



Monitoring the socio-economic impacts of COVID-19 on Djiboutian households in Djibouti

Results from fourth wave of survey
(collected March 11-April 25)

October 2021

Executive Summary

The fourth round of data collection on monitoring of socio-economic impacts of the COVID-19 pandemic in Djibouti took place between March 11 and April 25, 2021, and was implemented over phone by the Institute of Statistics of Djibouti (INSTAD). The fourth wave sample consists of 1,561 respondents, 1,122 of which are panel households interviewed in wave 3, and 439 replacement households. Seven themes are tackled during this wave to understand the trend of impacts of the COVID-19 crisis: economic activities, livelihoods, safety nets, access to basic goods, access to services, food insecurity and gender.

Djiboutian breadwinners continue to return back to work, showing a consistent trend in employment relative to the previous rounds of surveys. Indeed, 85 percent of households reported their breadwinner working the week before the survey, compared to 58, 77, and 83 percent in the first, second, and third wave of data collection. Notably, 83 percent of breadwinners who worked before the survey reported working as usual, compared to 77 percent in the third wave. In terms of sources of income, an increase in waged work and family business as a source of income is observed, together with a drop in assistance from government as the COVID-19 social assistance program came to an end in March 2021.

While Djibouti shows clear signs of recovery, some groups of the population may be lagging behind. For instance, informal workers exhibit signs of precarity, as they have a higher propensity to work less than usual, and among those a higher proportion receive no pay. Similarly among the female breadwinners who report working less than usual or not at all (6 and 7 percent respectively), 66 percent report not receiving any pay. In fact, compared to the private sector, public sector employees had a higher propensity to declare working as usual and receiving full pay. Indeed, 56 percent of households whose breadwinner works in the public sector reported having enough resources for the following 30 days, compared to 32 percent among those whose breadwinner is in the private sector. Poor households, as identified in the social registry, are also more likely to declare not having enough resources, compared to non-poor household (41 and 30 percent respectively).

In a positive sign, nearly all households report having access to basic goods, including food and basic medicines, and having access to healthcare when needed. Compared to the third wave, more households appear to have an adequate food consumption score, reflecting adequate food frequency intake and dietary diversity. Furthermore, around 98 percent of both boys and girls attend schools. However, differences are observed among children who require school catch-up activities. While 34 and 29 percent of girls and boys, respectively, are declared to need catch-up scholarly activities, only 70 percent of girls participate in them when needed compared to 92 percent of boys.

In the fourth wave of this survey, a new module was added on gender, intra-household decision making, and time-use. When household decisions are taken by a single household member, women tend to participate more than men in decisions related to everyday purchases and healthcare of household members. Where more than one household member is involved in making the decision, women participate in the decisions jointly with men in most of the cases, but it is often less likely that only women make the decision. On time-use, women are more likely to spend time on grocery shopping, domestic work, children's studies, healthcare and leisure activities, than they are on income-generating activities. A year after the onset of the COVID-19 in Djibouti, most respondents declared that COVID-19 had not changed their life. This is particularly the case when it is one member who spends the most time undertaking the activity. With regards to public safety, men report a higher likelihood of being a victim of crime and not feeling safe in public spaces than women do, but women report a higher likelihood of experiencing domestic conflict.

As Djibouti had experienced an increase in the COVID-19 cases in March 2021, this survey also elicited respondents' attitudes towards vaccines. Most respondents reported that they would accept to take an approved and free COVID-19 vaccine. The main reasons for refusing a COVID-19 vaccine are worries about undesirable effects (for 31 percent of the respondents) and the fact that respondents do not trust vaccines in general (23 percent). Around 10 percent of the respondents would not accept to take the COVID-19 vaccine but would be more likely to take it if someone, such as family, friends, religious leaders, recommends it. Respondents from poor households report a lower propensity to accept the vaccine, but a higher likelihood to change their mind if someone recommended it.

INTRODUCTION



More than a year after the onset of the COVID-19 pandemic, Djibouti faced a new wave of COVID-19 between March and May 2021, with the highest number of cases registered ever in the country during the week of March 29 (1,260 confirmed cases, according to WHO). As of July 13th, 2021, 11,621 confirmed cases and 155 deaths of COVID-19 were registered in Djibouti (WHO). Moreover, the vaccination campaign started with 26,796 vaccine doses administered as of June 23th, 2021 (WHO). Since the end of the first wave and the lift of most of the restrictive measures by the end of May 2020, the country has not initiated any further measures of confinement. Nevertheless, the potential negative effects of the pandemic may have persisted. Indeed, the first two waves of this survey revealed some of the negative effects the pandemic and its ensuing restrictive measures may have had on households' welfare, in particular in terms of breadwinners' employment and access to good and services. Despite an economic recovery that had been observed since the first wave, the third wave highlighted the precarity of some households that may have been left behind.

The fourth wave of the this COVID-19 survey aimed to follow the households that had been previously interviewed in the first three rounds, as well as a replacement sample. Seven themes are tackled during this wave to understand the trend of impacts of the COVID-19 crisis: economic activities, livelihoods, safety nets, access to basic goods, access to services, food insecurity and gender.

