COVID-19 SOMALI HIGH-FREQUENCY PHONE SURVEY

REPORT

Prepared by Altai Consulting for World Bank

Somalia – October 2020

WORLD BANK GROUP

altai consulting

October 2021

Disclaimer

This volume is a product of the staff of the International Bank for Reconstruction and Development/ The World Bank and Altai Consulting. The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Rights and Permissions

World Bank Publications
The World Bank Group
1818 H Street NW
Washington, DC 20433
USA
Fax: 202-522-2625

Unless specified otherwise, all pictures in this report are credited to Altai Consulting.

ACKNOWLEDGEMENTS

The COVID-19 Somali High-Frequency Phone Survey (SHFPS) was led by Wendy Karamba (Task Team Leader and Economist, Poverty and Equity Global Practice), and the World Bank team comprised Nobuo Yoshida (Lead Economist, Poverty and Equity Global Practice), Kazusa Yoshimura (Junior Professional Officer, Poverty and Equity Global Practice), Xiaomeng Chen (Consultant, Poverty and Equity Global Practice, Isabelle Salcher (Consultant, Poverty and Equity Global Practice). The survey was implemented by Altai Consulting and Tusmo Research and Consulting, in coordination with the respective statistical authorities.

From Altai Consulting, the SHFPS project was led by Laurence Hargreaves (East Africa Director) and implemented by Mariachiara Iannuzzi (Project Manager) and Saadia Ali (Somalia Project Coordinator). Preliminary analysis of the results and compilation of this report was carried out by Mariachiara Iannuzzi (Project Manager) and Marie Beigelman (Analyst). The call center was operated by Tusmo Research and Consulting, overseen by Guleid Hassan Dirir (Director), Noura Mohamoud (Team Leader), and Abdinasir Hussein (Team Leader).

CONTENTS

TABLES

FIGURES

FOCUS BOXES

ABBREVIATIONS

AS	*Al Shabaab*
CATI	*Computer Aided Telephone Interviews*
COVID-19	*Coronavirus Disease 2019*
EA	*Enumeration Area*
EU	*European Union*
FAO	*Food and Agriculture Organization*
FGS	*Federal Government of Somalia*
FMS	*Federal Member State*
SHFPS	*Somali High-Frequency Phone Survey*
SHFS II	*Somali High-Frequency Survey, wave 2*
IDP	*Internally Displaced Person*
IO	*International Organization*
MoE	*Margin of Error*
NGO	*Non-Governmental Organization*
NIEC	*National Independence Electoral Commission*
PESS	*Population Estimation Survey of Somalia*
PSW	*Propensity Score Weighting*
RDD	*Random Digit Dialing*
SHDS	*Somali Health and Demographic Survey*
SHFS	*Somali High-Frequency Survey*
UK	*United Kingdom*
UNFPA	*United Nations Population Fund*
WASH	*Water Sanitation and Hygiene*
WBG	*World Bank Group*
WFP	*World Food Program*
WHO	*World Health Organization*

EXECUTIVE SUMMARY

International experts warn that Somalia might become among the worst-affected countries in the region by the coronavirus disease 2019 (COVID-19), with significant effects on human lives, as well as bleak economic, political, and security-related consequences from which the country may struggle to recover. COVID-19 has hit Somalia while it is in the grip of a climate and food security emergency, all of which are having a devastating effect on the lives and livelihoods of the Somali people.

OBJECTIVES

The coronavirus disease 2019 pandemic and its effects on households creates an urgent need for timely data and evidence to help monitor and mitigate the social and economic impacts of the crisis. The World Bank has launched a global initiative to implement high-frequency phone surveys to track the socioeconomic impacts of COVID-19 on households.

Based on this background and as part of the global initiative, the COVID-19 Somali High-Frequency Phone Survey (SHFPS) was implemented with two overarching goals:

1. Gather socioeconomic data on Somali households to monitor the socioeconomic impacts of the COVID-19 pandemic.
2. Formulate recommendations to inform the design of country policy responses, to mitigate the negative impacts of COVID-19.

METHODS

The SHFPS has been designed to be representative at the national level and to provide reliable estimates at the state level and population type level. The sampling frame was the 2014 UNFPA Population Estimation Survey of Somalia (UNFPA PESS 2014).

Initially, a sample size of 3,000 households was targeted. However, due to implementation challenges in reaching specific population groups via phone, the sample size was slightly reduced. At the end of the data collection, 2,811 households had been interviewed, with a response rate of nearly 80 percent.

The survey questionnaire was designed to cover important and relevant topics, including household-level and individual-level sociodemographic characteristics, knowledge of COVID-19 and social behaviors, access to essential goods and services, access to social assistance, impacts of COVID-19 on income sources and economic activity, as well as households' exposure to shocks during COVID-19 and coping mechanisms.

The SHFPS was implemented from June 18 to July 23, 2020 by Altai Consulting with technical and financial support from the World Bank. The SHFPS sampled 2,811 households across Somalia using phone numbers selected through a Random Digit Dialing (RDD) protocol and relying on Computer Assisted Telephone Interviews (CATI).

Implementation challenges primarily consisted in the slow conversion rate of calls to successful interviews and difficulties in reaching populations residing outside of urban centers.

FINDINGS

Knowledge of COVID-19, Preventative Behaviors, and Satisfaction with Government Response

Awareness of the COVID-19 disease, associated symptoms, and main preventative measures is uniformly high across the Somali population. Indeed, 98 percent of the population are aware of the ongoing COVID-19 pandemic.

Somalis show a good understanding of the most common but also the most serious symptoms associated with COVID-19. When asked to mention up to three COVID-19 symptoms, over 90 percent cite fever and cough. Somalis identify respiratory problems as the third most evident symptom of COVID-19 (mentioned by 75 percent of respondents), despite only the most serious cases showing these symptoms. In contrast, only 2 percent mention fatigue, the third most common symptom according to the World Health Organization (WHO).

Knowledge of preventative measures to curb the spread of the virus is high, with regular handwashing and social distancing being the best-known measures. About 99 percent of respondents mention handwashing and 94 percent mention maintaining physical distance as preventative measures. Fewer respondents (89 percent) mention the use of personal protective equipment. While this is consistent with the WHO's guidance stating that masks and gloves are only effective when complemented with appropriate hygiene, this may also indicate poorer access to such protective equipment, both due to physical scarcity and financial reasons.

Adoption of correct COVID-19 preventative behavior is relatively less widespread as compared to knowledge. While appropriate hygiene routines are implemented, a considerable proportion of Somalis still participate in public gatherings and do not wear protective equipment such as masks when in public. Urban residents are more inclined to adopt COVID-19 preventative behavior than their rural counterparts.

Satisfaction with the government's response to COVID-19 is high, but Somali households consider the pandemic a serious health and financial threat and a source of political concern. Almost all respondents (94 percent) are satisfied with the government's response to the COVID-19 pandemic. Nonetheless, many Somalis consider the pandemic a serious health and financial threat to their households (91 and 88 percent of respondents, respectively). Moreover, Somalis perceive the response to the COVID-19 emergency as a source of political concern that could potentially limit their rights and freedoms. Over half (54 percent) of respondents are worried about the abuse of power and illicit appropriation of resources and funding allocated to COVID-19.

Stress and concerns brought about by the outbreak of COVID-19 are more strongly felt among more vulnerable populations, namely IDP and rural households. IDPs are more likely to consider COVID-19 a threat to their household finances, while concerns about the limitation of rights and the diversion of COVID-allocated resources are more widespread among rural residents. This may signal that such rural populations fear they would be excluded from benefiting from the government's response to COVID-19.

Access to Basic Goods and Services since the COVID-19 Outbreak

Access to basic goods, such as staple foods, medicines, and drinking water varies across Somalia and is especially low for vulnerable populations, namely IDPs, rural, and nomadic households. Over a third (36 percent) of households have been unable to source their preferred staple food when trying to purchase it. Almost one third (31 percent) have irregular access to drinking water. Access to medicine, crucial in the context of the COVID-19 pandemic, is poor overall and even poorer for populations living in remote areas.

Deep-rooted poverty rather than COVID-19 appears to explain poor access to staple food items, while supply factors appear to limit access to sufficient drinking water. Over three quarters (77 percent) of those unable to source their preferred staple food cite financial reasons. Insufficient access to drinking water, in turn, is mostly due to structural supply-side factors.

Nonetheless, COVID-19 contributes to limited access to basic food items, especially in urban areas. Although financial reasons are primarily responsible for limited access to staple foods in urban areas, urban residents are also more likely to cite supply-side reasons than their rural and nomadic counterparts. While 57 percent of urban households report limited access to basic food due to financial reasons, 18 percent mention price increases, and 11 percent cite movement restrictions and limited transport. In turn, financial reasons are mentioned by 83 percent of rural households and 81 percent of nomads.

Access to basic hygiene products, such as running water and soap for handwashing, is fairly good. Most households (85 percent) have enough running water to wash hands when needed. Availability of soap is scarcer, as only 70 percent indicate having enough access to soap when needed.

An important proportion of Somalis lack access to medical services since the COVID-19 outbreak, especially the vulnerable and remote populations. Forty-seven percent of households that tried to seek medical services since March 2020, have not been able to obtain them. With 82 percent of households citing insufficient financial resources as the main reason hindering access to healthcare, entrenched poverty afflicting the Somali population appears to be the root cause.

The pandemic drastically disrupted children's educational activities. On March 18, 2020, the Government of Somalia announced the closure of all primary and secondary schools to curb the spread of the virus that causes COVID-19. Of the 72 percent of households with children aged 6–18 attending

school prior to school closures in March 2020, only 32 percent had children recently engaged in alternative learning activities. Access to alternative learning activities is particularly low in rural areas (24 percent), where already fewer households had children attending school before they closed (64 percent). Such alternative learning activities most commonly take the form of assignments provided by the teacher (63 percent).

Employment and Income Fluctuations since the COVID-19 Outbreak

Somalis have experienced disruptions to regular work activities due to reasons strongly associated with the outbreak of COVID-19. One fifth (20 percent) of respondents had been working prior to COVID-19 but had to stop their work activity following the pandemic outbreak, with business closures due to COVID-19-related legal restrictions cited as the main reason (51 percent of respondents).

The COVID-19 pandemic has disrupted work activities of salaried workers, with some differences by geography and sector. Among salaried workers, who constitute almost half of all respondents, 20 percent were not able to work as usual. Rural salaried workers experience more work disruptions, as 50 percent of respondent report not being able to work as usual at their workplace or remotely. Primarily business closures and being put on furlough are cited as reasons for irregular working patterns since the COVID-19 outbreak. The pandemic outbreak therefore accounts for 58 percent of all work disruptions, with seasonality accounting for most of the remainder. Work activities in the energy supply, and professional services have been disrupted the most, whereas retail trade has been affected the least. Moreover, only 38 percent of respondents that have been able to work normally received their full normal compensation, whereas 27 and 35 percent received a partial or no payment at all, respectively.

COVID-19 has also had disastrous effects on businesses in Somalia. Of the 35 percent of Somali households owning a family business, 83 percent had fewer or no sales since February 2020. COVID-19-related reasons, such as business closure due to government restrictions, fewer customers, and the unavailability of inputs, are cited as the cause of low business activity by 80 percent.

The pandemic has also disrupted household farming activities, albeit to a lesser extent. A quarter (27 percent) of households involved in farming or livestock activities have not been able to carry out their farming activities normally. COVID-19 social distancing policies, such as stay-at-home directives and restrictions on movements constitute the biggest obstacles to farming activities, mentioned by 29 percent and 17 percent of households, respectively.

The disruptions to regular work activities meant that income from all livelihood sources has drastically decreased during COVID-19, including remittances flows. More than three quarters of respondents who reported wage employment, non-farm family business, or farming experienced as their household's source of livelihood over the past 12 months an income loss. The COVID-19 outbreak has also adversely affected remittance flows, another important source of income for Somali households. For half of the respondents receiving remittances[1], the frequency of remittances has decreased since March 2020, and about one third receive lower amounts of remittances. The impact of COVID-19 on this crucial source of livelihood for the Somali population is not unexpected, since the pandemic has adversely affected many economies around the world that are host to the Somali diaspora and consequently the livelihoods of remittance-senders. The cost of receiving remittances from abroad has remained mostly the same.

Household Shocks and Humanitarian Assistance

Since the outbreak of the COVID-19 pandemic, Somali households have been affected by numerous negative shocks, economic and food security-related being most prominent. Economic shocks such as the loss of a wage job, closure of family business, disruption of farming activities, and input/outputs fluctuations have stricken three quarters (74 percent) of the population. In addition, 76 percent of households have experienced increases in food prices, contributing to food insecurity.

[1] In this sample, 10 percent of households report having received remittances from abroad in the last 12 months, which is very low. Other reports (see http://documents1.worldbank.org/curated/en/633401530870281332/pdf/Remittances-and-Vulnerability-in-Somalia-Resubmission.pdf) indicate that between 30 and 40 percent of Somalis receive remittances from abroad. The difference might be due to the overrepresentation of wealthier households due to the nature of the phone survey. For details on this see Annex 7.3.

Natural disasters affected the livelihoods of 46 percent of Somali households. Somalia has a long history of being affected by droughts and flooding, and in 2019–2020 also suffered from the worst invasion of desert locusts in 25 years, leading Somalia to declare a national emergency. Large swarms of these migratory pests are feeding on people's crops and vegetation, ravaging hundreds of thousands of hectares land on which Somali households rely for their livelihood. While the locust invasion has been the most common natural disaster (experienced by 38 percent of households), 24 percent of households have also been affected by drought.

Security incidents and health-related shocks are only experienced by a minority. Security-related incidents such as conflicts or community violence and theft of cash and properties affected 22 percent of households. Health emergencies such as the illness, injury, or death of an income-earning member were experienced by 20 percent of households since the COVID-19 outbreak.

Assistance received from family and friends is the main mechanism households use to cope with shocks. Over half (54 percent) of households report having used this mechanism to cope with a shock they experienced since the outbreak of COVID-19. Households most commonly resort to this coping mechanism irrespective of the shock they face.

Prevalence of humanitarian assistance is generally low, as only 8 percent of household received assistance in cash since March 2020 and 9 percent in in-kind. International organizations are the main provider of both cash and in-kind assistance.

RECOMMENDATIONS

Given limited health infrastructure and low capacity to cope with the health emergency in the Somali context, prevention through appropriate behavioral change will be key to curb the spread of the virus. Despite generally high awareness of COVID-19, evidence suggests that awareness campaigns may not have reached all factions of the Somali population equally, marginalizing vulnerable and remote populations. In light of this:

- Awareness-raising efforts should be emphasized in rural and remote areas.
- Awareness-raising efforts should be specifically tailored to the local context and disseminated through effective and creative means.
- Fighting misinformation and disinformation is key to promoting safe preventative behavior, as false information and myths threaten to worsen the already severe effects of the virus.
- Together with awareness raising efforts, priority should be given to addressing material and social challenges, the first hindering access to basic prevention tools such as hygiene products and medicines and the latter creating a climate for stigmatization which favors the spread of the disease.
- Mitigating long-term effects of COVID-19 on affected populations is key for economic and human recovery from the disease. This can be achieved by providing sustainable livelihood opportunities to the most affected and vulnerable populations and implementing alternative community-led learning programs for disadvantaged children who cannot benefit from digital learning solutions.

1. INTRODUCTION

International experts warn that Somalia might become among the worst-affected countries in the region by the coronavirus disease 2019 (COVID-19), with significant health effects and bleak economic, political, and security-related consequences from which the country may struggle to recover. As of September 21, 2020, there were 3,645 confirmed cases with 98 deaths[2], but given the country's limited testing capacity, the total number of cases is believed to be significantly higher.

Somalia is in the grip of a climate – and now public health – emergency, which is only worsened by two decades of armed conflict, all of which are having a devastating effect on the lives and livelihoods of the Somali people. The pandemic comes in a context where the health capacity to handle such a crisis is close to inexistent, as thirty years of conflict have devastated the medical system. This holds even more in the areas controlled by the Al-Qaeda-linked armed group Al Shabaab (AS), where health infrastructure is almost entirely lacking.

The global health pandemic has also hit a country where food insecurity and displacement brought about by natural disasters, as well as conflict and instability are widespread. Somalia faces repeated cycles of flooding and droughts, swarms of locusts that threaten food security and cause forced displacements, leading to thousands of people living in crowded camps, making hygiene and social distancing difficult.

Political insecurity across the territory is also likely to have a counter-effect on government actions to contain the disease. AS has not allowed any information to emerge from its controlled areas and the armed group has been using the pandemic for its propaganda, claiming that COVID-19 was spread "by the crusader forces who have invaded the country and the disbelieving countries that support them."[3] This rhetoric indicates the group may oppose medical help from international aid agencies, much as it resisted most food aid during the 2010–2012 famine.

To address the needs of the Somali population, socioeconomic data is critical to help monitor the impact of the crisis and implement a prompt and tailored response. However, due to social distancing measures and mobility restrictions to prevent the spread of COVID-19, face-to-face surveys are currently not feasible. Phone surveys are an alternative data collection method. The World Bank has launched a global initiative to implement high-frequency phone surveys to track the responses to and socioeconomic impacts of COVID-19. The WBG-financed phone surveys will not only monitor the economic impacts of COVID-19 over time but will additionally inform the design of government policies and WBG operations to mitigate the negative impacts.

The COVID-19 Somali High-Frequency Phone Survey (SHFPS) was implemented with two overarching goals:

1. Gather socioeconomic data on Somali households over time, to monitor the socioeconomic impacts of COVID-19.
2. Formulate recommendations to inform the design of country policies and responses to mitigate the negative impacts of COVID-19.

In doing so, the SHFPS will focus on the socioeconomic impacts of COVID-19, and provide data to the Government of Somalia, the World Bank, and development partners in near real-time, supporting an evidence-based response to the crisis.

The World Bank contracted Altai Consulting to interview approximately 3,000 households, randomly selected from all states and population types across Somalia, in several waves, to assess the socioeconomic impacts of COVID-19.

---

[2] Somalia Ministry of Health (https://moh.nomadilab.org/), accessed September 21, 2020.

[3] BBC News, April 2020.

2. SUMMARY OF METHODS AND SURVEY IMPLEMENTATION

This report presents findings from the first round of the Somali High-Frequency Phone Survey (SHFPS). This section will present the survey methodology (i.e. sampling and the survey instrument) and data collection, including implementation challenges. The remainder of the report will explore demographic and socioeconomic characteristics of the surveyed population (section 3), knowledge of COVID-19 and associated behaviors (section 4), and impacts of COVID-19 on the lives of the Somali population, in terms of employment and income fluctuations, access to basic goods and services, and exposure to shocks (section 5). Finally, conclusions and recommendations are drawn, with the goal of supporting the development of data-informed relief programs to the Somali population.

KEY TAKEAWAYS

- The SHFPS has been designed to be representative at the national level and to provide representative and reliable estimates at the state level and by population type. The survey initially targeted a sample of 3,000 households, but the proposed sample size had to be slightly reduced due to implementation challenges.
- The survey questionnaire was designed to cover important and relevant topics, including household-level and individual-level sociodemographic characteristics, knowledge of COVID-19 and adoption of preventative behavior, access to basic goods and services, access to social assistance, impacts of COVID-19 on economic activity and income sources, as well as households' exposure to shocks and coping mechanisms.
- The SHFPS was implemented from June 18 to July 23, 2020 by Altai Consulting with technical and financial support from the World Bank. The SHFPS sampled 2,811 households across Somalia using phone numbers selected through a Random Digit Dialing (RDD) protocol. The response rate is nearly 80 percent.

2.1. SUMMARY OF METHODOLOGY

2.1.1. SAMPLING

The sampling methodology has been designed to provide nationally representative and reliable estimates[4] at the state level[5] and by population type. Six states–Galmudug, HirShabelle, Jubaland, Puntland, Somaliland, and South West–, Banadir, and four population groups (i.e. urban, rural, nomads, and internally displaced persons (IDPs) in settlements) are considered. The sampling frame was the 2014 UNFPA Population Estimation Survey of Somalia (UNFPA PESS 2014). Please refer to Annex 7.1 for more details on the sampling methodology and allocation.

To obtain reliable estimates at the state level and by population group, the SHFPS initially targeted a total of 3,000 households. However, due to implementation challenges related to reaching certain population groups via phone (see section 2.2.1 below), the target sample size was lowered to 2,750. At the end of the data collection, 2,811 household had been interviewed, with 2,659 of those interviews being complete.[6] Please refer to Annex 7.1 for details on the actual sample realization across states and by population types.

[4] With a margin of error between 2.8 and 5.3 percent. The Margin of Error is calculated as MoE=z*sqr((p(1-p)/n)) where *z* is the z-score associated with the chosen Confidence Level (usually the CL is 95%, so z=1.96), *p* is the proportion (a conservative measure usually utilized in this formula is 50%) and *n* is the sample size.

[5] Technically, Banadir is not itself a Federal Member State, but an administrative region (Banadir Regional Administration - BRA). In fact, the Federal Republic of Somalia is composed of five member states (HirShabelle, South West State, Jubaland, Galmuduug, and Puntland), BRA, and the claimed State of Somaliland.

To ensure the final sample is representative of the distribution of Somali households by state and population type, each household observation needs to be adjusted by a sampling weight. Sampling weights were calculated with two goals: i) to correct for the selection bias generated by the Random Digit Dialing (RDD) protocol, and ii) to ensure representativeness of the population at the state level and across population types. The final weight combines a propensity score weight and a post-stratification weight. In a first step, the propensity score weighting corrects for the selection bias generated by the random digit dialing approach adopted in the SHFPS. In a second step, post-stratification weighting ensures the sample is representative by state and population type. Please refer to Annex 7.4 for more details on the methodology used to compute the sampling weights and its limitations.

2.1.2. SURVEY QUESTIONNAIRE

The survey questionnaire was designed to cover important and relevant topics, including household-level and individual-level sociodemographic characteristics, knowledge of COVID-19 and adoption of preventative behavior, access to basic goods and services, access to social assistance, impacts of COVID-19 on economic activity and income sources, as well as households' exposure to shocks and coping mechanisms. The table below summarizes the topics covered by each module.

Table 1: Questionnaire modules and topics covered

Questionnaire module	Topics
Sociodemographic characteristics	- Household-level demographics (household size and composition, mode of living, household assets) - Individual-level demographics (age, gender, education, and relationship to household head)
Knowledge of COVID-19 and adoption of preventative behaviors	- Awareness of COVID-19 pandemic - Knowledge of COVID-related symptoms - Knowledge of preventative measures - Adoption of preventative behaviors - Knowledge of and satisfaction with government's response to COVID-19
Access to basic goods and services	- Access to basic goods (i.e. staple food, medicine, drinking water, running water and soap for handwashing) - Access to basic services (medical, education, and financial services)
Employment (salaried employment, non-farm business, farming activities)	- Employment status of the respondents - Sector and type of employment - Ability to work as usual and reasons for not being able to work normally
Income fluctuations	- Changes in sources of livelihoods since COVID-19 outbreak - Changes in frequency and amount of remittances received from abroad since COVID-19 outbreak
Food insecurity	- Whether household ran out of food - Whether members of the household were hungry but did not eat - Whether members of the household went without eating for a whole day
Concerns about COVID-19	- COVID-19-induced concerns related to health of other household members, household finances, rights and freedoms, security risks/crime/violence, and political concerns
Shocks and coping mechanisms	- Household exposure to shocks since COVID-19 outbreak - Coping strategies adopted by household
Aid and assistance	- Receipt of cash and in-kind assistance since mid-March - Main institutional sources of assistance

2.2. Survey Implementation

The SHFPS was implemented from June 18 to July 23, 2020 by Altai Consulting with technical and financial support from the World Bank. The SHFPS sampled 2,811 households across Somalia using phone numbers selected through a Random Digit Dialing (RDD) protocol. Interviews were successfully

completed for 2,659 out of these 2,811 households, corresponding to a completion rate of 95 percent.[7] Over 15,000 phone numbers were contacted in total as part of the RDD protocol. The response rate[8], calculated as the percentage of reached eligible households willing to participate in the survey, is nearly of 80 percent. The average survey duration was 28 minutes.

2.2.1. IMPLEMENTATION CHALLENGES

The implementation of the SHFPS posed several challenges:

- *Slow conversion rate:* over 15,000 numbers had to be called in order to reach 2,811 eligible households, indicating that most numbers were either invalid or switched off.
- *Hard-to-reach populations:* rural and nomadic households were harder to reach due to lower phone ownership and other lifestyle considerations. For more information, please refer to section 7.2.3.
- *Self-identification of population types:* unlike face-to-face surveys, households were classified into population types (i.e. rural, urban, nomadic, and IDP respondents) through self-identification. The IDP sample captures IDPs in settlements. Since RDD made it difficult to interview IDPs living in IDP settlements, the sample size is small and estimates for this population group should be interpreted with caution. For more information, please refer to section 7.2.4.

[7] Sudden unavailability of the respondent, such as the respondent hanging up or the phone running out of battery in the middle of the interview, is the main reason for incomplete interviews.

[8] The response rate is calculated as the number of interviewed households over the number of reached eligible households, thus excluding unreached households (i.e. invalid numbers or failure to contact the household) and households that were reached but were not eligible to participate in the survey (as determined by the minimum age requirement of the main respondent and sampling criteria).

3. SOCIODEMOGRAPHIC CHARACTERISTICS

KEY TAKEAWAYS

- At the household level, the sample is representative of the Somali population by state and population type.
- Sample composition in terms of household size, age, and gender is similar to previous population estimates. However, the sample is biased towards more educated individuals, who are often overrepresented in phone surveys.
- Joblessness is high and has further deteriorated since the outbreak of the COVID-19 pandemic.
- Main sources of livelihoods are wage employment, revenues from farming and livestock activities, and revenues from non-farm family business.

3.1. SAMPLE PRESENTATION: KEY DEMOGRAPHICS

The first objective of this section is to assess the representativeness of the survey sample beyond the characteristics used in the weighting procedure. To this end, we present the main demographic characteristics of the population approached for this survey and compare it, where possible, to the characteristics of the population of Somalia as measured by the Somali High-Frequency Survey (SHFS 2017–18) and the Population Estimation Survey of Somalia (PESS 2014).[9] Note that whenever findings are presented as "XY percent of the population …", we refer to "population of households". Sampling weights were computed at the household level, so this survey is representative of the population composed of Somali households and not of individuals. Whenever individual-level results are presented, findings will be worded as "XY percent of respondents", to avoid any confusion.

The second objective of this section is to analyze the main characteristics of households in terms of their employment activity and income sources, thereby providing insightful context for the analyses presented in the following sections.

All statistics provided during this and the following sections of the report refer to statistics from this particular survey, unless stated otherwise.

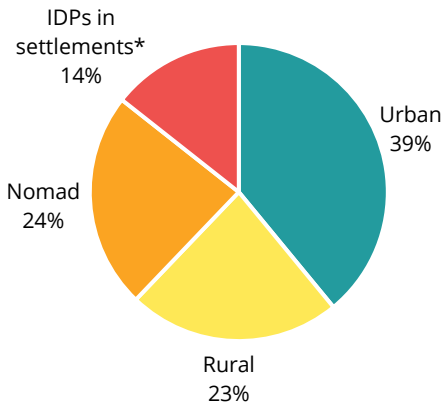
3.1.1. HOUSEHOLD CHARACTERISTICS

3.1.1.1. Sample representativeness

The total weighted household population amounts to 2.1 million households, of which 39 percent are urban households, 23 percent are rural households, and 24 percent are nomads. IDPs are defined as internally displaced persons living in an IDP camp. According to this classification, 14 percent of households identify as IDPs in 2020. Almost a quarter of the household population resides in Somaliland (26 percent), followed by South West State (17 percent), Puntland (16 percent), and Banadir (15 percent).

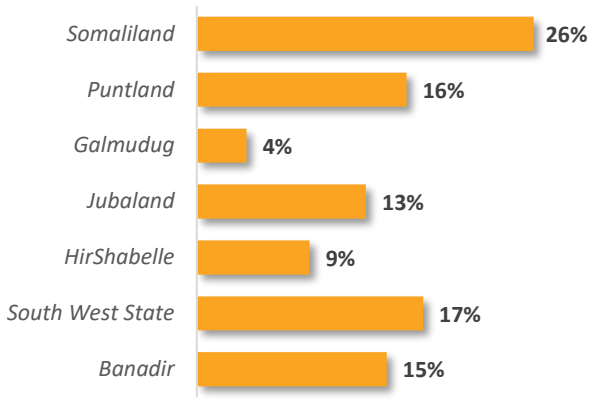
[9] UNFPA (2016). Educational Characteristics of the Somali People. Analysis on PESS 2014.

Figure 1: Population (weighted), by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

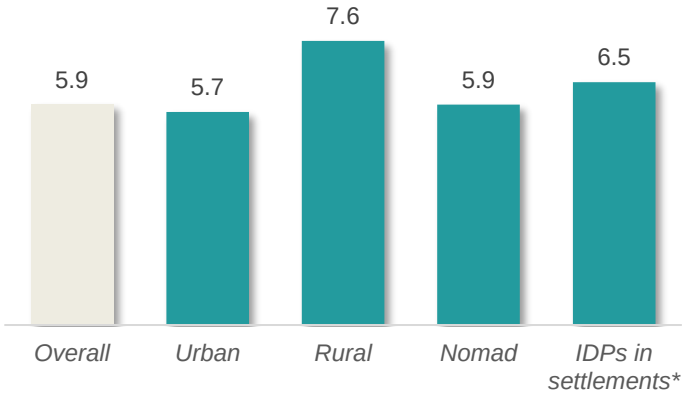
Figure 2: Population (weighted), by state



3.1.1.2. Household composition

The average household has 5.9 members. This figure is very close to, although slightly higher than, the average household size captured by the SHFS II (5.4 members per household). IDP households are the largest households with an average of 7.6 members, compared to 6.5 for nomadic households, 5.7 for rural households, and 5.1 for urban households.

Figure 3: Average household size, by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

3.1.2. RESPONDENT CHARACTERISTICS: AGE AND GENDER

The key demographic characteristics of the households included in the phone survey are very similar to those obtained from the SHFS 2017–18, providing confidence in the data and ensuring robustness to the household level analyses. The following subsection focuses on the characteristics of respondents, defined as those who picked up the phone, in order to shed light on the representativeness of the sample compared to the overall population.

