBYA: Government Launches Construction of a Solar Power Plant in Kufra," Afrik 21, March 16, 2020, https://www.afrik21.africa/en/libya-government-launches-construction-of-a-solar-power-plant-in-kufra/.
[160] "Solar Power Plant to Be Constructed in Tajoura, Libya," Construction Review Online, October 3, 2020, https://constructionreviewonline.com/news/solar-power-plant-to-be-constructed-in-tajoura-libya/.
[161] Households could report multiple issues, therefor the percentages do not add up to 62%.
[162] Wehrey, "Insecurity and Governance Challenges in Southern Libya."

over time. Considering their impact on shelter needs and access to services, this may lead to more common and more severe needs in the South.

CONCLUSION

Due to persistent information gaps on the effects of conflict and humanitarian needs in Libya, REACH, in coordination with OCHA and all active sectors and working groups, conducted an MSNA in all 22 mantikas (admin level 2). The primary aim was to inform humanitarian response planning for 2021. The assessment consisted of a quantitative and a qualitative component. Quantitative data collection took place between 24 June and 14 August 2020 and consisted of 6,061 household surveys. The sample was stratified on mantika and displacement status, with sampling quotas for non-displaced, IDP, and returnee populations for each mantika. Due to the operating environment in light of COVID-19, all household surveys were conducted over the phone. Phone numbers were sourced from respondent referrals and contact lists from organizations active in Libya. The sampling was therefore non-random and the findings cannot be taken as representative. Qualitative data collection consisted of 81 KIIs and took place during November and December. The topic and location of KIIs was informed by outlying findings in the quantitative data. In addition, two FGDs with women on the topic of GBV were conducted in Sebha with the help of the IMC. All findings were contextualized and triangulated with secondary sources.

Overall, the MSNA found that humanitarian need in Libya is extremely diverse, and that no one dominant profile of humanitarian need exists. The most common humanitarian needs were related to C&M (24%). The needs of these households were found to be primarily driven by a reliance on unstable income sources, such as government subsidies or daily labour, and an inability to access essential services and cover needs due to a lack of resources. These issues are closely connected to the protracted liquidity crisis in Libya which was exacerbated this year by the oil blockade. Findings suggested that C&M needs are closely related to other sectoral needs, and should to be taken into account in any kind of response.

Protection and health were additionally identified as key needs in Libya. Protection was the sector with the highest proportion of households falling into the extreme severity category of needs; 10% of households reported awareness of a safety and security incident that had happened within their baladiya in the 30 days prior to data collection, classifying these households as having an extreme unmet need in protection.[163] This percentage differed significantly per region, with the highest proportion of households with extreme protection needs found in the South (31%); notably higher than responses in the West (6%) and East (13%), despite the fact that primary conflict contact lines do not run through the South. Frequently reported incidents instead included robberies, kidnappings, and targeted killings. This safety landscape indicated by the responses reflects the degree to which protracted instability in Libya has led to localized forms of insecurity. Health needs were the third most common overall need. Quantitative and qualitative findings highlighted key weaknesses in the Libyan health system with issues of lacking medication and limited staff commonly reported. These issues in the health system may become critical as COVID-19 cases in Libya continue to rise.

There is considerable variation in humanitarian needs across regions and population groups. In addition to thematic and sectoral needs, this report also focused on two key sub-groups: women in Libya and Libyans living in the South. Through qualitative follow-ups, it was found that GBV was a key concern for women, and that many believed that instances have increased since the onset of the COVID-19 pandemic. KIs and FGD participants also noted the difficulties and social pressures women face when wanting to report instances of domestic or GBV. This has likely led to this issue being largely unreported and invisible, posing challenges for humanitarian responses and highlighting the need for further assessments on this topic.

In the South of Libya, a high percentage of households (70%) were found to have needs in at least two sectors/thematic areas. These needs are largely rooted in the historical neglect and fragmented governance of the region. Serious protection concerns were found alongside issues related to electricity and infrastructure in the South, which reportedly further impede access to services such as water and education. The role of these more structural factors should be taken into account when planning humanitarian response.

[163] Households with a 'severe' or 'extreme' severity category are classified as having a need. 'Extreme' needs are the most severe classification possible in the methodology. See Annex 7 for further explanation on severity classifications.

Throughout the presentation of key sectoral and thematic areas in this report, the specificities of different regions, mantikas and population groups have continuously been highlighted. Given the intended scope and sampling frame of the MSNA, this report is intended to provide only the starting point for examining these issues. To better understand the needs of, for example, women in Libya, or the needs of households in specific baladiyas (admin 3), it is important that further assessments are carried out to supplement the MSNA. Understanding the diversity of the specific needs and profiles in Libya is imperative to building an effective and inclusive humanitarian response.

Annex 1: Data & other publications

The following documents and publications relating to the 2020 Libya MSNA can be found on the REACH Resource Centre:

- Terms of Reference (ToR) can found here
- Dataset and results tables can be found here
- Factsheets can be found here
- Dashboard can be found here
- Quantitative and qualitative data collection tools can be found here

Annex 2: Key Definitions

1. Capacity gap (CG): A household with a CG is one that is relying on negative, unsustainable coping mechanisms to meet its basic needs at the time of data collection. A household may have a CG but no LSGs, meaning that it is meeting its basic needs, but only through reliance on these coping mechanisms. Alternatively, a household may have both a CG and LSGs in one or more sectors, indicating that the household is unable to meet its basic needs despite its use of coping mechanisms.

2. Context: Context, the first pillar of the analytical framework underlying this MSNA, consists of the relevant characteristics of the environment in which humanitarian actors plan and operate. These characteristics include, but are not limited to, characteristics and changes in the humanitarian, socio-cultural, economic, legal/policy, demographic, infrastructure and environmental profile.

3. Coping mechanisms: Coping mechanisms indicate the degree to which households are coping or facing challenges with impact recovery. In general, coping mechanisms can be positive or negative (e.g., displacement), sustainable or unsustainable (e.g., reliance on humanitarian aid). This assessment focuses only on negative coping mechanisms, as they can be erosive over time and may forecast future needs. Whereas in the context of an acute crisis, an analysis of coping mechanisms might focus on food consumption behaviour, in the case of Libya (a protracted crisis), this analysis focused on coping mechanisms addressing the lack of resources in general.

4. Event or shock: The event or shock, the second pillar of the analytical framework underlying this MSNA, is essentially a sudden or on-going event that severely disrupts the functioning of a community or society and causes human, material and economic or environmental losses. The draft JIAF seeks to identify key driver(s) or the immediate causes of the crisis, including type, location, intensity, inter alia, as well as underlying factors, defined here as the processes or conditions, often development-related, that influence the degree of the shock and influence exposure, vulnerability or capacity of the affected population.

5. Household: For the purpose of this MSNA, a household was defined as a group of people who live in the same dwelling and share food and other key resources. In the event of any ambiguity, survey respondents had the final say on who belongs to their household.

6. Humanitarian conditions: This is the fourth pillar of the analytical framework underlying this MSNA. Humanitarian conditions consist of the outcomes of the crisis on the affected population, in terms of living standards and coping mechanisms.

7. Impact: Impact is the third pillar of the analytical framework underlying this MSNA. It consists of the effects of the event/shock on the population and humanitarian access in the affected area.

8. Internally-displaced person (IDP): "An IDP is any '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.'"[164] For both IDPs and returnees, this MSNA looked specifically at displacement from baladiya of origin since 2011.

9. Living standards: As a result of the impact, the ability of households to meet their basic needs, such as water, shelter, food, healthcare, education, protection, etc. Basic needs may vary from one context to the other and are contextually defined with relevant partners/sectors. Living standards are measured by assessing accessibility, availability, quality, use and awareness of essential goods and services.

10. Living Standard Gap (LSG): signifies an unmet need in a given sector, where the LSG severity score is 3 or higher.

11. Non-displaced: For the purpose of this MSNA, a non-displaced person is a citizen or long-term resident of Libya, for whom Libya is their primary residence, and who does not fit the definitions of IDPs or returnees.

12. Pre-existing vulnerabilities (PEVs): PEVs are household-level conditions that may influence the household's ability to access services and fulfil basic needs across all sectors. PEVs are of interest because they may further aggravate humanitarian needs, and already-vulnerable households might find it more difficult to recover from shocks.

[164] IOM, "DTM Libya - Mobility Tracking 2017 Methodology Version 11," 2017.

13. Returnee: "A returnee is any person who was displaced internally or across an international border but has since returned to his/her place of habitual residence."[165] For both IDPs and returnees, this MSNA looked specifically at displacement from baladiya of origin since 2011.

14. Severity: Signifies the "intensity" of needs, using a scale that ranges from 1 (minimal/no) to 4+ (extreme+).

[165]IASC, "Human Population Figures," April 2016, p. 4.

Annex 3: Detailed household survey sampling strategy and process

Data sources

Two datasets were used to create the assessment's sampling frame:

- United Nations Fund for Population Activities **(UNFPA)/Libyan Bureau of Statistics 2017 population projections for Libya**: Total population figures for all mahallas covered by this assessment were drawn from Libyan population projections published as a joint effort between UNFPA and the Libyan Bureau of Statistics. Updated population projections were published in September 2020, after the data collection had taken place.
- **IOM-DTM Round 29 (January-February 2020) dataset**: IDP and returnee population figures were drawn from IOM's Displacement Tracking Matrix (DTM) Round 25 data on Libya, which covered the period from April-May 2019. This was the most recent IOM-DTM dataset available at the start of data collection for the household survey.

These population data sources were combined to calculate the number of non-displaced households in all mahallas of the mantikas targeted by this assessment. The number of non-displaced households each in mahalla was calculated by subtracting the number of IDP and returnee households (from the IOM-DTM figures) from the total number of households (from the UNFPA population projections). For most mahallas, this process was straightforward.

However, for a minority of mahallas, the number of IDP and returnee households cited in the IOM-DTM dataset was greater than the total number of households cited in the UNFPA population projections, meaning that subtracting IDP and returnee totals from the overall household total would have resulted in a negative number. In such cases, the number of non-displaced households was kept as the total number of households cited in the UNFPA population projections.

Calculation of sampling quotas for each stratum

Once the population totals were determined for each targeted mantika, sampling quotas were calculated using two-stage random sampling calculations. These samples were calculated to establish sampling targets that would ensure the final sample included the best cross-section of the population possible.

These quota calculations used 95% confidence interval and a 10% margin of error (unless otherwise noted) as parameters. The sample sizes also included a 20% buffer of extra surveys. While these calculations are essentially the same as the sampling calculations done for the 2019 MSNA, the sampling of respondents was not random this year, meaning that the sample cannot be taken as representative.

Annex 4 contains the final sampling frame and survey totals.

Sampling in practice

The 2020 MSNA household surveys were conducted entirely over the phone, due to the operational environment in light of COVID-19. The geographical sampling used in previous years could therefore not be employed. Instead, sampling relied on a mixture of referrals, and contact lists from CSOs, municipalities, and INGOs. Referrals were used to the fullest extent possible, with contact lists meant to fill any gaps left by referrals in order to reach strata quotas. The sources of phone numbers by region can be found in the table below:

Table 2: Phone Number Sources

Source	Region		
	West	East	South
Referrals	10%	20%	10%
Social affairs/crisis committee	60%	60%	40%
CSO lists	30%	20%	50%

As mentioned in the methodology section, this kind of sampling may have skewed our results, which needs to be taken into account when it comes to interpretation. This is especially true for Benghazi, see box below.

Box 2: Implications of sampling strategy on Benghazi findings

The only significant area where results from triangulation sessions indicated that results were likely to reflect higher than expected levels of vulnerability were in Benghazi. This is likely due the fact that respondents were predominantly sourced from CSO lists providing shelter, food, in-kind assistance and protection support. In Benghazi, 85% of respondents were sourced from such lists, and 15% were sourced from referrals from other respondents. As a result, 55% of households in the sample reported receiving assistance in the six months prior to data collection, compared to 6% in the 2019 MSNA sample. This may have skewed this year's findings, which should be kept in mind whenever findings from Benghazi are interpreted. The Benghazi findings have limited impact on the aggregated findings for Libya. For example, 20% of households in Libya were found to have a food security LSG. If Benghazi is excluded from the sample, this percentage drops to 18%. As this difference is quite limited, and we cannot know the extent of misrepresentation in Benghazi, all overall findings presented include Benghazi data.

Mantika	# of households			Target # household surveys				Actual # households surveys			
	Non-displaced	IDP	Returnee	Non-displaced	IDP	Returnee	Total	Non-displaced	IDP	Returnee	Total
Al Jabal Al Akhdar	36193	102	0	115	61	0	176	82	50	0	132
Al Jabal Al Gharbi	26028	1432	2262	116	112	112	340	159	112	113	384
Aljfara	81021	4799	1684	117	113	111	341	145	78	119	342
Aljufra	10577	389	0	116	95	0	211	90	76	0	166
Alkufra	8737	1368	347	116	108	92	316	134	83	54	271
Almargeb	55780	6026	198	114	116	79	309	125	107	82	314
Almarj	32077	34	0	117	33	0	150	76	1	0	77
Azzawya	53252	3021	16	115	159	16	290	115	160	20	295
Benghazi	111507	4938	36010	115	112	117	344	91	99	108	298
Derna	26494	86	7443	115	57	115	287	107	36	116	259
Ejdabia	33527	2734	100	116	112	60	288	87	83	56	226
Ghat	3281	1627	196	113	110	51	274	159	66	71	296
Misrata	85609	5485	1049	116	112	32	260	145	125	36	306
Murzuq	10652	5636	313	114	113	90	317	163	104	76	343
Nalut	17747	980	462	116	107	96	319	110	107	96	313
Sebha	24290	5260	492	115	114	98	327	154	94	77	325
Sirt	15283	2518	15467	116	112	115	343	92	8	220	320
Tobruk	30191	166	0	115	76	0	191	122	61	0	183
Tripoli	174388	16660	12226	116	115	114	345	125	105	114	344
Ubari	16660	1404	5626	116	109	114	339	123	106	91	320
Wadi Ashshati	16463	401	42	112	92	36	240	76	70	75	221
Zwara	56497	2227	2689	115	112	112	339	112	112	102	326
Total	**926254**	**67293**	**86622**	**2536**	**2250**	**1560**	**6346**	**2592**	**1843**	**1626**	**6061**

Annex 5: Summary of qualitative data collection triggers and locations

The number and topic of qualitative follow-ups using KIIs was determined by thresholds met in the quantitative data. The indicators that would trigger further assessments were selected in cooperation with the sectors and in line with identification of key indicators within the draft JIAF framework. The thresholds were set based on 2019 MSNA data. The trigger indicators and accompanying thresholds are shown in the table below.

Indicator	Threshold	Triggered mantikas	KII topic
% of households reporting to rely on a on unreliable public water network	More than 25% of respondents in a Mantika report that the public network is their main source of drinking water AND report to have had access rarely or not at all in the last 7 days.	Al Jabal Al Akhdar; Ghat	Access to services
% of households not satisfied with the quantity of their drinking water	More than 70% of respondents in a Mantika report to have experienced a shortage of drinking water in the 30 days prior to data collection	Aljufra; Almarj; Ejdabia; Ghat; Wadi Ashshati	Access to services
% of households reporting safety and security concerns	More than 50% of respondents in a Mantika report at least one safety concern	Al Jabal Al Akhdar; Alkufra; Ejdabia; Murzuq; Sebha; Ubari	Access to services
% of households reporting concerns related to sexual harassment and violence	More than 10% of respondents in a Mantika report to be concerned about sexual harassment and violence	Al Jabal Al Akhdar; Alkufra; Ejdabia; Murzuq; Sebha; Ubari	Access to services
% of households reporting safety and security concerns for children	More than 50% of respondents in a Mantika report child protection concerns	Al Jabal Al Akhdar; Alkufra; Ejdabia; Sebha	Access to services
% of households reporting at least one form of national identification (e.g., passport or national ID card) not in possession.	More than 40% of respondents in a Mantika report to have at least some essential documentation missing	Al Jabal al Akhdar; Almarj; Ejdabia; Murzuq; Sebha; Sirt; Wadi Ashshati	Access to services
% of households reporting problems accessing health care in the three months prior to data collection	More than 70% of respondents in a Mantika report issues accessing healthcare	Alkufra; Almarj; Derna; Ghat; Murzuq; Ubari; Wadi Ashshati	Access to services
% of households unable to access health services	More than 15% of respondents in a Mantika report to be unable to access health services	Aljufra; Wadi Ashshati	Access to services
% of households reporting engaging in negative coping strategies	More than 50% of respondents in a Mantika are classified as 'emergency' under the LCSI	Alkufra; Benghazi	Livelihoods
% of households relying on unstable income sources	More than 30% of respondents in a Mantika report that they do not rely on a HH member working for their main source of income	Benghazi; Ejdabia; Murzuq; Sebha; Sirt; Ubari; Wadi Ashshati	Livelihoods
% of households whose shelter solutions do not meet agreed technical and performance standards	More than 30% of respondents in a Mantika report that they have medium to complete damage	Alkufra; Benghazi; Murzuq; Ghat	SNFI
% of households living in substandard shelter type (e.g., unfinished room(s), public space not usually	More than 20% of respondents belonging to a particular displacement status in a Mantika live in an insecure form of shelter	Ejdabia (IDP); Wadi Ashshati (IDP)	SNFI

used for shelter, private space not usually used for shelter, tent or caravan, temporary shelter provided by INGO or local NGO, camp)			
% of households reporting having been threatened with eviction, or to have been evicted	More than 15% of respondents belonging to a particular displacement status in an Mantika report to have evicted or threatened with eviction in the six months prior to data collection.	Aljufra (ND); Alkufra (IDP,R); Benghazi (ND); Murzuq (IDP, R); Sebha (IDP, R)	SNFI
% of households reporting safety issues when children attend school	More than 30% of respondents in a Mantika report to have children that faced safety issues at school	Alkufra; Ejdabia; Wadi Ashshati	Education
% of households reporting school accessibility issues for children with disabilities	More than 10% of respondents in a Mantika report school accessibility issues	Al Jabal al Akhdar; Derna	Education
% of households with children enrolled in non-formal education.	More than 60% of respondents in a Mantika have at least one child not enrolled or not attending	Aljufra; Alkufra; Sebha; Ubari; Wadi Ashshati	Education

The triggers formed the basis for the scope for the KII phase. The table above illustrates how triggers were grouped under particular themes. The frequency with which a mantika met triggers within a certain theme was the basis for how many KIs on the topic would take place. Extensive discussions with field partners and the sectors led to some alterations and additions to the scope, leading to the final KII numbers shown below. Explosive hazards was added as a theme after discussions with several de-mining actors.