THE PHONE
SURVEY



The fourth round of data collection on monitoring of socio-economic impacts of the COVID-19 pandemic took place between March 11 and April 25, 2021, and was implemented over phone by the Institute of Statistics of Djibouti (INSTAD). This wave aimed to follow the households from the national sample that had been interviewed in the first three rounds of data collection, as well as a replacement sub-sample. Information on the households and breadwinners is provided by an adult respondent, randomly chosen household head and spouse and distributed equally between male and female across households, allowing gender decomposition of relevant personal data of the respondents by gender. The objective of this study is to identify trends in economic activities and livelihoods, access to basic goods and services, food insecurity and safety nets. New to this wave, a module on gender issues such as intra-household decision-making and time-use has been added. As in the three previous waves, the sample of national households is drawn from the Ministry of Social Affairs and Solidarity's social registry (see Box 1 for information about the sampling strategy and the sampling weights). The results are representative of the country's urban population (except the top wealth quintile) and can be disaggregated by location and poverty status.

The fourth wave sample consists of 1,561 respondents, 1,122 of which are panel households interviewed in wave 3¹, and 439 replacement households (see Box 2 for the analysis of attrition and the composition of the sample by panel status). The response rate of the whole sample stands at 71.8 percent (Table 2.1), with variations across location and replacement status.

Table 2.1: Response rate to the survey

	Number of Successful Interviews	Response Rate (%)
Whole Sample	1,561	71.8
By Replacement Status		
Panel (wave 3 to 4)	1,122	81.1
Replacement	439	55.6
By Location		
Balbala	539	75.1
Rest of Djibouti City	527	71.6
Other Urban Areas	495	68.8

Source: Djibouti COVID-19 phone survey, 4th wave.

¹ In previous waves of data collection, households who had not responded to any previous wave were not considered in subsequent samples. In the fourth wave, households who were not reachable in wave 3 but were part of the first two waves were considered as part of the sampling frame and are accounted for in the category "replacement" sub-sample of Table 2.1 to allow comparison of the panel sub-sample with other waves.

Around 59 percent of the respondents are female, 60 percent are the head of the household, and 47.5 percent are aged between 35 and 49 years old (Table 2.2). Around 81 percent of the households have a breadwinner who is a member of the household and for 41 percent of them, the respondent is the breadwinner. For those who are household member, breadwinners tend to be mainly male and household head (57 percent), and the majority of them have 35 to 49 years old. For more details on weighting, see Box 1.

Table 2.2: Characteristics of respondents and breadwinners (%)

	Respondent	Breadwinner
Gender		
Male	40.6	57.4
Female	59.4	24.3
Not a household member	-	18.5
Age group		
18-34	17.9	15.8
35-49	47.5	41.7
50-64	26.1	19.6
65+	8.5	4.4
Not a household member	-	18.5
Status in the household		
Household head	60.5	56.9
Spouse	38.7	11.6
Other	0.8	13.2
Not a household member	-	18.5
Observations	1,561	1,561

Source: Djibouti COVID-19 phone survey, 4th wave.

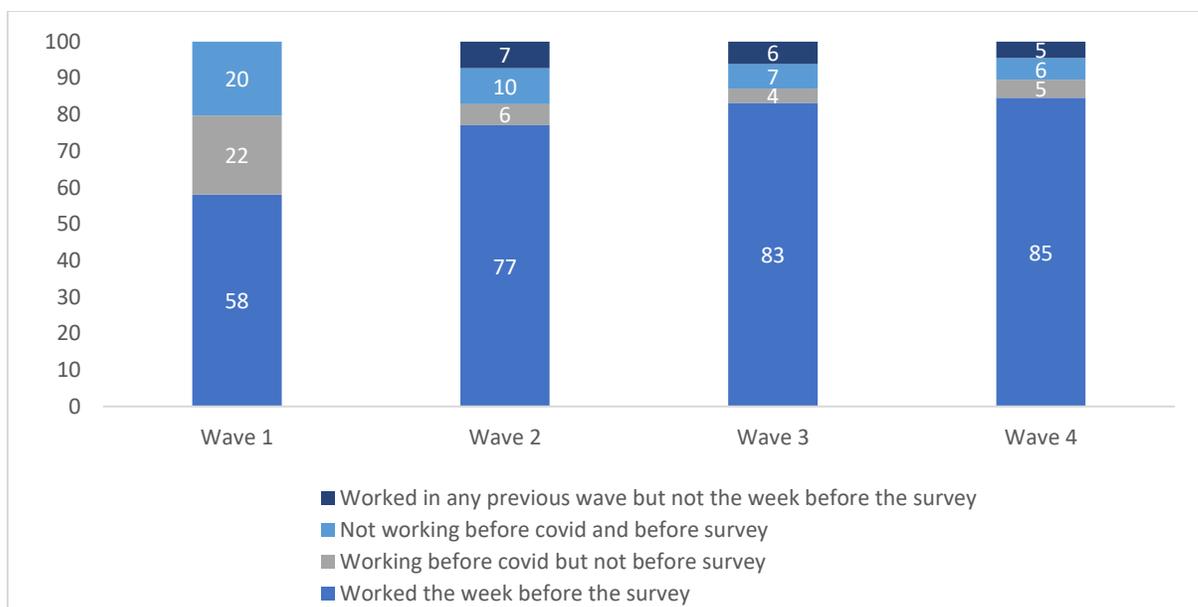
ECONOMIC
ACTIVITIES



More than a year after the onset of COVID-19, a large majority of households (85 percent) had their breadwinner² working the week before the 4th wave of the survey (Figure 3.1). Compared to previous waves, this proportion continued to increase albeit at a slowing rate over time, showing a steady recovery of jobs in Djibouti. The proportion of breadwinners who stopped working since COVID decreased from 22 percent in wave 1, in June 2020, to 5 percent in wave 4. Moreover, there is a small percentage of households whose breadwinner exhibits dynamic changes in their working status across the waves, working in some waves but not others. For example, in the 4th wave, 5 percent of the households had a breadwinner who was not working anymore the week before the survey whereas they reported their breadwinner as working in a previous wave.