3.1.2.1. Gender, age and status of respondents

The gender split in the phone survey reflects the Somali population, with a slight over-representation of women. While 54 percent of surveyed respondents are women, there are 49 percent in the overall population according to the PESS 2014.

Most respondents (82 percent) are the head of their household. This is a common characteristic of phone surveys: household heads are more likely to own or use the household mobile phone than other members of the household (i.e. parents, children). A lower proportion of female respondents were the heads of their households as compared with male respondent (77 vs. 88 percent), in line with findings from the SHFS 2017–18. Young Somalis (between 18 and 29 years old) represent 39 percent of respondents, which is close to the statistic drawn from the PESS 2014.

Figure 4: Gender of respondents

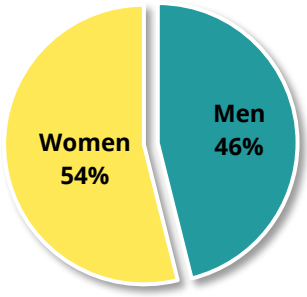


Figure 5: Status within household of respondents

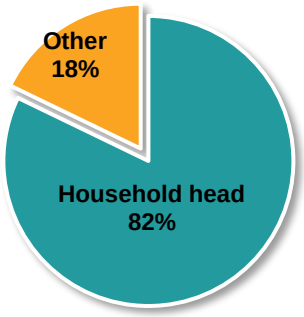


Figure 6: Age of respondents

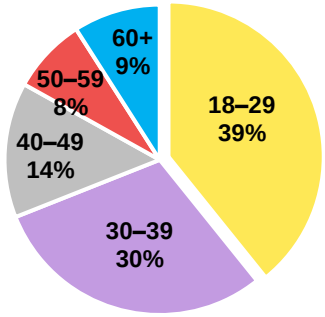
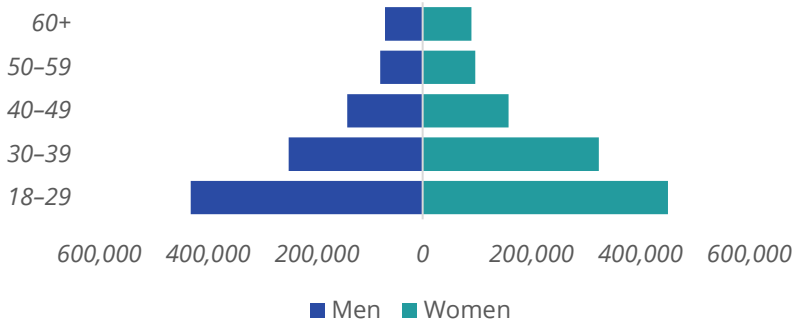


Figure 7: Age composition of respondents, by gender



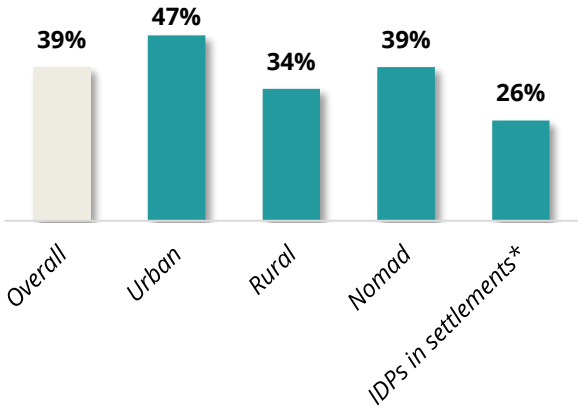
3.1.2.2. Age and gender distribution across states and population types

Urban respondents are, on average, younger than respondents in other population groups. Half of the sample of urban respondents (47 percent) are younger than 30 years, while this proportion lowers to 39 percent for IDPs and nomads, and to 34 percent for rural respondents. This is consistent with the structurally younger composition of the urban population in Somalia compared to rural, IDP, and nomadic populations, explained by the rural-to-urban economic migration of youth.

The gender distribution is similar across different population types. The gender distribution does not differ across urban residents, rural households, and IDPs as approximately 55 percent of respondents are female. Consistent with the gender distribution differences measured by the PESS 2014, we find that nomadic respondents have a slightly lower share of female respondents (50 percent).

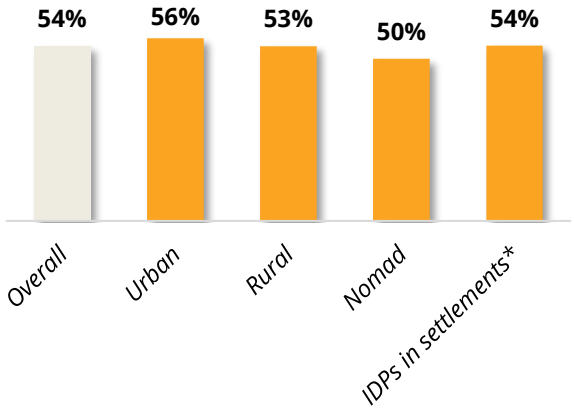
In Somaliland, with nearly half of respondents younger than 30, residents, on average, are younger than in other states. HirShabelle, Jubaland, and South West State have relatively older respondents. The highest share of women is also found in South West State (64 percent), while the lowest is in Somaliland (45 percent).

Figure 8: Share of respondents 18–29 years old, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 9: Share of women respondents, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 10: Share of respondents 18–29 years old, by state

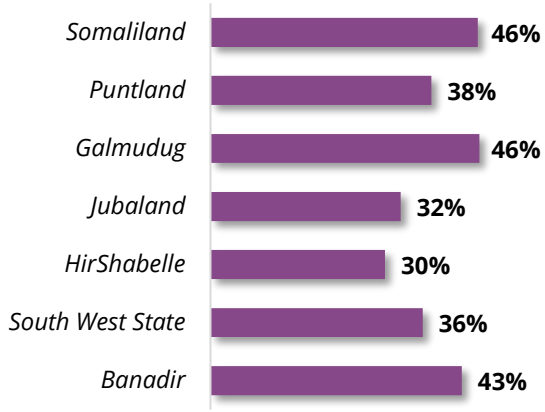
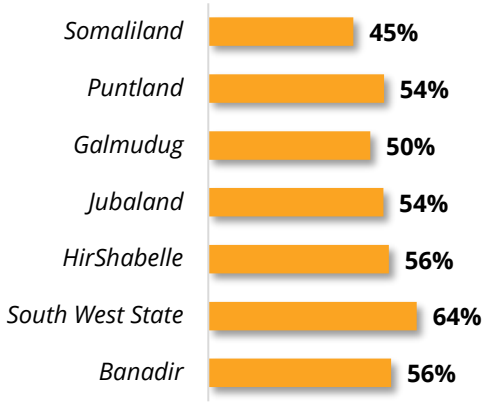


Figure 11: Share of women respondents, by state



3.2. EDUCATION

Respondents in the sample are more educated than the overall population of Somalia. Forty-seven percent of all respondents never completed primary school, compared to 63 percent of the overall population aged 18 years or more (SHFS 2017–18).

There is a large education gap between men and women. Fifty-five percent of women compared to 40 percent of men have never completed primary school. This gap is greater than for the overall population. According to the PESS 2014, 72 percent of male Somalis never completed primary school against 80 percent of females. Moreover, 24 percent of respondents attended Quranic school, with a much smaller gender gap in attendance.

Educational attainment is higher among urban residents, for whom education is more accessible. Fifty-four percent of nomadic and 49 percent of rural respondents have never completed primary school, compared with only 37 percent of urban respondents. Since educational facilities are concentrated in the urban centers, the opportunities for school attendance and educational progression are slightly better for urban dwellers compared with people living in rural and nomadic areas.

Figure 12: Highest level of education of respondents

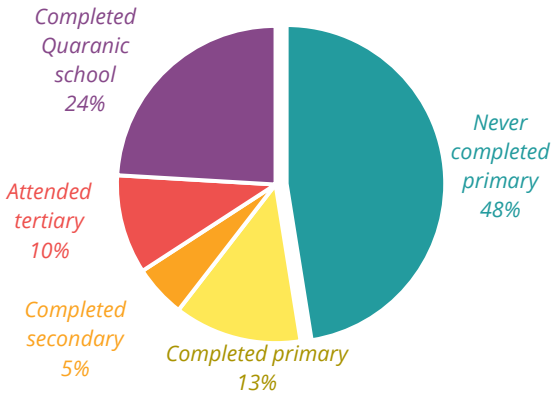
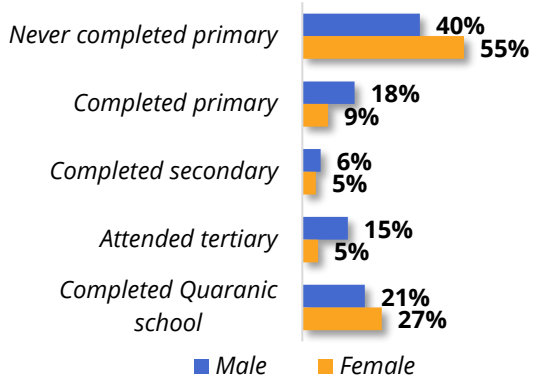


Figure 13: Highest level of education of respondents, by gender



3.3. EMPLOYMENT AND INCOME SOURCES

3.3.1. JOBLESSNESS

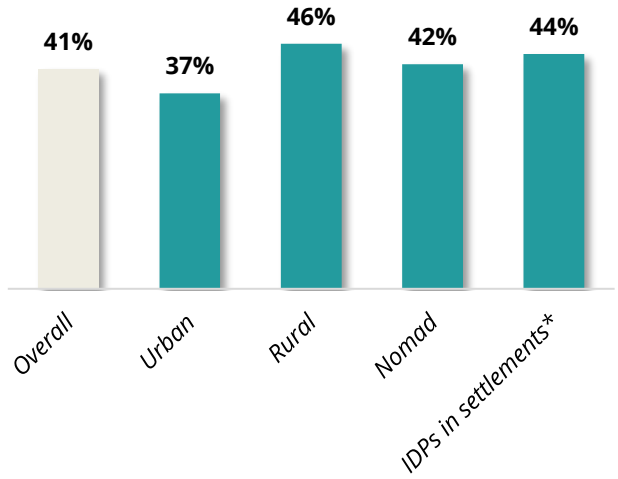
Joblessness is high in Somalia. Jobless respondents are those who do not work, irrespective of whether they are seeking work.[10] Forty-one percent of respondents were neither working at the time of the survey nor before the COVID-19 outbreak in March 2020.[11] This proportion is much higher among women: 53 percent of women declared being without employment compared with only 27 percent of men.

Prevalence of joblessness is highest among older, uneducated, and rural respondents. Unsurprisingly, the highest share of jobless individuals is found among individuals aged 60 years or older (66 percent). However, it is worth noting that a large share of Somalis aged 18–29 years have already been jobless prior to March 2020 (42 percent). Respondents who have never completed primary school record the highest rates of joblessness (50 percent). Moreover, respondents from rural households display the highest share of jobless respondents compared to urban respondents. While almost half (46 percent) of rural respondents are jobless, only 37 percent of urban respondents are without work.

[10] *Joblessness* refers to not working population, regardless of whether the population is seeking employment or not. *Inactivity* refers to persons not working and not seeking employment.

[11] This figure should not, however, be interpreted as an unemployment rate since it includes both unemployed and inactive individuals.

Figure 14: Share of jobless respondents at the time of the survey and prior to COVID-19, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 15: Share of jobless respondents at the time of the survey and prior to COVID-19, by age

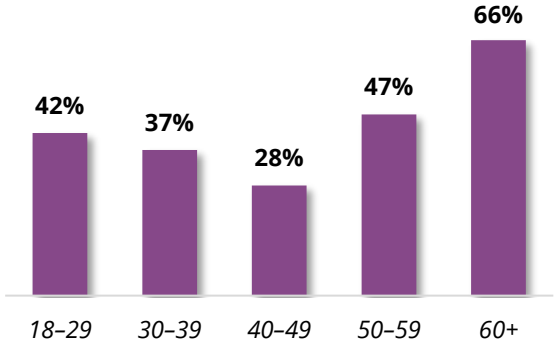


Figure 16: Share of jobless respondents at the time of the survey and prior to COVID-19, by state

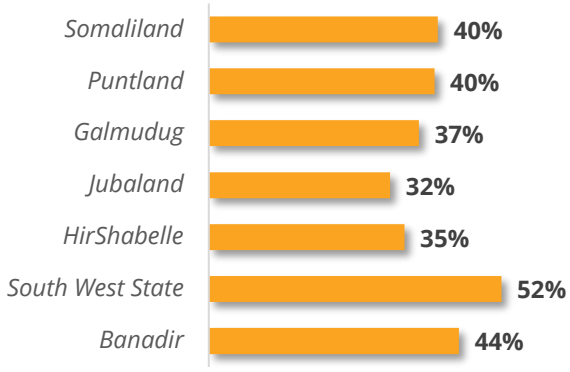
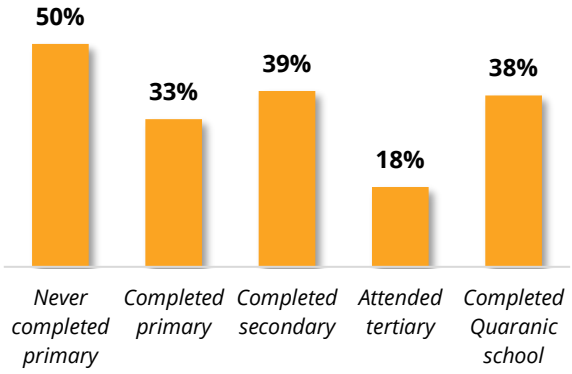


Figure 17: Share of jobless respondents at the time of the survey and prior to COVID-19, by education



3.3.2. EMPLOYED RESPONDENTS

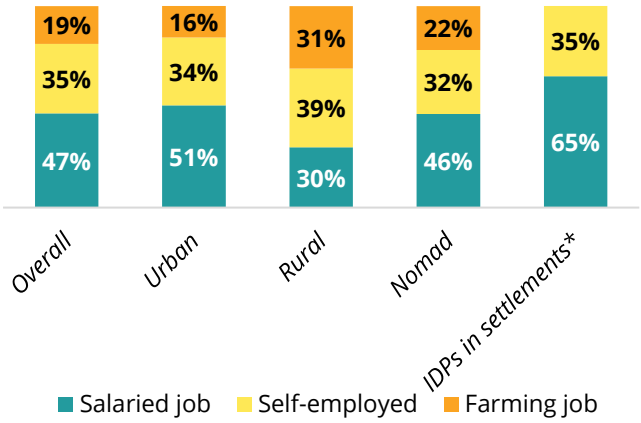
3.3.2.1. Employment status

The majority of the working respondents are employed in a salaried job (47 percent), while 35 percent work for their own or family-owned non-farming business and 19 percent work on their family farm.

The share of respondents working for their own (or family owned) non-farming business is similar across population types (between 32 and 39 percent of all respondents). A higher share of respondents that are salaried workers is found among urban respondents than among rural respondents (51 versus 30 percent). Around 31 percent of rural and 22 percent of IDP respondents work on their family farm.

There are strong gender differences in the type of work respondents are engaged in. More than half (57 percent) of the surveyed Somali men currently work as a paid employee for someone else, compared to 32 percent of women. On the other hand, women tend to work more for their own (or family owned) non-farming business (49 percent vs. 24 percent for men). However, men and women engage in family farming activities in similar proportions.

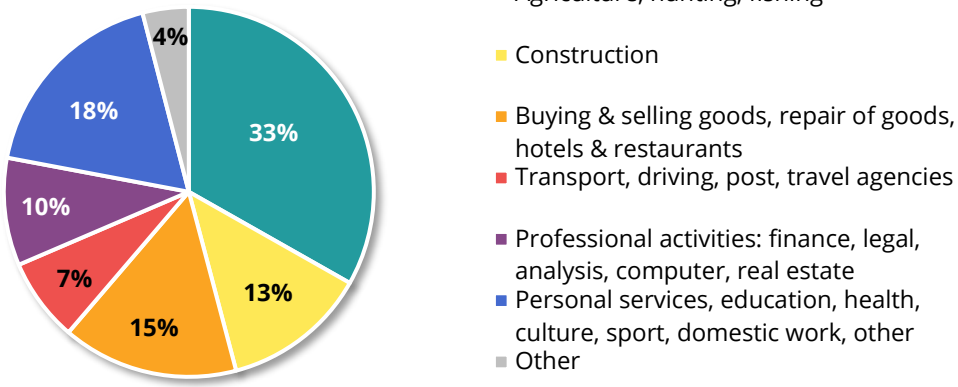
Figure 18: Current employment, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

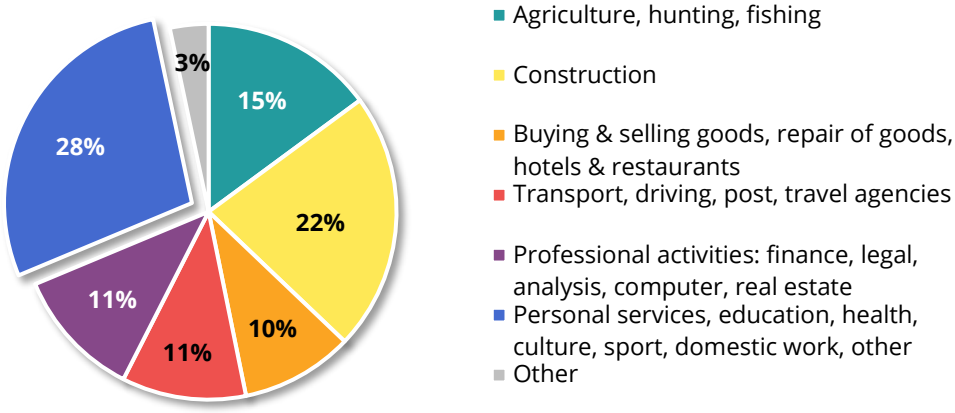
Figure 19: Current employment, by gender

Figure 20: Main sector of activity for all currently employed workers



Salaried workers are mainly employed in the personal services sector (28 percent), followed by the construction sector (22 percent) and agriculture sector (15 percent of working respondents).

Figure 21: Main sector of activity for salaried workers



3.3.2.1. Households involved in a non-farm family business

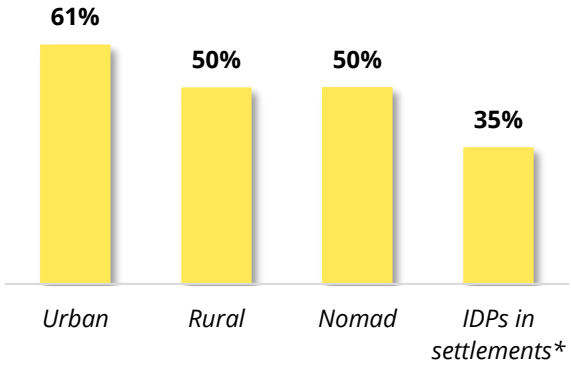
More than half of the working respondents (52 percent) affirm that their household has been operating a non-farm family-owned business at some point in 2020. The share of households operating a non-farm family-owned business is the highest among urban households (61 percent) and

lowest (35 percent) among IDP households. The higher prevalence of non-farm family-owned business among urban populations is due to the fact that those family enterprises are usually small shops or structures devoted to personal services (i.e. beauty salons, barber shop), typically found in a urban context.

Over a third of family businesses (34 percent) operate in the agricultural sector, followed by the retail trade and hospitality sector, and personal services sector. This suggests that, although those family businesses are not directly related to farming land, a good share of them deals with the processing or selling of agricultural or livestock products.

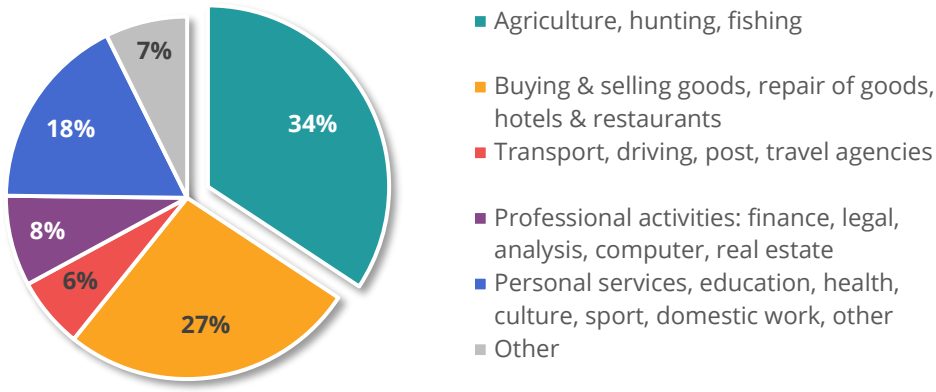
Figure 22: Share of currently working respondents whose household is operating a family business

Figure 23: Share of currently working respondents whose household is operating a family business, by population type



**IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.*

Figure 24: Main sector of activity for non-farm family-owned businesses

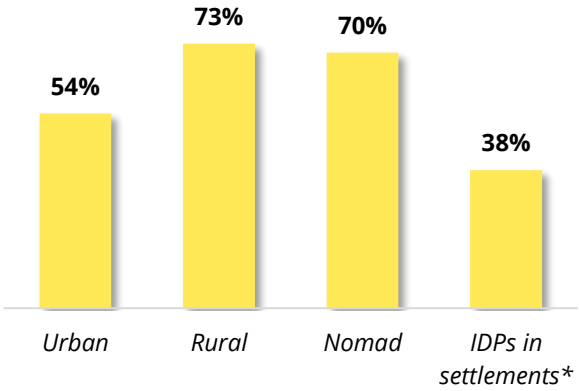


3.3.2.2. Households involved in farming or livestock activities

Among the working respondents, 60 percent affirm that their household has been involved in farming- or livestock-related activities on the household land during 2020. This proportion is lower, but also significant, for urban households: 54 percent of current workers in urban centers state that they or someone in their household have been involved in farming or livestock activities, compared to 70 percent of nomads and 73 percent of rural workers.

Figure 25: Share of currently working respondents whose household is involved in farming and/or livestock activities

Figure 26: Share of currently working respondents whose household is involved in farming and/or livestock activities, by population type

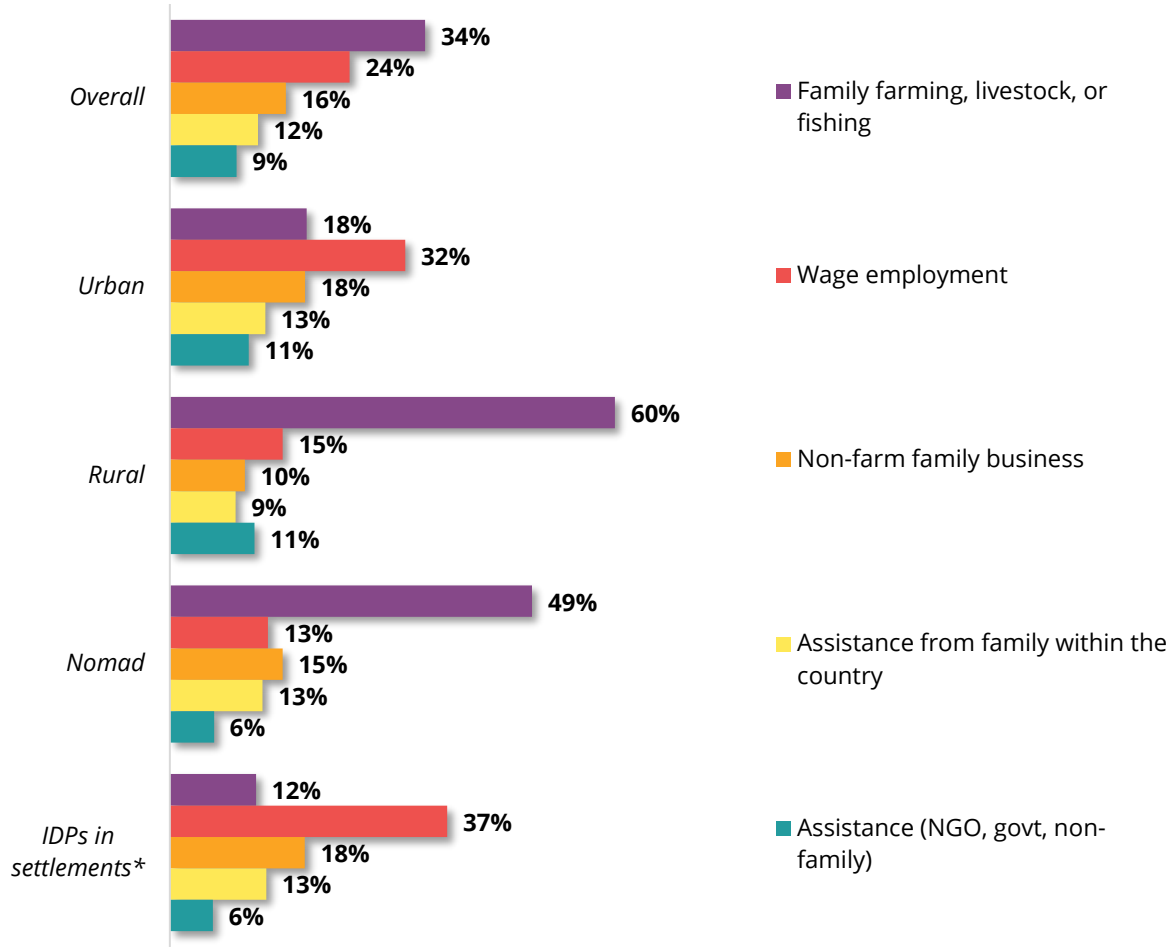


**IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.*

3.3.3. INCOME SOURCES

During the 12 months preceding the survey, farming, livestock, or fishing activities were the main source of income for Somali households, followed by wage employment, and non-farm family business revenues. Remote populations mainly rely on farming activities, whereas urban residents' livelihood sources are more diversified. Income streams from family farming or livestock activities are particularly important for rural and nomadic households, reported by 60 percent and 49 percent of households, respectively. IDP and urban households' sources of income are more diverse: wage employment of household members is the most cited source of income, followed by non-farm family business revenues, and family farming revenues. Assistance from family within the country is a source of income indicated by 9 to 13 percent for all population types. Despite the evident differences in the type of livelihood sources between urban and non-urban populations, the extent of income source diversification is similar among those populations, with households relying on one income source, on average, across all population types.

Figure 27: Share of income source in the past year, by population type



Note: the sum of all percentages for each population type category is higher than 100%, as households sometimes indicated several income categories.
**IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.*

4. AWARENESS OF COVID-19, BEHAVIORS, AND CONCERNS

KEY TAKEAWAYS

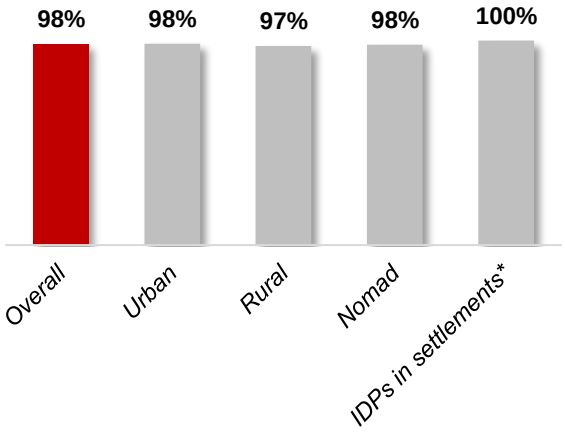
- Awareness of the COVID-19 disease, associated symptoms, and main preventative measures is uniformly high across the Somali population.
- Adoption of correct COVID-19 preventative behavior is high although less widespread, especially when it comes to wearing masks in public spaces. But there is evidence that awareness is key for inducing correct behavior, despite other access and psychological barriers.
- Satisfaction with the government's response to the COVID-19 pandemic is generally high. Yet, Somali households consider the pandemic a serious financial and health threat and are worried about the political risk brought about by COVID-19, namely the potential misuse and illicit appropriation of resources devoted to the COVID-19 response.

4.1. AWARENESS OF COVID-19, SYMPTOMS, AND PREVENTATIVE MEASURES

4.1.1. AWARENESS OF COVID-19 AND ASSOCIATED SYMPTOMS

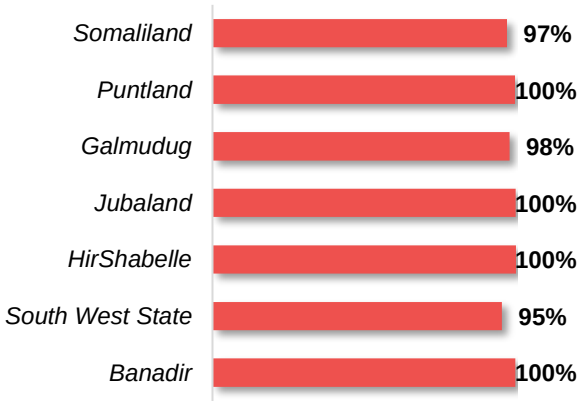
The Somali population across all states and population types show a high level of awareness of the ongoing COVID-19 pandemic. Indeed, 98 percent of the population is aware of the ongoing COVID-19 pandemic. Awareness does not substantially differ by population type, gender, and age group. Awareness rates also do not substantially differ across states, ranging from 95 percent and 97 percent in South West State and Somaliland respectively, to almost 100 percent in Banadir, HirShabelle, Jubaland, and Puntland.

Figure 28: Share of the population aware of COVID-19 pandemic, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 29: Share of the population aware of COVID-19 pandemic, by state



Somalis show a good understanding of the most common and also the most serious symptoms associated with COVID-19. When asked to mention up to three COVID-19 symptoms, over 90 percent cite fever and cough. These are two out of the three most common symptoms identified by the World

Health Organization (WHO), as shown in Table 2 below.[12] Yet, only 2 percent mention tiredness, the third most common symptom according to the WHO.