	Explosive hazards	Access to services - barriers	SNFI	Education	Livelihoods, income	Total
West						
Aljfara	0	0	0	0	0	**0**
Azzawya	0	0	0	0	0	**0**
Al Jabal Al Gharbi	0	0	0	0	0	**0**
Tripoli	3	0	0	0	0	**3**
Zwara	0	0	0	0	0	**0**
Nalut	0	0	0	0	0	**0**
Almargeb	0	0	0	0	0	**0**
Misrata	0	0	0	0	0	**0**
Sirt	0	4	0	0	2	**6**
East						
Benghazi	3	6	1	0	9	**19**

Al Jabal Al Akhdar	0	5	0	1	0	**6**
Al Kufra	0	4	1	1	0	**6**
Al Marj	0	3	0	0	3	**6**
Derna	0	2	0	1	0	**3**
Ejdabia	0	3	1	0	2	**6**
Tobruk	0	0	0	0	0	**0**
South						
Ghat	0	4	1	0	0	**5**
Murzuq	0	3	1	0	2	**6**
Sebha	0	4	1	1	3	**9**
Ubari	0	2	0	1	2	**5**
Wadi Ashshati	0	3	1	1	2	**7**
Al Jufra	0	4	1	1	0	**6**
Total	**6**	**47**	**8**	**7**	**25**	**93**

For the 'access to services' and 'livelihoods' topics, half of the KIs per mantika were women and half were men. If the number per mantika was uneven, the majority was female.

Annex 6: Data processing and quality control

The following processing and quality control measures were followed during the data collection period of this MSNA:

Household Survey

Data from the household surveys was collected via the KoBo Toolbox platform, using the ODK Android application. The coded survey tool included integrated logical controls and checks which were designed to reject inconsistent data, or data of the wrong type.

During the household survey data collection period, enumerators submitted their completed surveys ideally on a daily basis, provided internet connectivity would allow. All submitted surveys were passed to the REACH Database Officer for cleaning. The Database Officer would take the following steps:

- Anonymize all personal information, most importantly the phone number of the respondent and the phone numbers of referrals.
- Check for any duplicates
- Run a data cleaning script that flagged any inconsistent or nonsensical data, based on a pre-defined list of potential errors.

The anonymized scripts would be passed on to the assessment officers, who checked all flagged errors manually and who would decide to leave, change, or remove the data point depending on the specifics of the error and agreed on rules between the assessment officers. Where errors could not be explained, follow-ups were conducted with the enumerators. All errors and their correspondent actions were tracked in a joint cleaning log, which was cross-checked by both assessment officers to ensure consistency in cleaning. Any newly identified errors were added to the automated script where necessary during the cleaning process. The final cleaned dataset was checked once more by the Database Officer to identify and remove any outlying data points.

All surveys were additionally checked on duration. Any survey that took shorter than 10 minutes was immediately rejected. For all surveys between 10 and 20 minutes' enumerator follow-ups took place.

Key Informant Interviews

All KII data was collected over the phone and recorded in Word documents by the enumerator. These Word documents did not contain any personal information of the KI. These documents in Arabic were then sent to the Project Officer who would run them through the translation software SYSTRAN. Prior to uploading the Arabic transcript all documents were checked to make sure no personally identifiable information remained. The English transcripts were then checked by the assessment officers. Any potential translation errors or desired follow-ups were communicated to the Project Officer who would check the translated transcript against to Arabic transcript and follow-up with enumerator where necessary. After corrections and follow-ups were incorporated by the Project Officer, the transcripts would be checked one final time and uploaded to NVivo for analysis. Findings from the analysis were additionally checked with the Project Officer and field teams.

Ethical considerations

As in previous and all assessments, REACH considered and investigated the ethical implications of data collection and information dissemination.

First, in order to adhere to the "do no harm" principle, REACH conducted a "do no harm" analysis during the design phase. All questions in the tools were assessed against IMPACT Initiatives' Standard Operating Procedures on Personally Identifiable Information. Where personal data was collected, it was not shared with external partners and access to the information was restricted within REACH. All raw data was stored on password protected KoBo Toolbox servers using a secure sockets layer (SSL). All phone numbers recorded were automatically encrypted after download. Any other personally identifiable information was deleted before publication of the dataset. For the KIIs, no data was stored or shared on paper. Digital transcripts were saved in password protected files. The FGD

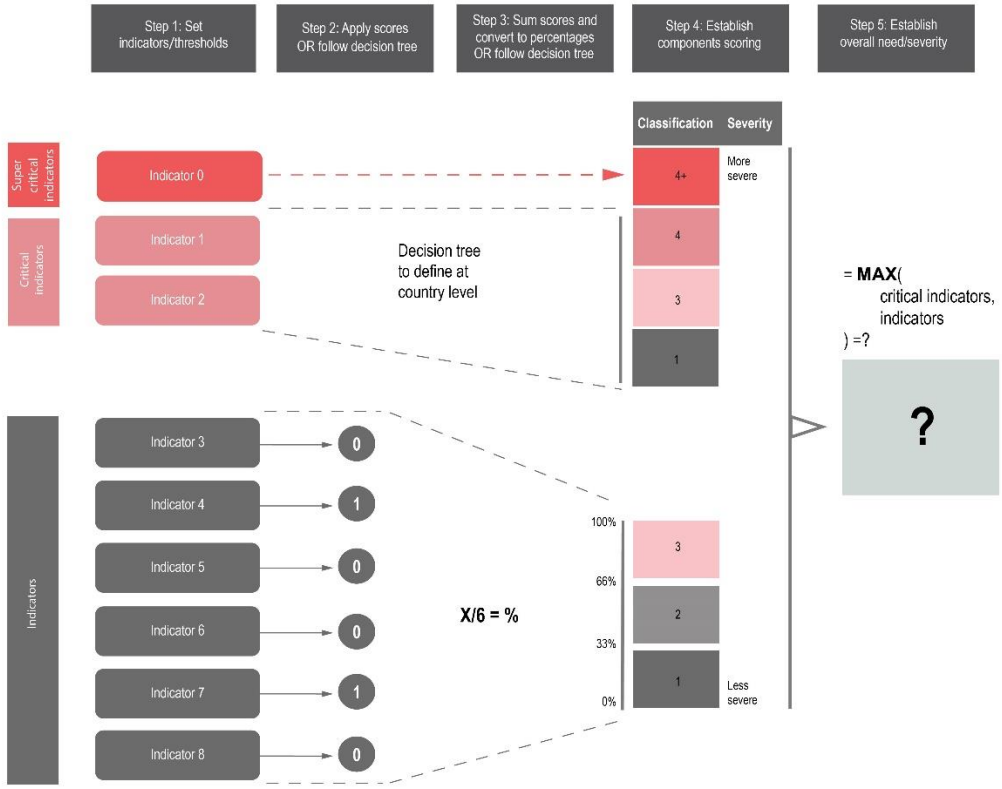
platform allowed for all participation to be entirely anonymous. After FGDs were finished, transcripts were exported and the discussions deleted. Second, enumerator training included modules on survey ethics, including strict protocols on the treatment and deletion of phone numbers given to enumerators, see annex 13 for further information. Third, all data collection components required informed consent from the respondent. A script was presented to all respondents outlining the nature and purpose of the assessment, and emphasizing the voluntary basis of participation. Fourth, all respondents were provided with the Complaints and Feedback Mechanism (CFM) phone number managed by the Electronic Telecommunication sector (ETS). Finally, a monitoring and evaluation (M&E) survey was conducted after quantitative data collection was completed, via random calls to selected interviewee households that had consented to be contacted again.

Annex 7: Identification of LSG & CG

The LSG for a given sector is produced by aggregating unmet needs indicators per sector. For the 2020 MSNA, a simple aggregation methodology has been identified, building on the Multi-Dimensional Poverty Index (MPI) aggregation approach. Using this method, each unit (household for example) is assigned a "deprivation" score according to its deprivations in the component indicators. The deprivation score of each household is obtained by calculating the percentage of the deprivations experienced, so that the deprivation score for each household lies between 0 and 100. The method relies on the categorization of each indicator on a binary scale: does ("1") / does not ("0") have a gap. The threshold for how a household is considered to have a particular gap or not is determined in advance for each indicator. The 2020 MSNA aggregation methodology outlined below can be described as "MPI-like", using the steps of the MPI approach to determine an aggregated needs severity score, with the addition of "critical indicators" that determine the higher severity scores. The section below outlines **guidance on how to produce the aggregation using household-level data.**

1) Identified indicators that measure needs ('gaps') for each sector, capturing the following key dimensions: accessibility, availability, quality, use, and awareness. Set binary thresholds: does ("1") / does not ("0") have a gap;
2) Identified critical indicators that, on their own, indicate a gap in the sector overall;
3) Identified individual indicator scores (0 or 1) for each household, once data had been collected;
4) Calculated the severity score for each household, based on the following decision tree (tailored to each sector);
    a. "Super" critical indicator(s): could lead to a 4+ if an extreme situation is found for the household;
    b. Critical indicators: Using a decision tree approach, a severity class is identified based on a discontinued scale of 1 to 4 (1, 3, 4) depending on the scores of each of the critical indicators;
    c. Non-critical indicators: the scores of all non-critical indicators are summed up and converted into a percentage of possible total (e.g. 3 out of 4 = 75%) to identify a severity class;
    d. The final score/severity class is obtained by retaining the highest score generated by either the super critical, critical or non-critical indicators, as outlined in the figure X below;

Figure 15: Identifying LSG per sector with scoring approach



5) Calculated the proportion of the population with a final severity score of 3 and above, per sector. Having a severity score of 3 and above in a sector is considered as having a LSG in that sector;
6) Identified households that do not have a LSG but that do have a CG;
    a. Identified individual indicators scores (0 or 1) for all CG indicators, amongst households with a severity score of 1 or 2;
    b. If any CG indicator has a score of 1, the household is categorized as having a CG;
7) Projected the percentage findings onto the population data that was used to build the sample, with accurate weighting to ensure best possible representativeness.

While the draft JIAF severity scale includes 6 classifications ranging from 1 (none/minimal) to 5 (catastrophic), for the purpose of the MSNA, only a scale of 1 (none/minimal) to 4/4+ (extreme/extreme+) is used. A "4+" score is used where data indicates that the situation could be catastrophic. This is because data that is needed for a score of (catastrophic) is primarily at area level (e.g. mortality rates, malnutrition prevalence, burden of disease), which is difficult to factor into household level analysis.[166]

The threshold used to determine whether a household was considered to have a particular gap or not was determined in advance for each indicator together with the sectors, and based on the classifications used in the 2019 MSNA. Please note that in conducting this analysis, all data was weighted to ensure that final results would be indicative for all strata. In addition, the results of this quantitative analysis were triangulated with the findings of the KIIs, as well as contextualized with secondary data.

[166] Additionally, as global guidelines on the exact definitions of each class are yet to be finalized, and given the response implications of classifying a household or area as class 5 (catastrophic), REACH is not in a position to independently verify if a class 5 is occurring.

Annex 8: LSG & CG indicators

LSG scores and the CG scores are calculated in line with the methodology presented in annex 7. The only exception being that no super-critical indicators were collected in the Libya 2020 MSNA. Super-critical indicators are those that indicate imminent catastrophe, such as increased mortality. Due to the nature of the Libyan crisis, these indicators were not collected. Accordingly, the severity scale used does not go beyond extreme (4).

Critical and non-critical indicators were selected for each sector, in line with discussions had with the active sectors in Libya. There is no overlap between critical and non-critical indicators. The calculation of critical and non-critical indicator scores is entirely independent. For critical indicators, the highest severity score for the household is the one that counts. For non-critical indicators, the sum of all non-critical indicator scores for a household is taken and divided by the total number of non-critical indicators for the sector. The proportion of non-critical indicator needs determines the severity score, in line with the percentage rule illustrated in figure X, with a proportion of 0.33 or less classified as 1 (None/minimal), a proportion between 0.33 and 0.66 classified as 2 (Stress), and a proportion of 0.67 or higher classified as 3 (Severe). The highest severity score attained by a household of either the critical indictor or the non-critical indicator calculation is the final severity score of the household. No critical indicators, or indicators that would immediately indicate a humanitarian need were collected for education. Therefore, the LSG calculation for education is only based on the non-critical indicator calculation.

Below the indicators that fed into the LSGs for each sector are presented. For non-critical indicators, a table is added below the indicator table that indicates how the proportion rule for establishing the severity score works in practice for each sector.

Food security LSG

Critical indicators

Indicator	Household survey question #	Household survey question	LSG Severity			
			None/Minimal	Stress	Severe	Extreme
			1	2	3	4
Food Consumption Score, by % of households (poor / borderline / acceptable)	3.30.1	Now, I would like to ask you a few questions about the meals you had in the last 7 days. This information will help us understand the range of foods eaten in Libya, and if there is anything important missing. I will list 9 food groups, can you tell me for each, how often you have eaten them in the last 7 days? First, how often in the last 7 days have you eaten ...	Acceptable		Borderline	Poor

Food Consumption Score methodology

The calculation of the Food Consumption Score (FCS) was conducted in line with global standards. The FCS is a "composite score based on dietary diversity, food frequency, and relative nutritional importance of different food groups."[167] The FCS captures households' food access and adequacy.[168]

Step 1: Calculation of numeric FCS			
Food groups	**Weight**	**Frequency**	**Weighted score = weight * frequency**
Cereals, grains, and tubers	2	[household answer]	2 * [household answer]
Legumes and nuts	3	[household answer]	3 * [household answer]
Milk and dairy products	4	[household answer]	4 * [household answer]
Eggs, meat, fish	4	[household answer]	4 * [household answer]
Vegetables and leaves	1	[household answer]	1 * [household answer]
Fruits	1	[household answer]	1 * [household answer]
Oil and fat	0.5	[household answer]	0.5 * [household answer]
Sugar and sweets	0.5	[household answer]	0.5 * [household answer]
Condiments and spices	0	[household answer]	0 * [household answer]
Total (sum)			**Total (sum) weighted scores**

Step 2: Classification of FCS severity			
	Acceptable	**Borderline**	**Poor**
Household's total weighted score	>42	>28 and <=42	<=28

Non-critical indicators

Indicator	**Household survey question #**	**Household survey question**	**Classification**	
			No need	**Need**
			0	**1**
% of households relying on food-based coping strategies to cope with a lack of food in the seven days prior to data collection reduced	3.31.1	Now, I would like to ask you a few questions about actions you may have taken in the last 7 days to deal with a lack of food or money to buy food. For each action, could you tell me how many days you have had to undertake the action?	Low	Medium or High

[167] WFP, "Food Consumption Analysis," 1st edition, February 2008, p. 5. Available at: https://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp197216.pdf

[168] WFP, "Consolidated Approach to Reporting Indicators of Food Security (CARI)," 2nd edition, November 2015, p. 17.

coping strategy index (rCSI)		Note that these questions can be sensitive, and if you prefer not to answer at any stage just let us know and we will move on. In the past 7 days, if there have been times when you did not have enough food or money to buy food, on how many days has your household had to:		
% of households with high food expenditure share (expenses on food in 30 days prior to data collection/total expenditure in 30 days prior to data collection)	3.8.1	During the past 30 days, could you estimate the market value (in LYD) of food items your household produced and kept for own consumption?	<65%	>65%
	3.12.1	In the last 30 days, could you estimate how much your household spent for in total in LYD?		
	3.12.2	During the past 30 days, how much did you spend, in LYD, on each of the following categories of items for domestic consumption?/Food and Water		
% of households that abandoned agriculture in the 12 months prior to data collection	3.9.1	Has your household had to abandon any agricultural activities such as crop farming, gardening, raising animals, fishing, etc., in the last 12 months?	no	yes

Non-critical indicators: LSG severity			
	None/minimal	**Stress**	**Severe**
Sum of non-critical indicator scores	<=1		>1

Reduced Coping Strategy Index (rCSI) methodology

The calculation of the rCSI was also conducted in line with global standards.[169] The rCSI captures the quantity or sufficiency of a household's food by asking about a selection of common, less-severe food-related coping mechanisms.

Step 1: Calculation of numeric rCSI score			
Food groups	**Weight**	**Frequency**	**Weighted score** **= weight * frequency**

[169] WFP, "The Coping Strategies Index: Field Methods Manual," 2nd edition, January 2008, p. 17. Available at: https://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp211058.pdf

Rely on less preferred, less expensive food	1	[household answer]	1 * [household answer]
Borrow food or rely on help from friends or relatives	2	[household answer]	2 * [household answer]
Reduce the number of meals eaten per day	1	[household answer]	1 * [household answer]
Reduce the size of portions or meals	1	[household answer]	1 * [household answer]
Reduce the quantity consumer by adults so that children can eat	3	[household answer]	3 * [household answer]
Total household score			**Total (sum) of weighted scores**

Step 2: Classification of rCSI severity			
	Low	**Medium**	**High**
Household's total weighted score	<=18	>18 and <=42	>42

Food expenditure share methodology

The food expenditure share is calculated as follows:

$$\frac{Food\ and\ water\ expenditures + value\ of\ non\ purchased\ food}{Total\ expenditures} \times 100$$

Cash and markets LSG

Critical indicators

Indicator	**Household survey question #**	**Household survey question**	**LSG Severity**			
			None/Minimal	**Stress**	**Severe**	**Extreme**
			1	**2**	**3**	**4**
% of households relying on unstable forms of income	3.1.1	What is your main source of income?	Household member working		No household members working	No income source
% of households relying on temporary or daily labour as their	3.1.2	The next questions are about the job or type of employment that is your main source of income. Is	Permanent job		Temporary job or daily labour	

main source of income		this job a permanent or temporary job, is it daily labour?				