Figure 3.1: Working status of breadwinners (%)

² For 44 percent of the households, the breadwinner's income represents all the household's income. Moreover, households with a female breadwinner are less likely to rely totally on her income than households with a male breadwinner (37 percent compared to 46 percent).

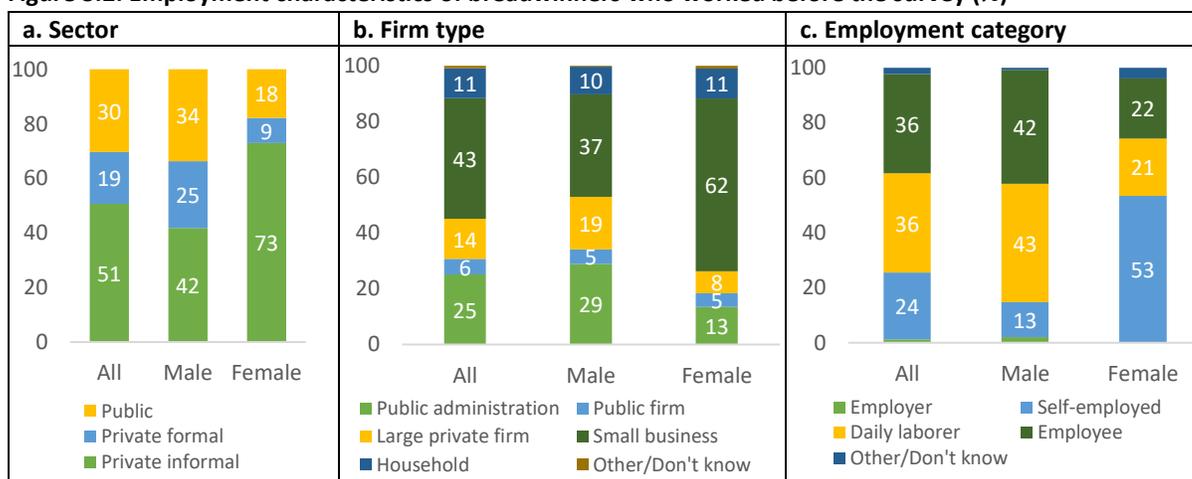


Source: Authors' calculation based on Djibouti COVID-19 phone survey, 1st, 2nd, 3rd and 4th waves.

Notes: Statistics are based on cross-sectional proportions and not only the longitudinal sample. Breadwinners are divided into four categories: 1) those working in the week before the survey, 2) those working before COVID-19 but were not working in the week before the survey, 3) those that were neither working before COVID-19 nor in the week before the survey, 4) those who worked in any previous wave but were not working the week before the survey.

Half of the breadwinners work in the informal sector, and most of them work in small businesses, as daily laborers or employees (Figure 3.2). However, there are important differences according to the gender of the breadwinner. Female breadwinners are much more likely to work in the informal sector than male breadwinners (73 percent and 42 percent, respectively). Women are also more likely to work in small businesses (62 percent compared to 37 percent) or to be self-employed (53 percent and 13 percent, respectively).

Figure 3.2: Employment characteristics of breadwinners who worked before the survey (%)



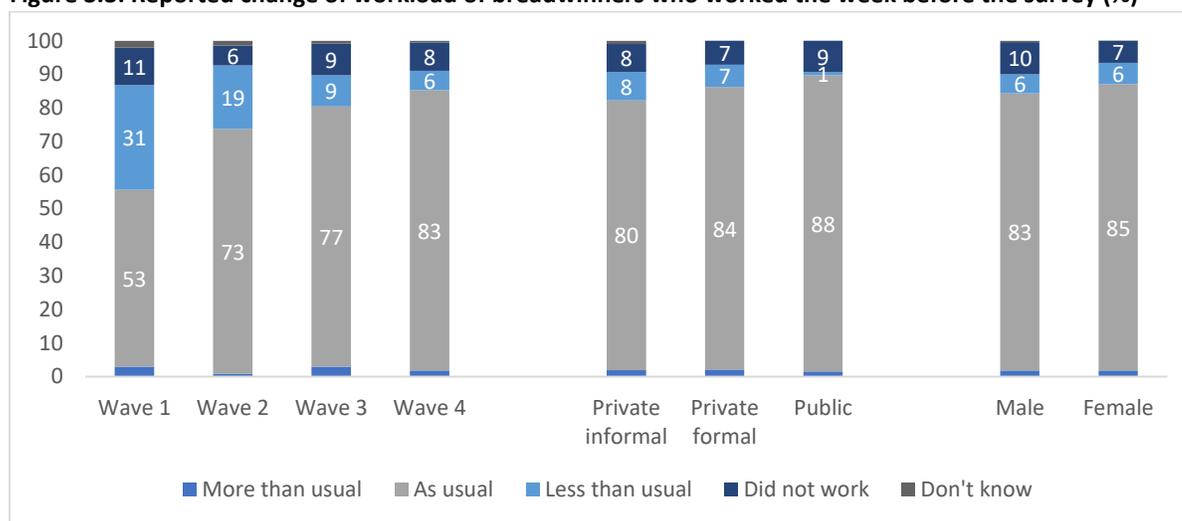
Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

Notes: A small business is a sole proprietorship or cooperative; public firms are state owned enterprises. The category "female" refers to households with a female breadwinner while "male" refers to households with a male breadwinner.