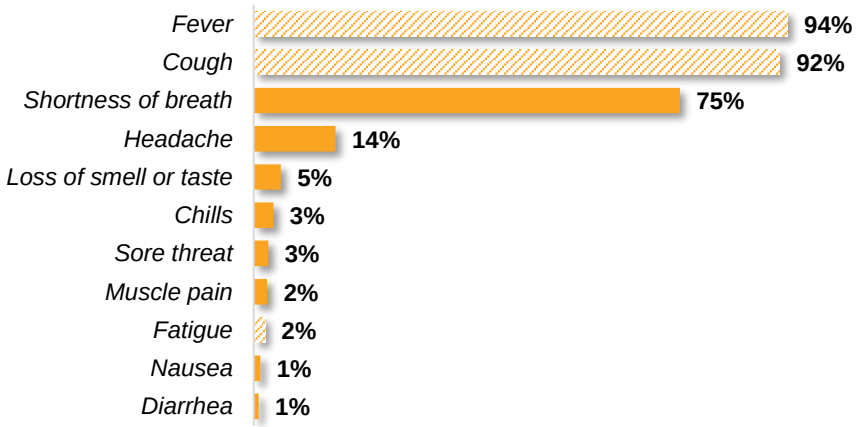
Somalis identify respiratory problems as the third most common symptom of COVID-19 (mentioned by 75 percent of respondents). Despite shortness of breath being present only in the most serious cases, its persistent mention by Somalis may be due to the fact that respiratory problems are a very specific symptom of COVID-19, while fatigue or weakness can be typical of other diseases present in the region such as malaria or the common flu.

Knowledge of COVID-19 symptoms is lower among the elderly (over 60 years old), who are less likely to mention symptoms of fever and shortness of breath. Knowledge of COVID-19 symptoms is uniformly high across states, population types, and gender.

Table 2 : List of symptoms associated with COVID-19 according to WHO

Category	Symptoms
Most common symptoms	- Fever - Dry cough - Tiredness
Common symptoms	- Aches and pains - Sore throat - Diarrhea - Conjunctivitis - Headache - Loss of taste or smell - Skin rash, or discoloration of fingers or toes
Serious symptoms	- Difficulty breathing or shortness of breath - Chest pain or pressure - Loss of speech or movement

Figure 30: Share of respondents aware of potential COVID-19 symptoms



Note: read as "94% of respondents mentioned fever as a symptom of COVID-19".

[12] WHO, 2020.

Figure 31: Share of the population aware of fever, cough, and shortness of breath as COVID-19 symptoms, by population type

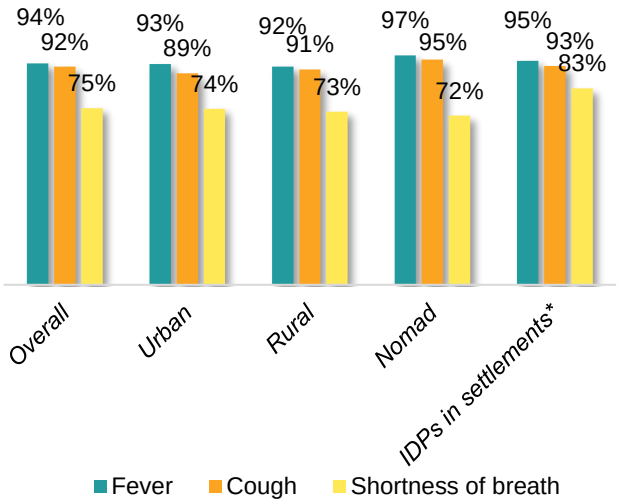
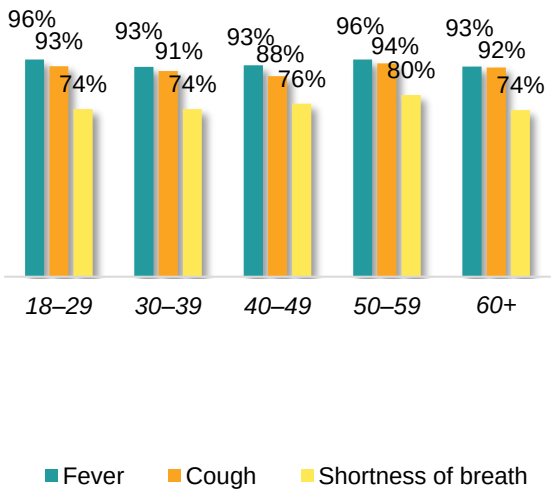


Figure 32: Share of the population aware of fever, cough, and shortness of breath as COVID-19 symptoms, by age group



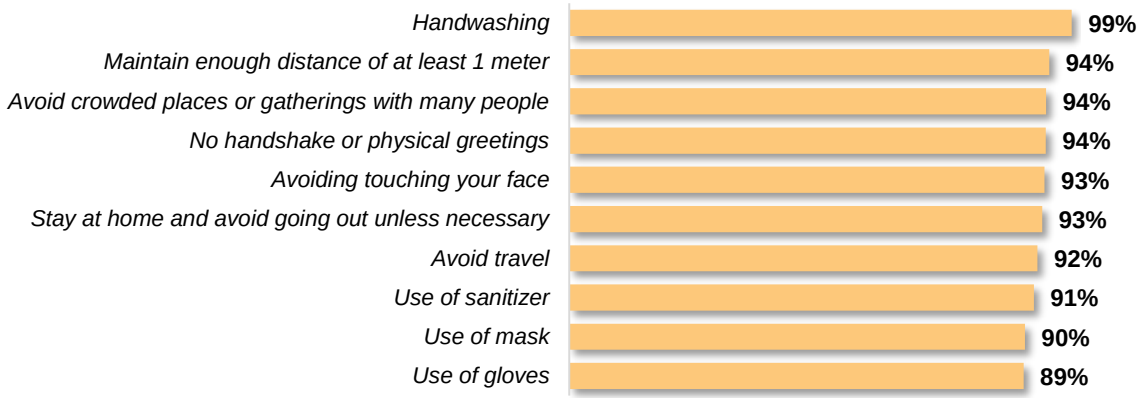
IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

4.1.2. AWARENESS OF COVID-19 PREVENTATIVE MEASURES

Knowledge of preventative measures is high, with each measure being mentioned by close to 90 percent of respondents. The population appears to be particularly well aware of measures related to hygiene (i.e. handwashing, avoid touching face, and use of alcohol-based sanitizers), social distancing, and movement restrictions (i.e. avoiding gatherings, maintaining at least 1-meter distance, and staying home unless necessary). Awareness of personal protective equipment (i.e. face masks or gloves) as preventative measures is only slightly lower (mentioned by 89 percent).

Greater knowledge about handwashing and social distancing measures is consistent with the WHO's guidance stating that handwashing and social distancing are the basic preventative measures and that the use of face masks is only effective when complemented with appropriate hygiene practices.[13] However, this may also indicate poorer access to such protective equipment, both due to physical scarcity and financial reasons. The use of protective equipment is mentioned significantly less by nomadic households compared to residents of urban centers.

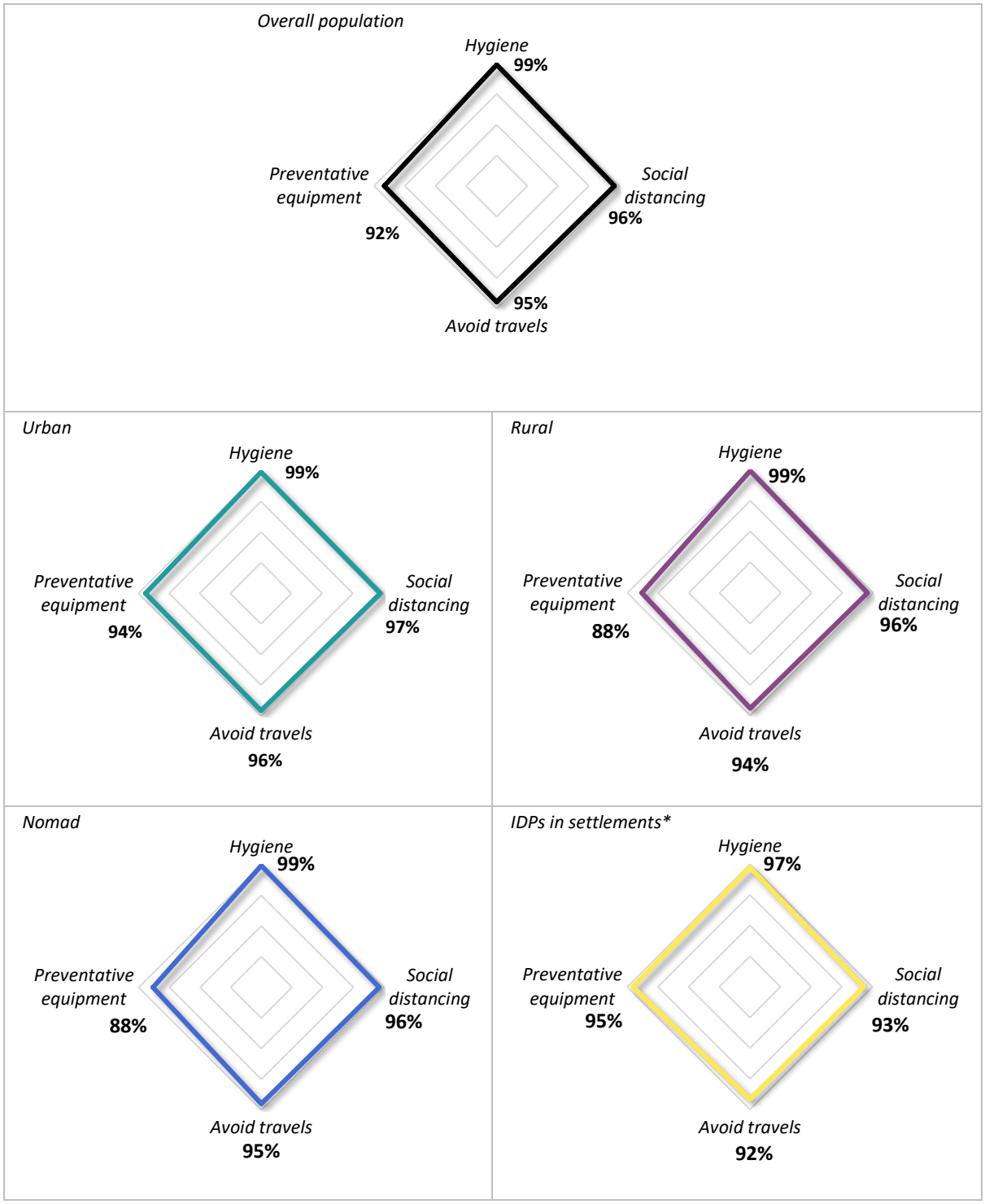
Figure 33: Share of the population that mentions each COVID-19 preventative measure



Note: read as "99% of the population mentioned handwashing as a preventive measure against COVID-19".

[13] WHO, March 2020.

Figure 34: Share of the population that mentioned measures related to hygiene, social distancing, movement restriction, and preventative equipment[14], by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

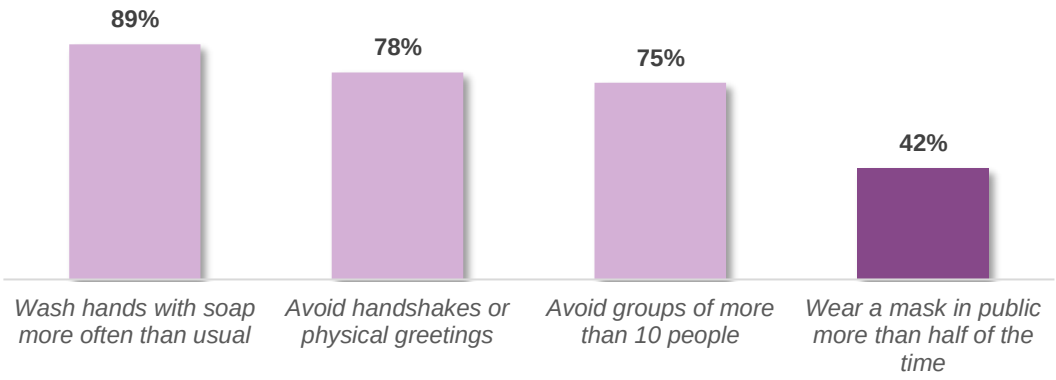
[14] **Hygiene measures** include: i) use of sanitizer, ii) regular handwashing, and iii) avoid touching own face. **Social distancing measures** include: i) avoid handshakes or physical greetings, ii) avoid crowded places or social gatherings, and iii) maintain at least 1-meter distance**. Avoid travel measures** include: i) stay home unless necessary and ii) avoid travel altogether. **Protective equipment measures** include: i) use of gloves and ii) use of masks.

4.2. PREVENTATIVE BEHAVIORS AGAINST COVID-19

Awareness of preventive measures does not necessarily translate into the adoption of correct preventive behavior. Despite widespread awareness, adoption of COVID-19 preventative behavior is less common. While Somalis wash their hands more frequently and avoid unnecessary physical greetings (89 and 78 percent of respondents, respectively), less than half (42 percent) of respondents regularly wear a mask in public spaces.

Nonetheless, evidence suggests that awareness of each COVID-19 precaution is associated with adoption of that preventative measure. There is a strong correlation[15] between awareness of a COVID-19 preventative measure and its adoption. Among respondents who had not mentioned handwashing, avoiding physical greetings, avoiding gatherings, and wearing a mask in public, the adoption rate of the corresponding safe practices fell by almost half.

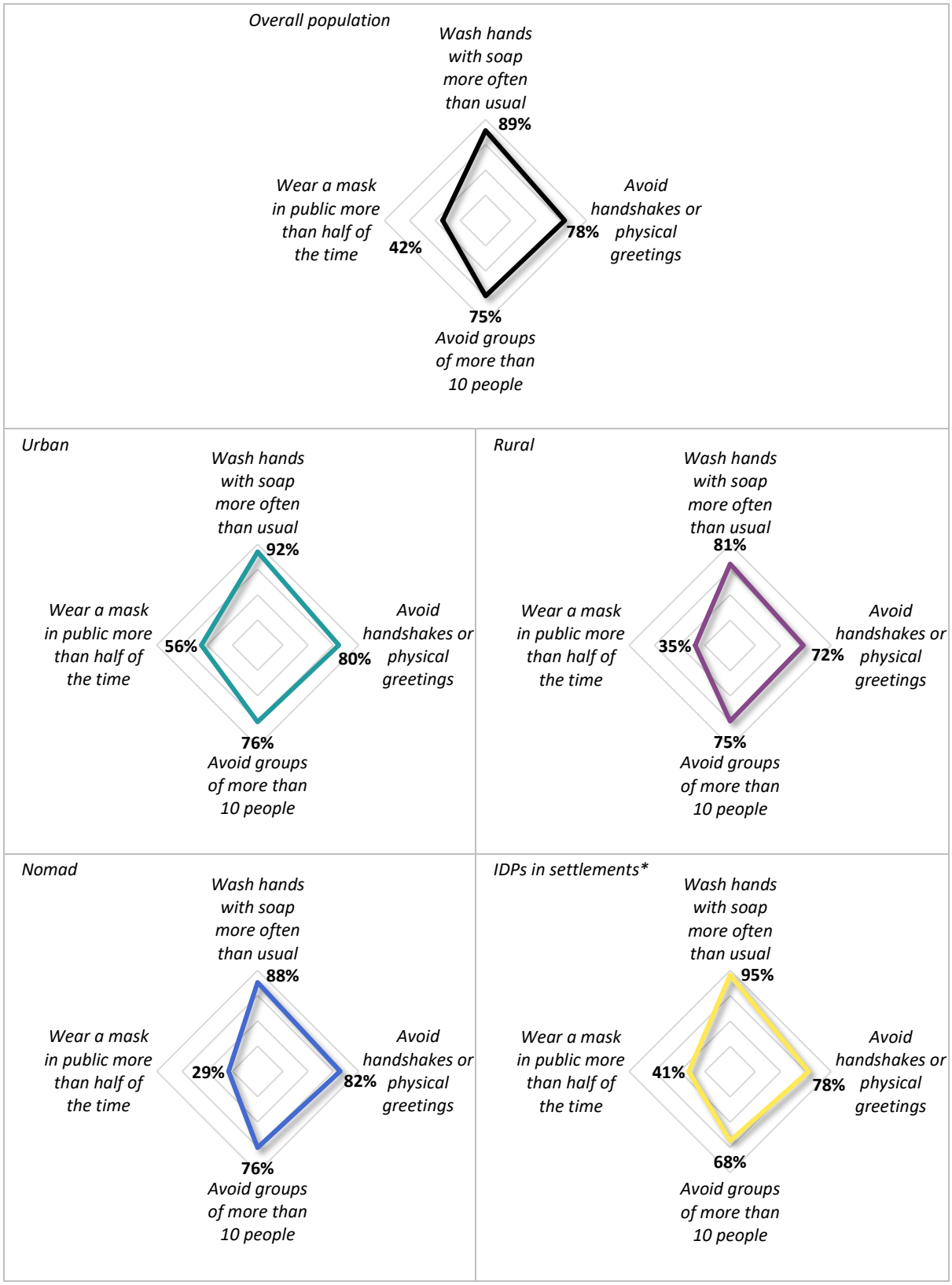
Figure 35: Share respondents who adopt COVID-19 preventative behaviors



Regularly wearing a mask in public spaces as protection against COVID-19 is especially uncommon among rural and nomadic populations. Only 35 and 29 percent of rural and nomadic respondents regularly wear a mask in public spaces, compared to 56 and 41 percent of urban residents and IDPs, respectively. Differences in knowledge of preventative equipment against COVID-19 (see Figure 34) unlikely explain these differences in mask wearing. Awareness rates are similar between urban and rural residents, as well as between IDPs and nomads. However, limited access to such personal protective equipment together with fear of social stigma and discrimination in part could prevent adoption of this preventative behavior. Moreover, lifestyle differences could also create less need for regular and strict preventative behavior among rural and nomadic residents. For instance, wearing a mask is more effective at preventing COVID-19 for urban dwellers in crowded public spaces than for nomads herding their livestock in the open field.

[15] Corresponding p-value of this correlation is 0.0001, i.e. the correlation is highly statistically significant.

Figure 36: Share of respondents who adopted preventative behaviors during the week prior to the survey, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Regular use of masks varies significantly across states. Banadir and Jubaland residents are the most regular users, with 63 and 59 percent wearing a mask most or all of the time when in public spaces. In contrast, only between 30 and 40 percent regularly wear a mask when in public in all other states. This may be explained by the fact that Banadir is the epicenter of COVID-19 in Somalia and has more than ten times the number of COVID-19 cases compared to South West State and HirShabelle[16], and as such residents in Mogadishu (located in Banadir) are more eager to protect themselves with the use of shielding equipment.

Regularly wearing a mask in public increases with educational attainment. While only 30 percent of respondents who never completed primary school report wearing a mask most or all of the time, 76 percent of respondents who attended some form of tertiary education have adopted this preventative measure.

Figure 37: Share of the population that declared wearing a mask in public most or all of the time during the week prior to the survey, by state

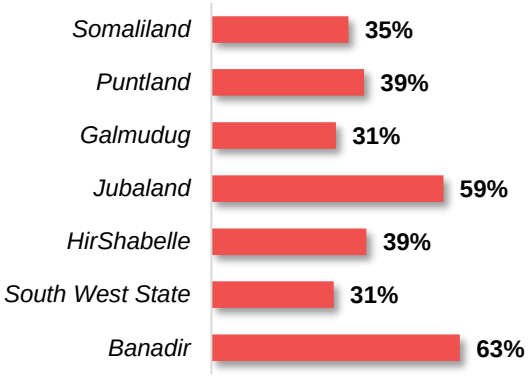


Figure 38: Share of respondents wearing a mask in public most or all of the time during the week prior to the survey, by age

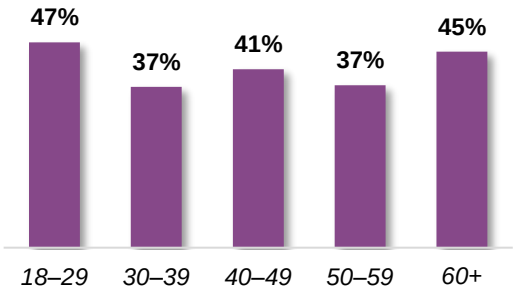
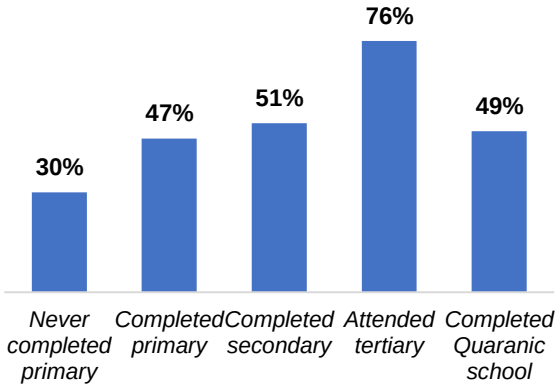


Figure 39: Share of respondents wearing a mask in public most or all of the time during the week prior to the survey, by education



[16] Somalia Ministry of Health, August 2020 (https://moh.nomadilab.org/).

4.3. CONCERNS ABOUT COVID-19

4.3.1. SATISFACTION WITH GOVERNMENT COVID-19 RESPONSE

Somalis are most aware of the government's COVID-19 policies related to avoiding any unnecessary movements (63 percent of respondents) and closure of educational institutions (58 percent of respondents). Awareness of restrictions on domestic and international travel is more moderate (34 and 30 percent, respectively). Only few are aware of the closure of mosques and non-essential businesses as well as of the government's relief interventions, such as the expansion of health infrastructure and testing capacity, or the provision of humanitarian assistance.

Lower awareness of government health and relief interventions among rural and nomadic respondents suggests that not all population groups might benefit equally from the government's COVID-19 response. Despite country-wide health and relief interventions, rural and nomadic households refer to the expansion of the health capacity, the increase in testing locations and the provision of food assistance significantly less than urban residents. For instance, while 8 percent of urban residents are aware of the government's efforts to open new clinics and testing locations, only 6 percent of nomads and 3 percent of rural respondents are. This signals that the health and relief interventions may not be catering to more remote areas.

There is more awareness about the curfew enforcement in the Banadir region. Increased awareness may be explained by the fact that an indefinite curfew has been introduced in Mogadishu, located in Banadir, since April 15, 2020 which is effective from 8pm to 5am. This curfew affects all businesses and activities except health workers, medical personnel, and food distributors (classified as essential businesses).[17] Moreover, more residents from Banadir compared with residents from other states mention the opening of testing locations, suggesting the government's efforts in countering the spread of COVID-19 may be focused on the epicenter of the pandemic in Somalia.

[17] WorldAware, 2020.

Focus Box 1: COVID-19 policies in Somalia

Since the outbreak of the COVID-19 pandemic in Somalia, the Federal Government of Somalia (FGS) and the Federal Member States (FMS) have issued several directives and statements, either written or verbal, aimed at mitigating the spread of COVID-19. These directives were revised and issued in increasing frequency as the number of cases rose.[18]

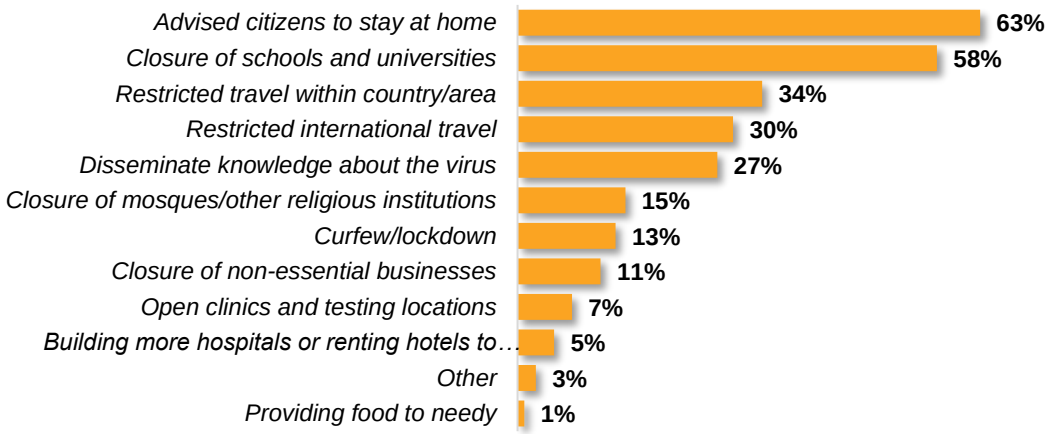
Most directives are related to compulsory measures such as social distancing, the closure of academic institutions, and the restriction of population movements. Five of these impose suspensions on international and domestic passenger flights and restrict land transportation, while seven directives relate to border closures and six impose a night curfew. Two directives introduce a tax exception on basic foods items and two directives relate to the registration of burial activities and deceased persons.

Somaliland also introduced similar measures, which were all lifted in June 2020. This included the resumption of flights, sporting activities, re-opening of schools and other learning institutions, in addition to the re-opening of all hotels, which had previously been closed.

As of August 2020, many restrictions have been lifted by the FGS and FMS, such as:

1. The ban on international flights. Flights resumed on August 3, but all travelers are required to provide a negative COVID-19 test certificate issued no more than 72 hours prior to travel. Domestic flights resumed on July 5.
2. All learning institutions and religious centers were set to resume by August 15 as directed by the FGS.
3. Land borders have been opened and general circulation has resumed.
4. The government issued guidelines to reduce congestion in public transport vehicles, with buses ordered to reduce their passenger capacity by half on each trip. This applies to within-city transportation and buses traveling outside the cities.

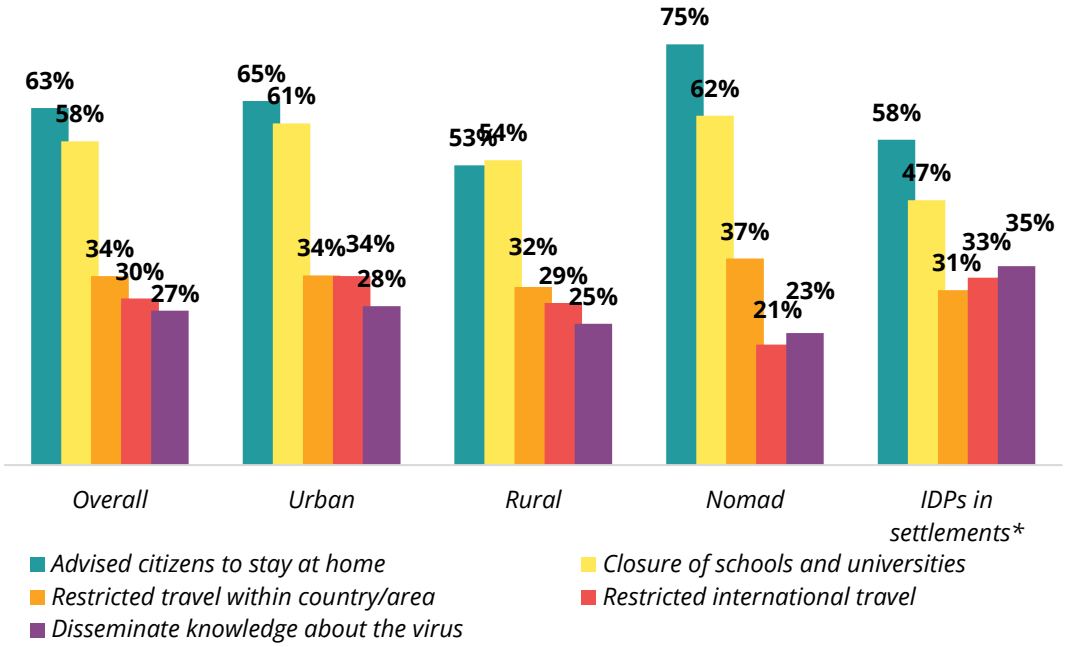
Figure 40: Share of the respondents aware of COVID-19 measures taken by the government



Note: read as "63% of respondents mentioned 'Advised citizens to stay at home' as a measure taken by the government during the COVID-19 pandemic".

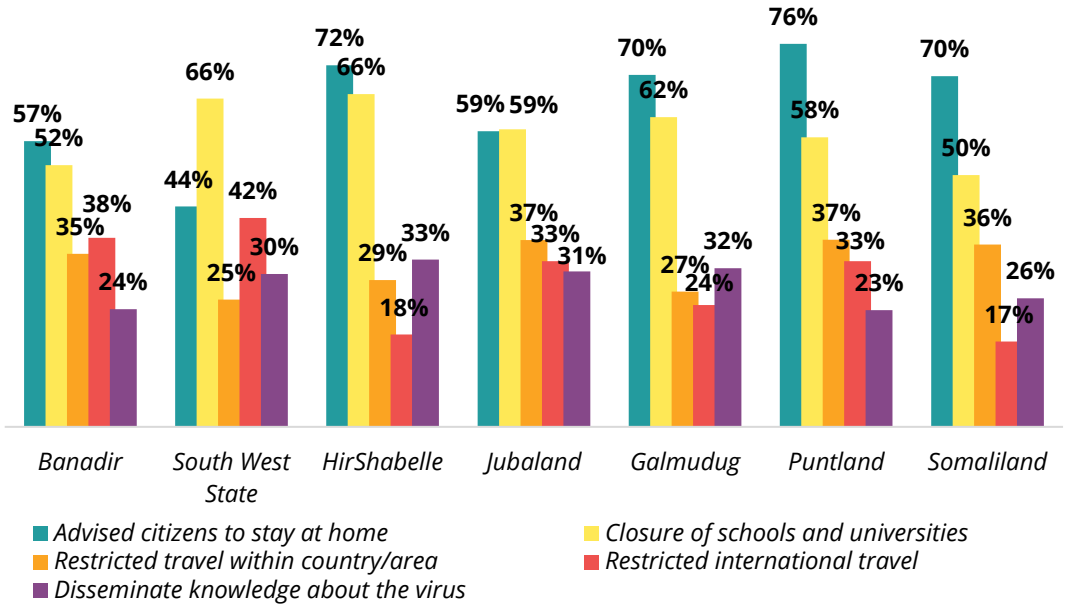
[18] https://reliefweb.int/sites/reliefweb.int/files/resources/Overview%20of%20COVID-19%20directives%202.pdf

Figure 41: Share of the respondents aware of the five main COVID-19 measures taken by the government, by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 42: Share of the respondents aware of the five main COVID-19 measures taken by the government, by state



Satisfaction with the government's COVID-19 response is high (94 percent of respondents), but there are significant differences between states. Satisfaction levels are slightly lower in Banadir, where only 90 percent of residents appear to be satisfied with the way the government has handled the COVID-19 response. The few who are not satisfied cite lack of financial assistance as the main reason for discontent (54 percent of those not satisfied), followed by a low supply of medical equipment and delayed government action (mentioned by 38 and 27 percent of those not satisfied, respectively). Another complaint, especially mentioned by the rural population, is the government's inability to reach populations in remote areas through its awareness raising campaigns, contributing to feelings of exclusion from government action.