Non-critical indicators

Indicator	Household survey question #	Household survey question	Classification	
			No need	Need
			0	1
% of households reporting challenges in obtaining enough money to meet its needs over the last 30 days	3.13.1	I will now list 5 categories of needs. In the past 30 days, did you ever have trouble meeting following essential needs because you could not afford them? Please tell me for each category I will list whether you were able to afford your needs - note we are just asking about financial coverage, we will discuss other safety/security/access concerns later.	None	At least one
% of households that are able to access basic food and non-food items within 30 minutes of their residence.	3.32.1	Do you have access to a marketplace or grocery store within 30 minutes travel time in your mahalla or close to your mahalla?	Yes	No
% of households that are able to access basic food and non-food items without challenges	3.32.2	In the last 30 days, did you face any barriers to consistently accessing marketplaces? If yes, what kind of barriers?	No barriers	At least one

Non-critical indicators: LSG severity			
	None/minimal	Stress	Severe
Sum of non-critical indicator scores	<=1		>1

Health LSG

Critical indicators

Indicator	Household survey question #	Household survey question	LSG Severity			
			None/Minimal	Stress	Severe	Extreme
			1	2	3	4
% of households unable to access health services	3.33.1	In the past 3 months, have you accessed health services (including medicines)?	Accessed hc or did not			Could not access because C19 or

	3.33.2	Why did you not access health services?	because not needed			other reasons

Non-critical indicators

Indicator	Household survey question #	Household survey question	Classification	
			No need	Need
			0	1
% of households reporting problems accessing health care in the three months prior to data collection	3.35.1	Which problems (if any) have you or members of your household faced in accessing health services in the past three months?	No problems	At least one problem
% of households tthat have to travel over one hour to the nearest health care facility	3.34.1	How long does it take you to reach the nearest healthcare facility (including clinics, hospitals) by walking?	Less than 1h	More than 1h
% of women who gave live birth in the last 2 years who were not assisted by a qualified health care provider	3.36.1	If you or any women in your household has given birth in the past two years, who assisted in the delivery or deliveries?	At health facility or with qualified help	At home alone or with non-qualified help

Non-critical indicators: LSG severity			
	None/minimal	Stress	Severe
Sum of non-critical indicator scores	<=1		>1

Education LSG[170]

Non-critical indicators

Indicator	Household survey question #	Household survey question	Classification	
			No need	Need
			0	1
% of households with non-enrolled and/or non-attending school-aged children	3.39.1	How many school-aged boys and girls (aged 6-17) in your household were enrolled in formal or non-formal education before schools were closed due to COVID-19?	No non-enrolled or non-attending children	At least one child non-attending or non-enrolled
	3.42.1	Prior to the COVID-19 outbreak, how many school-aged children in the household dropped out of school during the current school year		

[170] As mentioned earlier, no critical indicators could be identified for the education sector, so the severity calculation is entirely based on non-critical indicators.

		(2019-2020)? (Note for enumerators: Enter 0 if none. Dropped out = child attended school at the beginning of the year (or end of the previous school year) but stopped attending at some point since then and does not plan to re-start)		
% of households reporting issues when children attend school (e.g., lack facilities, violence from teachers, discrimination)	3.41.1	Have any children in your household ever faced any issues when attending school prior to the COVID-19 outbreak? Examples might be problems with the children, school staff or the school building/capacities. Please list any issues that a child may have had.	No issues	At least one issue
% of households with children enrolled in non-formal education.	3.40.1	What type of education are your children enrolled in - meaning formal or non-formal; please also let us know who the provider is	No child enrolled in non-formal education	At least one child enrolled in non-formal education
% of households reporting school-aged children without access to distant learning during school closures	3.43.1	Have any children in your household had access to any kinds of distant learning opportunities since the COVID-19 outbreak? Please tell us about all kinds of education children in your household have received since school closures, for example online or phone-based.	Access to distant learning	No access to distant learning

Non-critical indicators: LSG severity			
	None/minimal	**Stress**	**Severe**
Sum of non-critical indicator scores	<=1	2	>2

WASH LSG

Critical indicators

Indicator	**Household survey question #**	**Household survey question**	**LSG Severity**			
			None/Minimal	**Stress**	**Severe**	**Extreme**
			1	**2**	**3**	**4**
% of households relying on non-functional or non-improved sanitation facilities (e.g., pit latrines without slabs, hanging toilets, etc.)	3.24.1	What kind of sanitation facility (latrine/toilet) do you usually use? (Note to enumerator: do not read list)	Improved facility			Non-improved facility

Non-critical indicators

Indicator	Household survey question #	Household survey question	Classification	
			No need	Need
			0	1
% of households relying on non-improved drinking water sources (e.g. Water trucking, unprotected wells, etc.)	3.27.1	Now I would like to ask you some questions about drinking water What was the main source of drinking water you used over the past 30 days? (Note to enumerator: do not read list)	Improved	Unimproved
% of households with inconsistent access to the public water network	3.29.1	Over the past 7 days, on how many days did your household have access to drinking water from the public network?	4-7 days	0-3 days
% of households not satisfied with the quantity of their drinking water	3.28.1	In the past 30 days, has there been any time when you did not have access to enough drinking water to meet your daily needs?	Sufficient drinking water	Insufficient drinking water
% of households with soap in their household	3.25.1	Do you currently have soap in your household?	Yes	No

Non-critical indicators: LSG severity			
	None/minimal	Stress	Severe
Sum of non-critical indicator scores	<=1	2	>2

Protection LSG

Critical indicators

Indicator	Household survey question #	Household survey question	LSG Severity			
			None/Minimal	Stress	Severe	Extreme
			1	2	3	4
% of households who report that they are aware of safety incidents in the baladiya in the previous 30 days	3.46.1	Are you aware of any safety or security incidents in your Baladiya in the last 30 days? (LYB)	No			Yes

Non-critical indicators

Indicator	Household survey question #	Household survey question	Classification	
			No need	Need
			0	1
% of households reporting at least one form of national identification (e.g., passport or national ID card) not in possession.	3.44.1	Do all households members currently have a valid ID (for example Passport and/or valid national ID)?	None missing	Some missing
% of households reporting presence of explosive hazards at neighbourhood level	3.47.1	Are you aware of the presence of any explosive hazards in your neighbourhood?	No	Yes
% of households reporting safety and security concerns	3.45.1	What are your main safety and security concerns, if any? We are trying to find out any reasons why you might feel in danger in your area	None	Any
% of households reporting safety and security concerns for children	3.48.1	What do you think are the main safety and security concerns for boys (under 18) in your baladiya?	None	Any
	3.48.2	What do you think are the main safety and security concerns for girls (under 18) in your baladiya?		
% of households reporting having been threatened with eviction, or to have been evicted	3.23.1	Have you experienced eviction or the threat of eviction within the past 6 months?	No	Yes (threatened or evicted)

Non-critical indicators: LSG severity			
	None/minimal	Stress	Severe
Sum of non-critical indicator scores	<=1	>1 and <=3	>3

Shelter & NFI LSG

Critical indicators

Indicator	Household survey question #	Household survey question	LSG Severity			
			None/Minimal	Stress	Severe	Extreme
			1	2	3	4

% of households living in substandard shelter type (e.g., unfinished room(s), public space not usually used for shelter, private space not usually used for shelter, tent or caravan, temporary shelter provided by INGO or local NGO, camp)	3.18.1	What type of house or accommodation (shelter) do you live in? (Note to enumerator: do not read out list)	Acceptable shelter			Sub-standard shelter
% of households whose shelter solutions do not meet agreed technical and performance standards	3.21.1	Does the accommodation currently have any damage or defects? (Note to enumerator: read out list)	No damage		Medium damage	Heavy damage or destroyed

Non-critical indicators

Indicator	Household survey question #	Household survey question	Classification	
			No need	Need
			0	1
% of households reporting enclosure issues (lack of insulation, leaks during light rain, or limited ventilation)	3.22.1	Does the accommodation have any enclosure issues, such as leaking when it rains or ventilation issues?	None	At least one
% of households reporting need for key non-food items (mattresses; blankets; clothing for cold weather; water storage containers)	3.15.1	I will read a list of 15 household items, please tell me which of these items you do not have and need urgently.	None	At least one
% of households reporting not having access to mobile phone network coverage at their current dwelling	3.16.1	Do you have reliable mobile phone network coverage where you live? Reliable coverage means that the mobile network has at most only a few and short outages, for example 2 hours than less than once a week.	Access	No access

% of households reporting not having access to internet network coverage at their current dwelling	3.17.1	Do you have reliable internet coverage where you live? Reliable coverage means that internet network has at most only a few and short outages, for example 2 hours less than once a week.	Access	No access
% of households reporting insecure occupancy status for their shelter (e.g. Renting without contract, squatting, being hosted at workplace)	3.19.1	How would you describe your occupancy status? For example, do you own the house, or is someone else paying for it?	Secure occupancy status	Insecure occupancy status

Non-critical indicators: LSG severity			
	None/minimal	Stress	Severe
Sum of non-critical indicator scores	<=1	>1 and <=3	>3

Capacity Gap score

The CG score is based entirely on the LCSI. This single indicator is treated as a critical indicator, meaning that the highest severity reached by the household is the household severity score. See indicator matrix below.

Indicator	Household survey question #	Household survey question	LSG Severity			
			None/Minimal	Stress	Severe	Extreme
			1	2	3	4
% of households who resorted to using or more coping mechanisms in the 30 days prior to data collection; % of households per LCSI classification	3.14.1	Now I would like to ask you some questions about how you have dealt with situations where you did not have enough resources to cover your basic needs. Could you tell me for each of the following actions whether you had to undertake them in the last 30 days because of a lack of resources? If you already used up a certain action before the last 30 days, or if a strategy is not applicable to you, please say so. In the last 30 days, when you had a lack of resources, did you ever have to ...	None	Stress	Crisis	Emergency

Livelihoods Coping Strategies Index methodology

The LCSI methodology is in line with global standards. The severity classification of included strategies was determined based on 2019 data and discussions with key actors in Libya.

Guidelines for determining LCSI score:

1. The respondent is questioned about a series of coping strategies, and whether they have used any of these coping strategies in the 30 days prior to data collection. For each coping strategy, the respondent may choose from the following options: (A) Yes; (B) No, have already exhausted this coping strategy and cannot use it again; (C) No, had no need to use this coping strategy; and (D) Not applicable/This coping strategy is not available to me.
2. If the respondent chooses either "Yes" or "No, have already exhausted this coping strategy and cannot use it again" for at least one coping strategy in a severity category, then the respondent is considered to have used coping strategies from that severity category.
3. The respondent is classified according to the most severe category from which they used coping strategies.

LCSI severity rating			
None	**Stress**	**Crisis**	**Emergency**
n/a	1. Sold non-productive household assets or goods (TV, household appliance, furniture, gold, etc.) 2. Spent savings 3. Borrowed money 11. Reduced expenditures on essential non-food items (water, hygiene items, etc.)	5. Sold productive household assets or means of transport (sewing machine, wheelbarrow, car, etc.) 6. Reduced expenses on health (including drugs) 10. Took on an additional job	7. HH members over 18 engaged in degrading or illegal income activities (e.g. theft, smuggling) 8. HH members under 18 engaged in degrading or illegal income activities (e.g. theft, smuggling) 8. Asked money from strangers 9. Sold house or land

Pre-existing Vulnerability Score

The PEVs score methodology is based on a simple binary scoring approach. The indicator is based on five indicators that indicate some degree of vulnerability. The indicators were chosen based on conversation with the sectors and the 2019 MSNA data. For each indicator the criteria that would make the household vulnerable were selected and recorded. If a criterion is met by a household, the household received a score of 1 for that indicator, otherwise a 0. The sum of each household's indicator scored was then taken. If a household possessed three or more of the vulnerability criteria, it is considered as having PEVs. The indicators can be found below.

Indicator	Household survey question #	Household survey question	Classification	
			No vulnerability	Vulnerability
			0	1
% of households that are female-headed households	1.3.1	Is the head of household male or female?	male-headed	female-headed
	1.3.2	Enumerator to note down respondent gender (if in doubt, ask)		

Age-dependency ratio	1.5.1-1.5.7	Please tell me how many there are of the following in your household ?	<= 0.49	> 0.49
Household income in the 30 days prior to data collection	3.11.1	Can you estimate your household's total income (in LYD) over the last 30 days?	Income above MEB	Income below MEB
% of IDP and returnee households that have been displaced more than once since 2011	2.3.1	How many times has your household been displaced since 2011?	Displaced never or once	Displaced more than once
% of IDP and returnee households that have been displaced in the 6 months prior to data collection	2.2.1	When was your household displaced by conflict from your baladiya for the first time?	Never displaced or initially displaced prior to 2020	Displaced in 2020

Age-dependency ratio

The age-dependency ratio is calculated as follows:

$$\frac{Sum\ of\ household\ members\ between\ ages\ 18\ and\ 60}{Sum\ of\ household\ members\ ages\ 0\ to\ 17\ and\ 60+}$$

Household income below Minimum Expenditure Basket

The MEB is the expected minimum value of expenditures to meet basic needs on a monthly basis, including food and hygiene items, as well as rent. The value is based on regular price monitoring as part of the Joint Market Monitoring Initiative (JMMI) led by REACH. Separate values were used in the PEV score calculations for the South and the other regions, due to the relatively high cost of living in the South.

Annex 9: Composite indicator results

Food security LSG

Figure 16: Food security LSG score, per population group

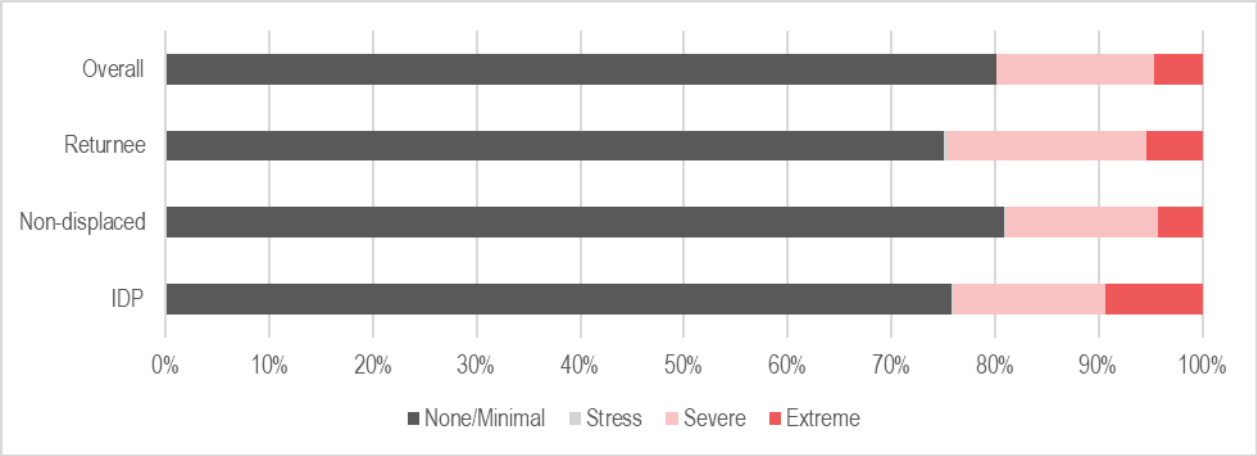


Figure 17: Food security LSG score, per mantika

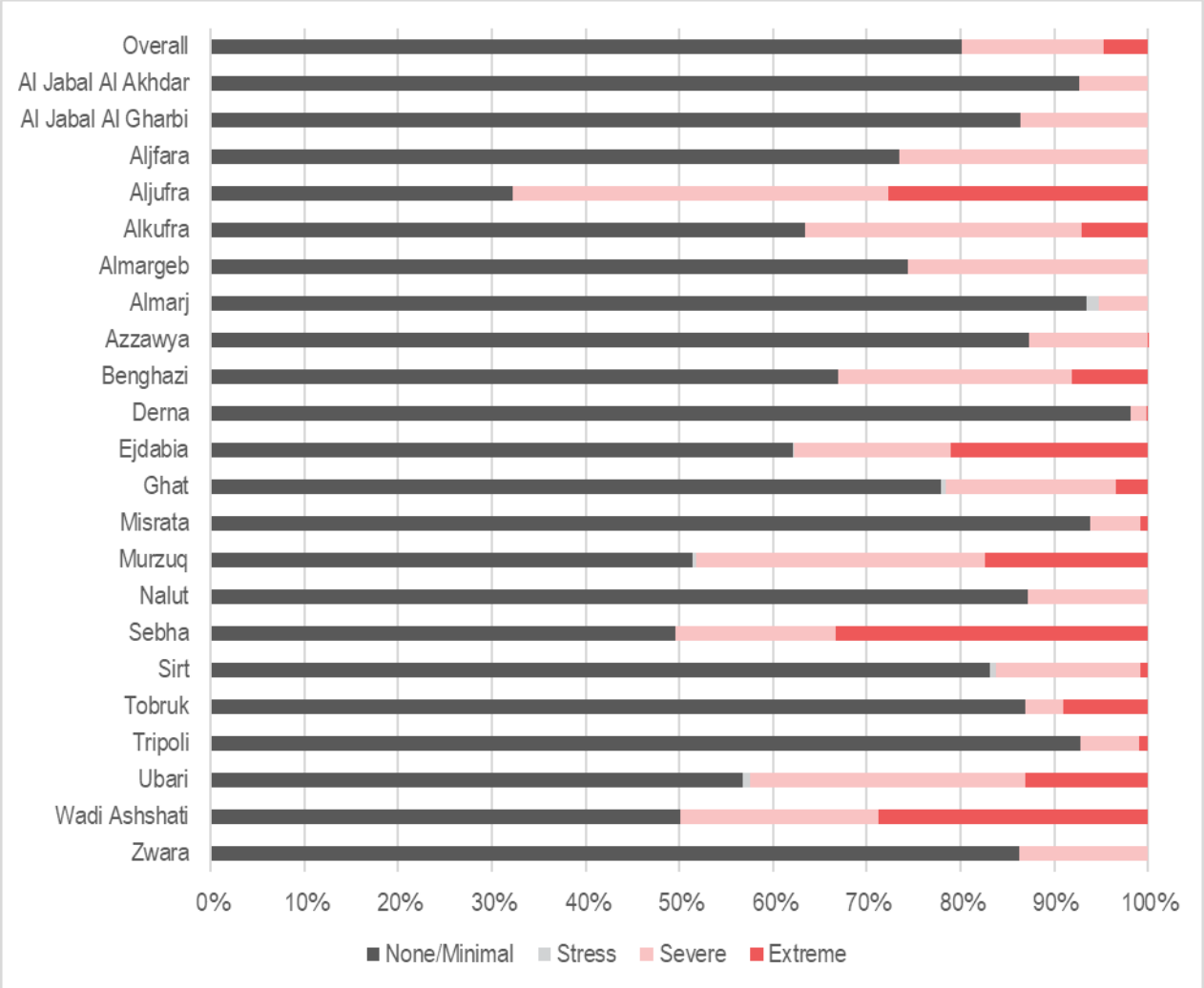
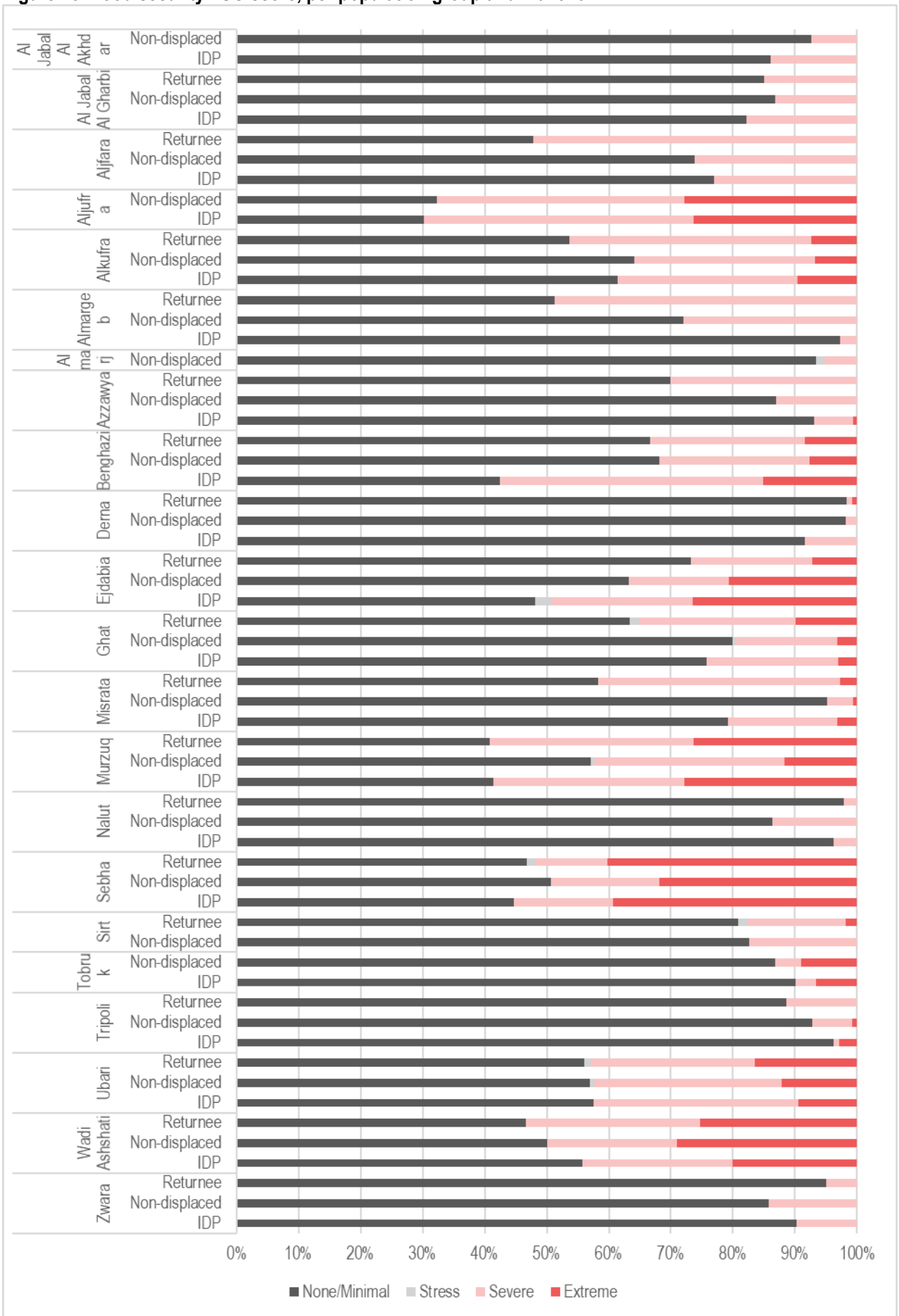