When asked about their change in workload, most breadwinners who worked the week before the survey reported working as usual (Figure 3.3). The proportion of breadwinners who reported working as usual increased from 53 percent in wave 1 to 83 percent in wave 4. Only slight differences are observed according to

the gender of the breadwinner. Female breadwinners are more likely to work as usual than their male counterparts (85 and 83 percent, respectively), and are slightly less likely than men to have not worked at all (7 percent and 10 percent, respectively). There are still some differences according to the sector of employment of the breadwinner. Breadwinners working in the public sector are more likely to have worked as usual (88 percent) than breadwinners from the private formal sector (84 percent) and from the private informal sector (80 percent). The main reason for not working as usual is the reduction of working hours due to lack of activity (cited by 40 percent of those who worked less than usual or not all).

Figure 3.3: Reported change of workload of breadwinners who worked the week before the survey (%)

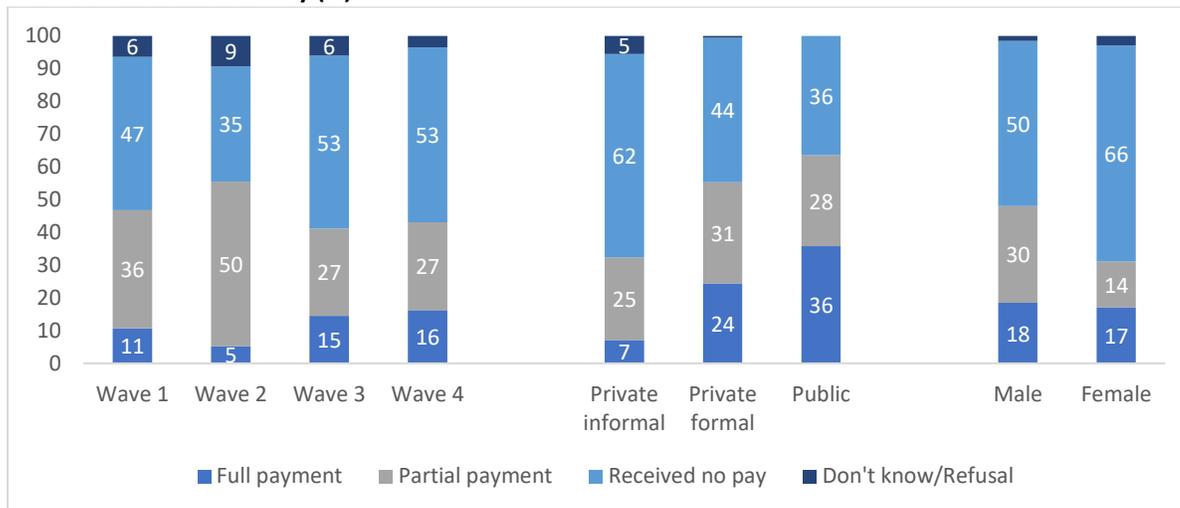


Source: Authors' calculation based on Djibouti COVID-19 phone survey, 1st, 2nd, 3rd and 4th waves.

Notes: Statistics are based on cross-sectional proportions and not only the longitudinal sample. The distinction by sectors of employment (public, formal, informal) concerns all the households whose breadwinner was working before the survey. The category "female" refers to households with a female breadwinner while "male" refers to households with a male breadwinner.

A similar proportion (53 percent) of breadwinners who worked less or not at all the week before the survey and did not receive any pay is observed in the third and fourth waves of the survey (Figure 3.4). When working less than usual, female breadwinners are much more likely to receive no pay than male breadwinners (66 percent and 50 percent, respectively). By contrast,, men are twice as likely as women to receive partial payment (30 percent versus 14 percent), while both have roughly the same probability to receive a full payment. Working in the public sector offers a protection in terms of labor income as 36 percent of the breadwinners who worked less than usual received a full payment, while they are 24 percent among the breadwinners from the private formal sector and 7 percent among the ones from the private informal sector. Breadwinners working in the informal sector are much more exposed to the risk of receiving no pay when working less than usual than others (62 percent). Thus, in addition of being already vulnerable, breadwinners in the informal sector may be suffering negative impacts of the COVID-19 crisis for longer, both in terms of their employment status and their wages.

Figure 3.4: Reported change in labor income among breadwinners who worked less than usual or not at all the week before the survey (%)



Source: Authors' calculation based on Djibouti COVID-19 phone survey, 1st, 2nd, 3rd and 4th waves.