Figure 43: Satisfaction with government's COVID-19 response

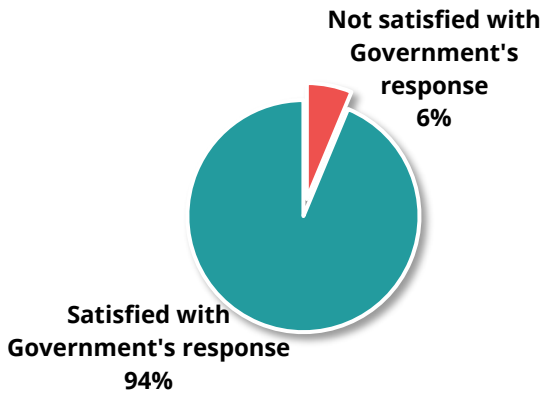


Figure 44: Satisfaction with government's COVID-19 response, by state

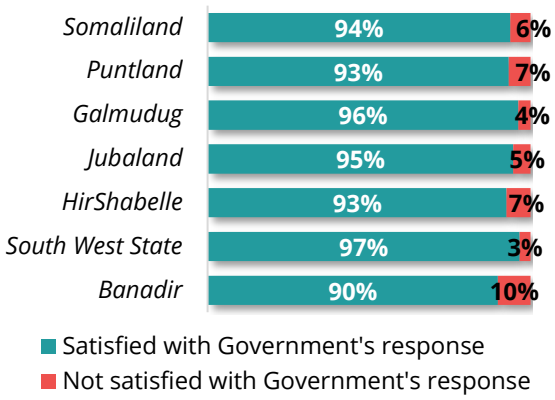
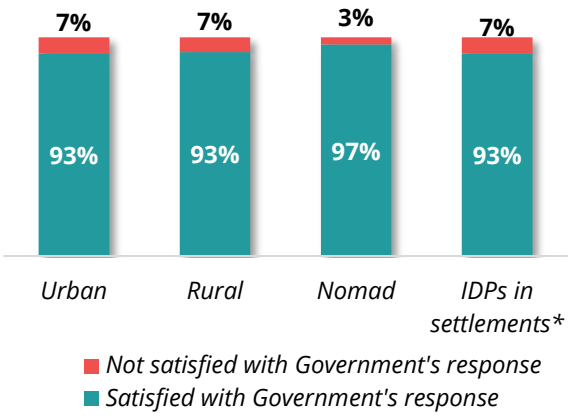
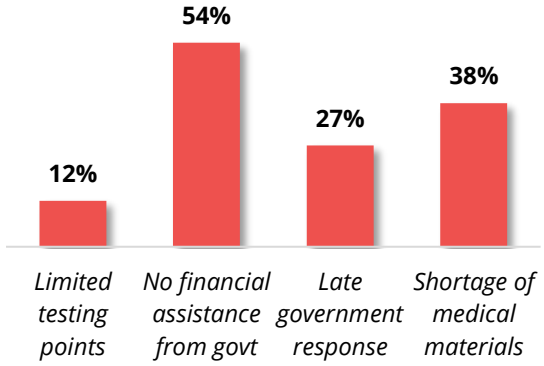


Figure 45: Satisfaction with government's COVID-19 response, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

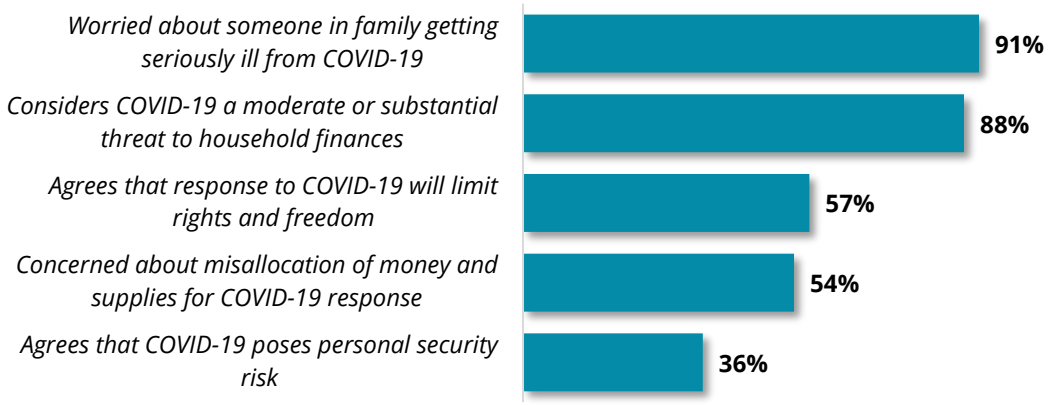
Figure 46: Major sources of discontent among those dissatisfied with government's COVID-19 response



4.3.2. Concerns about COVID-19

Despite high levels of satisfaction with the government's COVID-19 response, Somalis very much consider the COVID-19 pandemic a serious threat to household finances and health, as well as a source of political concern. Health and financial concerns are the most common, as over 88 percent of the respondents mention COVID-19 constitutes a threat to their household finances and for the health of their household members. The response to the pandemic also evokes political concerns, with 57 percent of respondents perceiving it as potentially limiting their rights and freedom. Further, over half of respondents (54 percent) are concerned about the potential illicit appropriation of resources and funding allocated to the COVID-19 response. COVID-19 also represents a threat to security, as 36 percent of respondents affirm that the pandemic increases their exposure to crime and violence.

Figure 47: Share of respondents concerned about COVID-19-related risks



Note: read as: "88% of respondents consider COVID-19 as a moderate or substantial threat to household finances".

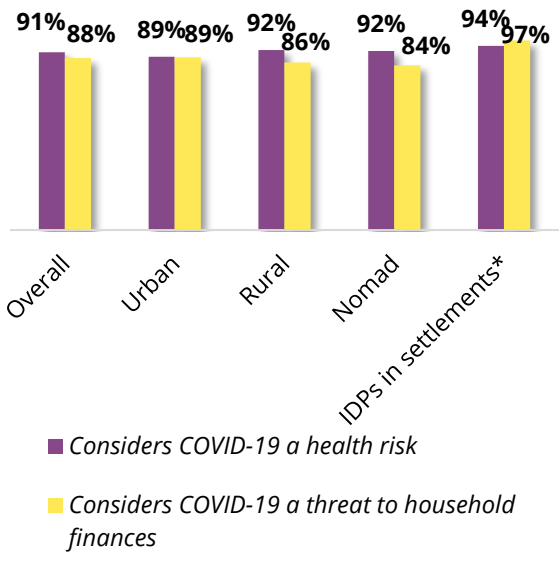
Stress and concerns brought about by the COVID-19 outbreak are more strongly felt among more vulnerable populations, namely IDP and rural households. IDPs are more likely to consider COVID-19 a threat to their household finances than any other population group. Concerns about the limitation of rights and freedom and the diversion of COVID-allocated resources are more widespread among rural residents than among urban residents. This may signal that rural populations fear that they would be excluded from benefiting from the government's COVID-19 response.

COVID-19 has come in a time of political tension, as Somalia is slowly preparing for holding its first widely inclusive elections in over five decades. Three previous presidential elections were decided in a system whereby lawmakers were voted in by about 14,000 clan delegates. In December 2017, the National Independence Electoral Commission (NIEC) launched a five-year plan to draft electoral laws, plan voter registration, and work on setting up the right mechanisms to hold elections.[19] Since then, talks have been ongoing between the Federal Member States and the Central Administration. Despite significant progress made in the past months, with leaders from the five Members States and the President and Prime Minister meeting in Dhusamareb (Galmudug) to discuss the way forward,[20] tensions remain high. The outcome of the discussion on the electoral format will define the future of the Somali leadership.

[19] Deutsche Welle, 2020.

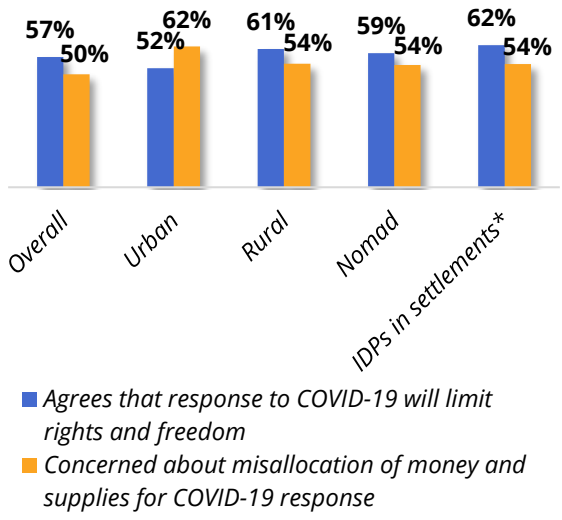
[20] Africanews.com, 2020.

Figure 48: Share of respondents considering COVID-19 a health risk or financial threat, by population type



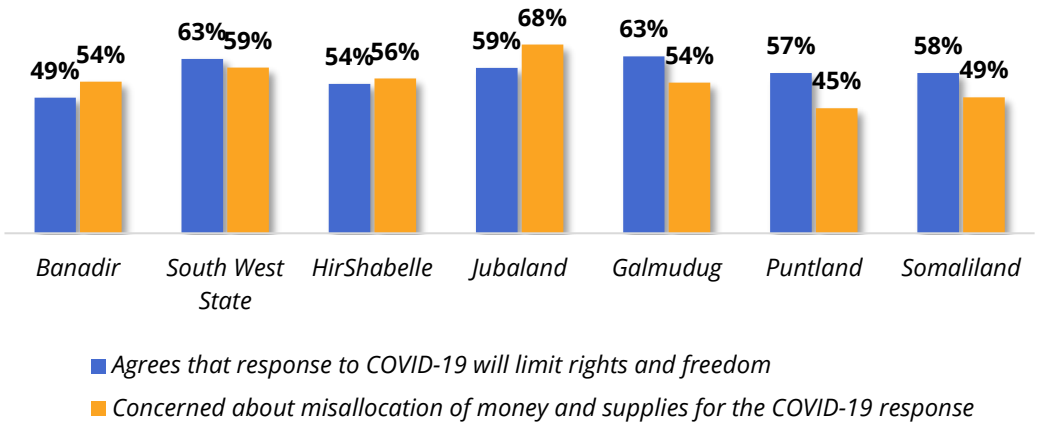
*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 49: Share of respondents concerned about COVID-19-related political risks, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 50: Share of respondents concerned about COVID-19-related political risks, by state



Focus Box 2: Somalis, COVID-19, and stigma

Stigma around COVID-19 in Somalia has complicated the response to COVID-19. Stigma has been identified as preventing many Somalis from getting tested and from taking the proper measures to curb the spread of COVID-19. It is widely believed that the number of COVID-19 cases is much higher than what is being reported and that the possible carriers of the virus within the community are hiding it, fearing social stigma and discrimination.

The long history of segregation due to occupation, clan, identity, and social economic status in Somalia creates fear of discrimination in people once they disclose exhibiting symptoms of the virus.[21] Many people who experience symptoms do not reveal this to anyone to avoid being stigmatized or quarantined. In addition to this, suspicion and mistrust are raised even among close relatives at the first attempt to self-isolate. This further decreases the incentive to quarantine or disclose symptoms to health authorities.

Finally, religious considerations also play a role. If a family member is confirmed to have deceased from COVID-19, they will not be buried according to standard Islamic funeral rituals, and this may lead to further discrimination against the family, especially in remote communities. There is also a religious misconception that suggests “real” Muslims cannot contract COVID-19.[22] As a result of this, there are anecdotal reports that people who wear masks have been verbally abused and accused of not believing in Islam.

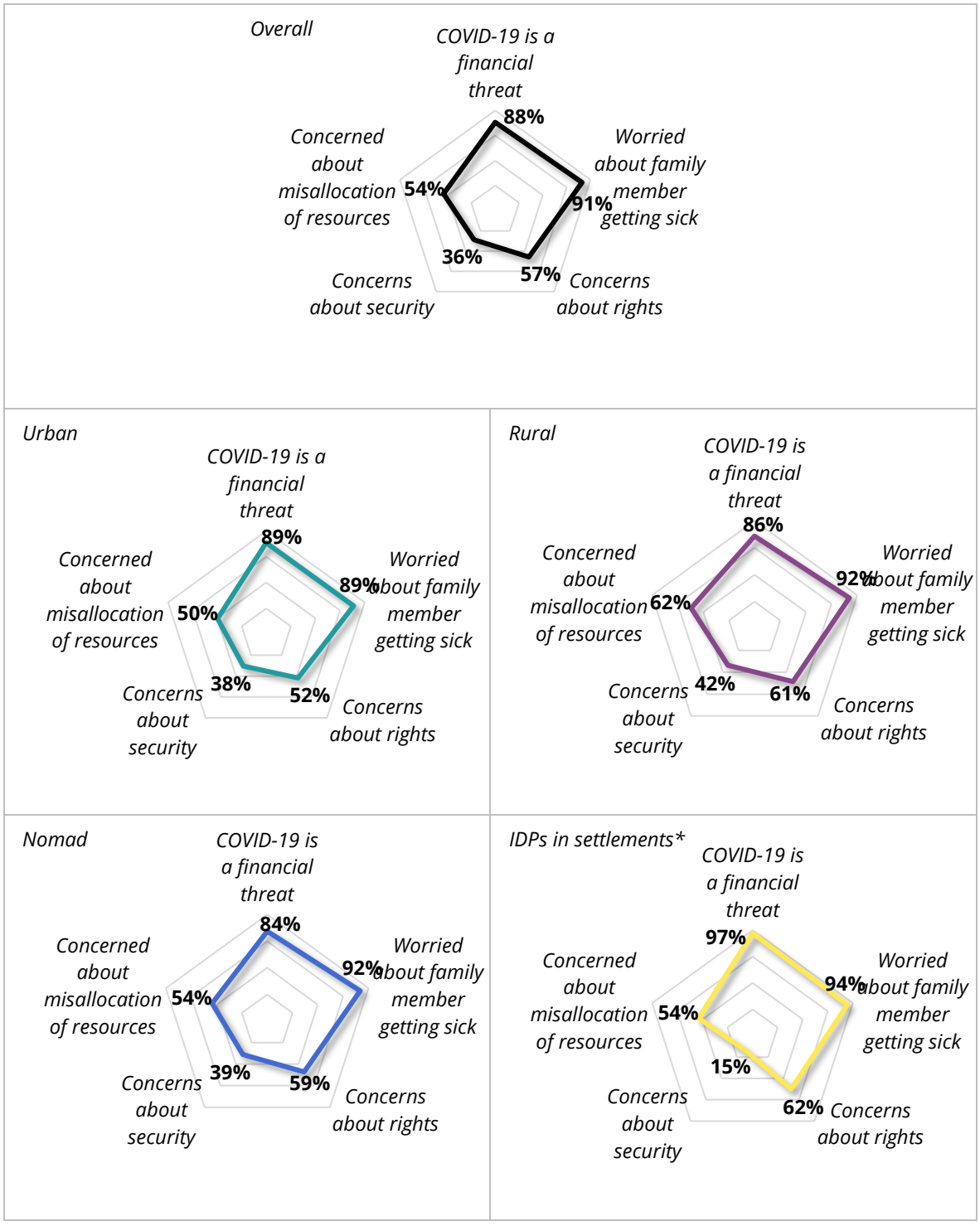
It is unsurprising that stigma is associated with COVID-19 in Somalia, given that many Somalis also refrain from disclosing that they are affected by other conditions such as tuberculosis and HIV, which many are uncomfortable disclosing due to social and religious reasons.

Perceptions of limited government capacity to fight COVID-19 further negatively affect incentives to disclose the contraction of the disease. Due to poor healthcare capacity and lack of resources to contain the spread of COVID-19, many people believe they would not get any assistance from the government and are better off not getting tested.

[21] CARE, July 2020.

[22] Jerving, August 2020.

Figure 51: Share of respondents concerned about COVID-19-related risks, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

5. IMPACTS OF COVID-19 ON THE SOMALI POPULATION

KEY TAKEAWAYS

- Many Somalis lack access to basic goods and services, critical during COVID-19, especially vulnerable populations (IDPs, nomads, and rural residents).
- The COVID-19 outbreak has drastically reduced employment opportunities and income sources, resulting in increased joblessness and lower household income. Sales among family-owned businesses have plunged. COVID-19 has also negatively affected remittance flows, an important source of income for Somali households.
- In addition, many households have been affected by economic shocks, food security, and natural disasters during the COVID-19 pandemic, while the main source of relief – family assistance – is falling due to reduced economic activities.
- The prevalence of humanitarian assistance is low.

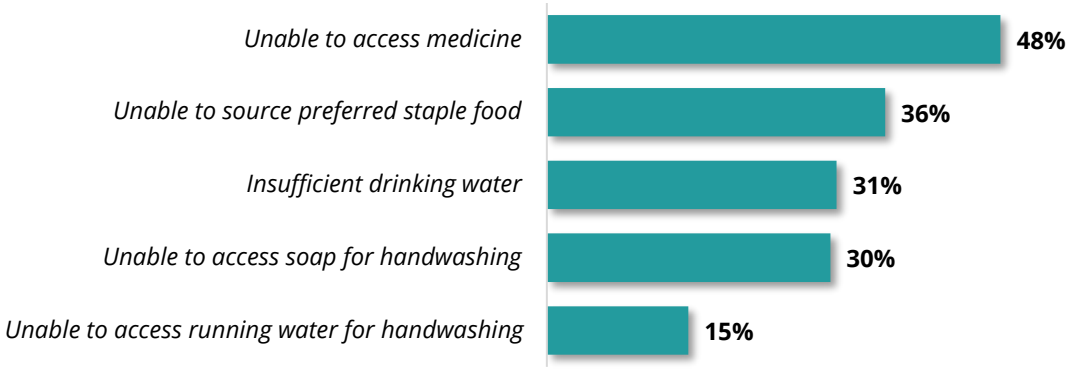
5.1. ACCESS TO BASIC GOODS AND SERVICES

This section analyzes access to basic goods, such as staple food, medicine, drinking water, and hygiene products fundamental to the COVID-19 prevention, such as running water and soap for handwashing. This section also assesses access to basic services, such as education, health, and financial services.

5.1.1. ACCESS TO BASIC GOODS

Overall, access to basic necessities is limited. Around 36 percent of Somali households have not been able to purchase their preferred staple food. Beyond staple foods, many Somali households lack access to medicine during the COVID-19 pandemic. Of the households that recently tried to buy medicine, 48 percent were unable to buy them. In addition, many Somali households lack a sufficient supply of drinking water (31 percent), while fewer lack access to running water for handwashing (15 percent).

Figure 52: Share of the population lacking access to basic goods in the week prior to the survey

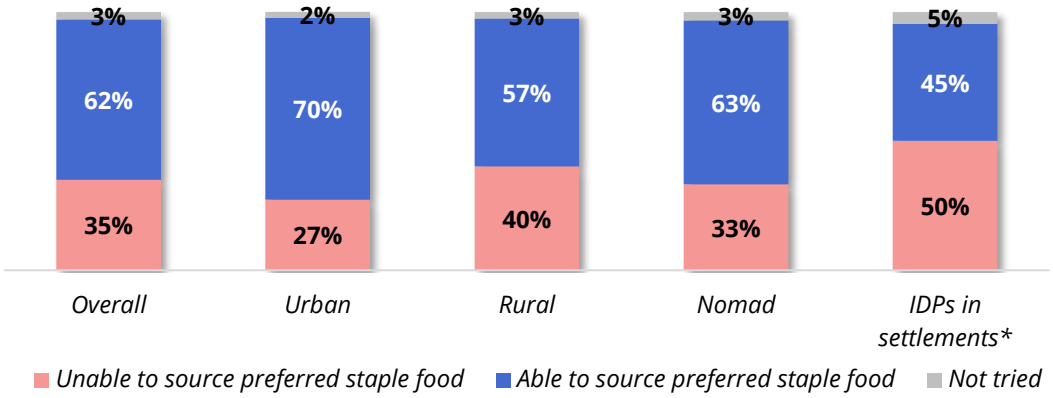


5.1.1.1. Preferred staple food

Many Somalis lack access to essential foodstuffs, such as rice, maize, and dry beans. Over a third (36 percent) of the respondents have been unable to source their preferred staple food when trying to purchase it. **Poor access to basic staple food items is even more common among vulnerable populations, namely rural residents, nomads, and IDPs.** While 27 percent of urban households

were unable to purchase their preferred staple food, around 40 percent of rural households have been unable to do so.

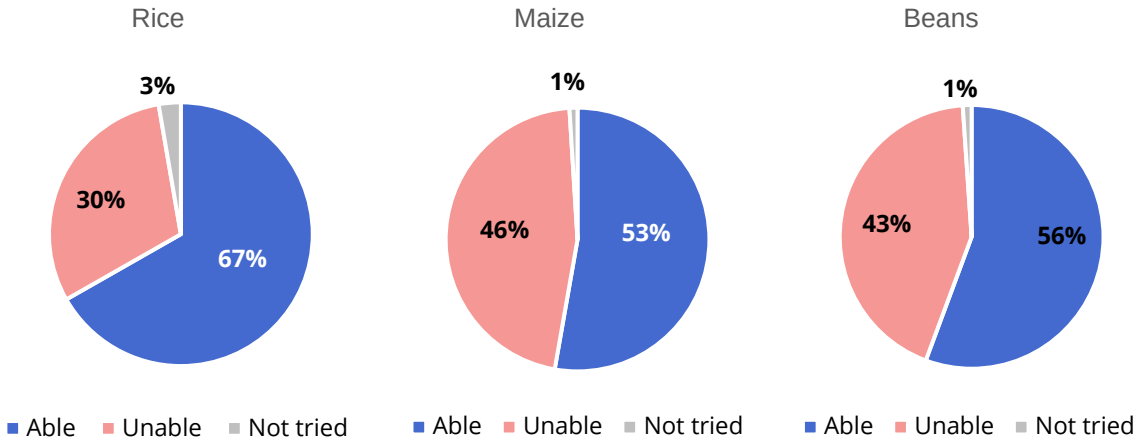
Figure 53: Share of households that have been unable to purchase their preferred staple food, by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

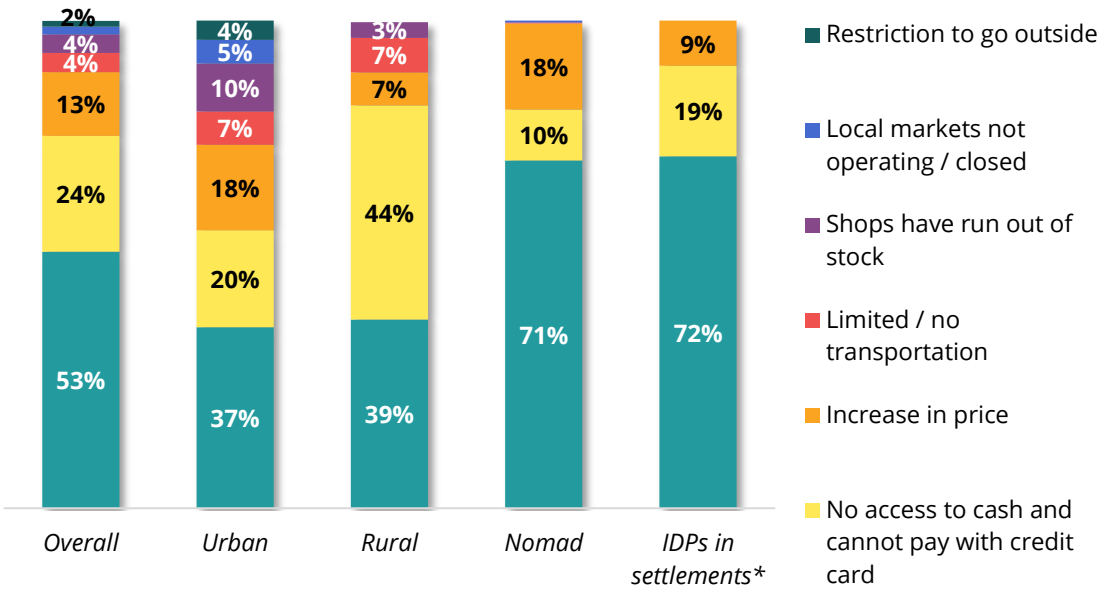
It appears that households could source rice more easily than maize and dry beans. While 30 percent were unable to purchase rice, 46 and 43 percent of households were unable to purchase maize and dry beans, respectively. Rice is the most popular staple food in Somalia (preferred by 56 percent of households), followed by maize (25 percent) and dry beans (10 percent). However, among rural residents, maize is the most popular staple food.

Figure 54: Share of households that have been unable to purchase preferred staple food



Deep-rooted poverty rather than COVID-19 appears to explain lack of access to staple foods. Over three quarters of those unable to source their preferred staple food cite financial reasons. **Reasons related to entrenched poverty are even more acute for nomadic and rural households,** as over 80 percent of rural and nomadic respondents mention lack of financial resources as the reason for being unable to source basic foods. For rural populations, access to financial resources (rather than lack of resources) is cited as the predominant cause. Still, there is some evidence showing that COVID-19 may have a role in rendering goods less accessible, either through supply reductions or price increases. Price increases are mentioned by 13 percent of the respondents, while other COVID-related reasons (i.e. lack of physical supply due to low stock, local market closure, movement restrictions and limited transportation) are mentioned by 11 percent of respondents.

Figure 55: Reasons for lack of access to preferred staple food, by population type



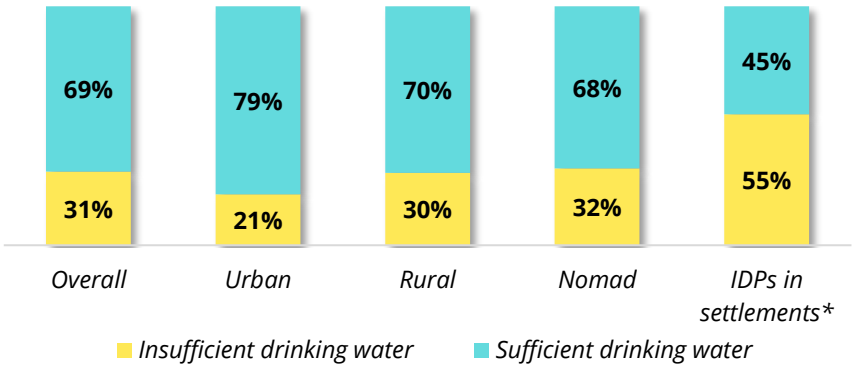
Note: read as "77% of households who were unable to access their preferred staple food mentioned financial reasons". Financial reasons include (i) cannot afford it, and (ii) no access to cash and cannot pay with credit card.
**IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.*

Nonetheless, COVID-related obstacles to sourcing basic foodstuffs are still present, predominantly in urban settings. Despite financial reasons being predominant in urban areas, urban residents give more weight to supply-side reasons than their pastoral and agricultural counterparts. Low stock in shops, closure of local markets and reduced transportation and movement induced by COVID-19 still hinder access to food, even if in a minor way and specifically in the urban context. Increases in basic foodstuff prices are mentioned by between 7 percent and 18 percent of respondents, depending on the livelihood zone. A surge in prices of staple foods in relation to COVID-19 is highly likely, as Somalia is heavily reliant on cereal imports and the closure of borders has led to an increase in shipping and import cost.

5.1.1.2. Drinking water

With 31 percent of households lacking sufficient drinking water to meet their household needs, sufficient access to drinking water is not a given. Access to drinking water is even scarcer among vulnerable populations, such as rural residents, IDPs, and nomadic households. Fifty-five percent of IDPs report being unable to access sufficient drinking water compared to 21 percent of urban households. This highlights that IDPs find themselves in more precarious living situations than non-displaced urban dwellers.

Figure 56: Insufficient access to drinking water, by population type



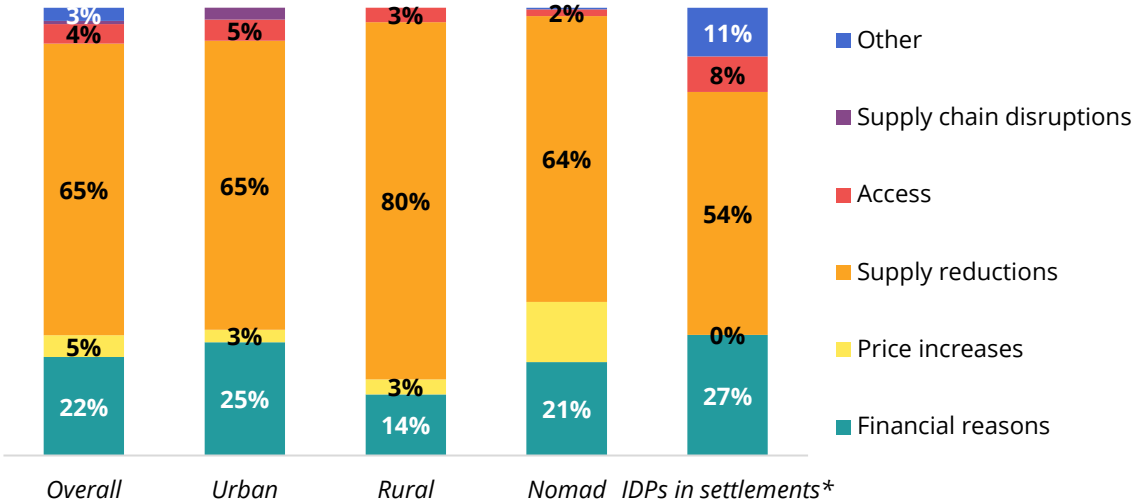
IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

While demand-side factors (mainly financial) limit access to staple foods, supply factors appear to mostly limit access to sufficient drinking water. Around two thirds of respondents (65 percent) cite reduced or unavailable water supply as the main reason for insufficient drinking water.