Figure 18: Food security LSG score, per population group and mantika



Cash and market LSG

Figure 19: Cash and markets LSG score, per population group

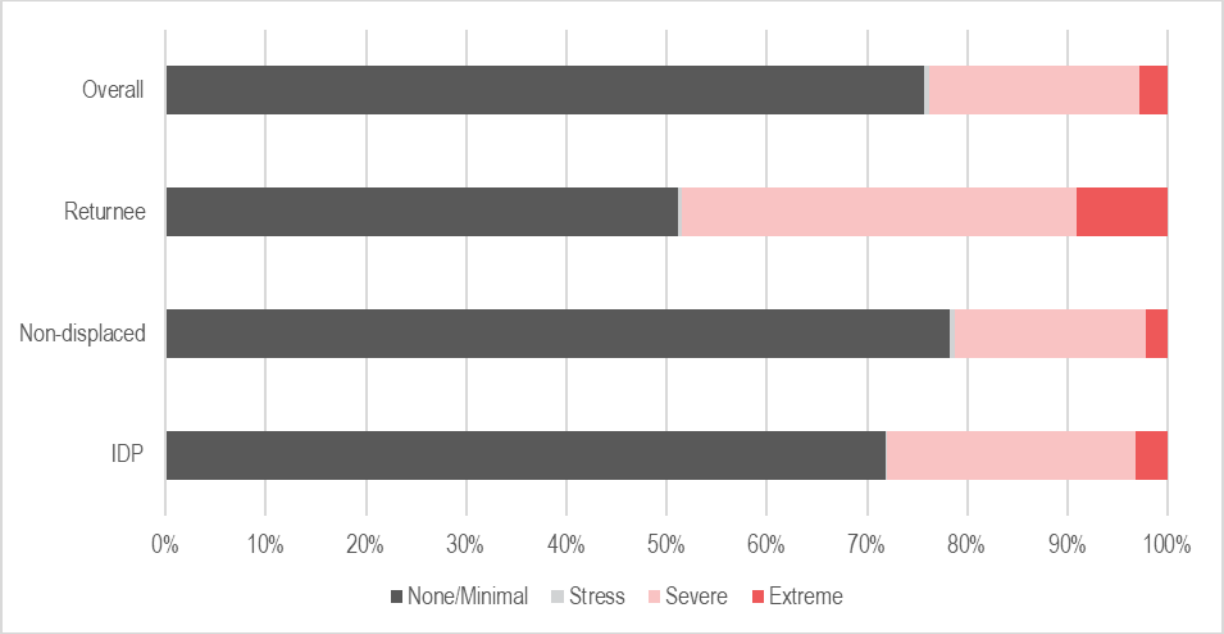


Figure 20: Cash and market LSG score, per mantika

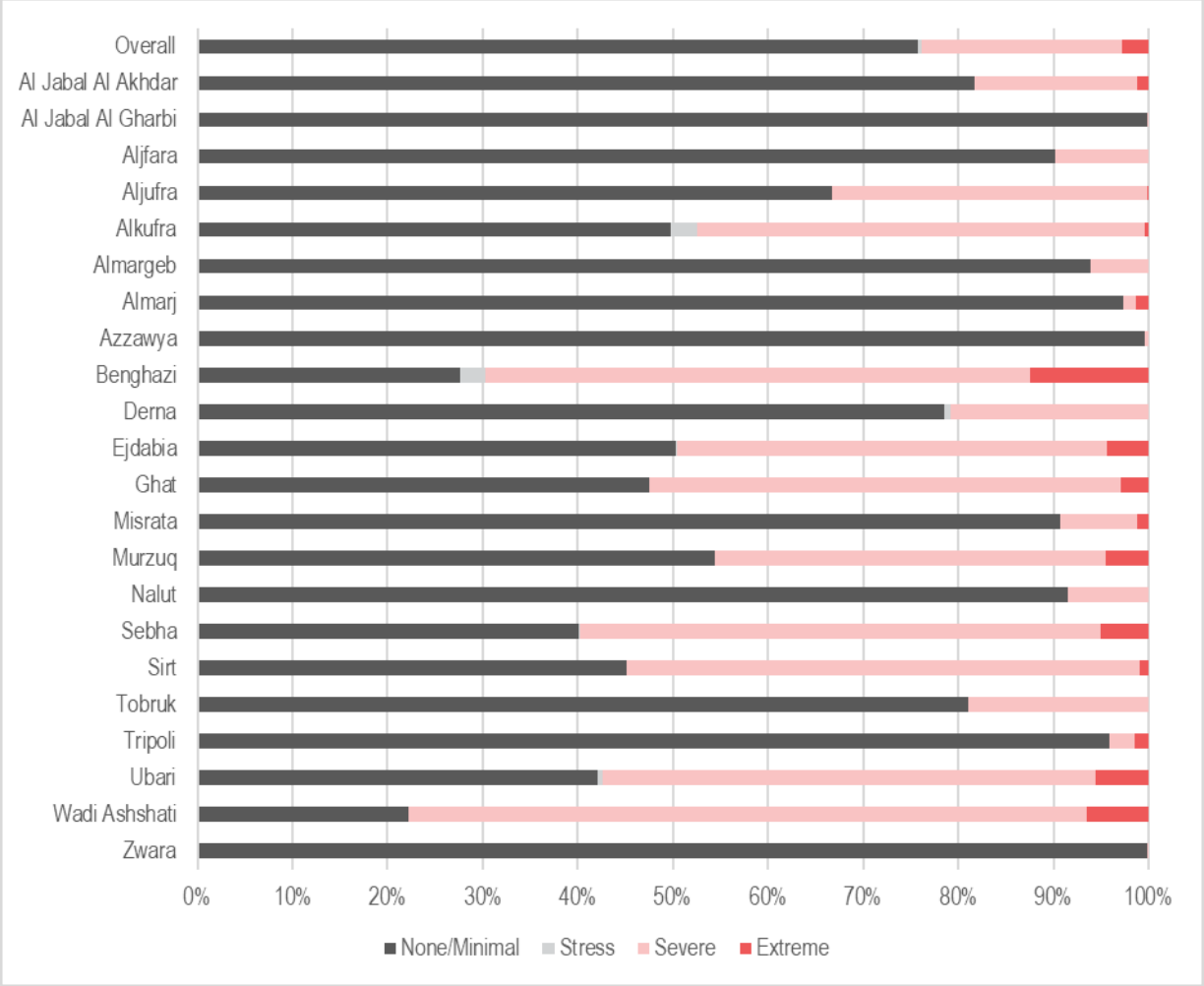


Figure 21: Cash and markets LSG score, per population group and mantika

Health LSG

Figure 22: Health LSG score, per population group

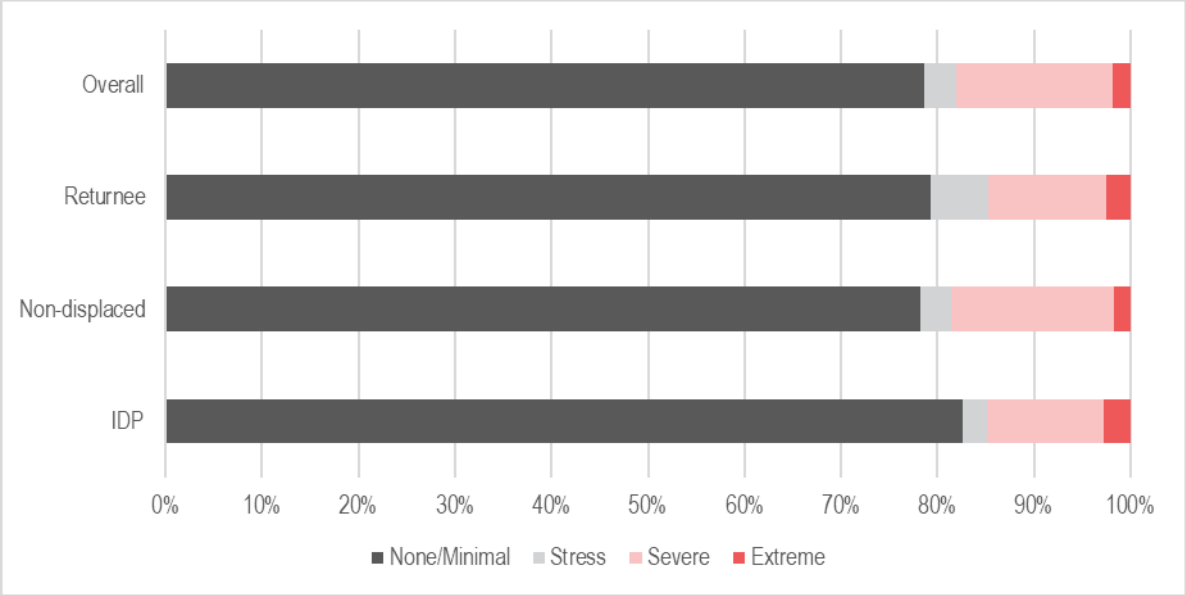


Figure 23: Health LSG score, per mantika

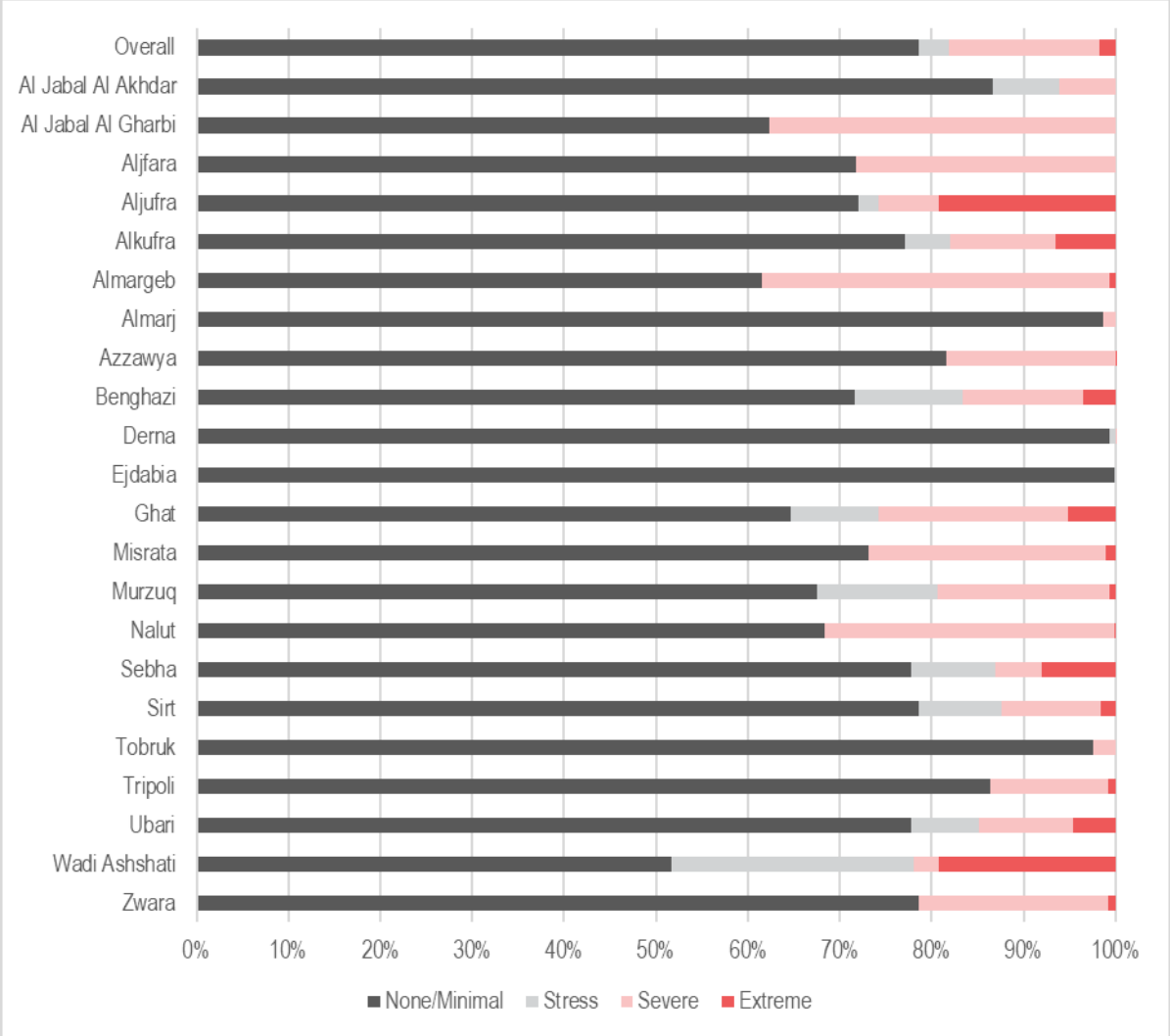
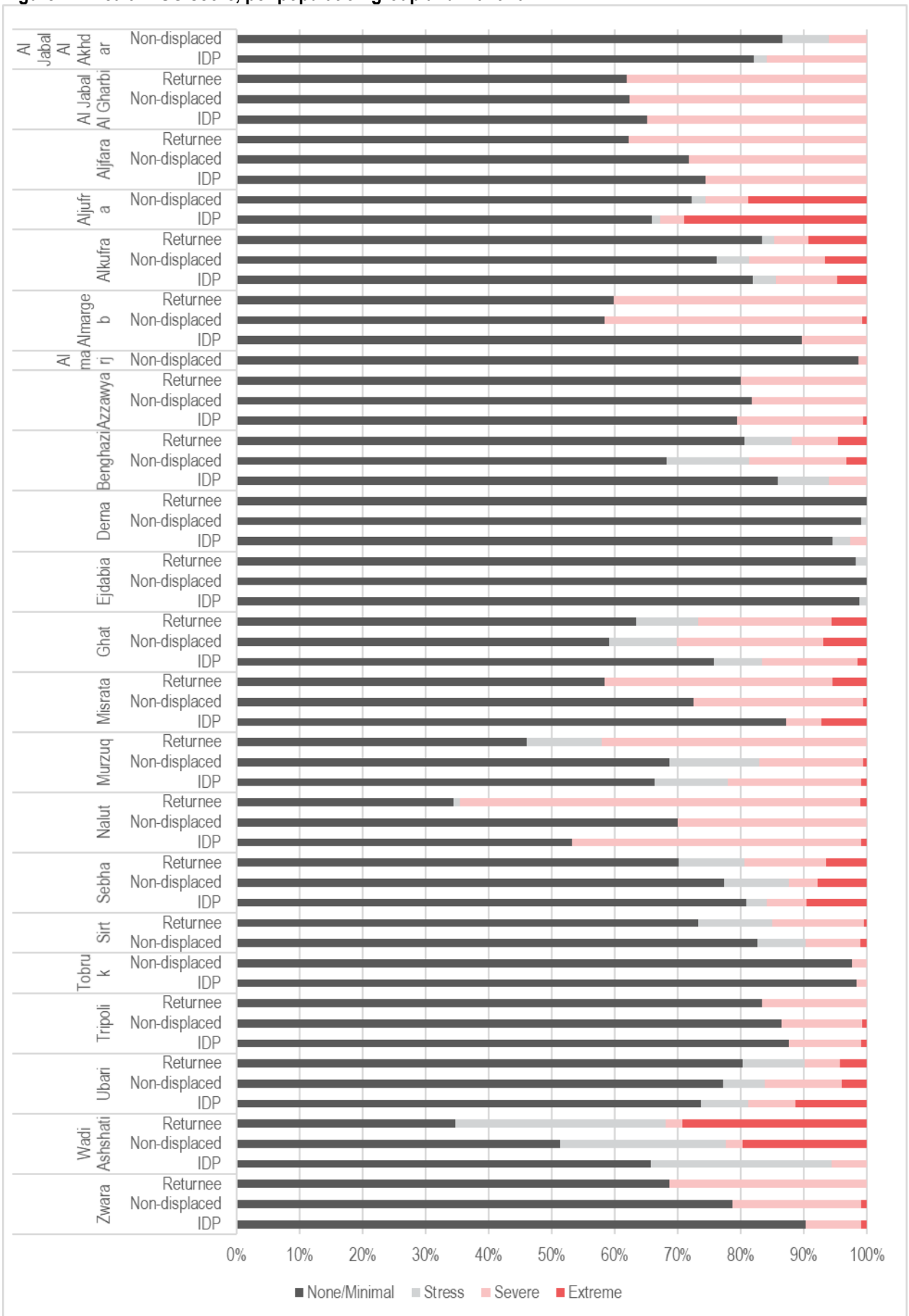