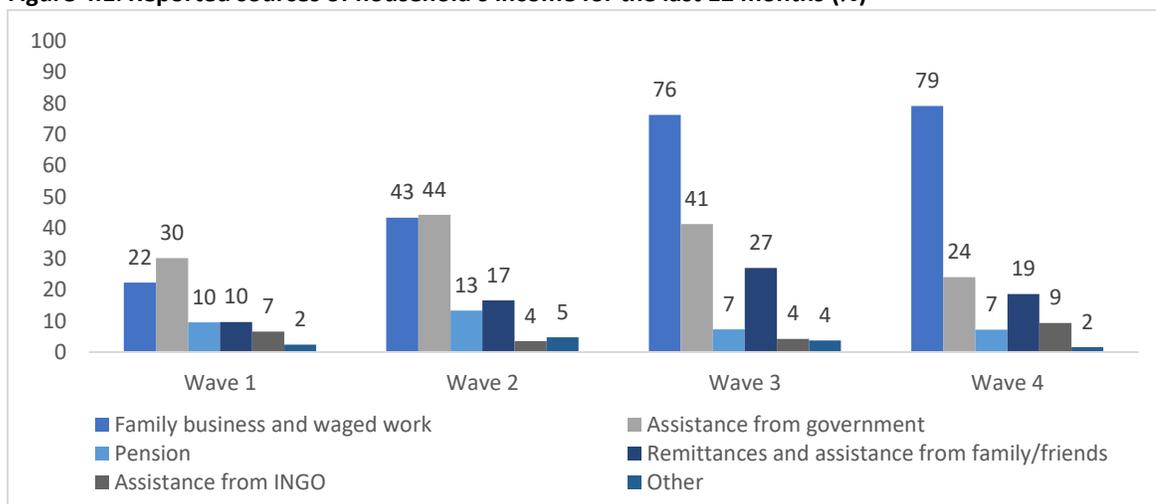
Notes: Statistics are based on cross-sectional proportions and not only the longitudinal sample. The distinction by sectors of employment (public, formal, informal) concerns all the households whose breadwinner was working before the survey. The category "female" refers to households with a female breadwinner while "male" refers to households with a male breadwinner. The sample size for the employment sector is 153 for informal, 49 for formal and 44 for public. The sample size for the gender is 159 for men and 48 for women.

LIVELIHOODS



Following the wave 3 trend and consistent with the working status outcomes, more households continue to report income source from family business and waged work (Figure 4.1). Indeed, 79 percent of households reported it as an income source in wave 4 compared to 22 percent in wave 1. However, the proportion of households receiving assistance from the government has decreased compared to previous waves, as well as the proportion of households receiving remittances and assistance from family and friends compared to the 3rd wave.

Figure 4.1: Reported sources of household's income for the last 12 months (%)



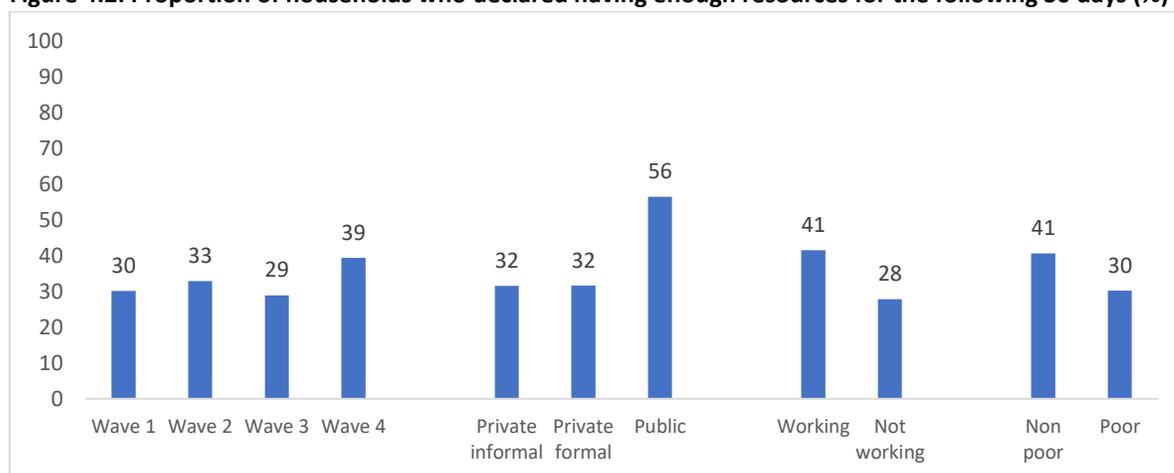
Source: Authors' calculation based on Djibouti COVID-19 phone survey, 1st, 2nd, 3rd and 4th waves.

Note: Statistics are based on cross-sectional proportions and not only the longitudinal sample.

In wave 4, around 40 percent of the households declare having enough resources for the following 30 days (Figure 4.2). This is an increase of 10 percentage points compared to wave 3. However, important differences are observed according to the characteristics of the breadwinner and the poverty status of the household.

Households whose breadwinner was not working the week before the survey are much less likely than others to declare having enough resources for the next month (28 percent versus 41 percent). Moreover, while 56 percent of households with a breadwinner working in the public sector report having enough resources for the following month, it is the case for only a third (32 percent) of the households whose breadwinner is working either in the informal or formal sectors. Consistently, poor households are less likely to report having enough resources for to meet their needs for the next 30 days, compared to non-poor households (30 percent and 41 percent, respectively).

Figure 4.2: Proportion of households who declared having enough resources for the following 30 days (%)



Source: Authors' calculation based on Djibouti COVID-19 phone survey, 1st, 2nd, 3rd and 4th waves.