Financial reasons are the second most cited reason for being unable to access sufficient drinking water, while COVID-related obstacles are only mentioned by a minority of respondents. A fifth of respondents (22 percent) affirmed that the lack of funds is the main obstacle to securing a sufficient supply of drinking water. COVID-related obstacles, such as low stock in shops or local markets, and price increases do not seem to play a substantial role (mentioned only by 5 percent of respondents).

Reduced supply of drinking water is more common in remote areas, but financial reasons also play a role, especially in urban settings. Structural factors impeding a regular drinking water supply are even more acute in rural areas (80 percent of rural citizens suspect halted or reduced supply as the main cause) but 25 percent of the urban population mention lack of financial resources as the main reason for irregular drinking water supply. The extent to which this reduced supply of safe drinking water is caused by the pandemic is not clear, as most safe drinking water supply across Somalia is provided by private companies.

Figure 57: Main reasons for insufficient access to drinking water, by population type

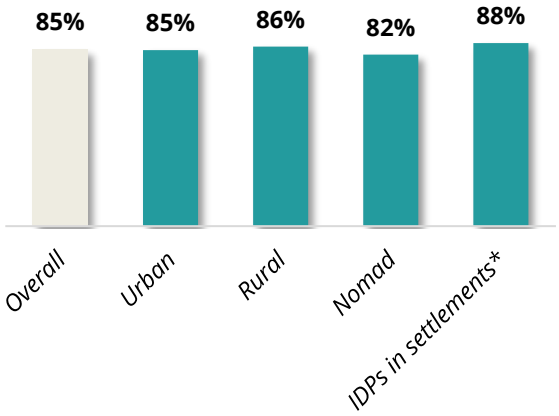


Note: read as "22% of households who were unable to access sufficient drinking water mentioned financial reasons as the main reason for being unable to access drinking water". Financial reasons include (i) cannot afford it, and (ii) no access to cash and cannot pay with credit card. Supply reductions include (i) water supply no longer available, and (ii) water supply reduced. Access includes (i) unable to access communal sources, and (ii) limited/no transportation. Supply chain disruptions include: (i) shops have run out of stock, and (ii) local markets not operating/closed.
**IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.*

5.1.1.3. Basic hygiene products

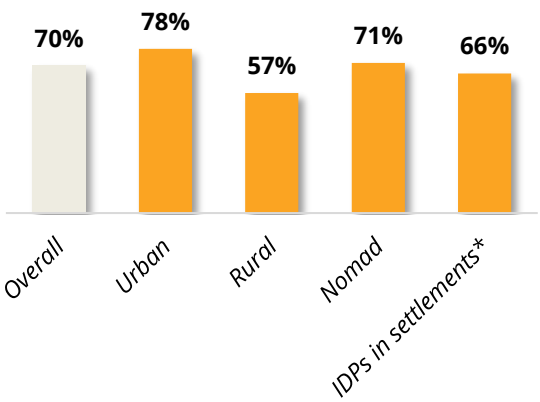
While access to running water for handwashing is fairly good, access to soap is more limited. Only 15 percent of households report not having enough running water for handwashing, whereas 30 percent do not have access to soap when needed. Access to soap is scarcest among rural households.

Figure 58: Share of households with sufficient water for handwashing, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 59: Share of households with sufficient soap for handwashing, by population type

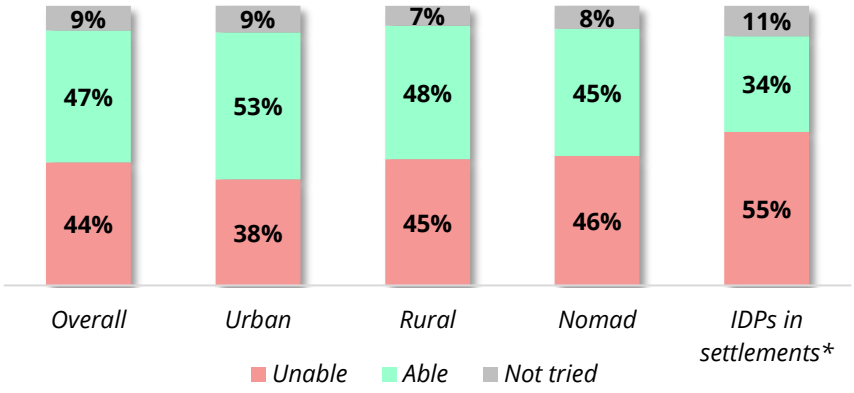


*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

5.1.1.4. Medicines

Almost half of the Somali households lack access to medicine, crucial in the context of the COVID-19 pandemic. Of the 91 percent of households that recently tried to buy medicine, 48 percent were unable to buy them. In particular, rural and nomadic households lack access to medicine, with 45 and 46 percent of rural and nomadic households being unable to buy the necessary medications.

Figure 60: Share of households unable to buy medicine, by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

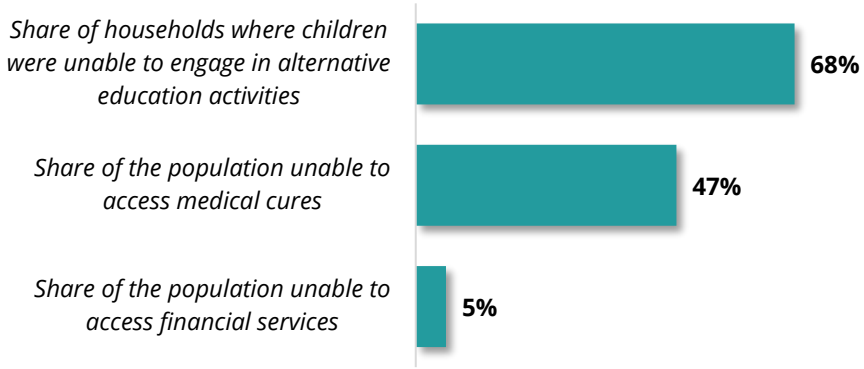
5.1.2. Access to basic services

A significant proportion of Somalis lack access to basic services. Forty-seven percent of households that tried to seek medical services[23] since March 2020, have not been able to obtain them.

[23] General cures, not specifically COVID-related.

The pandemic also drastically disrupted children's educational activities. Of the 72 percent of households with children aged 6-18 years attending school prior to school closures in March 2020, 68 percent had children not recently engaged in alternative learning activities. In contrast, access to financial services and institutions has hardly been affected by COVID-19.

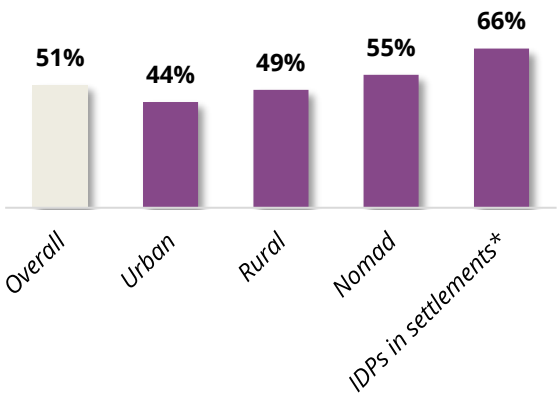
Figure 61: Share of the population unable to access basic services



5.1.2.1. Medical services

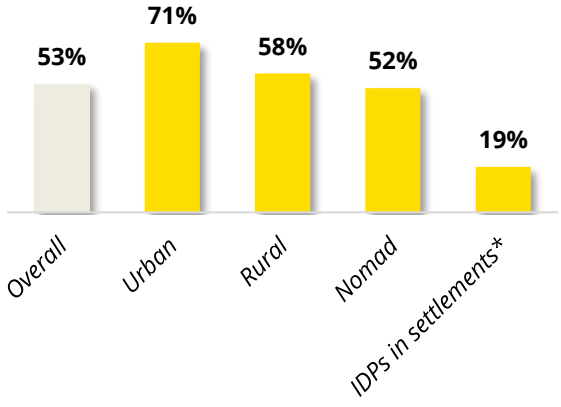
A significant proportion of Somalis lack access to medical services during the COVID-19 pandemic, and vulnerable and remote populations even more so. Almost half (47 percent) of households that tried to seek medical services since March 2020, have not been able to obtain them. With 81 percent of IDPs and 48 percent of nomadic households unable to access medical services, access is even lower for these population groups. Despite better access in urban areas, still 30 percent of households report having been unable to access healthcare since the outbreak of COVID-19.

Figure 62: Share of households that needed medical services since outbreak of COVID-19, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

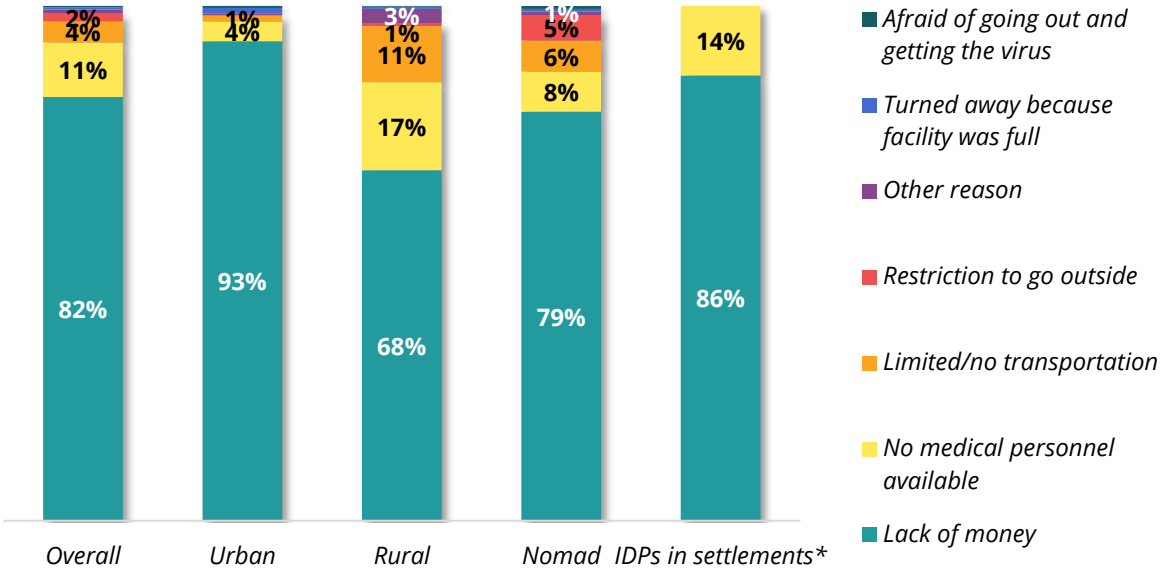
Figure 63: Share of households able to access medical services since outbreak of COVID-19 when needed, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Entrenched poverty appears to be the root cause of poor access to medical services. Eighty-two percent of respondents cite insufficient financial resources as the main reason hindering access to healthcare. Supply-side reasons (i.e. lack of medical personnel) are present but play a minor role (mentioned by 11 percent of respondents). Limited transportation to healthcare facilities also constitutes a reason for remote populations (mentioned by 11 percent of rural residents). Fear of contracting COVID-19 does not seem to be a barrier to seeking medical services.

Figure 64: Main reasons for limited access to healthcare services, by population type



Note: read as "82% of the population mentioned lack of financial resources as the main reason for being unable to access healthcare services"
**IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.*

5.1.2.2. Education services

On March 18, 2020, the Federal Government of Somalia announced the closure of all primary and secondary schools to curb the spread of the virus that causes COVID-19. School closures may deprive students of valuable months of schooling, especially children from poor families or remote areas whose ability to access alternative educational solutions is limited.

The pandemic drastically disrupted children's educational activities. Of the 72 percent of households with children aged 6–18 years attending school prior to school closures in March 2020, 68 percent had children not recently engaged in alternative learning activities. Such alternative learning activities most commonly take the form of assignments provided by the teacher (63 percent). Studying with the help of learning apps, TV or radio is mentioned by a negligible proportion of the population.[24] Access to alternative learning activities is particularly low in rural areas (76 percent with no access), where already fewer households had children attending school before they closed (64 percent).

[24] 14% of respondents mentioned using learning apps, 7% and 6% of respondents mentioned resorting to education programs on the TV or radio.

Figure 65: Share of households with children aged 6–18 attending school before school closure due to COVID-19

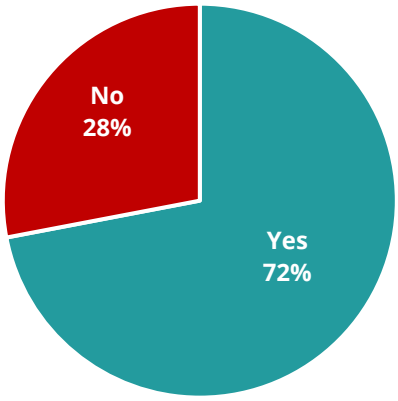


Figure 66: Share of households with children engaged in education or learning activities in the week prior to the survey

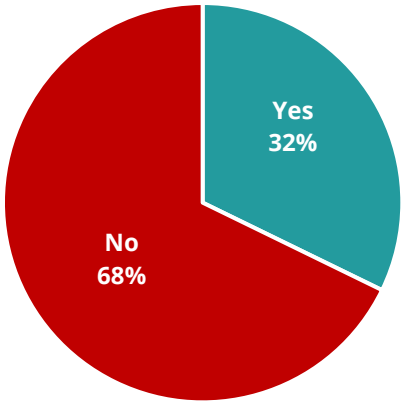
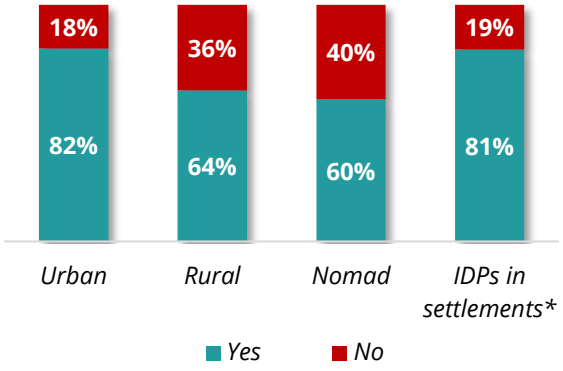
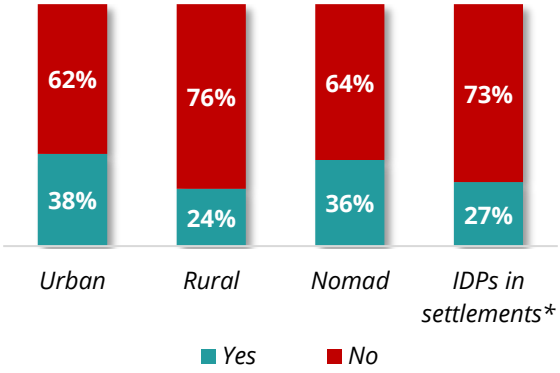


Figure 67: Share of households with children aged 6–18 attending school before school closure due to COVID-19, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 68: Share of households with children engaged in education or learning activities in the week prior to the survey, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 69: Share of households with children unable to access education activities, by state

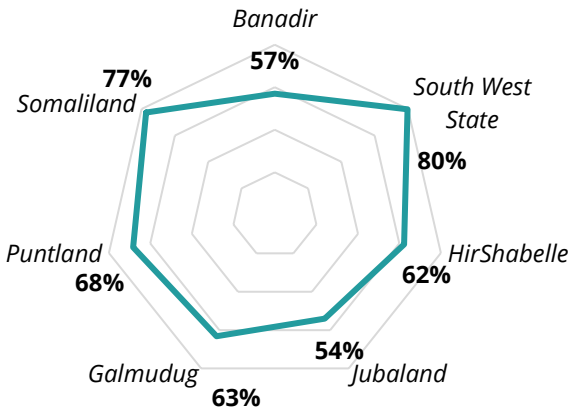
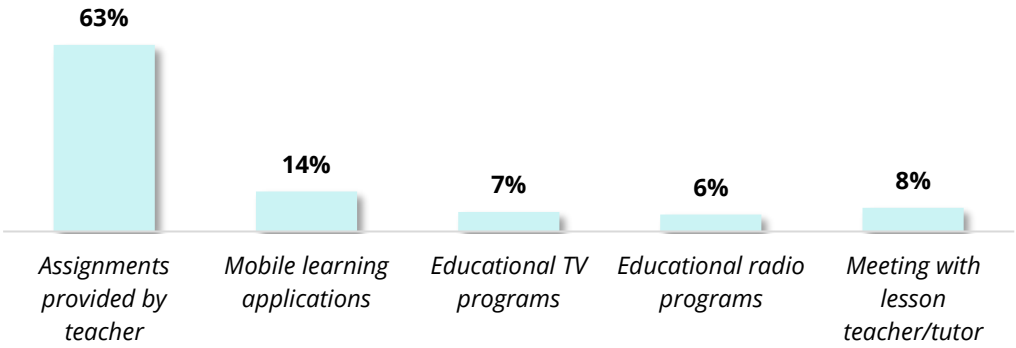


Figure 70: Type of education or learning activities children are engaged in the week prior to the survey



5.1.2.3. Financial services

Access to financial services and institutions, including banks, mobile money agents, and money transfer organizations has hardly been affected by COVID-19. Nearly all (95 percent) of the 14 percent of households that needed to physically access financial institution premises managed to successfully access them.

Unsuccessful in-person visits are mainly due to COVID-19-related reasons. More than two thirds (67 percent) of the respondents unable to access financial institutions buildings cite office closures imposed by COVID-19 restrictions, as well as limited movement as advised by authorities. Thirteen percent of the respondents also cite fear of catching the virus as a reason to avoid making an in-person visit to financial institutions.

Figure 71: Share of households needing to access financial services

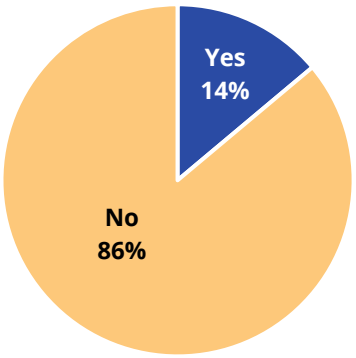


Figure 72: Share of households able to successfully access financial services

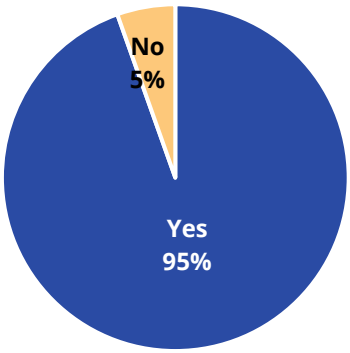
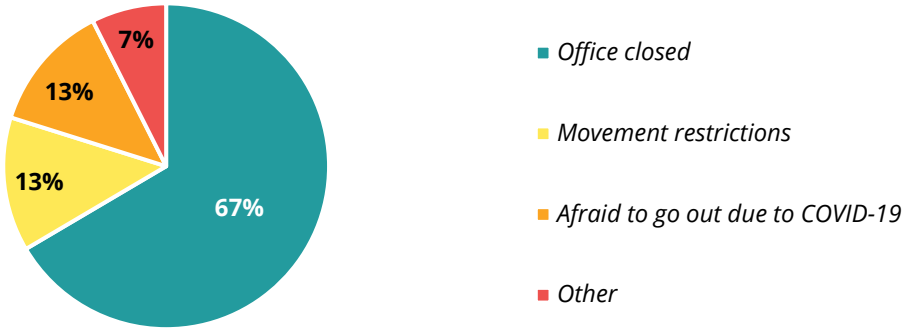


Figure 73: Reasons for unsuccessful access to financial services



5.2. EMPLOYMENT AND LIVELIHOOD SOURCES

This section analyzes the impacts of COVID-19 on the employment status of the Somali population, encompassing salaried workers, the self-employed, and farming households.

5.2.1. EMPLOYMENT PATTERNS SINCE THE COVID-19 OUTBREAK

5.2.1.1. Inactivity between March 2020 and July 2020

Somalis have experienced disruptions to regular work activities due to reasons strongly associated with the outbreak of COVID-19. A fifth (20 percent) of Somalis who were working prior to COVID-19 had to stop their work activity following the pandemic outbreak. This percentage is higher for IDPs and urban dwellers (21 and 24 percent, respectively)**.** Business closures due to COVID-19 restrictions are cited as the main reason (51 percent of respondents) for disrupted work activities.

Figure 74: Share of respondents working

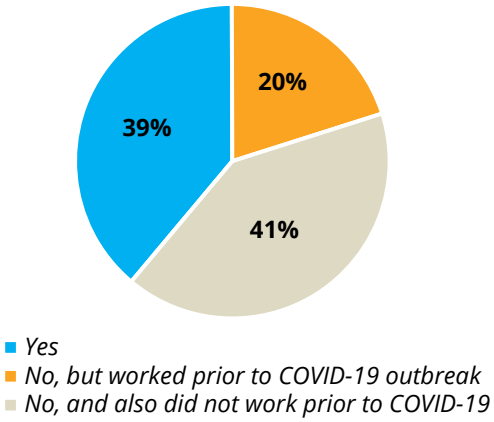
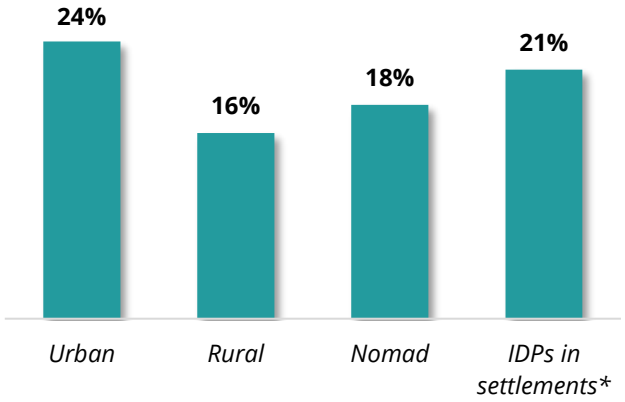
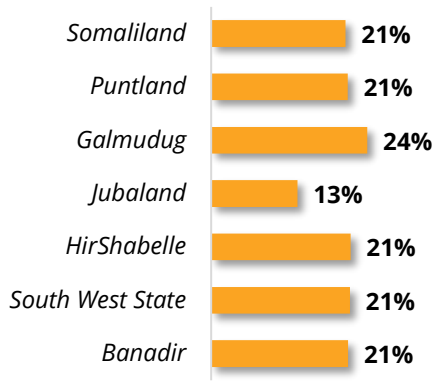


Figure 75: Share of respondents who were working prior to COVID-19 but currently not working, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 76: Share of respondents who were working prior to COVID-19 but currently not working, by state



Work activities of male and younger respondents are more disrupted. While 24 percent of respondents aged 18-29 years have experienced disruptions to their work activity since the onset of the COVID-19 pandemic, only 14 percent of 50-to-59-year olds have. In addition, 25 percent of male but only 16 percent of female respondents report not having worked since the outbreak of the pandemic. In contrast, disruptions do not differ by educational attainment.

Figure 77: Share of respondents who were working prior to COVID-19 but currently not working, by

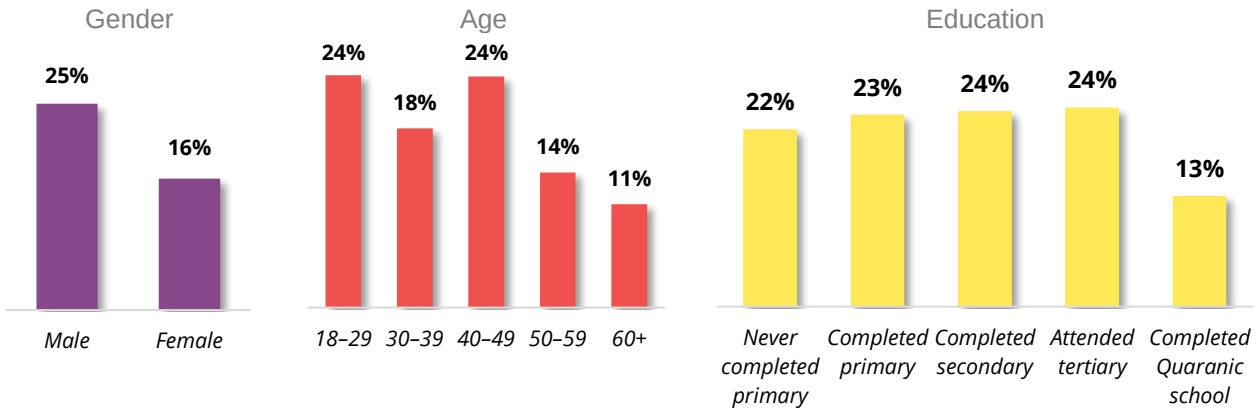


Figure 78: Main reasons for stopping work activity between March and July 2020

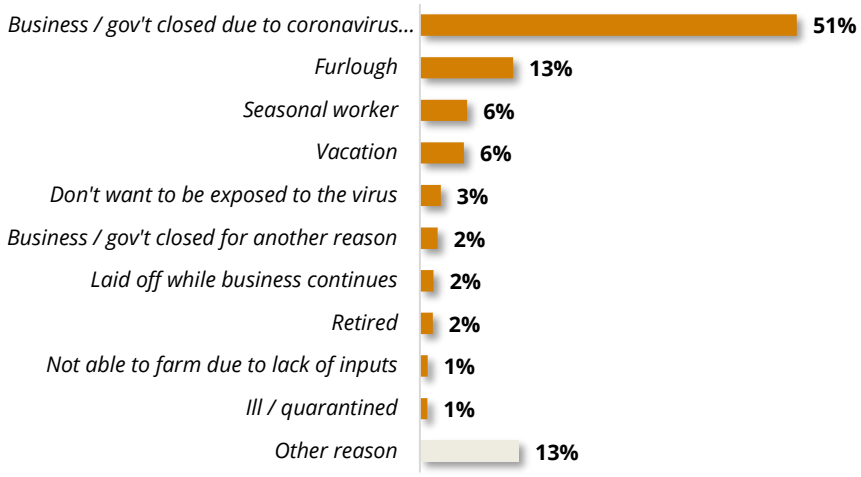
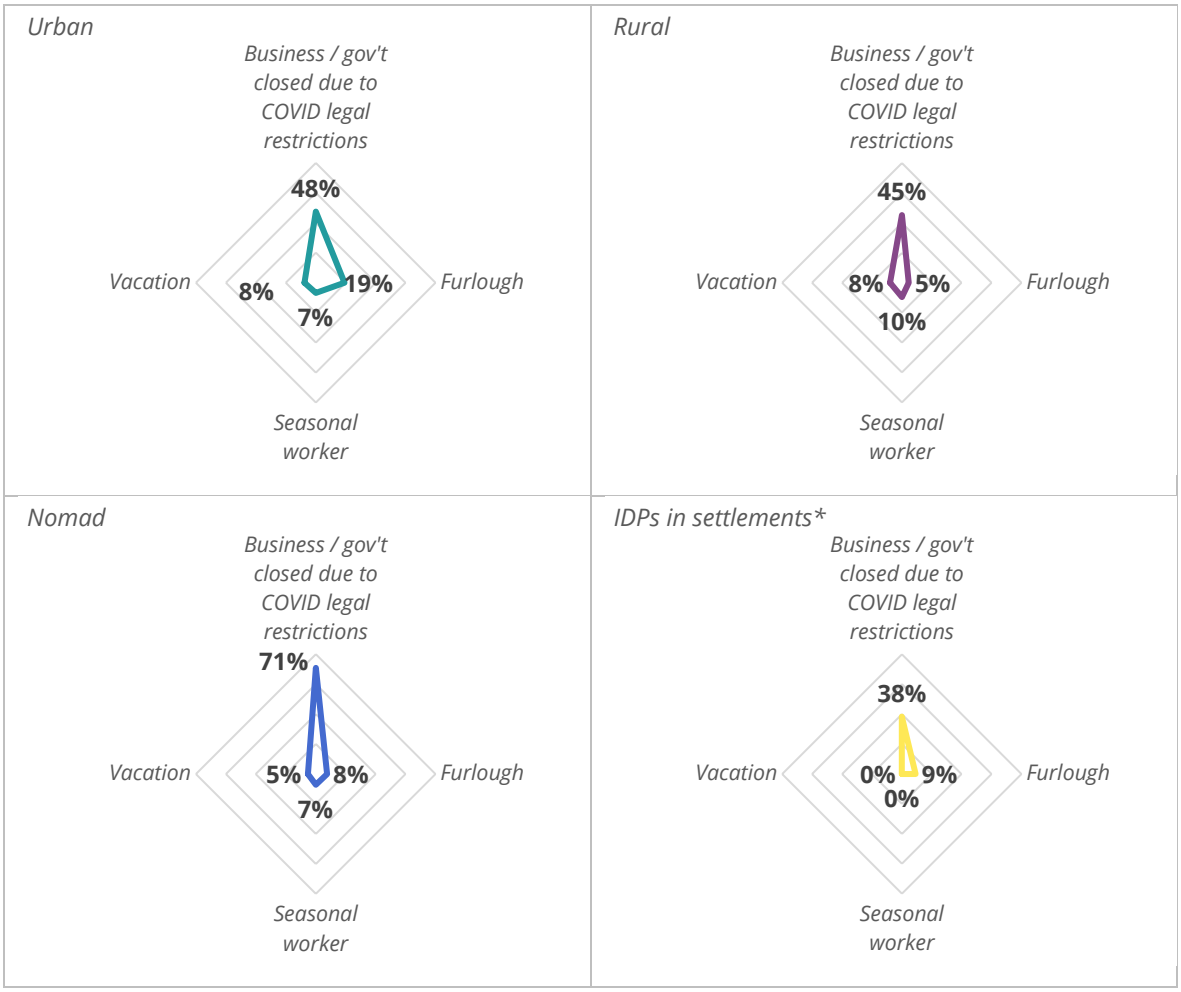


Figure 79: Main reasons for stopping working between March and July 2020, by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

5.2.1.2. Salaried workers

In Section 3, it was shown that salaried workers constitute almost half of all working respondents. Salaried employment is more common in urban areas (51 percent), but still important for rural households (approximately 30 percent of rural respondents are salaried workers).