Figure 24: Health LSG score, per population group and mantika



Education LSG

Figure 25: Education LSG score, per population group

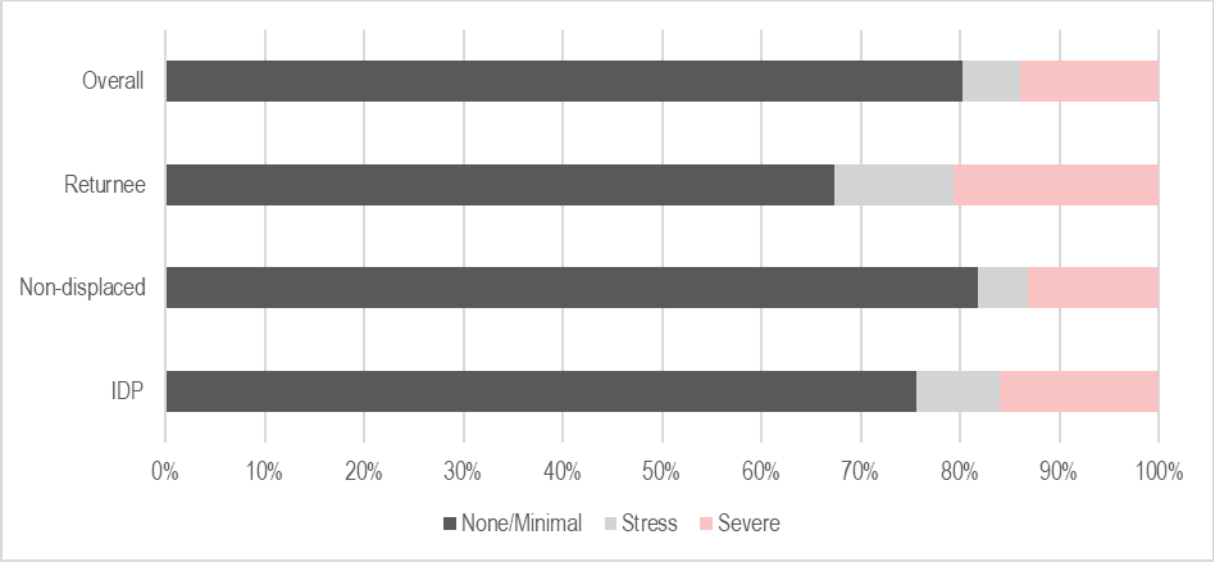


Figure 26: Education LSG score, per mantika

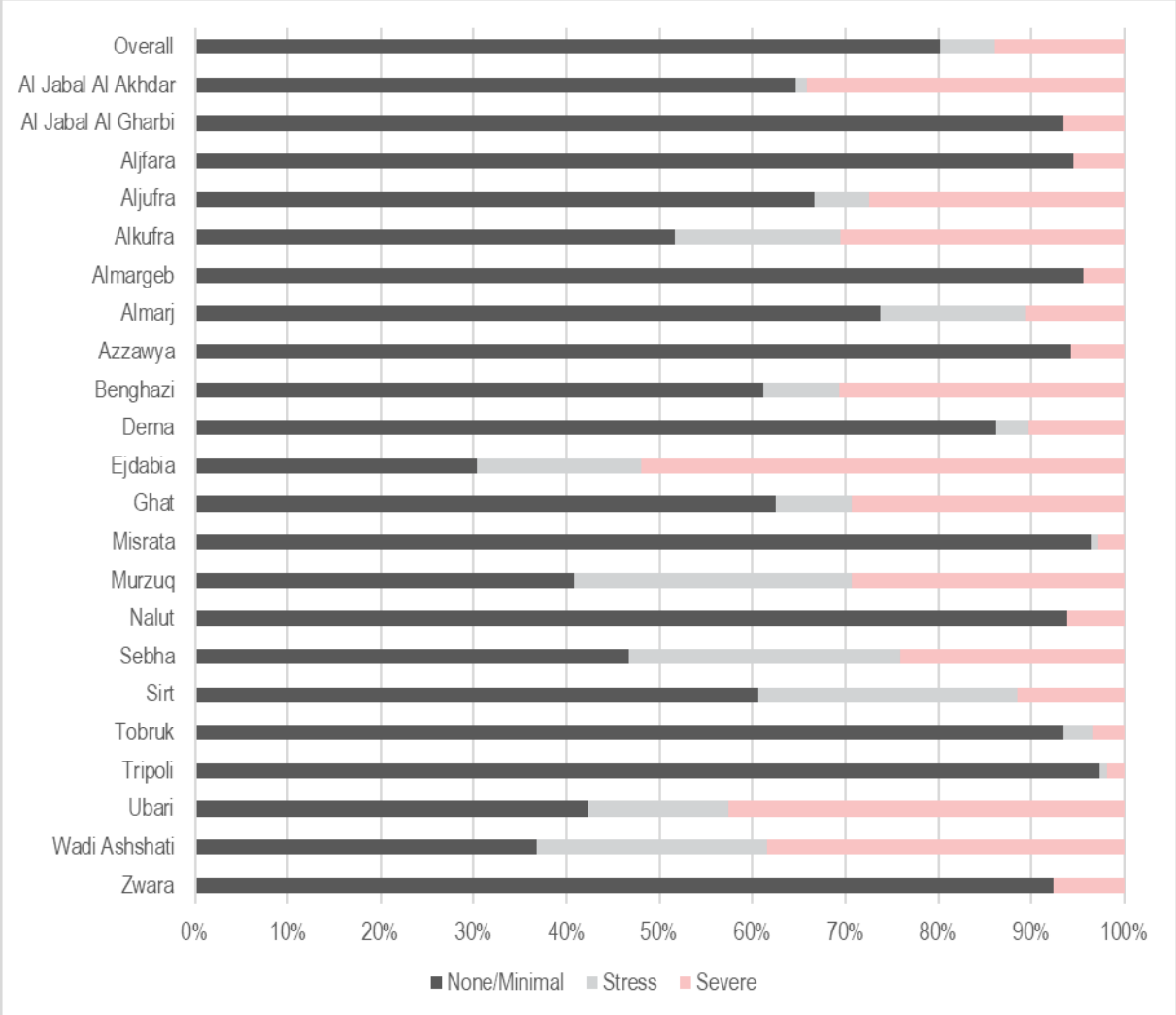
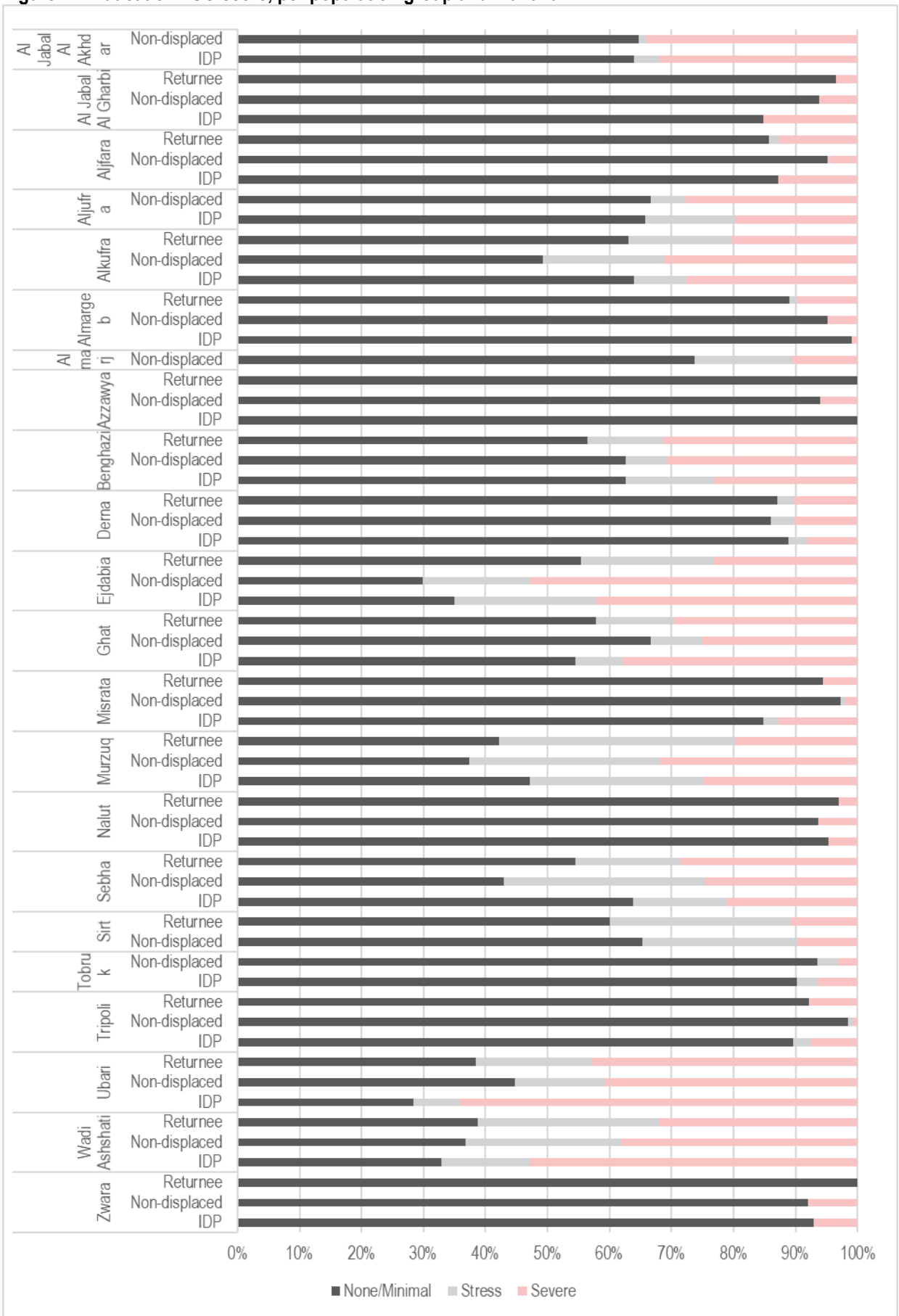


Figure 27: Education LSG score, per population group and mantika



Wash LSG

Figure 28: WASH LSG score, per population group

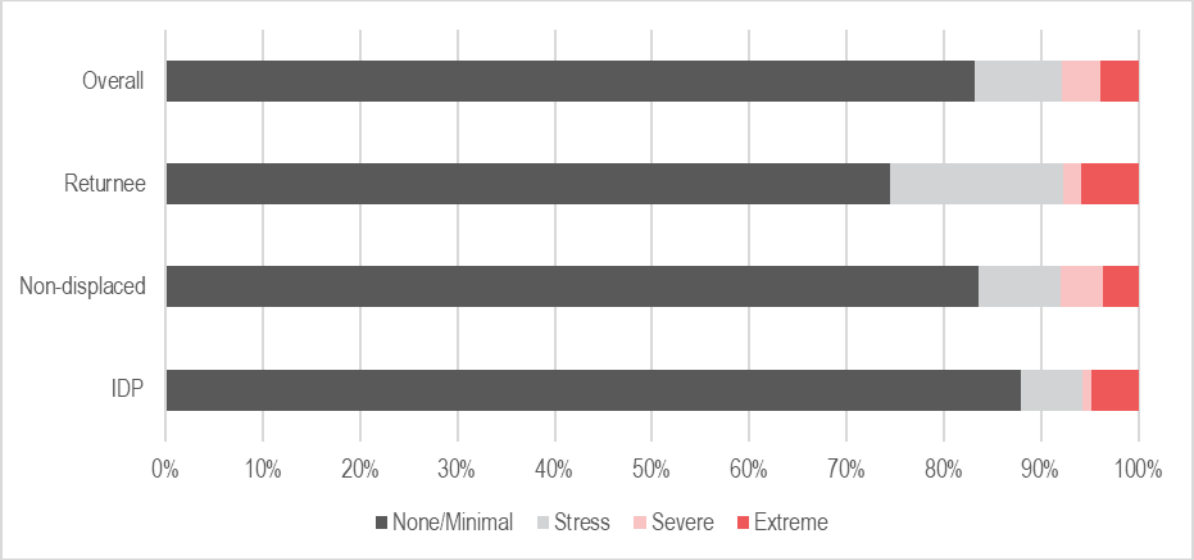
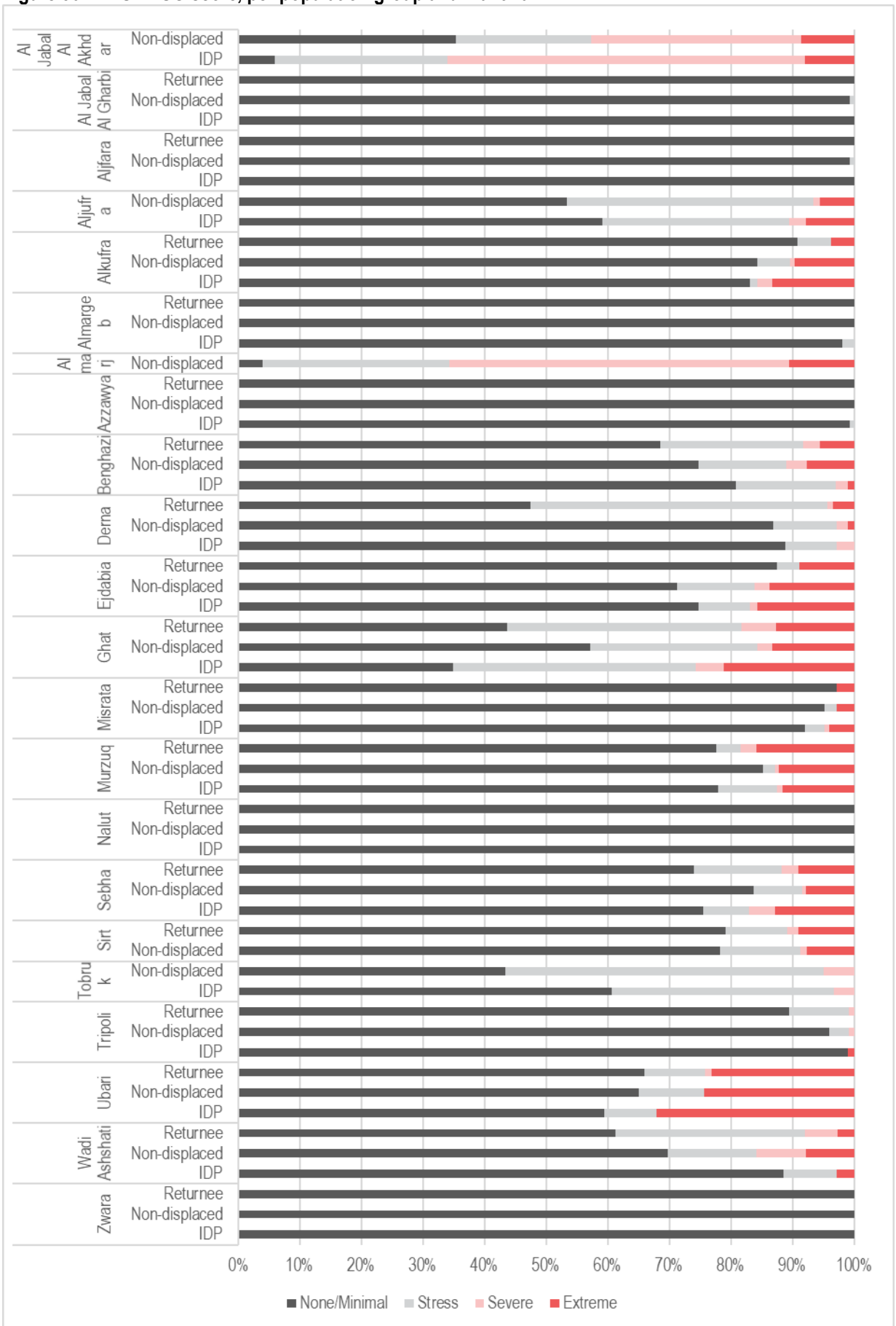