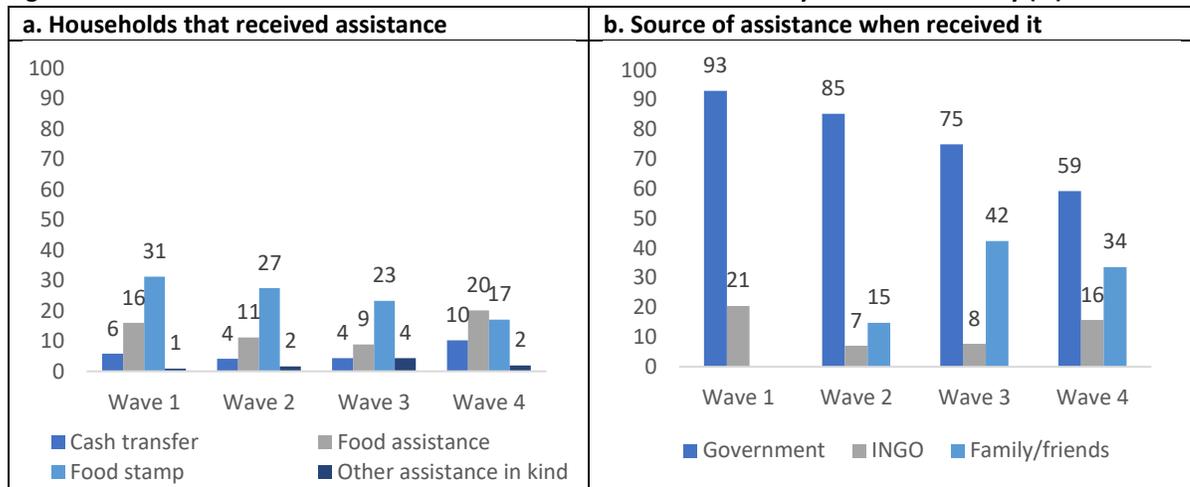
Notes: Statistics are based on cross-sectional proportions and not only the longitudinal sample. The distinction by sectors of employment (public, formal, informal) concerns all the households whose breadwinner was working before the survey. The category “working” refers to households whose breadwinner was working the week before the survey while “not working” refers to the households whose breadwinners did not work the week before the survey.

SAFETY NETS



Compared to previous waves, less households received assistance in the form of food stamp, but more households received cash transfers and food assistance (Figure 5.1). Indeed, the proportion of households receiving cash transfers and food assistance has more than doubled between waves 3 and 4, while those receiving food stamps have decreased from 31 percent in wave 1 to 17 percent in wave 4. Consistent with the previous waves, there is a decreasing trend in the proportion of households who received assistance from government: from 93 percent in wave 1 to 59 percent in wave 4. Around 16 percent of the households received help from INGOs, which is twice as in wave 3 but comparable with the first wave. Moreover, households are still counting on help from social networks as 34 percent reported assistance from family and friends.

Figure 5.1: Assistance received and source of assistance in the last 30 days before the survey (%)



Source: Authors' calculation based on Djibouti COVID-19 phone survey, 1st, 2nd, 3rd and 4th waves.

Notes: Statistics are based on cross-sectional proportions and not only the longitudinal sample. Data of figure 5.1.b come from income source questions whereas in previous waves, the source of assistance were computed from a different question.

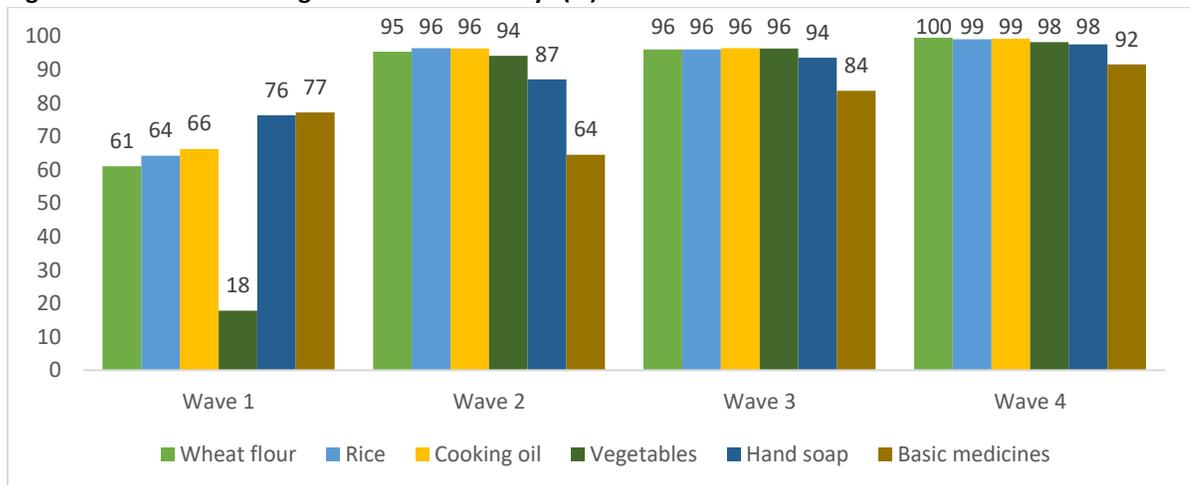
ACCESS TO BASIC GOODS



Almost all the households reported having access to basic goods the week before the survey (Figure 6.1).

Indeed, nearly all the households reported having access to wheat flour, rice, cooking oil and hand soap, and compared to previous waves, the trend continues to rise for all the goods. Access to basic medicines is still slightly lower than for other basic goods, though the gap with other goods is closing (the difference with hand soap was 10 percentage points in wave 3 compared to 6 percentage points in wave 4).