Twenty percent of salaried workers have not been able to work as usual, with disruptions differing by geography and employment sector. While only 18 percent of salaried workers in urban areas affirmed that they have not been able to work as usual, this holds true for half (50 percent) of rural salaried workers. Work activities in the energy supply, and professional services have been disrupted the most, whereas the retail trade sector has been affected the least.

Figure 80: Share of respondents with salaried employment working as usual at workplace or remotely

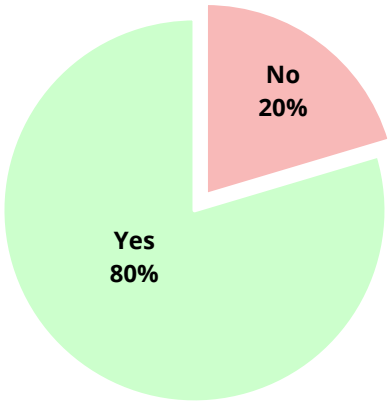
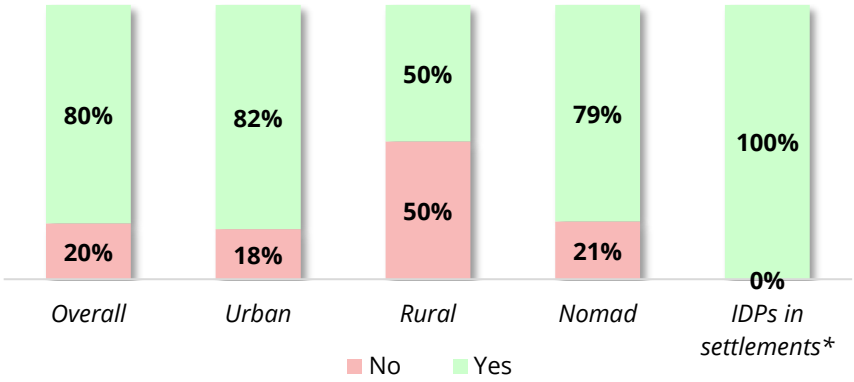
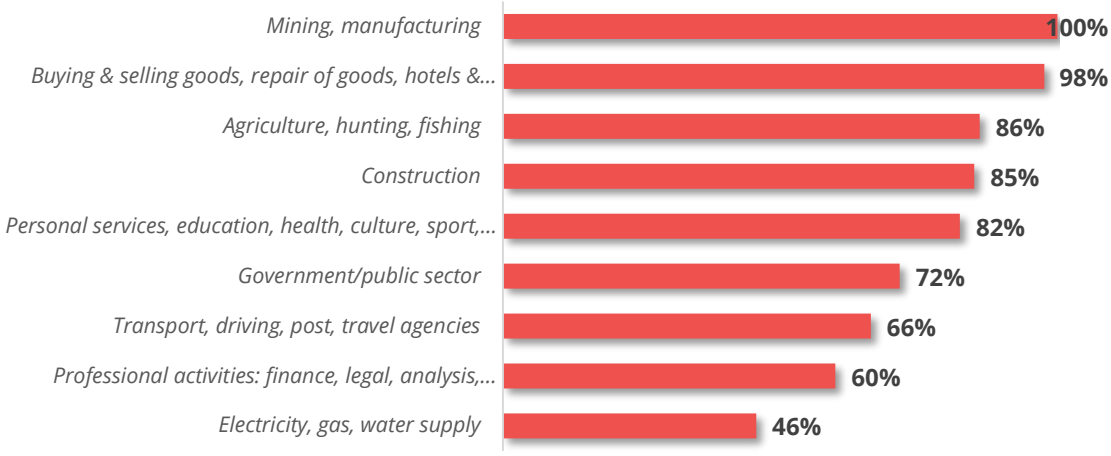


Figure 81: Share of respondents with salaried employment working as usual at workplace or remotely, by population type



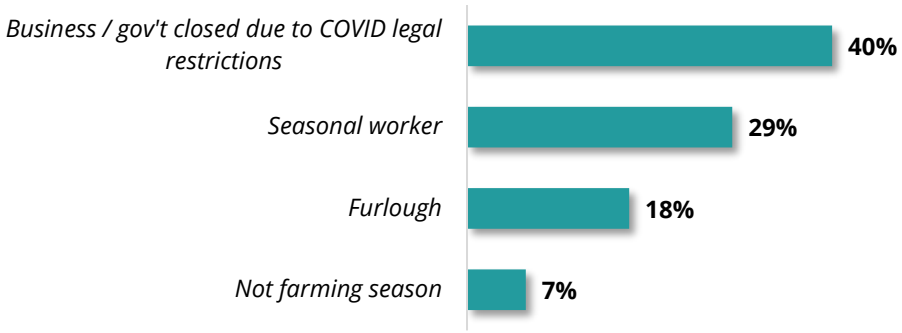
*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 82: Share of respondent with salaried employment who were able to work normally during the week prior to the survey, by activity sector



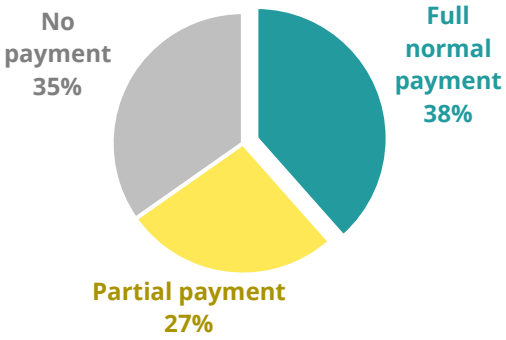
Disruptions to salaried employment activities can be mainly attributed to the outbreak of COVID-19. Fifty-eight percent mention business closures due to COVID-19 and being put on furlough as the main reasons for not being able to work normally. An additional 29 percent state that the seasonality of their job is the primary reason for not having had a regular occupation in the recent past, unrelated to COVID-19.

Figure 83: Main reasons for not being able to work normally



Compensation patterns are volatile, even for workers whose occupation has not been disrupted by COVID-19. Only 38 percent of respondents that have been able to work normally received their full normal compensation, whereas 27 and 35 percent received a partial or no payment at all, respectively.

Figure 84: Compensation patterns for workers who worked normally



5.2.1.3. Households involved in a non-farm family business

The outbreak of the COVID-19 pandemic has had a major effect on family-owned businesses in Somalia. Of the 35 percent of households owning a family business, 83 percent had fewer or no sales since the outbreak of COVID-19. COVID-19-related reasons, such as business closure due to government restrictions, fewer customers, and the unavailability of inputs, are cited as the cause of low business activity by 80 percent.

Figure 85: Share of households involved in a family business that report having fewer or no sales since outbreak of COVID-19

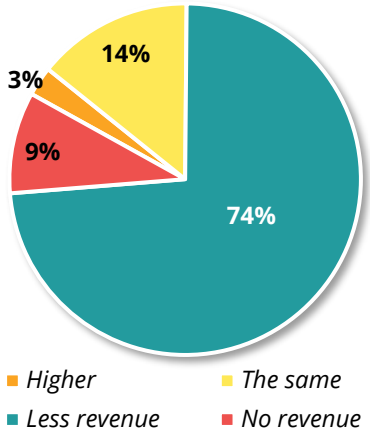
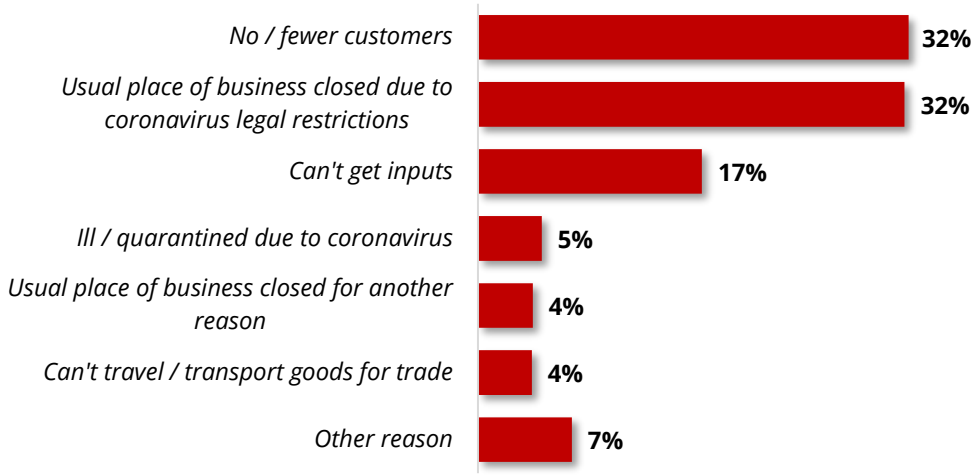
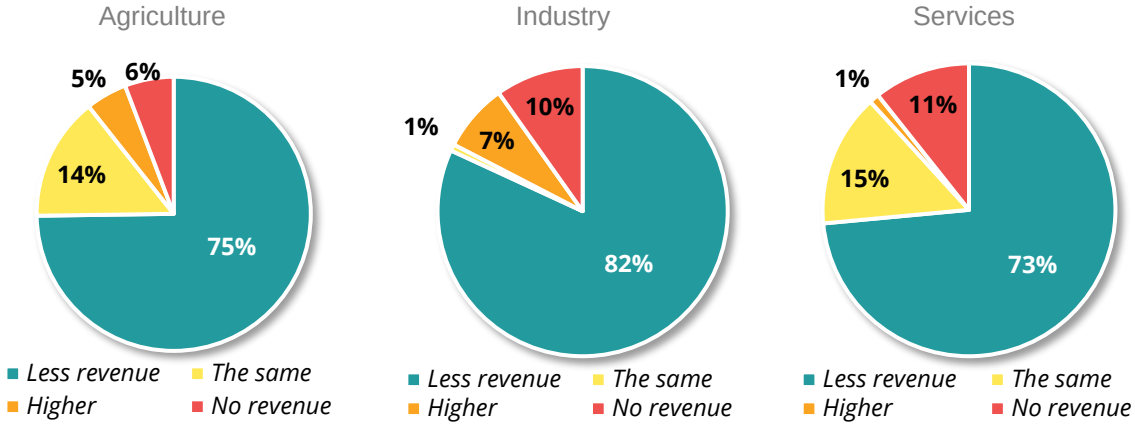


Figure 86: Reasons for no or low business activity for family businesses



The highest pandemic-induced hindrance is correlated with the nature of the business activity. While for agricultural enterprises the biggest constraint appears to be the lack of inputs (mentioned by 36 percent of agricultural-related businesses), the lack of customers and premise closures due to COVID-19 are the biggest challenges for trading businesses, hotels and restaurants, and personal services (i.e. education, culture, sport).

Figure 87: Share of households involved in a family business that report having fewer or no sales since outbreak of COVID-19, by nature of the business



5.2.1.4. Farming households

COVID-19 is having a disruptive effect on household farming activities, although to a lesser extent than for non-farm household businesses. Twenty-seven percent of households involved in farming or livestock activities have not been able to carry out their farming activities normally.

COVID-19 "social distancing" policies such as movement restrictions and encouragement to stay home constitute the biggest obstacle to farming activities, mentioned by 43 percent of respondents unable to carry out normal farming activities. Lack of inputs and labor to perform farming activities account for the second biggest obstacles (mentioned by 34 percent).

Figure 88: Share of households with disrupted farming activities

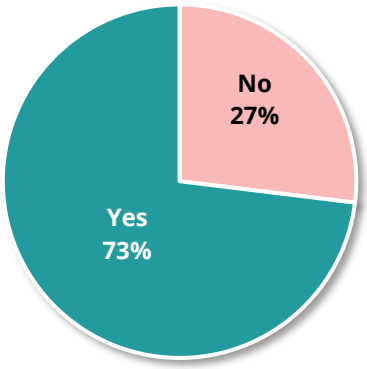
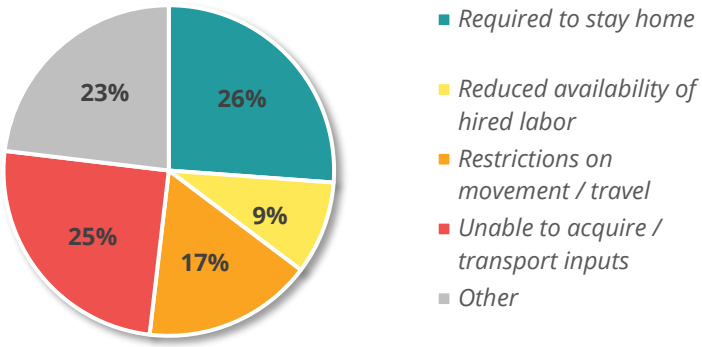


Figure 89: Reasons for not being able to carry out farming activities normally



5.2.2. IMPACT OF COVID-19 ON LIVELIHOOD SOURCES

5.2.2.1. Fluctuation of main income sources

Income from all livelihood sources has decreased since the outbreak of COVID-19. Among the most mentioned livelihood sources (farming, wage employment, and non-farm family businesses), over three quarters of the respondents affirmed that their income has declined.

Figure 90: Share of households with given source of livelihood in last 12 months

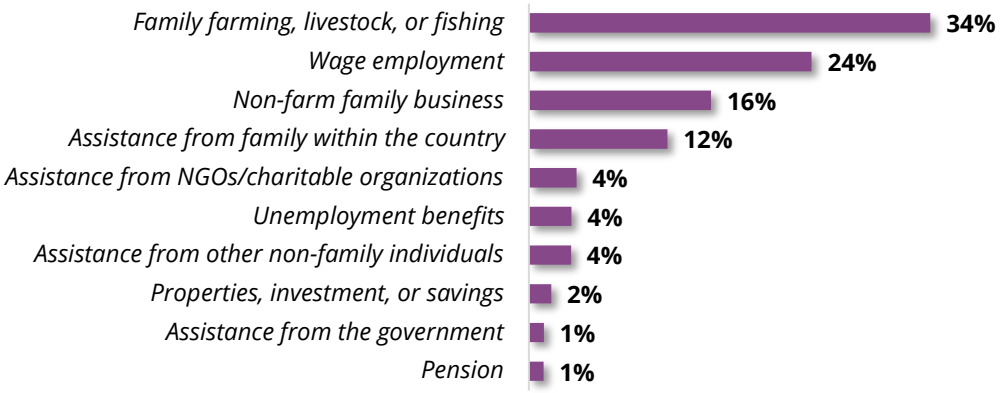
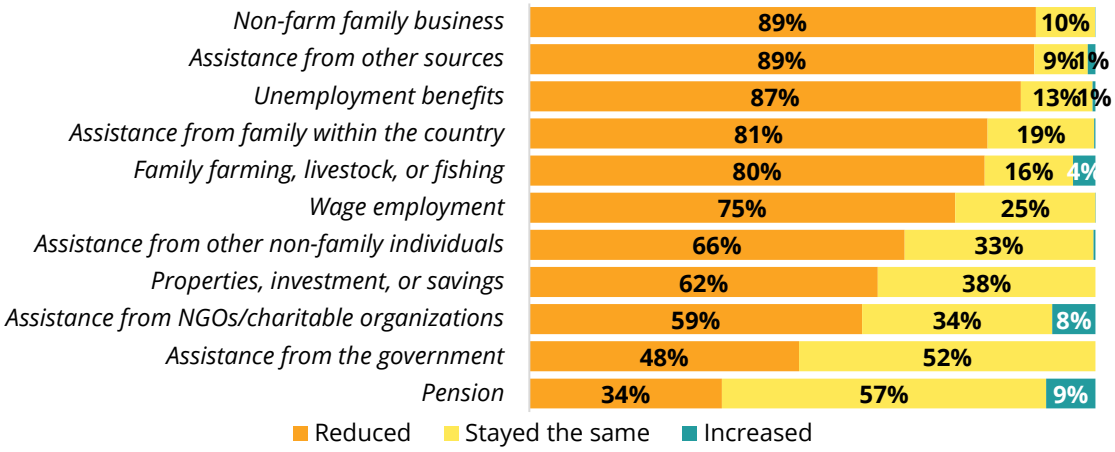


Figure 91: Share of the population experiencing changes in income since outbreak of COVID-19, by income source



5.2.2.2. Remittance flows since outbreak of COVID-19

COVID-19 has negatively affected remittance flows, an important source of income for the Somali population. For the 9.6 percent of households receiving remittances from abroad, the frequency of remittances and amount received have decreased since March 2020.[25] Fifty percent report the frequency of receiving remittances has decreased, while 31 percent report receiving a lower amount.

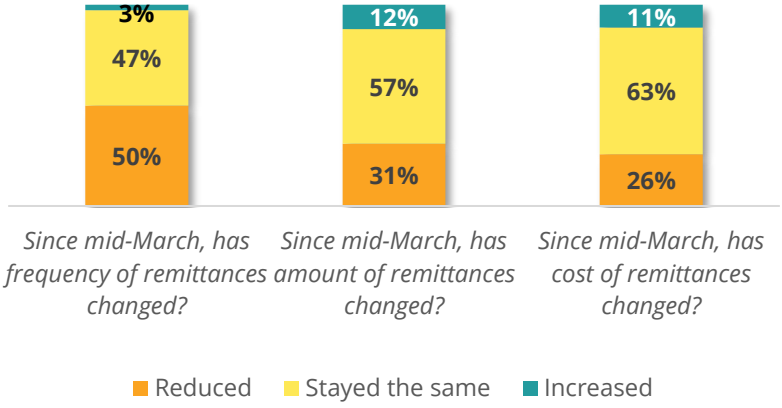
The impact of COVID-19 on this crucial source of income for the Somali population is not unexpected, since the pandemic has adversely affected many economies around the world that are

[25] 9 percent of the entire population is very low for the Somali population (13 percent of urban households, 10 percent of IDPs, 7 percent of rural households, and 5 percent of nomads). Other reports (see Majid, Abdirahman and Hassan, 2017) indicate that between 30 and 40 percent of Somali receive remittances from abroad. The difference might be due to the overrepresentation of wealthier households due to the nature of the phone survey. For details on this see Annex 7.3.

host to the Somali diaspora and consequently the livelihoods of remittance-senders. The World Food Program (WFP) has already reported a reduction in remittances in Banadir, HirShabelle, and Somaliland.[26] A United Kingdom (UK)-based NGO study on the impact of COVID-19 on remittances noted that 89 percent of respondents in the UK have reduced remittances to Somalia due to the pandemic, while 25 percent reported that remittances have dropped to zero.[27] Nationwide, it is estimated that remittances will decline by as much as 50 percent.[28]

The cost of receiving remittances from abroad has remained mostly the same, as reported by 63 percent of respondents. With 26 percent affirming that costs decreased, there is little evidence that Somali money transfer operators reduced their transfer fees, which are generally considered fair and usually covered by the diaspora family members who send the remittances. Intra-country operation fees by money transfer and mobile money operators have also remained the same.

Figure 92: Share of the population that has seen its remittances from abroad affected since outbreak of COVID-19 (mid-March) in terms of frequency, amount, and cost



5.3. HOUSEHOLD SHOCKS

Since the outbreak of the COVID-19 pandemic, Somali households have been affected by numerous negative shocks, economic and food security-related being most prominent. Economic shocks such as the loss of a wage job, closure of a family business, disruption of farming activities, and input/outputs fluctuations have affected 74 percent[29] of households. Seventy-six percent of households have experienced increases in prices of major food items, contributing to food insecurity. Moreover, only 8 percent of households did not experience any negative shock since the outbreak of COVID-19, whereas 69 percent of households faced at least two adverse shocks and 33 percent at least six shocks.

Natural disasters have affected the livelihoods of 46 percent of Somali households. Somalia has a long history of being affected by droughts and flooding, and in 2019–2020 also suffered from the worst invasion of desert locusts in 25 years, leading Somalia to declare a national emergency. Large swarms of locusts destroyed hundreds of thousands of hectares of land on which Somali households rely for their livelihood. While the locust invasion has been the most common natural disaster (experienced by 38 percent of households), 24 percent of households have also been affected by drought.

Security incidents and health-related shocks are only experienced by a minority. Security-related incidents such as conflicts or community violence, and theft of cash and properties affected 22

[26] WFP Somalia, May 2020.

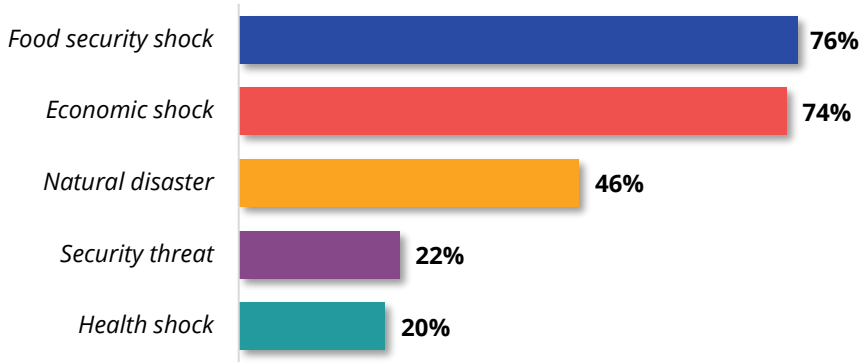
[27] The Anti-Tribalism Movement, May 2020.

[28] Federal Government of Somalia, March 2020.

[29] This must be read as 74 percent of households have been affected by at least one of the following economic shocks: i) job loss, ii) non-farm business closure, iii) disruption of farming, iv) inputs shocks (not available or increased price of inputs), or v) output shocks (output reduction or fall in the price of output).

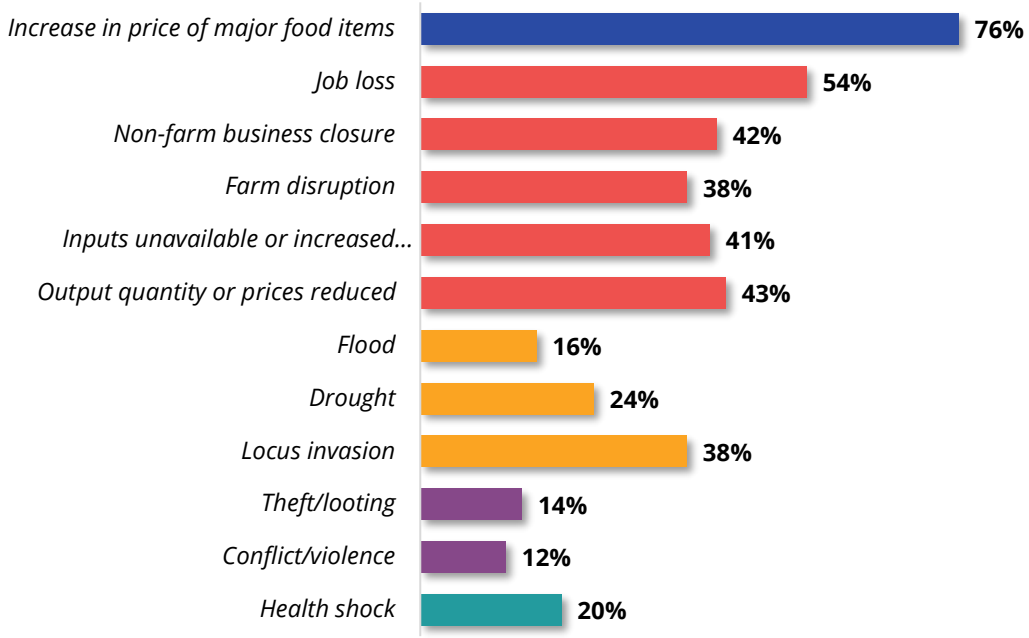
percent[30] of the population. Moreover, since the COVID-19 outbreak, 20 percent of households experienced a health emergency such as the illness, injury, or death of an income-earning household member.

Figure 93: Share of households exposed to shocks since outbreak of COVID-19, by shock category



Food security shocks includes (i) increase in price of major food items. Economic shocks includes (i) job loss, (ii) non-farm business closure, (iii) disruption of farming activities, (iv) lack of availability of business/farming inputs, (v) increased price of farming/business inputs, and (vi) reduced price of farming/business output. Natural disasters includes (i) flooding, (ii) drought, and (iii) locust invasion. Security threats includes (i) theft/looting of cash and other property, and (ii) conflict or community violence. Health shocks include (i) Illness, injury, or death of income earning household member.

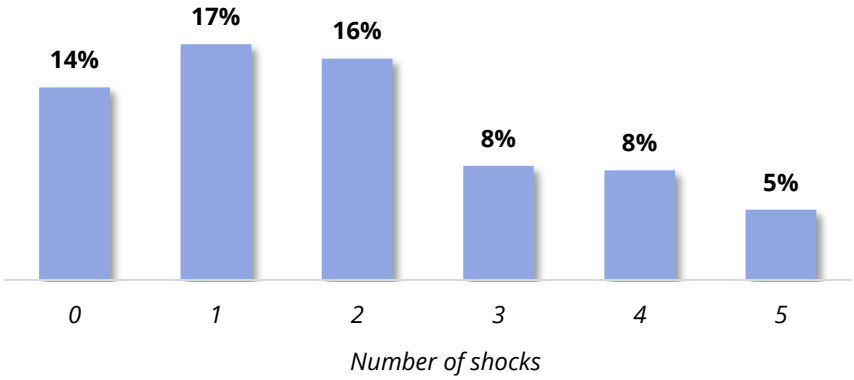
Figure 94: Share of households exposed to shocks since outbreak of COVID-19, by individual shock



Food security shocks includes (i) increase in price of major food items. Health shocks include (i) illness, injury, or death of income earning household member.

[30] This must be read as 22 percent of households have been affected by at least one of the following security incidents: i) conflict or community violence, or ii) theft/looting of cash or other property.

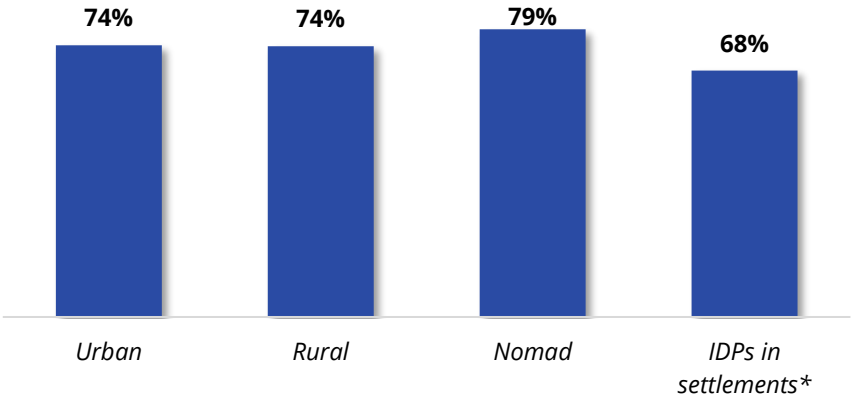
Figure 95: Share of households exposed to a given number of shocks since the COVID-19 outbreak



5.3.1. ECONOMIC SHOCKS

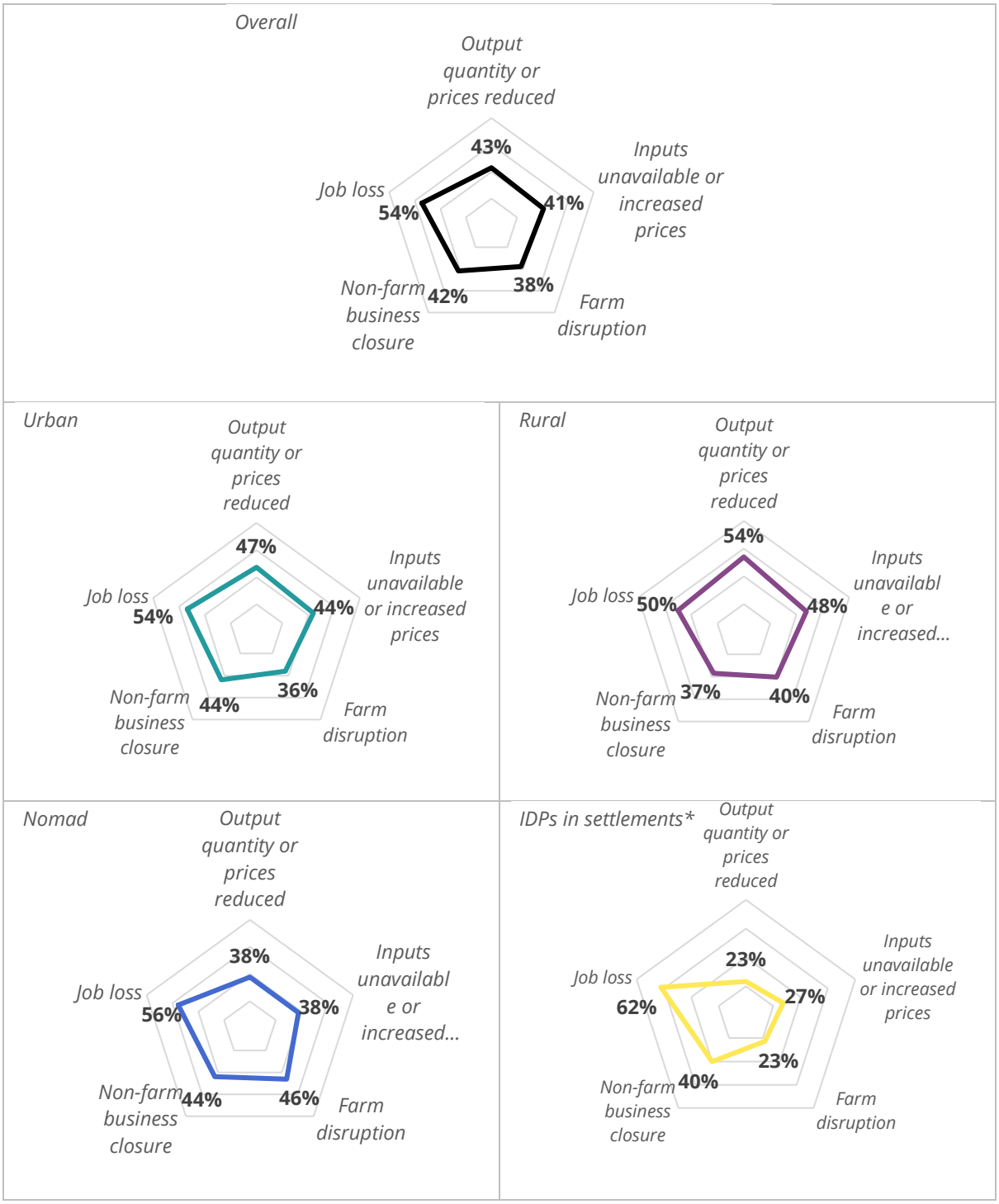
Almost three quarters (74 percent) of households are affected by economic shocks and all population types are affected similarly. As expected, job loss is the most commonly faced economic shock since the outbreak of COVID-19, followed by the closure of a non-farm household business, and the disruption of farming activities.