Figure 29: WASH LSG score, per mantika

Figure 30: WASH LSG score, per population group and mantika



Protection LSG

Figure 31: Protection LSG score, per population group

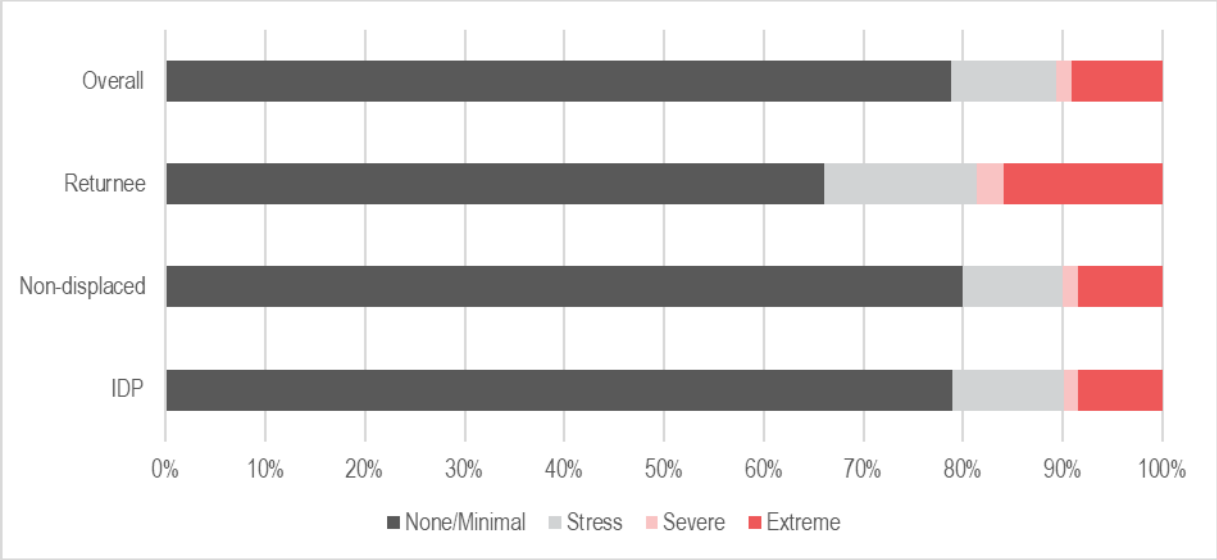


Figure 32: Protection LSG score, per mantika

Figure 33: Protection LSG score, per population group and mantika

Shelter & NFI LSG

Figure 34: Shelter & NFI LSG score, per population group

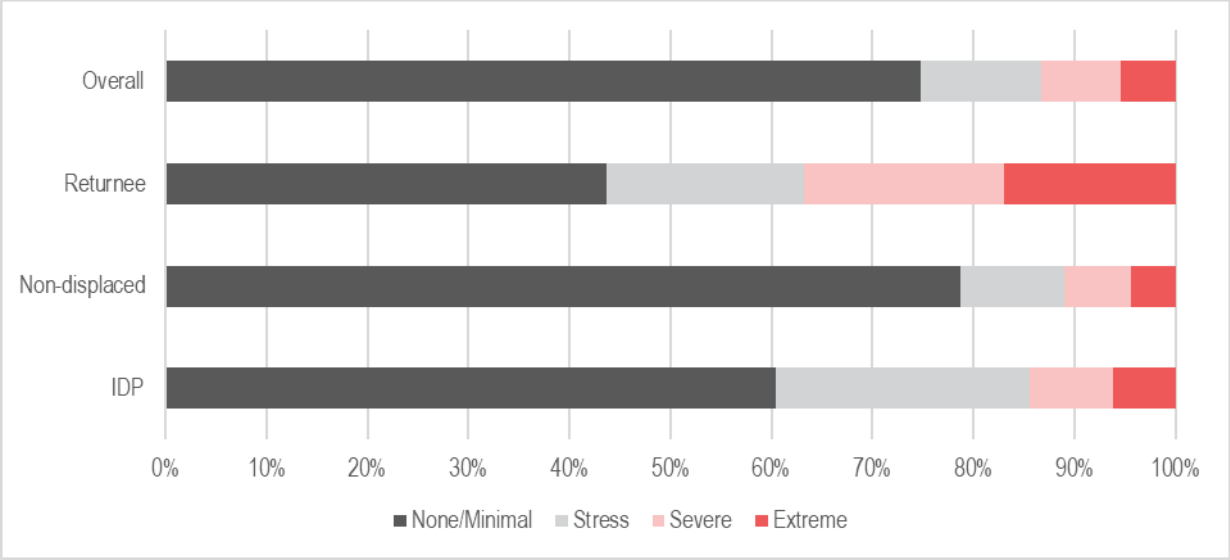


Figure 35: Shelter & NFI LSG score, per mantika

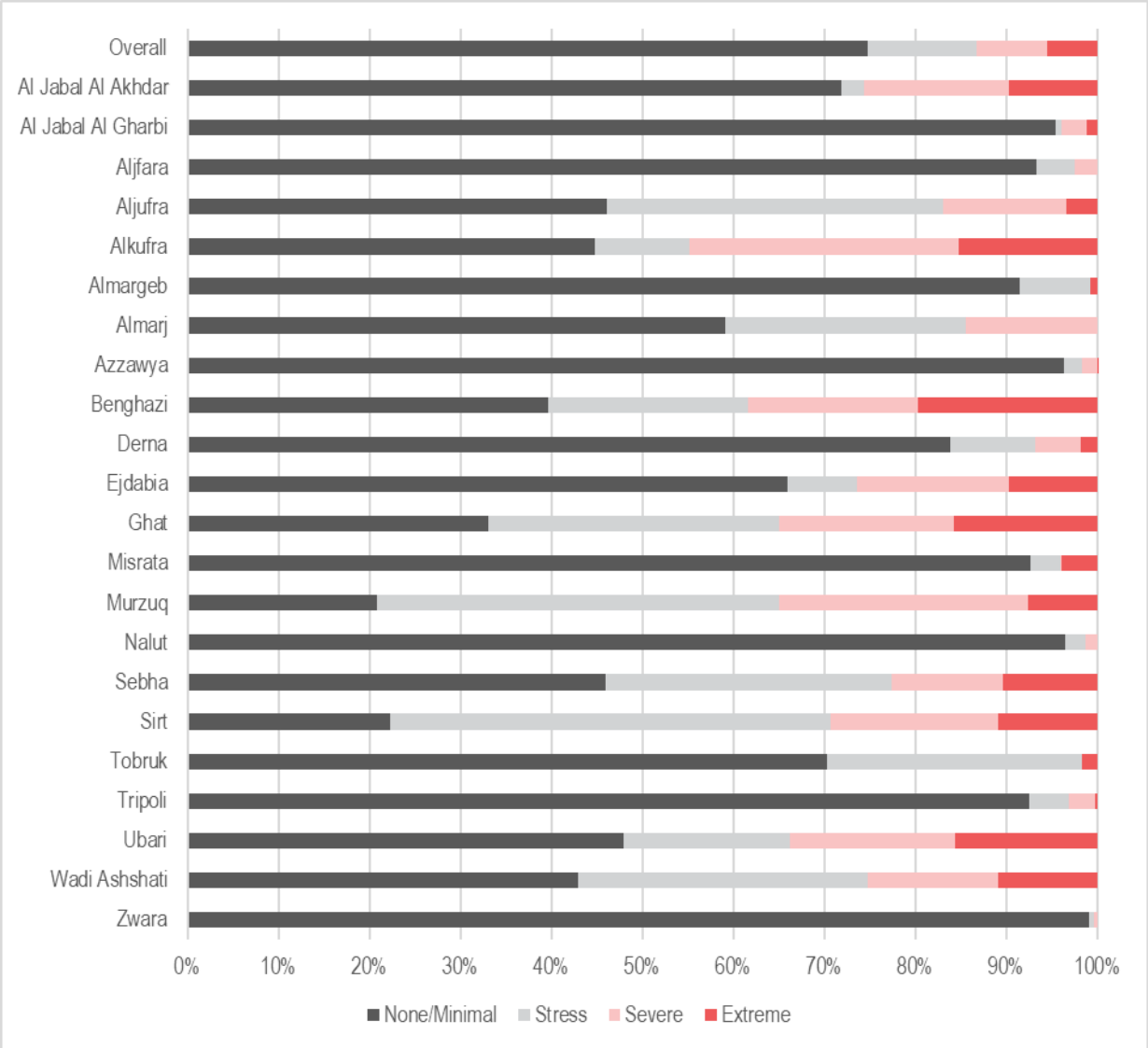
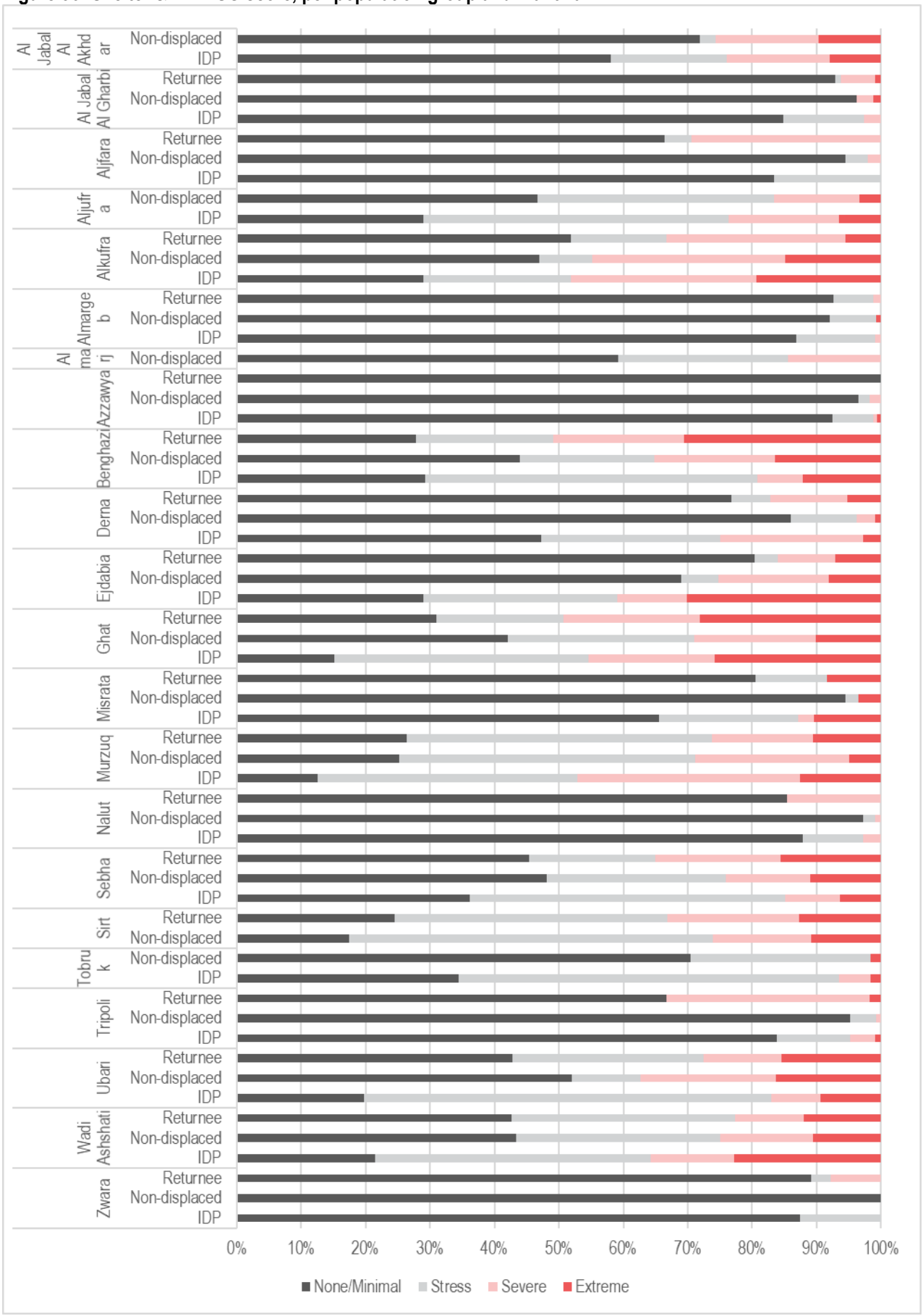


Figure 36: Shelter & NFI LSG score, per population group and mantika



Capacity Gap score

Figure 37: Capacity gap score, per population group

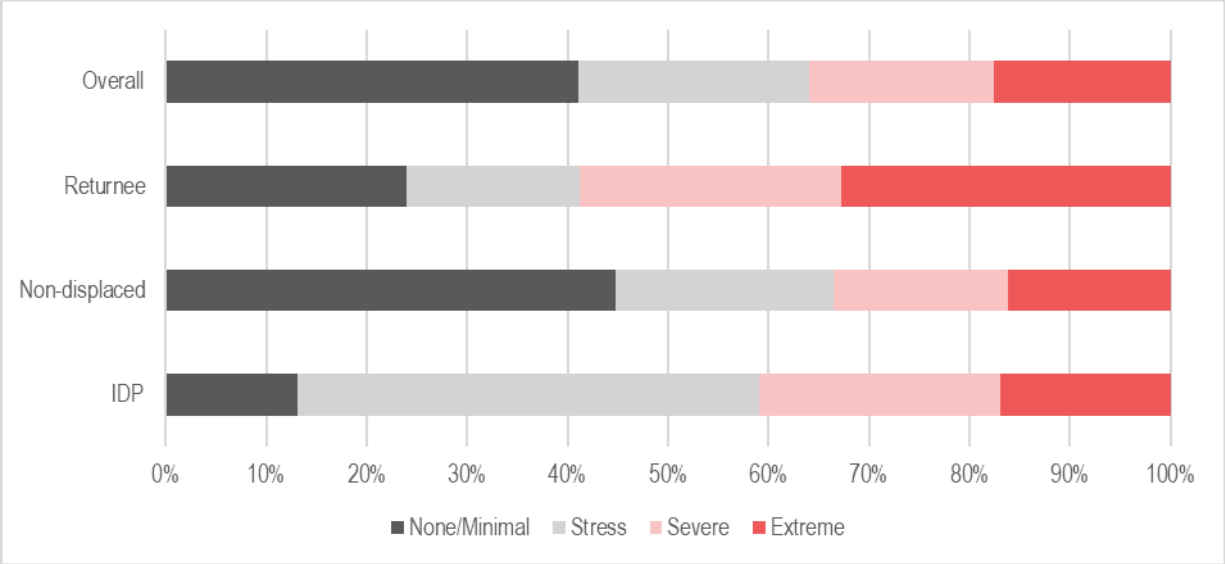


Figure 38: Capacity gap score, per mantika

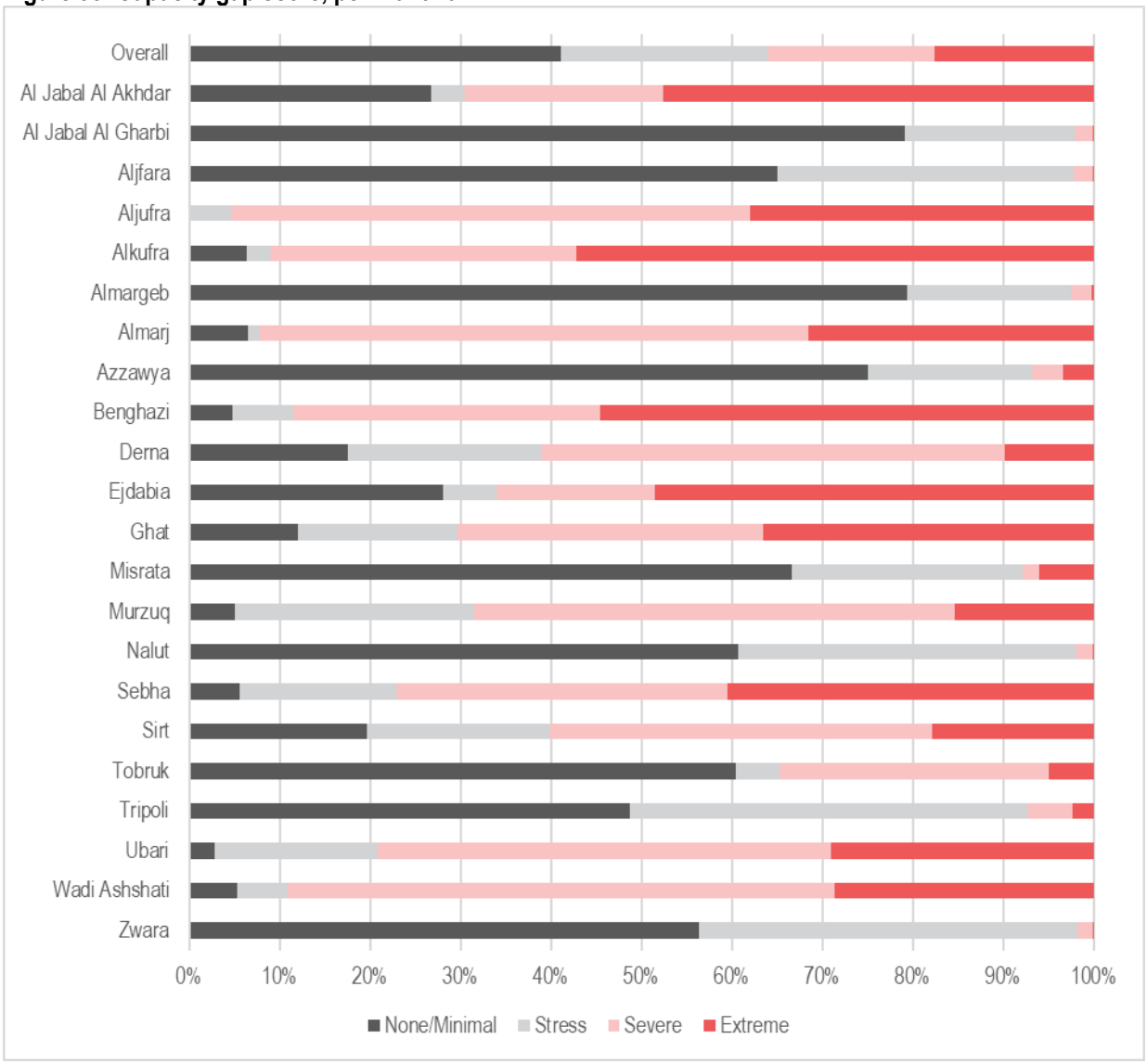
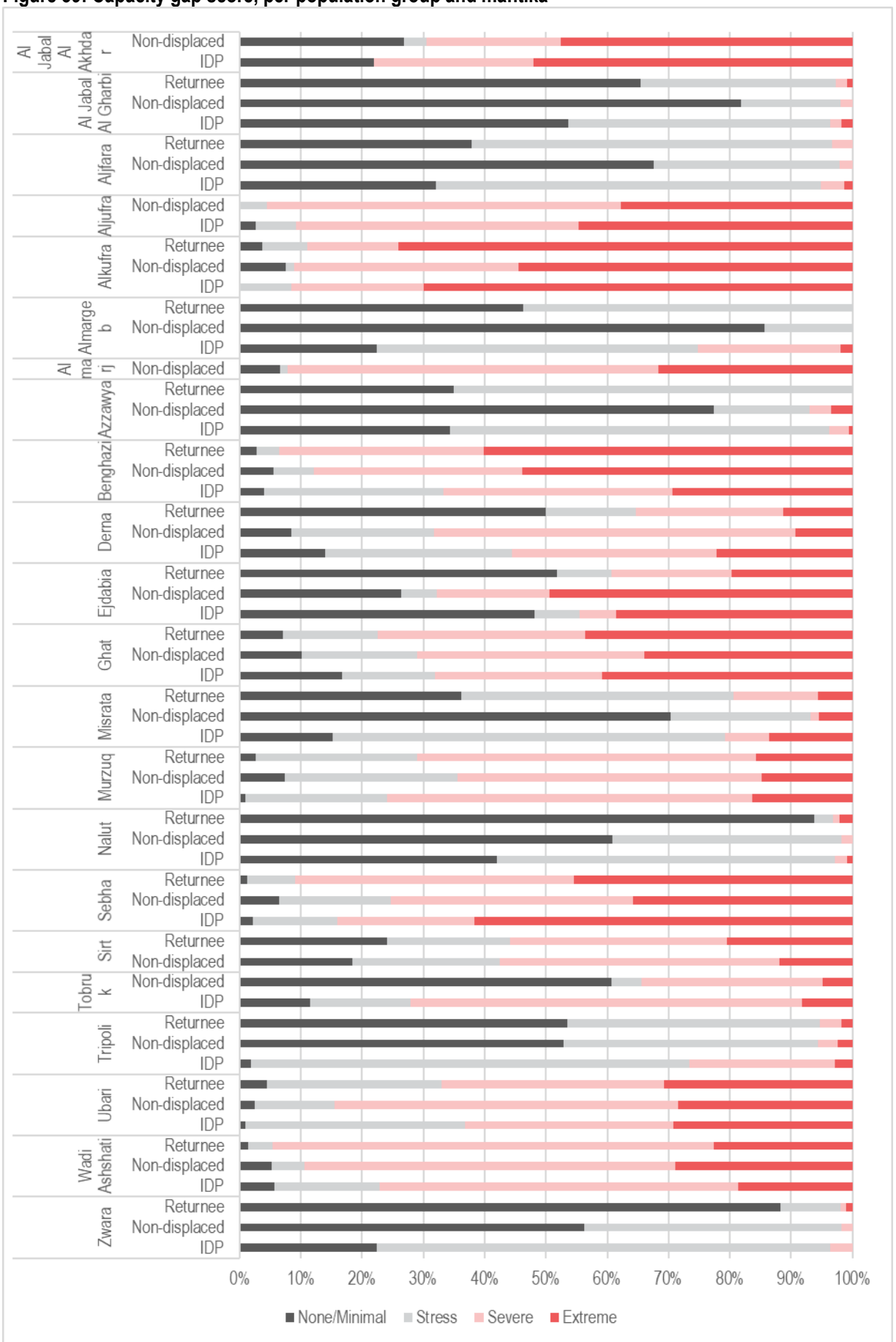