Figure 6.1: Access to basic goods in the last 7 days (%)

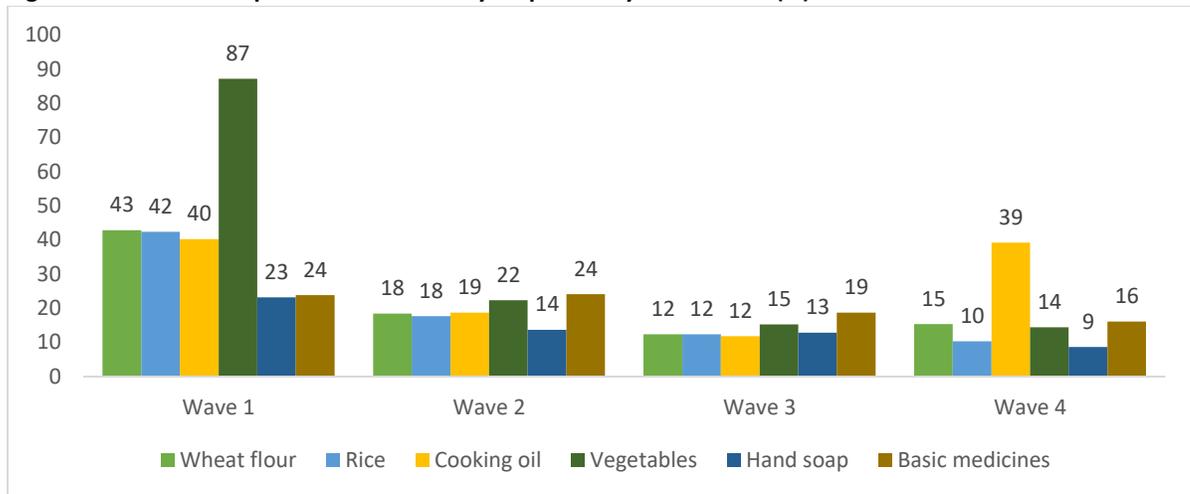


Source: Authors' calculation based on Djibouti COVID-19 phone survey, 1st, 2nd, 3rd and 4th waves.

Note: Statistics are based on cross-sectional proportions and not only the longitudinal sample.

Depending on the goods (except for cooking oil), between 9 and 16 percent of the households reported a price increase of main basic goods, similar to the findings in wave 3 (Figure 6.2). In wave 4, less households declared a price increase of rice, vegetables, hand soap and basic medicines than compared to all the previous waves. Notably, however, 39 percent of households reported experiencing an increase in cooking oil prices in the last 7 days, an increase of 27 percentage points since wave 3.

Figure 6.2: Increase in price in the last 7 days reported by households (%)



Source: Authors' calculation based on Djibouti COVID-19 phone survey, 1st, 2nd, 3rd and 4th waves.

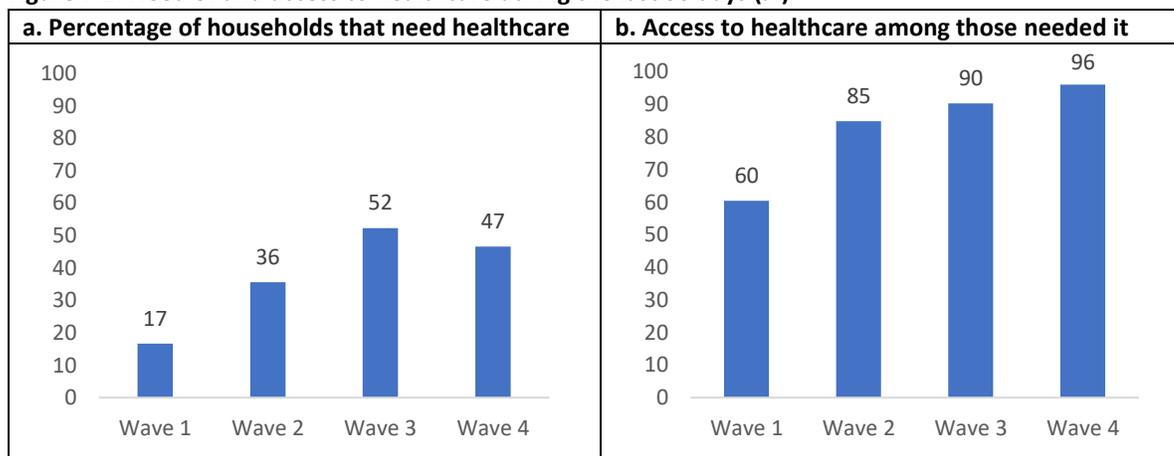
Note: Statistics are based on cross-sectional proportions and not only the longitudinal sample.

ACCESS TO SERVICES



As in wave 3, almost half of the households reported a need of healthcare (Figure 7.1), and nearly all of those who needed healthcare had access to it. The proportion of households reporting having access to healthcare when needed increased from 60 percent in wave 1 to 96 percent in wave 4. Households with a female breadwinner are less likely than those with a male breadwinner to have access to healthcare when needed (83 percent compared to 96 percent, respectively). Moreover, households whose breadwinner was not working before the survey were slightly less likely to have access to healthcare when needed than those with a working breadwinner (94 percent and 96 percent, respectively). While poor households are more likely to report being in need of healthcare than non-poor ones (48 percent compared to 46 percent, respectively), the least well off are less likely to report having access to healthcare when needed than the non-poor population. Indeed, 93 percent of the poor households reported being able to receive healthcare when needed compared to 96 percent of the non-poor households. These differences being in general quite small, the results highlight a very good and almost universal access of the national population to healthcare services when needed.