Figure 96: Share of households exposed to adverse economic shocks since outbreak of COVID-19, by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 97: Share of the population affected by economic shocks, by population type

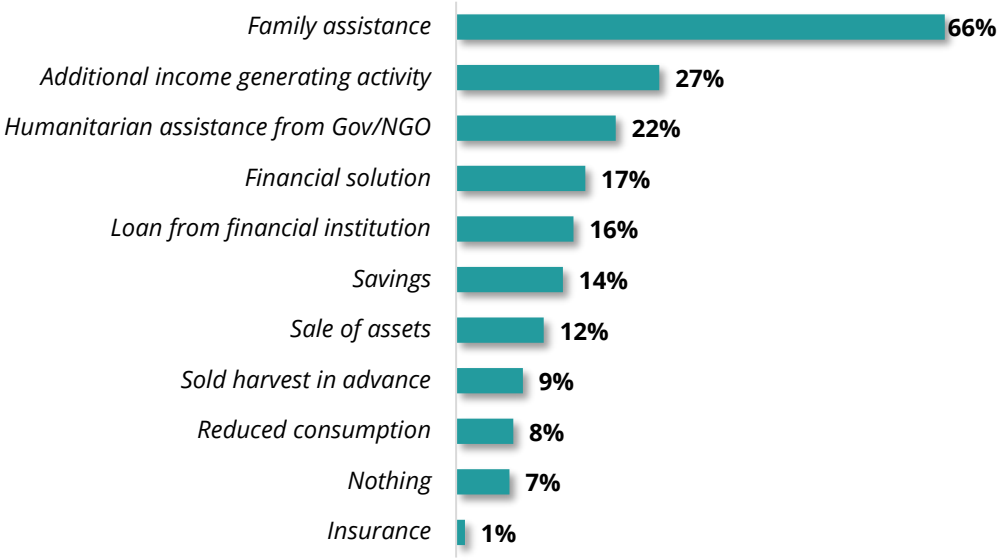


*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Receiving assistance from family and friends is the most common way of coping with economic shocks, as mentioned by 66 percent. This suggests that informal community support networks play a key role in counteracting income volatility, and thus act as an insurance mechanism. In addition, 27 percent of households exposed to economic shocks engaged in additional income generating activities, such as taking on other jobs. Less than 20 percent of households mention resorting to loans from financial institutions or financial solutions (purchasing on credit, delaying payment of obligations,

advance salary payments). Resorting to drastic coping strategies such as reduced consumption and the distress sale of assets appear to be relatively uncommon (mentioned by 8 and 12 percent of households, respectively).

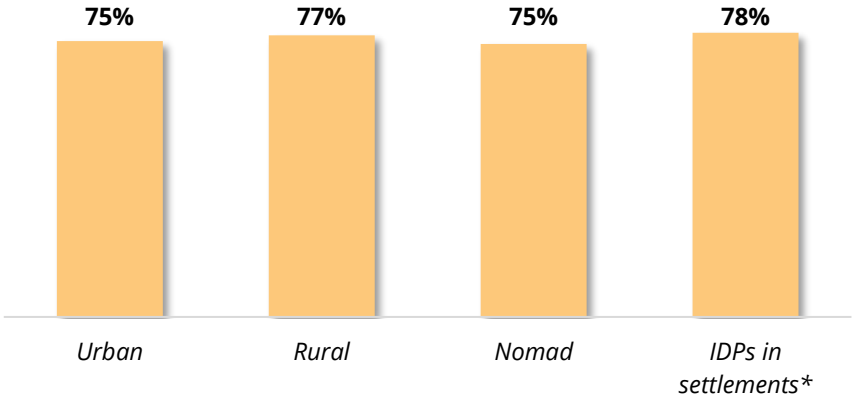
Figure 98: Strategies to cope with economic shocks



5.3.2. FOOD SECURITY SHOCKS

Increases in prices of major food items affect 76 percent of Somali households, with no differences by population type. While a higher proportion of IDPs report food price increases compared to the other population groups, the differences are not statistically significant. Increases in the prices of major food items can contribute to food insecurity in Somalia, as a smaller quantity of food can be purchased with given household resources (holding quality of the consumption basket constant). Food insecurity is further exacerbated when not only food prices increase but also sources of livelihood decline.

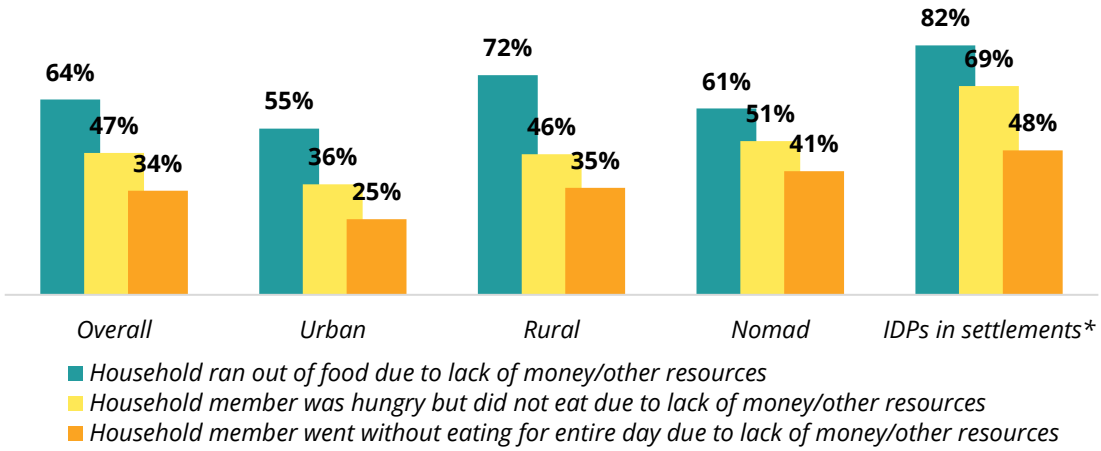
Figure 99: Share of households exposed to increases in prices of major food items since outbreak of COVID-19, by population type



**IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.*

Food insecurity affects more than half of the Somali population and its prevalence is higher among populations living in remote areas. Sixty-four percent of households report having run out of food in the past 30 days due to lack of money or other resources. Reduced food consumption due to lack of financial resources is particularly common among remote populations. Around 74 percent of rural households incurred at least one episode of food insecurity, compared to 59 percent of households in urban areas. Food insecurity can take severe forms, with an adult not being able to eat despite being hungry in 47 percent of households and going for an entire day without eating in 34 percent of households. These severe episodes of food insecurity are most frequent among nomadic populations and least common among urban households.

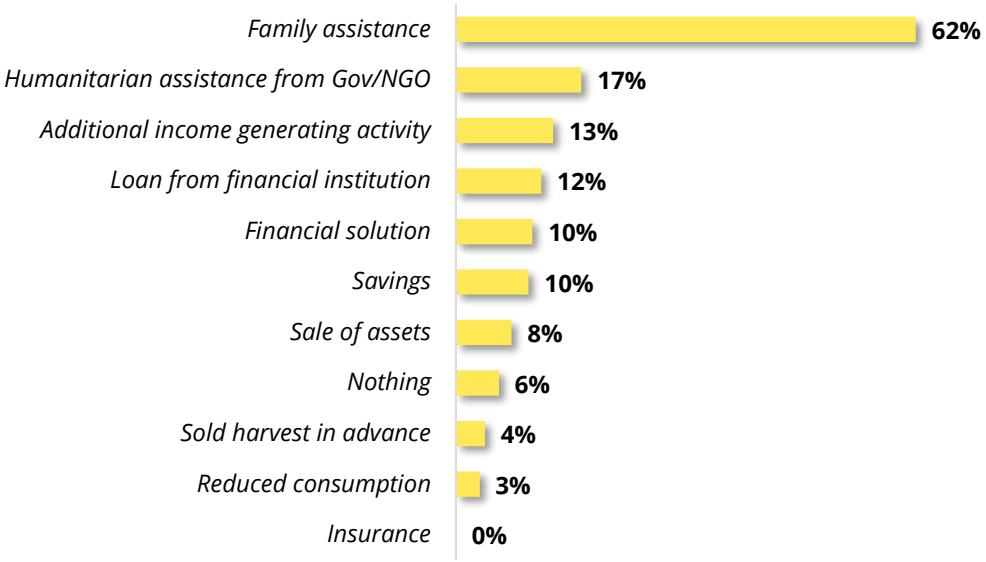
Figure 100: Share of households who experienced food insecurity in past 30 days, by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Households mainly use assistance received from family and friends to cope with food security shocks. Alternative coping strategies, such as humanitarian assistance, engaging in additional income-generating activities, resorting to financial solutions, and institutional assistance are less commonly used to address income volatility caused by food price increases.

Figure 101: Strategies to cope with food security shocks

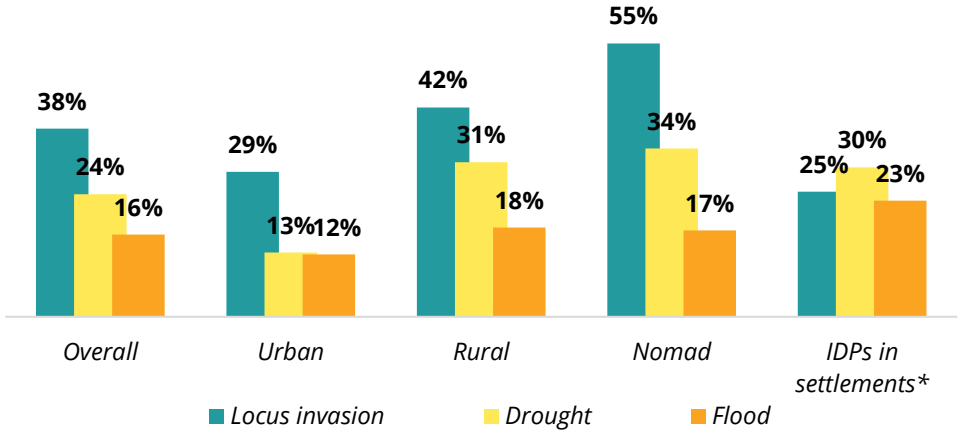


5.3.3. NATURAL DISASTERS

Populations with mobile lifestyles, namely IDPs and nomadic households are particularly prone to exposure to natural disasters. While 35 percent of urban households report having been affected by natural disasters, 51 percent of rural and 67 percent of nomadic households have been exposed to such shocks.

Different populations are hit by different natural disasters. Urban households are less affected by droughts than other population groups. Only 13 percent of urban households were affected by droughts, as compared with around one third of nomadic, rural, and IDP households. The recent locust invasion, in contrast, particularly hit nomadic households (55 percent). IDP households, in turn, appear to be most exposed to flooding (23 percent), although still 18 percent of rural households state having suffered the consequences of unpredictable rainfalls.

Figure 102: Share of population affected by natural disasters, by population type



**IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.*

While assistance from family and friends is the main means of coping with natural disasters, humanitarian assistance also plays an important role. While 47 percent of households exposed to natural disasters mention family assistance as their main relief strategy, 37 percent cite government and NGO assistance as a source of relief. Emergency financial behaviors, such as purchasing on credit and delaying payment of obligations are mentioned by 1z percent of respondents.

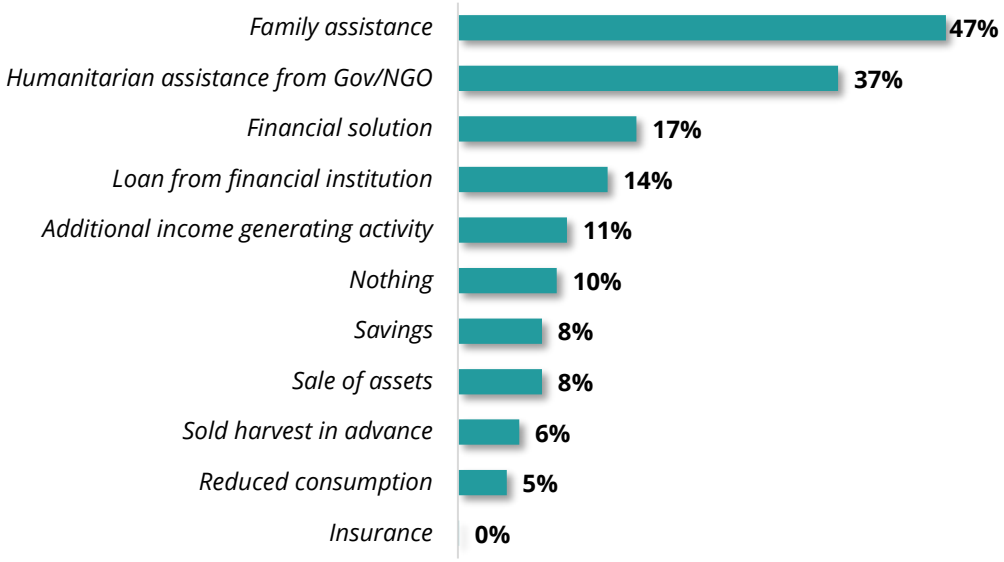
Focus Box 3: Natural disasters and COVID-19 in Somalia

Flash and riverine floods since late June 2020 have affected a large proportion of the population in HirShabelle, South West, Banadir, and Jubaland states. Among the affected, 124,200 people have been displaced from their homes, increasing the risk of further displacement and damage to farms. This, coupled with the dramatic impact of COVID-19, has meant that humanitarian partners had to scale up responses with regard to food, WASH (Water Sanitation and Hygiene), shelter and non-food items, health services, and protection assistance.[31] Somalia, like other countries in East Africa, has been hit hard by enormous swarms of locusts. The devastating threat to crops in Somalia started towards the end of 2019 and due to extreme rainfall creating favorable breeding conditions, the locust invasion increased. Somalia was one of the first African countries to declare the locust infestation a national emergency in February 2020.[32] The invasion is considered a large threat to the already fragile food security situation in Somalia. The country's Ministry of Agriculture reported last May to have deployed helicopters to spray new swarms of

[31] OCHA, Haaga season floods update 2, July 2020.
[32] Aljazeera, February 2020.

desert locusts and efforts to work with international communities such as 'hiring experts to use bio-organic pesticides' that target swarms of young locusts.[33] Efforts by the Food and Agriculture Organization (FAO) have been noted across Somalia with support from relevant government counterparts.

Figure 103: Strategies to cope with natural disasters



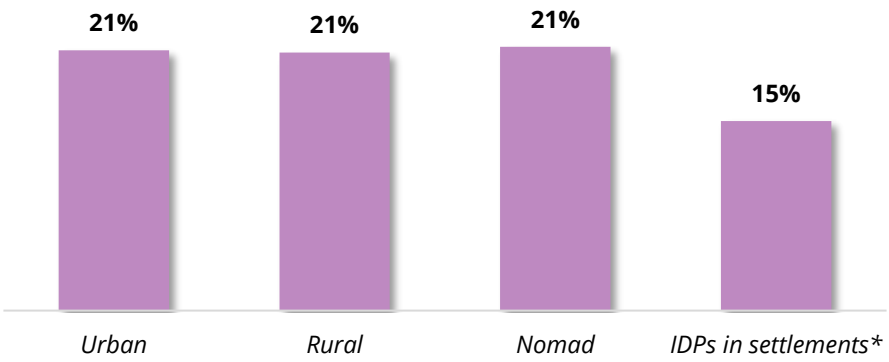
5.3.4. HEALTH SHOCKS

Health shocks, such as illness, injury, or death of an income-earning household member, have affected 20 percent of households since the outbreak of COVID-19. Family assistance is the most important coping mechanism (40 percent), followed by humanitarian assistance and emergency financial solutions (24 and 22 percent, respectively). This can be explained by the existence of many informal networks beyond the family circle in East African society, which are activated whenever an income earner from the household suffers from health issues or death. It is common that livelihoods support in those critical moments can also be extended by religious circles, employers and suppliers that belong to the same community, in the form of informal loans, advance salary payments, and purchase of basic subsistence goods on credit.

Moreover, 14 percent of households affirm that they could not do anything to counter the health shock they experienced. As for other shocks, reliance on savings or insurance is very low, as is dependence on extreme coping strategies such as the distress sale of assets and consumption reduction.

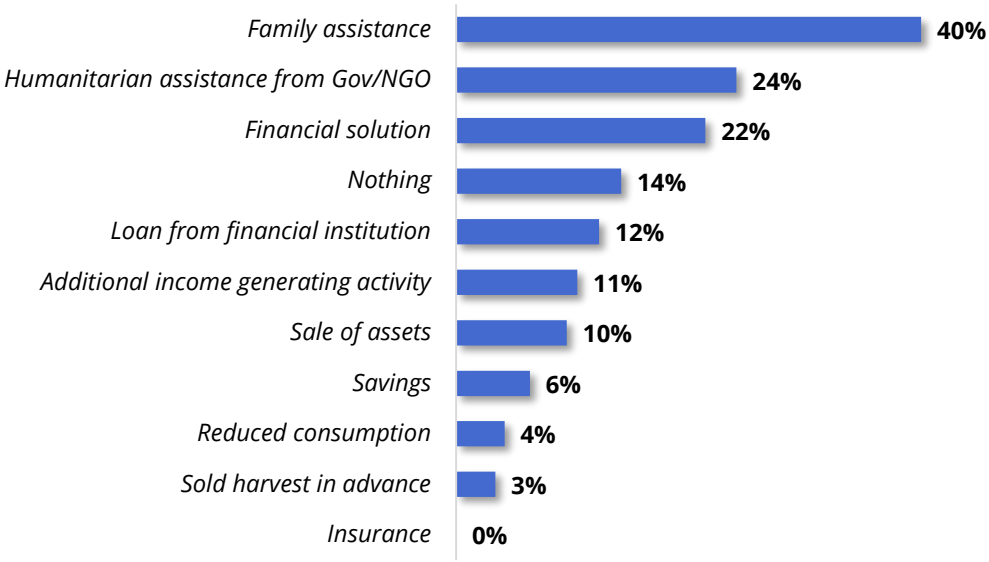
[33] Stokstad, February 2020.

Figure 104: Share of households exposed to health shock since outbreak of COVID-19, by population type



*IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

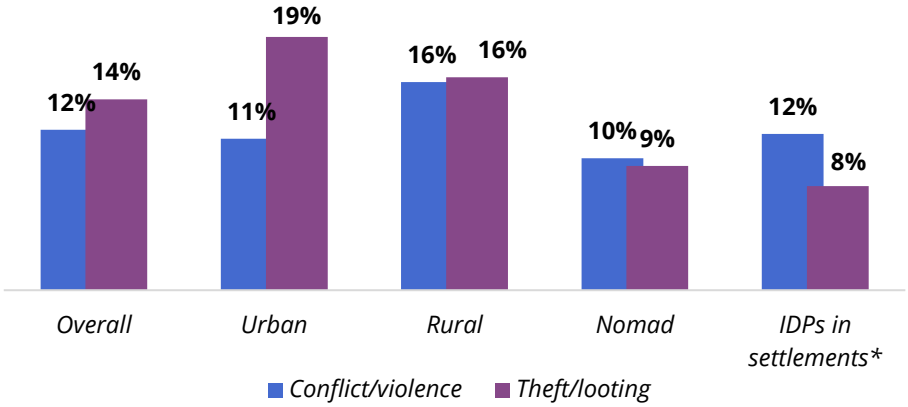
Figure 105: Strategies to cope with health shocks



5.3.5. SECURITY SHOCKS

Security incidents during COVID-19, such as theft of cash or property and community violence appear to be rare. Theft appears to be more of an urban phenomenon, affecting more urban residents than IDPs or nomadic residents.

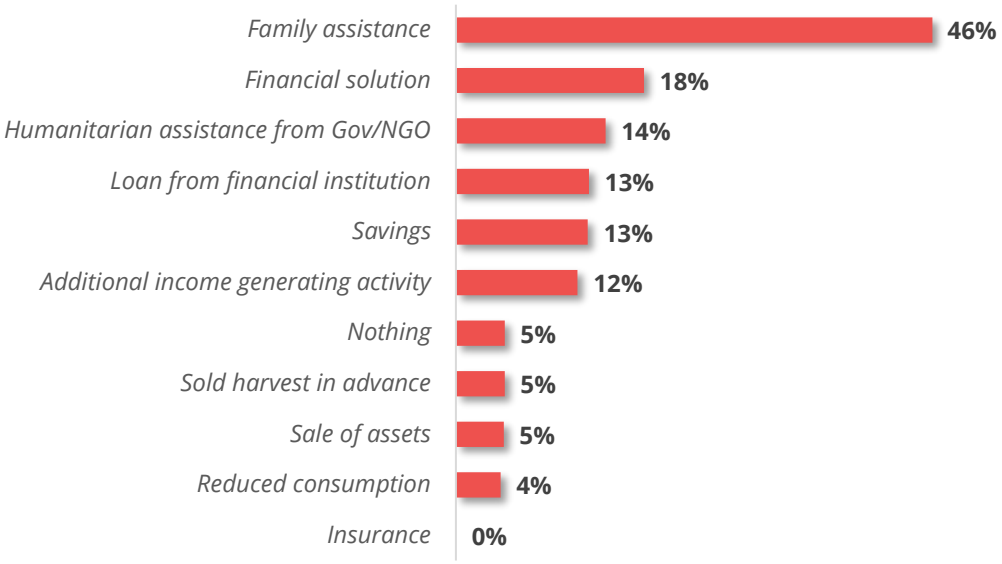
Figure 106: Share of the population affected by security incidents, by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Family assistance plays the biggest role in coping with security threats, as over 46 percent of households mention it as a coping strategy. Informal financial behaviors and humanitarian assistance also play a role, as mentioned by 18 percent and 14 percent of respondents affected by security shocks, respectively.

Figure 107: Strategies to cope with security shocks

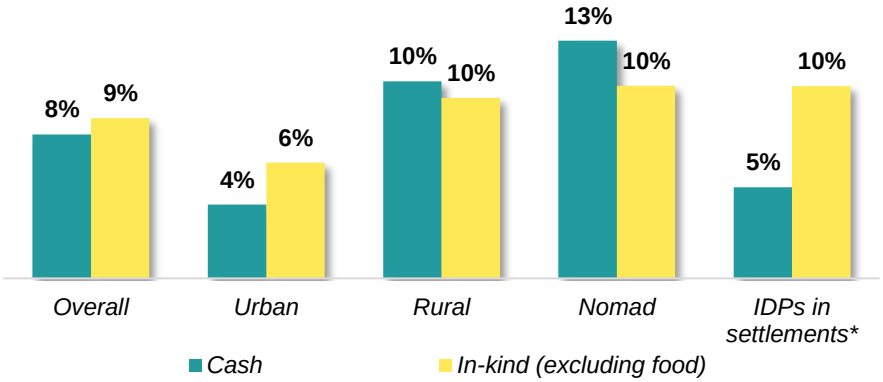


5.4. HUMANITARIAN ASSISTANCE

This section analyzes the extent to which Somali households have received humanitarian assistance since the outbreak of the COVID-19 pandemic and which institutional sources have granted relief assistance (i.e. government, International Organizations, NGOs).

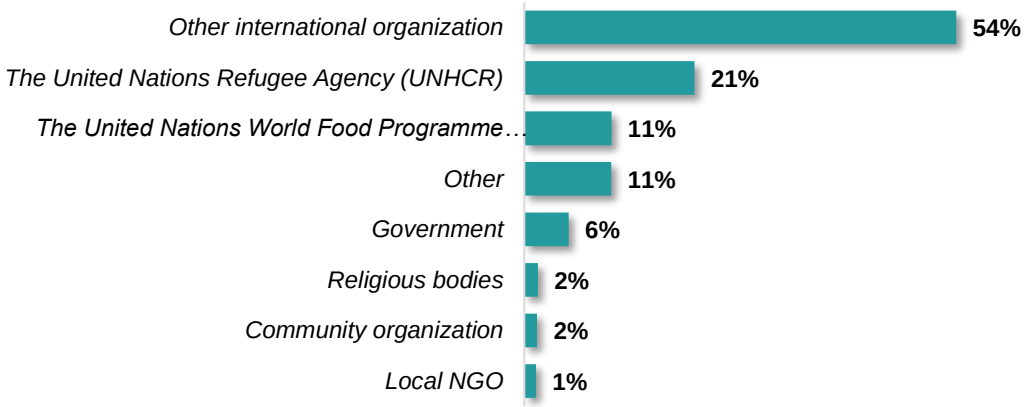
Prevalence of humanitarian assistance is generally low, as only 8 percent of respondents received assistance in cash since March 2020 and 9 percent in in-kind.[34] Humanitarian assistance (both in-cash and in-kind) is slightly higher among nomadic populations and lowest among IDP households. International organizations are the main providers of both cash and in-kind assistance. The government plays a bigger (but still minor) role in in-kind assistance than in delivering cash-based transfers. The role played by local NGOs, community organizations, and religious bodies is even smaller.

Figure 108: Share of the population that received humanitarian assistance, by type of assistance and population type



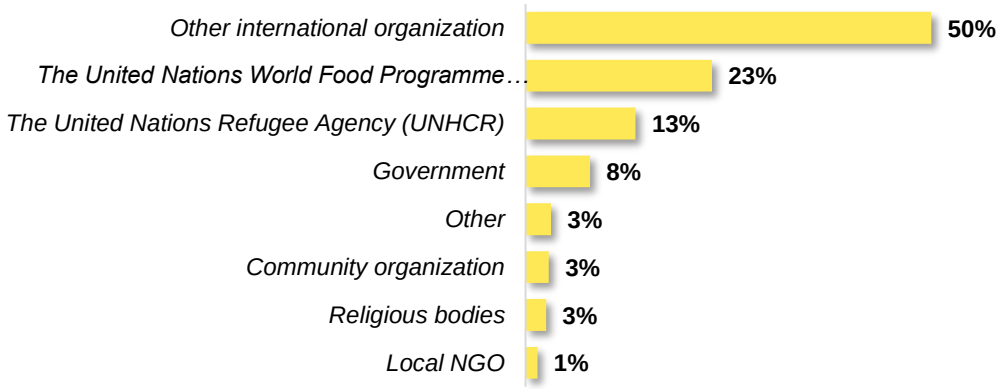
IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 109: Sources of cash assistance



[34] This figure is low for the population, as other sources report that nearly a third of the Somali population receive humanitarian assistance (OCHA, *Somalia Humanitarian Response Plan 2020*, July 26 2002). The difference might be due to the overrepresentation of wealthier households due to the nature of the phone survey. For details on this see Section 2.2.1.

Figure 110: Sources of in-kind assistance



6. CONCLUSIONS AND RECOMMENDATIONS

The outbreak of the COVID-19 pandemic in Somalia has tipped the country into a nation-wide health crisis which, coupled with widespread food insecurity, conflict and natural disasters, is having significant impacts on the lives and livelihoods of the Somali population and is testing the government's capacity to quickly react to the pandemic.

6.1. RECOMMENDATIONS TO PREVENT THE SPREAD OF COVID-19

In the Somali context, with the lack of health infrastructure and low capacity to cope with the health emergency, prevention through appropriate behavioral change is key to curb the spread of the virus. Results show that the adoption of COVID-19 preventative behavior is correlated with awareness of the disease and of the main hygiene and social distancing preventative measures.

Despite high awareness, there is evidence that awareness campaigns have not benefited all sections of the Somali population equally. In particular, remote and non-urbanized zones are mostly excluded from official awareness campaigns, leading to reliance on word-of-mouth instructions on how to prevent COVID-19.[35] In light of this:

- Awareness-raising efforts should be emphasized in rural and remote areas, despite urban centers being the epicenter of the disease in Somalia. Increasing prevention-focused efforts among those populations is crucial, both to avoid the spread of the virus, but also because those communities would be the worst hit by the virus, due to urban-rural financial and access gap in terms of services, hygiene products, medicines, etc.
- Awareness-raising efforts should be specifically tailored to the local context and disseminated through effective and creative means, able to capture the attention of the broad Somali population. This is important at the planning stage as well, where local community leaders can be informative of the solutions that may or not may not work in each context. Part of this has already been implemented through institutional partnerships between government authorities and religious institutions such as mosques and Quranic schools, where religious leaders have been acting both as information vehicles and as monitors of COVID-19 preventative conduct.[36] The following should be implemented more broadly:
    - *Adopt tailored and bottom-up awareness-raising efforts,* especially in rural communities, leveraging partnerships with influential individuals (i.e. elders, community leaders, youth leaders) who have a real chance in making a difference towards better COVID-19 preventative conduct.
    - *Employ creative solutions*, employing different and innovative platforms to make sure the reach of informative messages is maximized, and perceived as "useful entertainment" by the target audience. For example, the United Nations Development Program (UNDP) partnered with an artist to create a song raising awareness about the disease,[37] while the European Union is sponsoring art-related initiatives.[38]
- Fighting misinformation and disinformation is key to promoting safe preventative behavior, as false information and myths threaten to worsen the already severe effects of the virus. This should also be planned and implemented in collaboration with the Government and local stakeholders, to ensure reach and effectiveness. UNDP partnered with the biggest telecom provider in Somalia, Hormuud, to deliver a recorded message on millions of phones with useful COVID-19 information and directions to an informative website.[39]

Awareness dissemination is a necessary condition for the fight of the spread of COVID-19 in Somalia, but there are other material and social challenges that need to be addressed by the government and the international community, including:

---

[35] OCHA, June 2020.

[36] BBC News, April 2020.

[37] UNDP, August 2020.

[38] Anadolu Agency, June 2020.

[39] UNDP, August 2020.