Figure 39: Capacity gap score, per population group and mantika



Pre-existing vulnerability score

Figure 40: Pre-existing vulnerability score, per population group

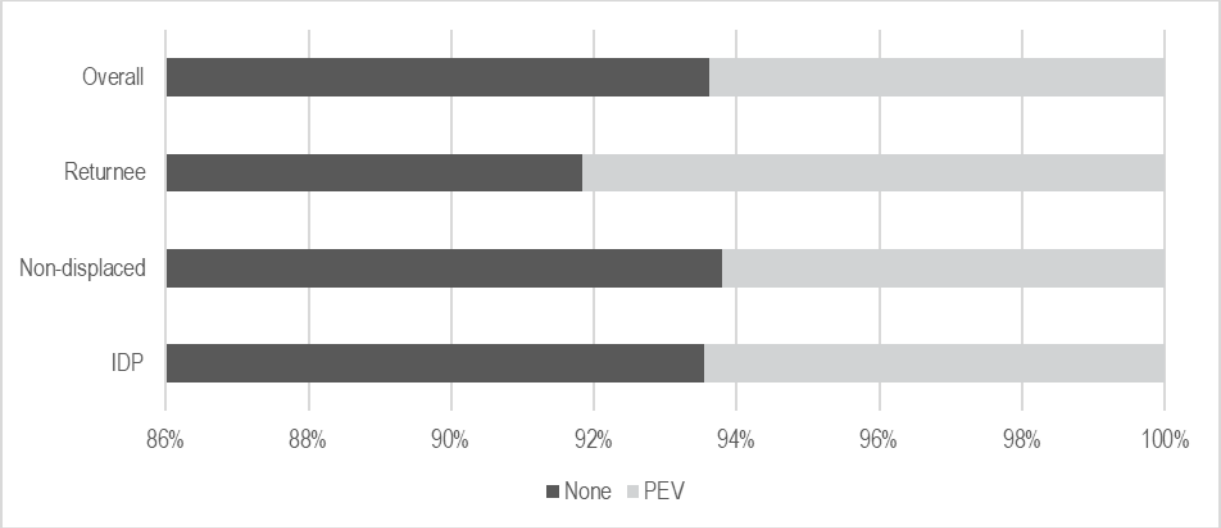


Figure 41: Pre-existing vulnerability score, per mantika

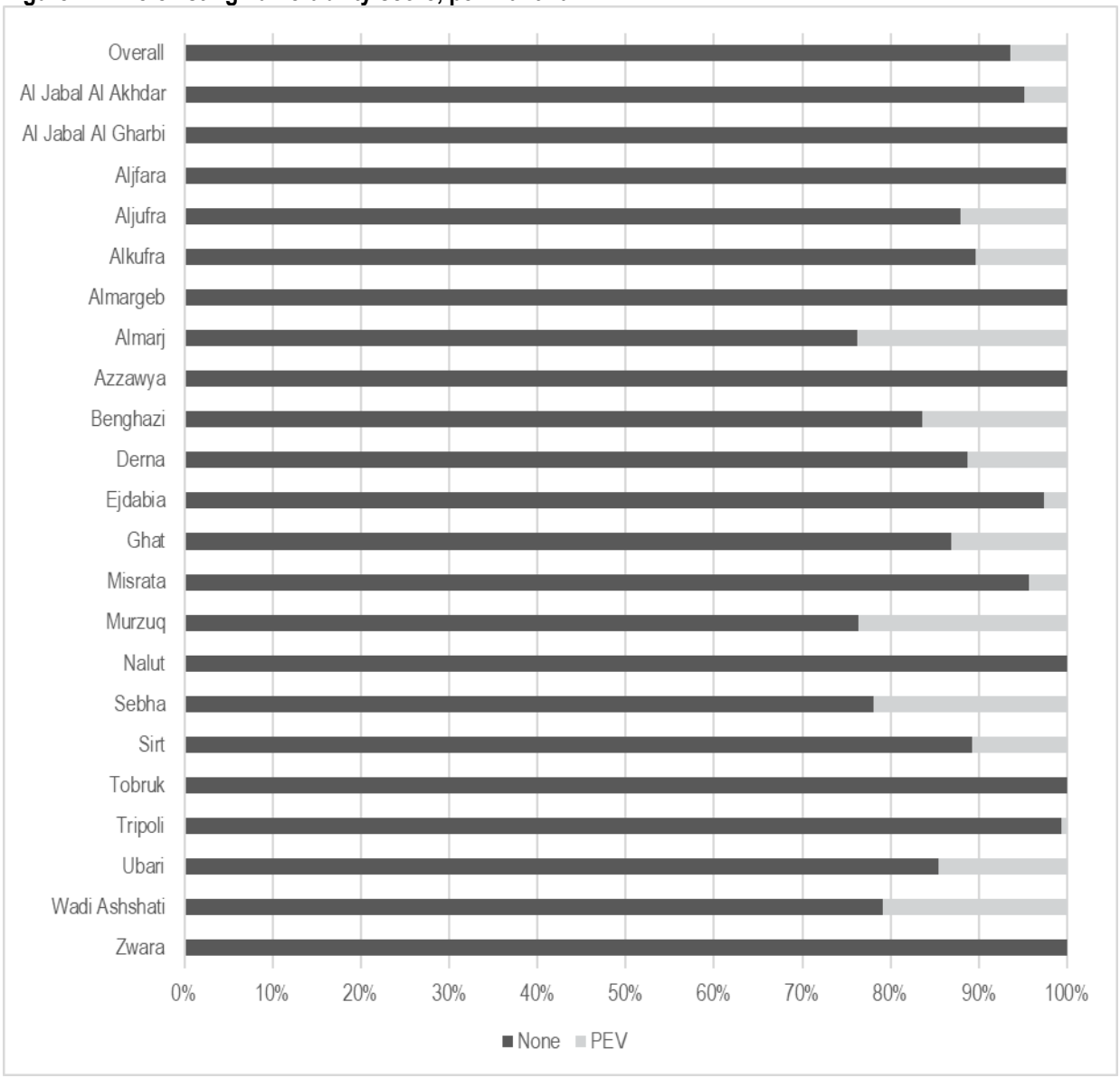
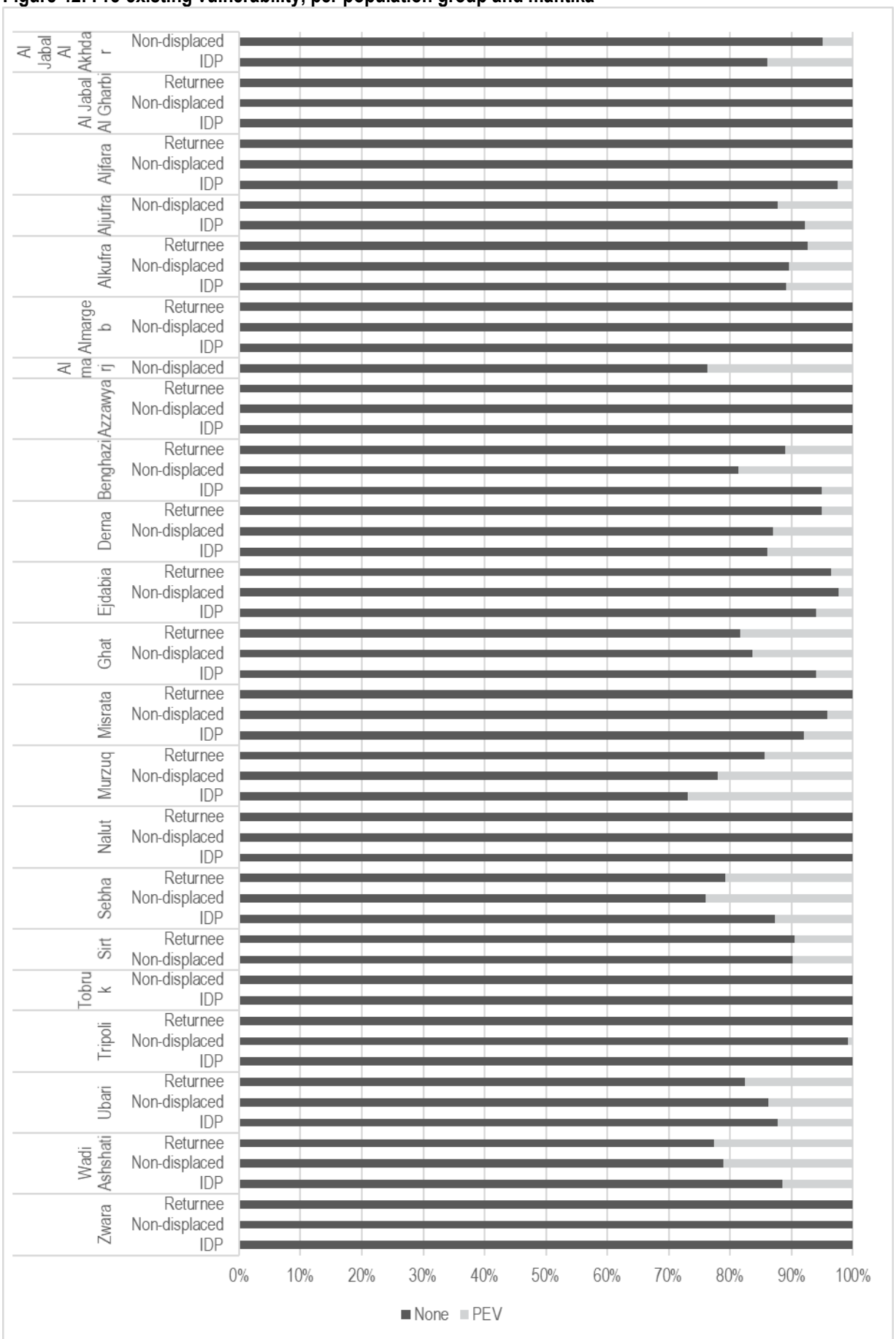


Figure 42: Pre-existing vulnerability, per population group and mantika



Annex 10: Income data

Income data was gathered during the quantitative phase by asking respondents how much income their household received in the 30 days prior to data collection. To avoid data entry errors, enumerators then selected the income range that the amount fell into. The graphs below show the percentage of households per income range.

Figure 43: % of households per income range (LYD)

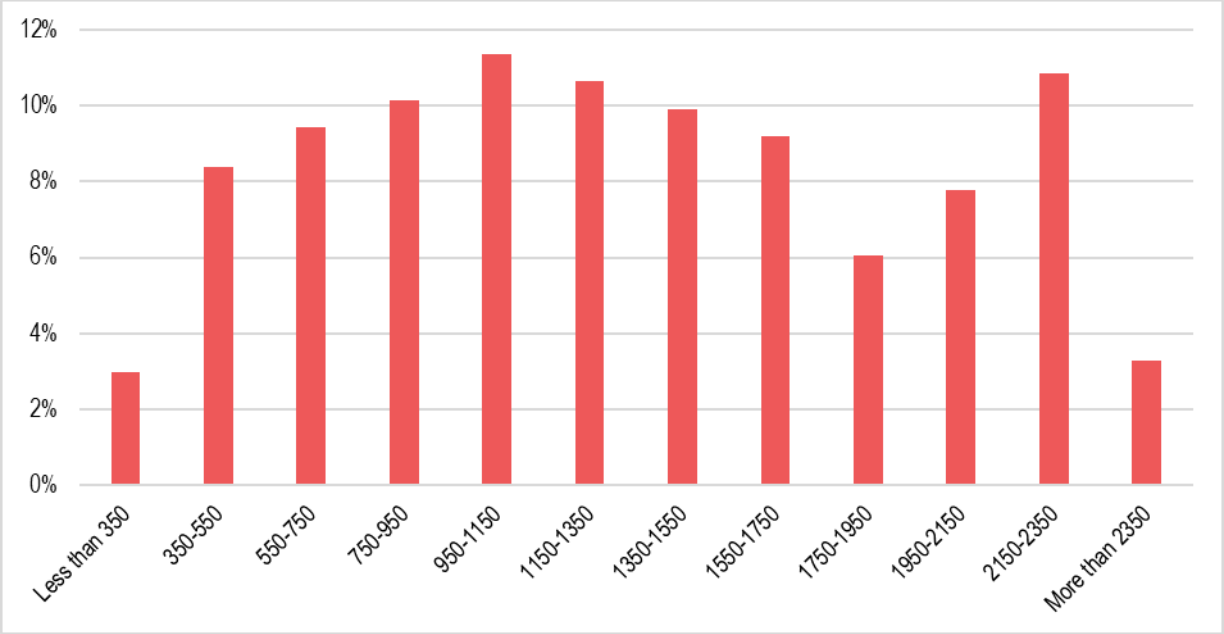


Figure 44: % of households per income range (LYD), per region

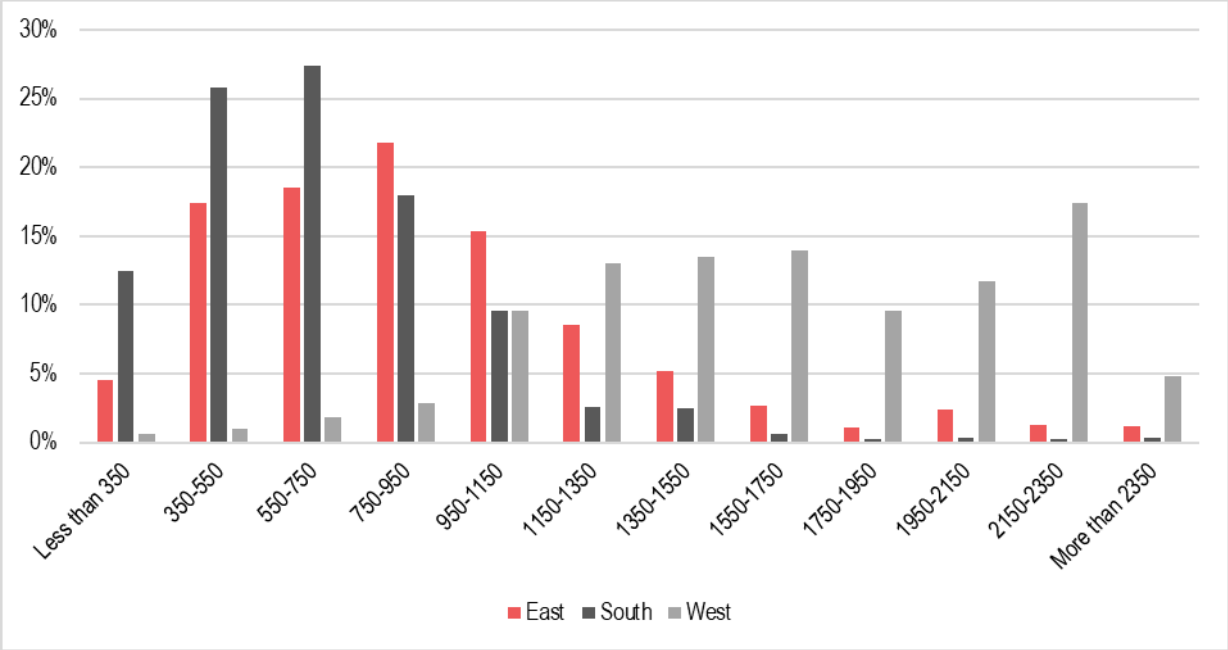
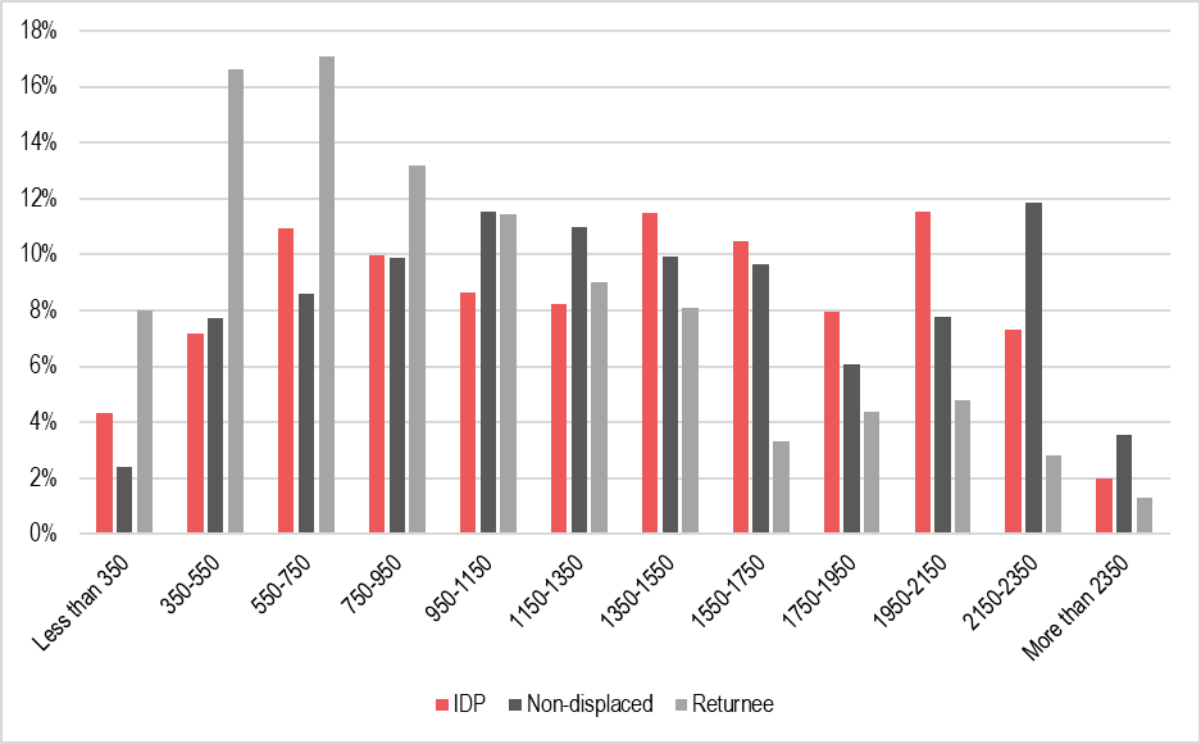