1. Material challenges (i.e. lack of financial resources) to access basic hygiene products and services: international efforts must foster an inclusive process of providing cash and in-kind assistance, targeted at solving hygiene challenges among vulnerable populations (i.e. IDPs and refugees living in camps) but also for remote populations that do not have regular and sufficient access to those basic goods and services.
2. Social challenges: social challenges are the hardest to tackle, and are specific to the Somali context. Efforts must be implemented to fight stigma surrounding COVID-19, potentially through the implementation of media campaigns, emphasizing the need to denounce the disease to protect the lives of fellow Somalis. Partners should work hand in hand with influential individuals and local organizations at the community level to devise tailored solutions to overcome stigmatization, mistrust, and myths about the COVID-19 disease.

6.2. Recommendations to limit the damaging effects of COVID-19

COVID-19 has negatively impacted access to education and to employment opportunities, which could potentially have a long-term effect on Somalia's economy. Efforts should be made to mitigate these long-term effects by:

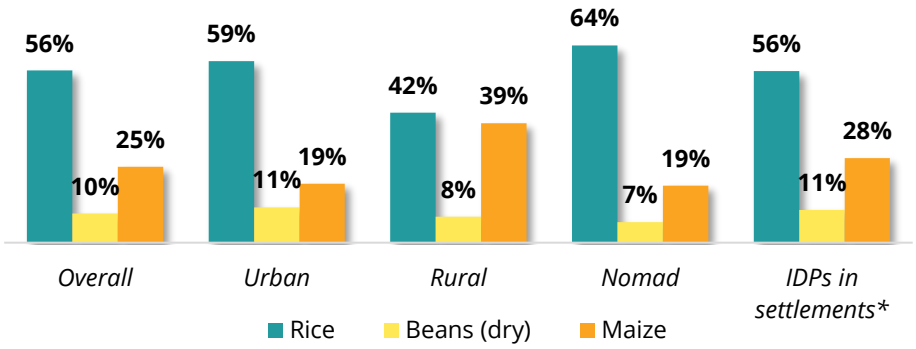
- Providing "smart" remote education options by implementing innovative alternatives to provide remote content to students, including remote lessons, but also self-learning options through the provision of radio and TV shows catered to children's curricula. Even though a good proportion of Somali schools have re-opened, this should still be considered in case conditions worsen and educational institutions need to be closed again.
- Providing livelihood options to those that suffered from job loss due to COVID-19. Efforts should not be directed only to providing subsistence cash or in-kind transfers but should also aim at promoting sustainable livelihood patterns of the most affected populations. Examples are the facilitation of community-led initiatives aimed at vocational skills transfer and entrepreneurship workshops.

7. ANNEXES

7.1. ANNEX A: ADDITIONAL FIGURES AND TABLES

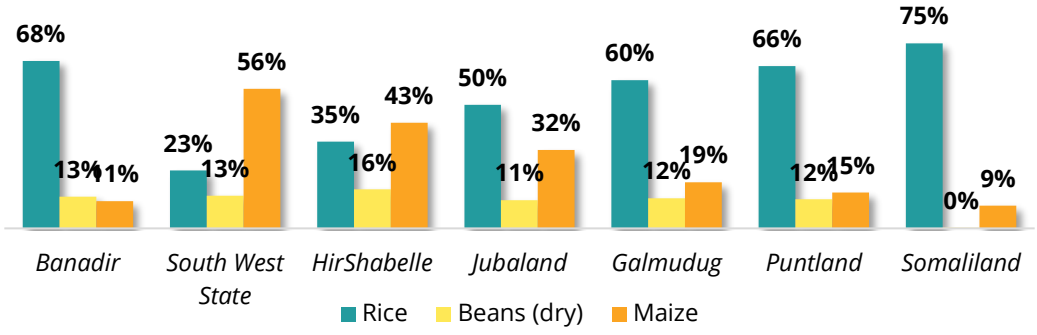
The three main staple foods among the Somali population are rice, maize, and dry beans. There are however variations between states, as rice is the preferred food for three quarters of the population in the North (Somaliland and Puntland) and maize is preferred in the South-Central regions. Rice is also preferred by urban, IDP and nomadic populations, while maize is more common among populations in rural areas.

Figure 111: Prevalence of main staple food usually consumed by household, by population type



IDP sample captures IDPs in settlements. Due to the small sample size, estimates for this population group should be interpreted with caution.

Figure 112: Prevalence of main staple food usually consumed by household, by state



7.2. ANNEX B: SAMPLING METHODOLOGY

7.2.1. SAMPLING FRAME

Sample allocation for the COVID-19 SHFPS has been developed to provide reliable estimates[40] at the state level[41] (i.e. Banadir, Jubaland, South West, HirShabelle, Galmudug, Puntland, and Somaliland) and by population type (i.e. urban, rural, nomads, and IDPs populations). The sample has been stratified according to the 18 pre-war regions and population types, thus resulting in 57 strata, of which 7 are IDP, 17 are nomadic, 16 are exclusively urban strata, 15 exclusively rural and two are combined urban-rural strata.[42] See Table 6: Sample allocation, by strata below for a list of the 57 strata and associated sample allocation.

While the 2020 Somali Health and Demographic Survey (UNFPA SHDS 2020[43]) was conducted creating its own sampling frame, it was decided to use the 2014 UNFPA Population Estimation Survey of Somalia (UNFPA PESS 2014)[44] for the following reasons:

- The SHDS 2020 microdata is still not public.
- In addition, the SHDS 2020 offers population estimations by population type (i.e. urban, rural, and nomad), but not according to the 18 pre-war regions. Stratification at the level of the 18 per-war regions will ensure higher comparability with previous nationally representative surveys, namely the Somali High-Frequency Survey Wave 2017–18 (SHFS 2017–18).
- The SHDS 2020 does not include IDPs as a population type, while the PESS 2014 does. Either way, there would be a need to rely on the PESS 2014 to obtain reliable population estimates for the IDP strata.
- Using PESS 2014 as a sampling frame allows for higher comparability with data collected during the SHFS 2017–18, also taking into account post-weighting adjustments in terms of gender and age groups (i.e. as it relies on the same population distribution across regions and populations types).

7.2.2. SAMPLE ALLOCATION

The sample was allocated across strata using optimal allocation (Neyman) techniques, as for the SHFS 2017–18.[45] The sample allocation was designed to give reliable estimates at the state level, with a Margin of Error (MoE) of 5.4 percent for all the states but for Jubaland and South West State, where the MoE is 3.80 percent. The MoE for Jubaland and South West Stata is lower because, as shown in Table 3 below, Kismayo (Jubaland – Lower Juba – Urban stratum) and Baidoa (South West – Bay – Urban stratum) were oversampled so as to give reliable estimates for those two cities.[46] Table 4 shows it at the population type level, both with their corresponding MoEs.

---

[40] With a margin of error between 2.8 percent and 5.3 percent. The Margin of Error is calculated as MoE=z*sqrt((p(1-p)/n)) where *z* is the z-score associated with the chosen Confidence Level (usually the CL is 95%, so z=1.96), *p* is the proportion (a conservative measure usually utilized in this formula is 50%) and *n* is the sample size.

[41] Technically, Banadir is not a Federal Member State, but an administrative region (Banadir Regional Administration - BRA). The Federal Republic of Somalia is composed of five member states (HirShabelle, South West State, Jubaland, Galmuduug, and Puntland), BRA, and the claimed State of Somaliland.

[42] The sample size in some strata was too small, thus urban and rural areas were merged into one single strata; this was the case for Sool and Sanaag.

[43] Directorate of National Statistics, Federal Government of Somalia. *The Somali Health and Demographic Survey 2020*)

[44] UNFPA, *Population Estimation Survey of Somalia,* 2014.

[45] nh = n * (Nh * σh) / [Σ (Ni * σi)], where *nh* is the sample size for stratum *h*, *n* is total sample size, *Nh* is the population size for stratum *h*, and *σh* is the standard deviation of stratum *h*.

[46] With a MoE of 5.31 percent.

Table 3: Sample allocation, by state

State	Sample allocation	Margin of Error
HirShabelle	330	5.40%
Galmudug	330	5.40%
Jubaland	670	3.80%
Banadir	340	5.40%
South West	670	3.80%
Puntland	330	5.40%
Somaliland	330	5.40%
TOTAL	**3,000**	

Table 4: Sample allocation, by population type

Population type	Sample allocation	Margin of Error
Urban	1,226	2.80%
Rural	914	3.24%
IDPs	430	4.73%
Nomads	430	4.73%
TOTAL	**3,000**	

Table 5: Sample allocation, by region

Pre-war regions	Sample allocation
Awdal	51
Woqooyi Galbeed	126
Toghdeer	74
Sool	33
Sanaag	47
Bari	127

Nugaal	52
Mudug	151
Galgaduud	330
Hiraan	141
Middle Shabelle	189
Banadir	340
Lower Shabelle	155
Bay	462
Bakool	52
Gedo	128
Middle Juba	99
Lower Juba	443
TOTAL	**3,000**

Table 6: Sample allocation, by strata

State	Strata	Region (state for IDPs strata)	Type	Sample allocation
	1	HirShabelle	IDP	30
	2	Galmudug	IDP	18
	3	Jubaland	IDP	77
	4	Mogadishu	IDP	90
	5	Puntland	IDP	168
	6	Somaliland	IDP	24
	7	South West	IDP	23
HirShabelle	8	Hiraan	nomad	40
	9	Middle Shabelle	nomad	15
Galmudug	10	Galgaduud	nomad	30
Jubaland	11	Gedo	nomad	28
	12	Lower Juba	nomad	20
	13	Middle Juba	nomad	21
Puntland	14	Bari	nomad	20
	15	Mudug	nomad	28
	16	Nugaal	nomad	35
Somaliland	17	Awdal	nomad	19
	18	Sanaag	nomad	32
	19	Sool	nomad	20
	20	Toghdeer	nomad	16
	21	Woqooyi Galbeed	nomad	30
South West	22	Bakool	nomad	23

	23	Bay	nomad	28
	24	Lower Shabelle	nomad	25
HirShabelle	25	Hiraan	rural	68
	26	Hiraan	urban	25
	27	Middle Shabelle	rural	126
	28	Middle Shabelle	urban	26
Galmudug	29	Galgaduud	rural	73
	30	Galgaduud	urban	210
Jubaland	31	Lower Juba	urban	340
	32	Gedo	rural	46
	33	Gedo	urban	19
	34	Lower Juba	rural	46
	35	Middle Juba	rural	57
	36	Middle Juba	urban	16
Banadir	37	Banadir	urban	250
Puntland	38	Bari	rural	5
	39	Bari	urban	32
	40	Mudug	rural	5
	41	Mudug	urban	25
	42	Nugaal	rural	2
	43	Nugaal	urban	9
Somaliland	44	Awdal	rural	12
	45	Awdal	urban	18
	46	Sanaag	urban/rural	14
	47	Sool	urban/rural	13
	48	Toghdeer	rural	6
	49	Toghdeer	urban	44
	50	Woqooyi Galbeed	rural	15
	51	Woqooyi Galbeed	urban	67
South West	52	Bay	urban	340
	53	Bakool	rural	20
	54	Bakool	urban	7
	55	Bay	rural	86
	56	Lower Shabelle	rural	95
	57	Lower Shabelle	urban	23
				3,000

7.2.3. IMPLEMENTATION CHALLENGES AND ACTUAL SAMPLE REALIZATION

While sample allocation was suggested to provide reliable estimates across the four population types (i.e. urban, rural, nomads, and IDPs in settlements), reaching rural and nomadic-lifestyle respondents proved to be difficult in a phone survey setting. This is not due to higher refusal rates among those population, but can be explained by the following reasons:

- Phone penetration is lower for populations excluded from urbanization, especially rural households;
- Lifestyle considerations: despite phone ownership being still quite high among nomadic households, those respondents were the hardest to reach as mobile phone usage among nomadic populations is irregular. Nomadic households usually share a phone among their members. When the man of the household is busy working with the livestock, the phone usually stays with the woman within the nomad camp, but is only turned on in case of emergency. In addition, nomadic households are likely to move across areas with low network coverage and low electricity penetration, which leads to a failure to keep their phones active and charged. Nomads are also less likely to be registered with Non-Governmental Organizations (NGOs) since they are often on the move. They therefore have less of an incentive to regularly check their phones, unlike urban/IDPs/rural households.

Given the above-mentioned challenges, it was decided in consultation with the World Bank Group to adopt measures to speed up the data collection while still obtaining reliable estimates at the population type level and at the state level by:

- Lowering the sample size of the rural stratum (to approximately 500 interviews)
- Reducing the number of interviews in the oversampled urban strata of Kismayo (Jubaland – Lower Juba/Urban) and Baidoa (South West State – Bay/Urban)
- Utilizing snowball sampling methodology (i.e. referrals) to increase the sample for hard-to-reach population types, namely the nomadic households

The two tables below present the final sample realization by population type and state.

Table 7: Actual sample realization, by state

State	Number of interviews
Banadir	345
Galmudug	351
Jubaland	336
HirShabelle	433
Puntland	377
Somaliland	393
South West	576
TOTAL	**2,811**

Table 8: Actual sample realization, by population type

Population type	Number of interviews
Urban	1,735
Rural	611

IDPs	30
Nomad	435
TOTAL	**2,811**

7.2.4. SAMPLE CONSIDERATION FOR INTERNALLY DISPLACED PEOPLE (IDP) STRATA

The proposed sample allocation reflects the need to be representative at the population type level, including urban residents, rural respondents, nomads, and IDPs in settlements. In a face-to-face survey, this allocation would be addressed by drawing Enumeration Areas (EAs) from different livelihood zones. However, being a phone survey, respondents were asked to self-identify themselves according to one of the four population types, as presented in Table 9.

Table 9: Population type self-identification questions

Identification element	Question
State of Residence	In which state do you currently reside?
Region of Residence	In which region do you currently reside?
IDP household	Have you had to leave your home in the last 3 years due to conflicts or natural disasters (i.e. drought, flooding)?
Zone of livelihood	Do you live in an urban area, rural area, in an IDP camp, or are you on the move for at least 6 months per year (i.e. nomadic household)?

IDPs are here defined as those who answered positively to the "Have you had to leave your home in the last 3 years due to conflicts or natural disasters (i.e. drought, flooding)?" question. Households answering "Yes" to this question, are further asked what their mode of living is (urban, rural, or currently in an IDP camp). Households are considered IDP households if they are currently living in an IDP camp. However, targeting IDPs living in camps is difficult using an RDD protocol. Only 5 percent of the surveyed households that had to flee their home in the past 3 years are living in IDP camps.

7.3. ANNEX C: DATA COLLECTION IMPLEMENTATION

7.3.1. IMPLEMENTATION INFRASTRUCTURE

The data collection for the SHFPS lasted nearly 30 days (from June 18 to July 23, 2020) and it was implemented by Altai Consulting with technical and financial support from the World Bank. The phone survey data collection was conducted through a call center. Altai Consulting selected a gender-balanced call center team who can communicate with respondents in local accents to minimize any bias against other geographic regions. The call center platform uses **a TeleSom multi-line phone system** accessed through laptops. This system's software allowed users to dial any number across the country across the four main Somali phone networks (TeleSom, Somtel, Gollis, and Hormuud). The system used land-based technology rather than Voice Over IP (VOIP) to improve call quality.

The SHFPS sampled 2,811 households across Somalia **using phone numbers selected through a Random Digit Dialing (RDD) protocol**. 2,811 households were interviewed, with 95 percent (2,659)

of those interviews being successfully completed.[47] To achieve 2,811 successful interviews, over 15,000 phone numbers were contacted. The calling protocol included three attempts for each phone number before discarding the phone number, expect in cases where the phone number was non-existent.

The response rate, calculated as the percentage of reached eligible households willing to participate in the survey,[48] is nearly 80 percent, while the average duration of the survey was around 28 minutes. To make sure stratification across the 18 pre-war regions was correctly implemented (thus ensuring representativeness at the state level), **the Altai team included quotas within the survey questionnaire that reflected the sample allocation for each stratum**. The above-described call center system allowed calls to be stratified by region with a high degree of accuracy based on the number syntax. The interviews were conducted using Computer Assisted Telephone Interviews (CATI) and the survey was run on the SurveyCTO platform.

7.3.2. DATA QUALITY MONITORING PROTOCOL

During the survey implementation, the following quality assurance mechanisms were applied:

- Project progress was followed in near real-time thanks to the upload of questionnaires onto the SurveyCTO server at the end of each day. Altai's Research Team monitored the quality of the data daily using purposefully developed Stata scripts, and then communicated appropriate feedback to the enumeration teams. These procedures allowed for the comparison of enumerators' performances and to take immediate corrective actions when needed, e.g. providing additional guidelines and training for those enumerators who were seen to underperform. Enumerators' performance was monitored through indicators such as duration of interviews by enumerator, skip patterns, completeness of responses per interview, response rate, and item response rate. Comparing the completeness of answers also served to identify any suspicious patterns, e.g. inconsistent answers are a symptom of poorly conducted interviews. Figure 113 below shows a screenshot of the monitoring dashboard that Altai's Research Team in Nairobi used to monitor fieldwork and enumerators' performance.
- Call center supervisors closely monitor the enumerators in the call center and their progress, thereby ensuring that any issues are promptly addressed.
- Random sound bites are recorded by the SurveyCTO software on a pre-defined percentage of randomly selected questions. These must include respondent and enumerator voices, otherwise the interview will be discarded.

[47] Sudden unavailability of the respondent, such as the respondent hanging up or the phone running out of battery in the middle of the interview, is the main reason for incomplete interviews.

[48] The response rate is calculated as the number of interviewed households over the number of reached eligible households, thus excluding unreached households (i.e. invalid numbers or failure to contact the household) and households that were reached but were not eligible to participate in the survey (as determined by the minimum age requirement of the main respondent and sampling criteria).

Figure 113: Altai's real-time monitoring dashboard

7.4. ANNEX D: CALCULATION OF SAMPLING WEIGHTS

The objective of the weighting procedure is twofold:

(i) **Construct sampling weights to correct for the selection bias generated by Random Digit Dialing (RDD) phone surveys.** This will be achieved using a Propensity Score Weighting (PSW) methodology.

(ii) **Construct analytical weights to ensure the representativeness of the sample according to state x population type.** This will be achieved using a post-stratification methodology.

7.4.1. STEPS IN THE PROPOSED SAMPLING METHODOLOGY

7.4.1.1. Propensity score weighting (weights w1)

PSW allows for weight computation based on the households' probability of being included in the phone survey. The propensity score weights are calculated based on a representative household survey: the SHFS II. The probability of being included in the phone survey is then estimated based on selected variables which are common to both surveys.

Preliminary analyses

To identify the explanatory variables to include in the PSW model, preliminary statistical analysis was performed on the SHFS II. The SHFS II contains detailed information on households' characteristics and assets, including whether the household owns a mobile phone. Since the probability of being included in a phone survey is strongly correlated with mobile phone ownership, logistic regressions were run to identify the most important predictors of the probability of owning a phone.

Since the variables to be included in the PSW model had to be common to the SHFS II and the phone survey, preliminary analyses were limited to variables that were also present in both surveys. Five categories of explanatory variables were identified: (1) population type, (2) state or region, (3) household size, (4) floor material, and (5) asset ownership.

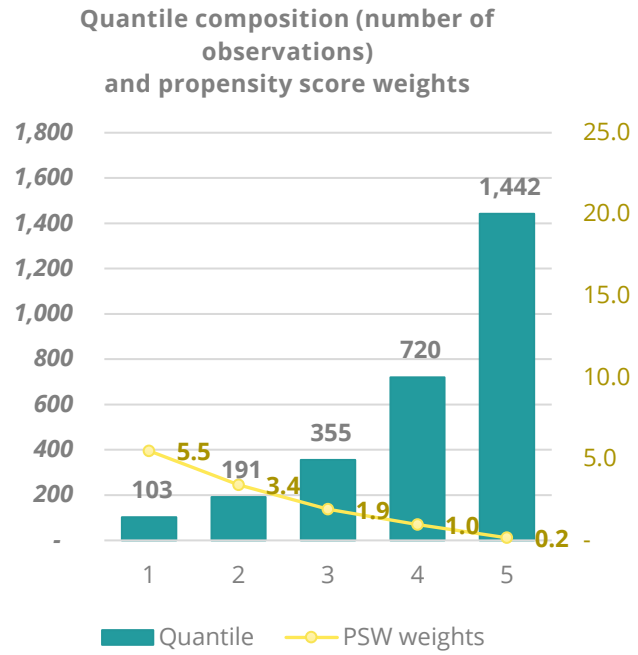
PSW results

The choice of the final PSW model was made by considering the following conditions:

(1) **The PSW model should have a relatively good explanatory power of the probability of being included in the phone survey[49].** A PSW that only includes one explanatory variable (i.e. population type) can usually be improved by including other explanatory variables (regions, asset ownership).
(2) **There must be enough overlap in each propensity score subgroup (i.e. quantiles) between the SHFS II and the phone survey.** Including too many variables in the PSW model may lead to highly imbalanced quantiles, with a predicted probability of being included in the phone survey of 1 for each phone survey observation.

In the table below, we present the results for the chosen PSW model. We chose a PSW model which (1) included key and poorly correlated variables to estimate the probability of being included in a phone survey (population type, region, asset proxy) a sufficient explanatory power of the probability of being included in the phone survey (include most relevant variables such as asset proxy; (2) guaranteed sufficient overlap between the phone survey and the SHFS II in each quantile.

Figure 114: PSW model: explanatory variables, statistics, quantile composition, and weights



Variables	State Household size Population type Satellite ownership
Non missing Obs (*)	8,624
Pseudo R^2	27%

Note (*): *some observations in the phone survey had one or several variables missing (floor material, assets, household size). For those observations, it is not possible to calculate the PSW based on the chosen model. One possibility to deal with such observations is to penalize them by assigning them to the highest quantile, i.e. to the subgroup of observations with the lowest propensity score weight. Another option, which is usually done, is to create another subgroup for observations with a missing variable. However, this is not a good option in our setting, because this group would only contain phone survey observations (there are no missing values in the SHFS II for our variable of interest), which is a violation of condition (2) above. As such, those observations with missing values are "penalized" and included in the highest quantile.*

After running the PSW, weights were assigned to all observations of the phone survey such that the observations with the lowest probability of being included in the phone survey were given more weight in the sample. The sum of all weights is equal to the sample size, here 2,811.

[49] The explanatory power of a model is represented by the R-square (R2). It is equal to the share of the variance of the variable of interest (here, the probability of being included in a phone survey) explained by the model. The R-square, however, does not exist for a logistic regression since these regressions rely on maximum likelihood estimates obtained through an iterative process. In this case, a comparable pseudo R-square can be computed. While there is no absolute rule on how high an R2 should be, we systematically excluded specifications with an R2 lower than 10 percent, which indicates that the variables included in the model are poorly relevant. On the other hand, in the specific context of PSW, the explanatory power of the model should not be too high in order to ensure enough overlap between the phone survey and the SHFS II in each quantile (above 50 percent).

7.4.1.2. Post-stratification (weights w2)

The objective of a post-stratification methodology is to compute weights such that the sum of all weights for each population subgroup of interest (in our case, groups are defined by a state x population type cell) is equal to the real population size. Post-stratification can be conducted when the real population size is known for each mutually exclusive cell, in this case defined by the state and population type (28 cells). When only the marginal distribution of the population (according to state or population type) is known, other methods such as ranking can be used.

Household population estimates of the SHFS II per state and population type were used as reference values. The calculation of post-stratification weights was then conducted for each cell (28 cells) by calculating the ratio of the (propensity weighted) sample over the population size. Each observation of the phone survey was then assigned a post-stratification weight w2, depending on its state and population type.

Table 10: Illustration of the sampling weight computation process

State	Population type	Sample pop (sample)	Sample population, propensity weights (sample_w1)	Population (pop)	Post stratification weights w2 (sample_w1/pop)	Weighted sample (sample_w1 x w2)
Banadir	urban	251	496,3	187 246	377	187 246,0
Banadir	idp		5,8	115 775		15 775,0
South West State	urban		7,7	60 383		60 383,0
South West State	rural		2,8	207 063		07 063,0
South West State	idp	24	11,5	15 200	1 317	15 200,0
South West State	nomad	69	48,9	78 247	1 600	78 247,0
HirShabelle	urban	54	41,1	26 700	650	26 700,0
HirShabelle	rural	182	73,2	77 191	1 055	77 191,0
HirShabelle	idp	42	14,9	19 640	1 315	19 640,0
HirShabelle	nomad	58	25,5	56 398	2 212	56 398,0
Jubaland	urban	235	124,4	61 575	495	61 575,0
Jubaland	rural	37	21,8	98 952	4 547	98 952,0
Jubaland	idp	92	31,2	50 277	1 613	50 277,0
Jubaland	nomad	69	26,6	70 664	2 654	70 664,0
Galmudug	urban	175	151,7	29 745	196	29 745,0
Galmudug	rural	108	69,5	7 855	113	7 855,0
Galmudug	idp	20	9,5	11 413	1 198	11 413,0

Step1 - Propensity score weights

Step2 – post stratification

7.4.1.3. Final weights (w1 x w2)

At the end of the weighting procedure, each individual observation has a final weight w, which is equal to w1 (propensity weight) x w2 (post-stratification weight). The weighted distribution of the phone survey observations is representative of the Somali household distribution at the state and population type level.

7.4.2. LIMITATIONS OF THE WEIGHTING PROCEDURE

The weighing procedure was designed to ensure the external validity of the analyses at the household level, not at the respondent level. In the case of the propensity score weighting procedure, selection bias generated by RDD phone survey of *households* was corrected, not for individuals. As a result, the sample of *respondents* is not perfectly representative of the population of Somalia, in particular in terms of educational level and general wealth. This, in turn, may affect the representativity of the households of our sample (more educated households).

Another important limitation of the weighting procedure comes from the fact that the PSW can only partially correct for selection bias. While it is important to include sufficient variables in the PSW to predict the probability of being included in a phone survey (demographic characteristics, indicator of wealth), statistical inference can be jeopardized – and the PSW rendered ineffective - when there is an

attempt to correct for the under/over representativity of the sample on many dimensions – that is,. when too many variables are included in the PSW model. It is particularly important to avoid the inclusion of variables which are correlated with each other (for instance, different wealth indicators) in order to obtain unbiased estimates.

8. SOURCES

Africanews.com. *Somalia leaders agree to hold timely polls, format to be decided.* 23 July 2020. https://www.africanews.com/2020/07/23/somalia-s-regional-presidents-meet-national-polls-top-agenda/.

Anadolu Agency. «Somali artists use art to spread COVID-19 awareness.» 26 June 2020. https://www.aa.com.tr/en/africa/somali-artists-use-art-to-spread-covid-19-awareness/1890554.

BBC News. «Coronavirus: Fighting Al Shabaab propaganda in Somalia.» 1st April 2020: https://www.bbc.com/news/world-africa-52103799.

CARE. *Stigma harming Somalia's efforts to stop COVID-19.* 22 July 2020. https://www.garoweonline.com/en/news/somalia/stigma-harming-somalias-efforts-to-stop-covid-19.

Deutsche Welle. «Is Somalia ready for a one-person one-vote election?» https://www.dw.com/en/is-somalia-ready-for-a-one-person-one-vote-election/a-49324124, 2020.

Federal Government of Somalia. «Comprehensive Socio-Economic Impact and Response Plan for COVID-19.» Mogadishu, March 2020.

Jerving, Sarah. *Devex.com.* 13 August 2020. https://www.devex.com/news/stigma-and-weak-systems-hamper-the-somali-covid-19-response-97895.

Majid, Nisar, Khalif Abdirahman, e Shamsa Hassan. *Remittances and Vulnerability in Somalia: Assessing sources, uses and delivery mechanisms.* Rift Valley Insistute, 2017.

«Mask Guidance.» *World Health Organization.* 11 March 2020. https://www.who.int/docs/default-source/searo/bangladesh/2019-ncov/epi-win-infographics.pdf?sfvrsn=fd860d4d_4.

OCHA. «Hagaa Season Floods Update 2.» *Reliefweb.com.* 26 July 2020. https://reliefweb.int/sites/reliefweb.int/files/resources/hagaa%20flash%20floods%20update%202%20-%20final%202%20ci%20final.pdf.

OCHA. «Somalia COVID-19 Impact Update No. 8.» *Reliefweb.com.* 8 June 2020. https://reliefweb.int/sites/reliefweb.int/files/resources/COVID%20-19%20Impact%20Update%208_-%20publish.pdf.

OCHA. «Somalia Humanitarian Response Plan 2020.» 26 July 2020.

OCHA. *Somalia: Update 2 - Overview of COVID-19 directives.* https://reliefweb.int/sites/reliefweb.int/files/resources/Overview%20of%20COVID-19%20directives%202.pdf, 26 Aprile 2020.

Organization, World Health. «Mask guidance.» 11th March 2020.

«Somalia declares national emergency over locust surge.» *Aljazeera.* 2 February 2020. https://www.aljazeera.com/news/2020/02/somalia-declares-national-emergency-locust-upsurge-200202115231010.html.

Somalia Ministry of Health. s.d. https://moh.nomadilab.org/.

Stokstad, Erik. «Science.» *In Somalia, an unprecedented effort to kill massive locust swarms with biocontrol.* 12 February 2020. https://www.sciencemag.org/news/2020/02/somalia-unprecedented-effort-kill-massive-locust-swarms-biocontrol#.

The Anti-Tribalism Movement. «COVID-19: Impact on Remittances from UK to Somalia.» Briefing for the UK Government, May 2020.

UNDP. «UNDP and Aar Maanta release new song warning COVID-19 still threat to Somalia.» *UNDP Somalia.* 8 August 2020. https://www.so.undp.org/content/somalia/en/home/presscenter/pressreleases/2020/undp-and-aar-maanta-release-new-song-warning-covid-19-still-thre.html.

UNFPA. «Educational characteristics of the Somali people, Analysis on PESS 2014.» 2016.

WFP Somalia. «Joint Markets and Supply Chain Weekly Update.» 3-10 May 2020.

World Aware. *COVID-19 Alert: Somalia Imposes Indefinite Nightly Curfew in Mogadishu From April 15.* 13 April 2020. https://www.worldaware.com/covid-19-alert-somalia-imposes-indefinite-nightly-curfew-mogadishu-april-15.

World Health Organization. s.d. https://www.who.int/health-topics/coronavirus#tab=tab_3 (consultato il giorno August 15 , 2020).