Figure 45: % of households per income range (LYD), per displacement status

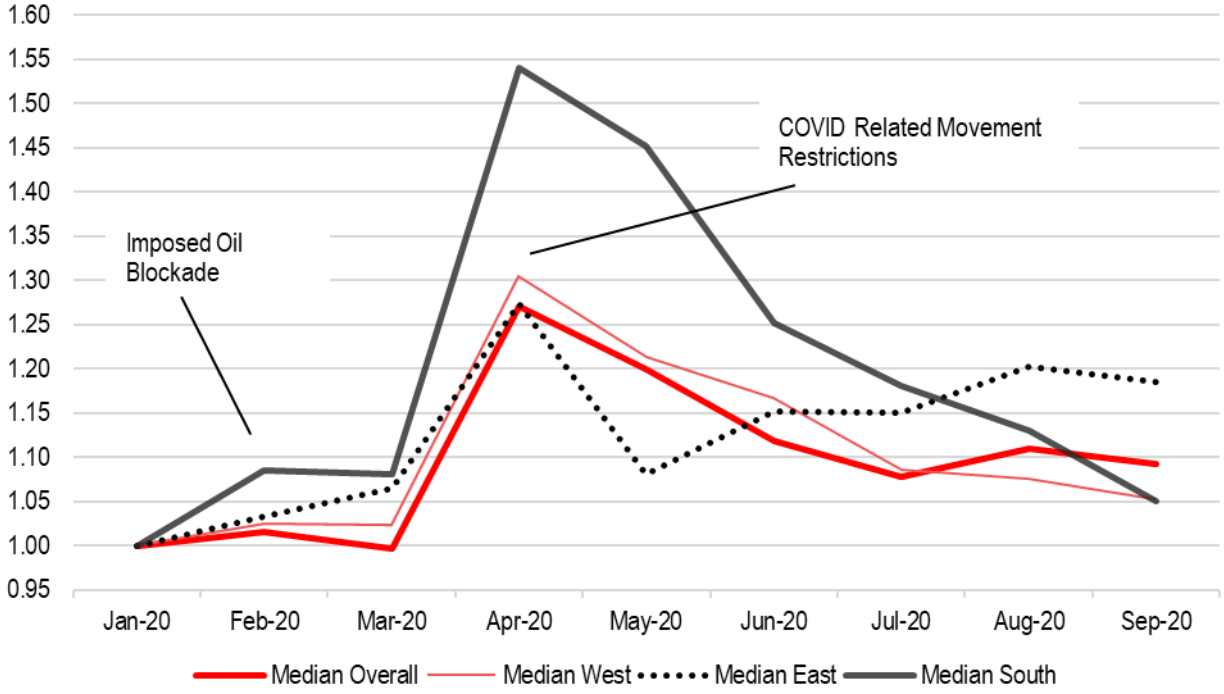


Annex 11: Minimum Expenditure Basket (MEB)

The MEB is calculated on a monthly basis by REACH in cooperation with the Cash and Markets Working Group (CMWG) as part of the JMMI. The MEB represents the minimum culturally adjusted group of items required to support a five-person Libyan household (HH) for one month. The cost of the MEB can be used as a proxy for the financial burdens facing households in different locations. The MEB's contents were defined by the CMWG in consultation with relevant sector leads.

Only the MEB's key elements (food and non-food items) were incorporated into the calculations in this report

Figure 46: MEB price index (normalized: January 2020 = 1)



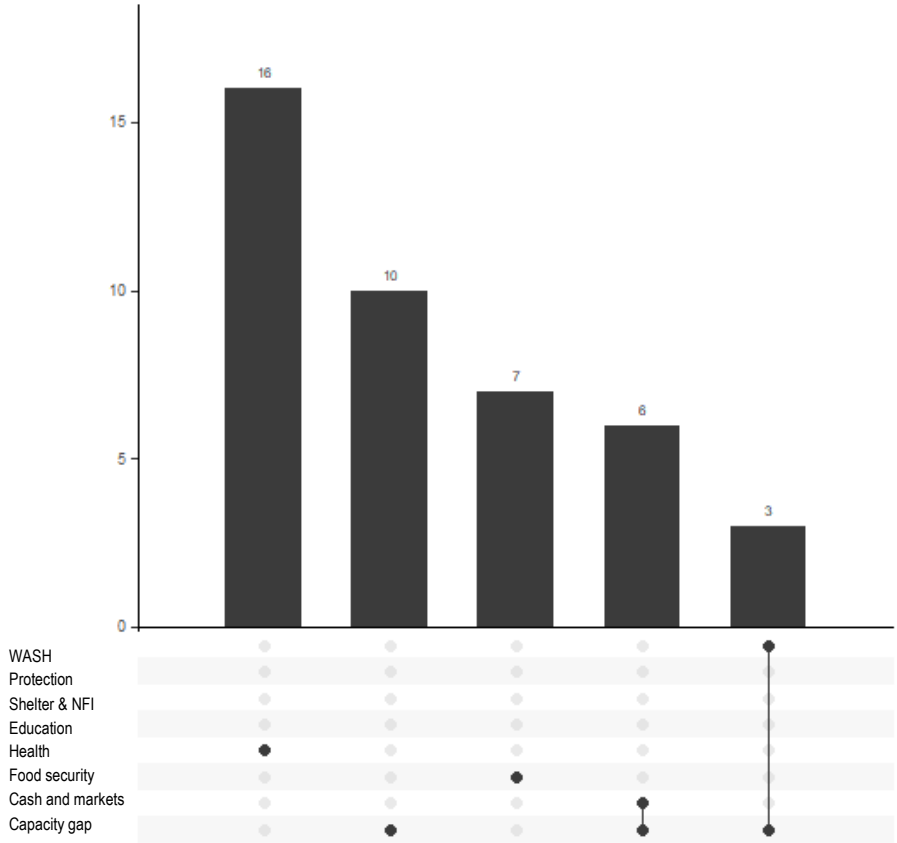
Annex 12: Guidance on reading multi-sector bar graph

The multi-sector bar graph is used for visualizing the most common needs profiles of households with a LSG in one or more sectors and/or a CG. The graph enables the identification of sectors in which needs tend to co-occur or occur independently. Importantly, the graph does not visualize the severity of needs. Instead, it shows the prevalence of needs across sectors.

To illustrate, please see a more detailed explanation of the general multi-sector bar graph presented in the findings section:

1. Vertical bars in the top: Among all households with a LSG in one or more sectors and/or a CG, these bars indicate the proportion of households per needs profile. Only the 5 most common needs profiles are featured.
2. Dots and lines in the bottom right quadrant: The black dots and lines define the needs profiles. For example, out of all households with a LSG in one or more sectors and/or a CG, 16% had only a health LSG (i.e., no CG or other LSGs). An additional 10% had a CG only (i.e. no LSGs). As a final example, among households with a LSG in one or more sectors and/or a CG, 3% had a CG and a WASH LSG, and no other LSGs.
3. Order of labels in in the bottom left quadrant: The labels are ordered from bottom to top in order of prevalence in the subset of household with a LSG in one or more sector and/or CG. For example, CGs are the most common, and WASH the least common LSG in the sample.

Figure 47: Among households with at least one LSG and/or a CG, most common combinations of one or more LSG(s):



Annex 13: Enumerator training agenda quantitative training

Training Session	Sub-sections	Facilitator
General introduction to REACH and the MSNA	• Assessment purpose and scope • Objectives and outputs • MSNA structure overview • Geographical coverage • Methodology • Timeline • Lessons learnt from MSNA 2019	REACH via Moodle + Quiz
Methodology and tools	• Key terms and definitions • Household survey overview • Interview techniques • How to use Kobo Toolbox	REACH via Moodle + Quiz
Safety & Security, Survey Ethics, Data Protection, and Complaint & Response Mechanism	• Data responsibility • Safety and security survey ethics • Conducting Mobile Surveys Responsibly • Complaint mechanism • How to deal with difficult situations • Data protection forms • Sensitive data management • Managing expectations of affected communities	REACH via Moodle + Quiz
Communication and reporting between the field and Tunis	• Communication organizational diagram • Referral procedures • Enumerator debrief form • Contact details • Field manager responsibilities • Reporting waves	REACH via Moodle + Quiz
Data collection methods (SOPs)	• Workplan • Typical working day/ waves • Data collection step by step • Data collection rules • Data collection FAQs • Daily completion form	REACH via Moodle + Quiz

Annex 14: Enumerator training agenda qualitative training

Training Session	Sub-sections	Facilitator
General introduction to REACH and the MSNA	• Assessment purpose and scope • Objectives and outputs • MSNA structure overview • Geographical coverage • Methodology • Timeline • Lessons learnt from MSNA 2019	REACH via Moodle + Quiz
Methodology and tools	• Key terms and definitions • Conducting Key informant interviews • Conducting Focus group discussions • Techniques and rules • Roles and responsibilities	REACH via Moodle + Quiz
Online data collection Ethics , safety & security	• Data responsibility • Safety and security • Complaint mechanism • How to deal with difficult situations • Data protection forms • Sensitive data management • Managing expectations of affected communities	REACH via Moodle + Quiz
Data collection tools	• Key Informant Interview tool on Access to Services • Key Informant Interview tool on Livelihoods • Key Informant Interview tool on Shelter and NFI • Key Informant Interview tool on Explosive Hazards • Key Informant Interview tool on Protection	REACH via Online Training + FAQs
Communication and reporting between the field and Tunis	• Communication organization • Referral procedures • Enumerator debrief form • Contact details • Field manager responsibilities • Reporting	REACH via Online Training + FAQs
Data collection methods (SOPs)	• Workplan • Typical working day/ waves • Data collection step by step • Data collection rules • Data collection FAQs • Daily completion form	REACH via Online Training + FAQs

Annex 15: CSI tool revision

The consumption-based coping strategies index (CSI) is a common food security indicator. It measures food security by asking about the use of coping strategies to deal with a lack of food. It thus asks directly about the experience of food insecurity, rather than food intake (as is done in for example the FCS). Households are asked how often they have had to use a pre-defined list of coping strategies in the last 7 days as a result of a lack of food or money to buy food. The frequency provided by the household is then multiplied by the weight assigned to each strategy. The sum of these products is the household's CSI score. The higher the score, the more food insecure the household. The value assigned to each household is primarily very useful for comparing groups and areas within the same context, and comparing across time.

The CSI tool is culturally sensitive, as it asks about behaviour. The pre-defined list of coping strategies and their weights need to reflect the behaviour and perceptions of the population of interest. If common food coping strategies are excluded from the tool, for example, this can mean that valuable information is missed. It is therefore important to tailor the tool to the context. This had not yet been done in Libya. Instead, the reduced CSI (rCSI) was commonly used for food security assessments. The rCSI is a short list of coping strategies and weights that is used across different contexts. It is useful for comparing food security across regions and contexts but it can miss valuable intra-region differences in food security as it is not tailored to any context. Therefore, REACH has conducted two rounds of data collection to revise the tool for the Libyan context, following requests from food security actors in Libya.

Methodology

The methodology for the CSI revision typically consists of two phases: 1) Establishing consensus from local populations on a list of coping strategies to be used in the local context; 2) Establishing the severity of coping strategies of the agreed list in line with local behavioural norms. The revision process is recommended to take place via FGDs, in order to achieve consensus on agreed lists within target communities.[171] However, due to the global outbreak of COVID-19 and the subsequent movement restrictions put in place by authorities, in-person FGDs were not possible within the operating environment. Risks were assessed and mitigated using IMPACT's SOPs for data collection during COVID-19.[172] As such the methodology for updating the CSI was amended to consist of a mixture of expert consultations and online FGDs. Two separate but parallel processes were conducted for the Libyan population and for the migrant and refugee population, in an effort to create bespoke tools for the separate populations.

Expert consultations comprised of phase 1 of the CSI revision. Phase 1 was an exploratory and iterative process to establish the list of coping strategies that fed into phase 2 (consultation with communities). Data collection for this phase took place from 1 June to 5 June. Experts were selected to represent especially vulnerable populations that were hard to reach for the online FGDs in phase 2. The respondents were found through the Food Security Sector's (FSS) network. At the end of phase 1, a list of coping strategies was established that served as the starting point for phase 2.

Phase 2 served to validate the list of coping strategies agreed by expert interviews, and assign weights to each strategy. Phase 2 was conducted through online FGDs. These FGDs took place during November and December 2020. Participants in phase 2 had the opportunity to dismiss any of the strategies that were proposed by experts in phase 1. After participants validated the provided list, they were tasked with assigning weights. Weights need to be assigned according the perceived severity of the selected strategies. The FGDs further served to identify any systemic differences in the perception of coping strategies across assessment strata (such as region, geography type, and displacement status). Six FGDs were conducted, stratified by region and displacement status. Due to operational issues faced recruiting enough participants from the East and West, these two regions were grouped. Within this grouping and within the South, three FGDs were conducted with one FGD per displacement status (IDP,

[171] Maxwell, D., Caldwell, R. "The Coping Strategies Index: Field Methods Manual." Second edition. January 2008.
[172] IMPACT Initiatives. "SOPs for data collection during COVID-19." April 2020.

returnee, non-displaced) per region. The groups all had five to eight participants with a roughly even distribution for gender.

The online FGDs took place via asynchronous discussions though a digital message board platform, reliant on typed responses from participants. The platform was developed in cooperation with a Tunisian tech start up, Placeholder, and is owned by REACH. Asynchronous discussions were preferred in this case due to frequent power cuts and internet connections in Libya, making it challenging to have all participants online at the same time for an extended period of time. The discussions were text-based because lists of strategies provided by REACH and by the participants constitute data that is more easily communicated and digested through text. The platform was designed to accommodate these discussions, as well as other types of assessments in the future. Several kinds of questions and discussions are possible on the platform, namely single choice polls, multiple choice polls, ranking polls, and open discussions. Within the open discussions, participants can respond directly to each other or to the main question. The platform and discussions can accommodate pictures and different kinds of media.

For the CSI revision, four separate questions were asked over the span of several weeks. Questions were staggered, with one question being visible for participants at a time. Questions took roughly two to five working days, primarily due to internet problems faced by participants. The questions within the FGD were structured as follows:

1. Multiple choice poll: **Select all coping strategies that you or households in your community might use in case of a lack of food or money to buy food** (from the strategies that were proposed in phase 1).
2. Open discussion: **These were the strategies selected, are there any missing or any that should not be on the list?**
3. Ranking poll: **Rank the coping strategies from least to most severe** (strategies to be ranked based on question 1 and 2).
4. Open discussion: **This is the grouping of strategies based on the rankings provided – do you agree with these severity groupings?**

Any question would only be closed if the majority (more than half) had answered. Moderators were available outside the platform and facilitated the open discussions on the platform. The final severity groupings for each group were the basis for analysis. The severity groupings per group were aggregated and averaged to come to an overall tool. The analysis was also used to determine whether bespoke tools were needed for different regions or displacement status.

Limitations

The use of online FGDs is dependent on several contextual factors. First, internet connection needs to be sufficiently stable for participants to log in and participate ideally once every day. The asynchronous nature of discussions mitigates this factor to some extent, but not entirely. Second, the online platform could be used on desktops or smart phones, which are not necessarily available to all. Third, navigation of the platform was made to be as intuitive as possible, but still requires some digital literacy to use. Fourth, all participants must be fluent in the same language, as immediate translation is not possible. For example, FGDs with migrants from different regions proved too difficult in part because not all participants were able to sufficiently understand standard Arabic or French. Finally, on the data quality side, the online modality of FGDs does mean that some of the interaction between participants is missed. The platform and data collection tools were designed to create as much interaction as possible, but it is likely that some more active discussion was still lost with the move to the online modality.

Results

During analysis, the first step was to ascertain whether bespoke CSI tools should be developed for per region or displacement status. This would be the case if considerable differences in participants' answers in the FGDs were found. However, no significant differences were found between regions and displacement status groups, so one overall CSI tool was created for all Libyans. FGDs with migrants and refugees did not yield results, as internet

issues, phone access, and language barriers disallowed enough participants to take part in the discussions. Therefore, the final CSI tool presented below can be considered appropriate only for the Libyan population. Along with the list of coping strategies within the CSI tool package are weights associated with each strategy. The weights are based on analysis of the ranking poll answers and final discussion on the FGD platform. See the final coping strategies and their weights listed below.

Table 3: Revised final CSI tool for the Libyan population

Coping strategy	Weight
CS1: Borrow/receive food from friends or relatives	4
CS2: Limit portion size for all HH members at mealtimes	3
CS3: Reduce portion sizes and meals for adults in order for small children to eat	2
CS4: Reduce the number of meals eaten in a day (for all HH members)	1
CS5: Purchase food on credit	1
CS6: Go whole days without eating	4
CS7: Send women and/or children to work for food	3
CS8: Send children to eat elsewhere	3
CS9: Rely on less preferred and less expensive foods	2
CSN1: Use bank checks to purchase food	1

The tool includes the strategies that feed into the rCSI. This way, data can be collected for the rCSI and context-specific CSI within the same data collection exercise. There are some key differences in the weights assigned for both tools. The rCSI strategies and weights can be seen below.

Table 4: rCSI tool for general cross-context use

Coping strategy	Weight
CS1: Borrow/receive food from friends or relatives	2
CS2: Limit portion size for all HH members at mealtimes	1
CS3: Reduce portion sizes and meals for adults in order for small children to eat	3
CS4: Reduce the number of meals eaten in a day (for all HH members)	1
CS9: Rely on less preferred and less expensive foods	1

One key difference is for strategy one, which shows that borrowing from friends and family is perceived as more severe in Libya and therefore weighted more heavily than in the rCSI. On the other hand, reducing portion sizes for adults is not perceived as severely as is assumed in the rCSI. These differences indicate the importance of this exercise of creating a context specific tool, so that strategies are weighed appropriately and in line with the perceptions of the population of interest.

One coping strategy was added by four out of six groups, which is using bank checks to purchase food. This is quite common in the Libyan context and is closely related to the liquidity crisis. It involves households acquiring checks from the banks and using those to purchase food. There are often significant mark-ups or interest rates involved. Despite the potentially severe negative consequences of using this strategy, is was not considered a severe option by the participants.

The final tool presented here is recommended for use for future food security assessments. It can be used especially as a form of triangulation with for example the FCS. It will also be used in the 2021 MSNA.