Figure 7.1: Need of and access to healthcare during the last 30 days (%)

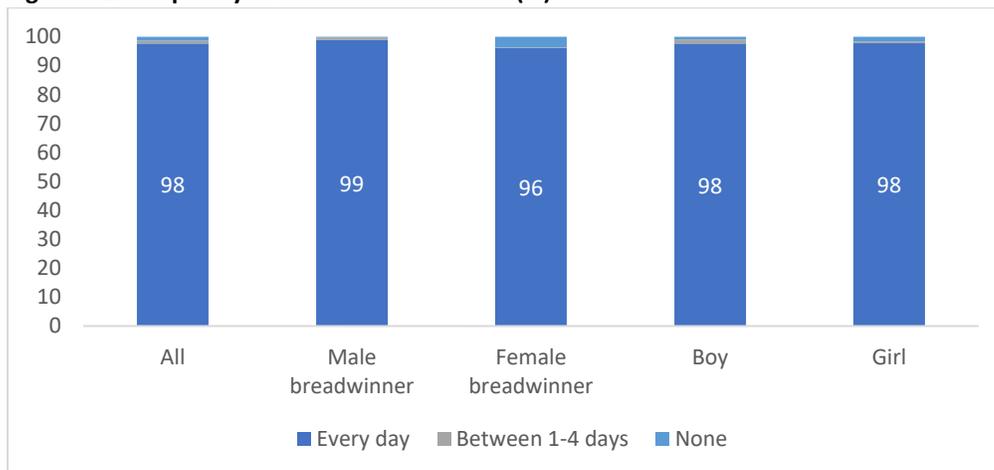


Source: Authors' calculation based on Djibouti COVID-19 phone survey, 1st, 2nd, 3rd and 4th waves.

Note: Statistics are based on cross-sectional proportions and not only the longitudinal sample.

On education, very few households reported having a child who does not attend school every day (2 percent) and there is no difference between boys and girls³ (Figure 7.2). However, children from a household with a female breadwinner are slightly less likely to attend school every day than children from a household with a male breadwinner (96 percent and 99 percent, respectively). Moreover, when girls do not attend school every day, they are more likely than boys to miss school the whole week, while boys are more likely to miss school occasionally.

Figure 7.2: Frequency of attendance of school (%)

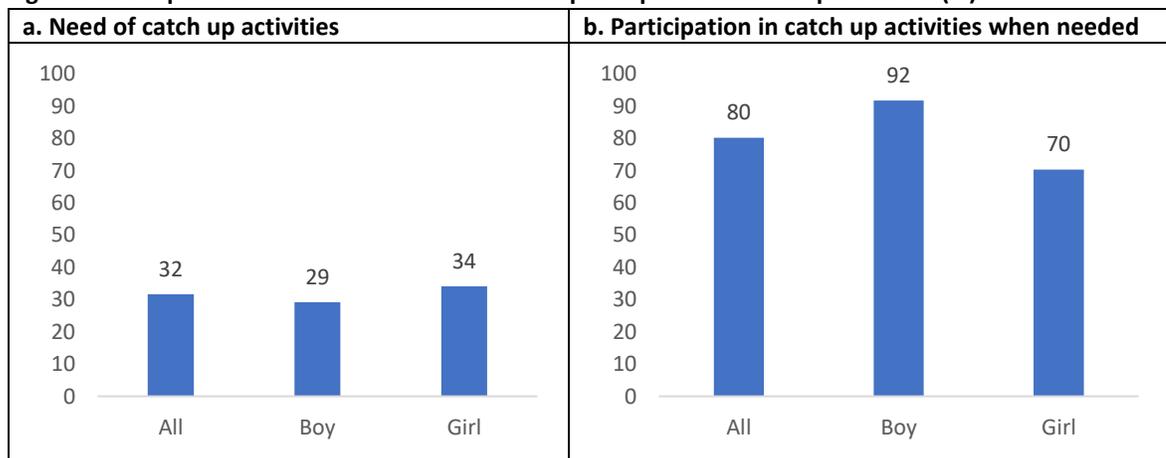


Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

Notes: The category "female breadwinner" refers to households with a female breadwinner while "male breadwinner" refers to households with a male breadwinner. The category "boy" refers to households with a randomly selected male child to question about education while "girl" refers to households with a randomly selected female child.

Around a third (32 %) of households reported their child being in need of catch up activities (Figure 7.3). While girls are slightly more likely than male children to need catch up activities, they are less likely to participate in these activities when needed than boys (70 percent compared to 92 percent).

Figure 7.3: Proportion of children who needed and participated in catch up activities (%)



Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

Note: The category "boy" refers to households with a randomly selected male child to question about education while "girl" refers to households with a randomly selected female child.

³ This question was asked about a randomly chosen child, distributed equally between boys and girls across households. Among the 1,047 households who have at least one school-age child (between 6 and 15 years old), a boy was picked in 526 households and a girl was chosen in 521 households.

FOOD INSECURITY



Few respondents report experiencing food insecurity based on the three indicators captured in this survey (Figure 8.1). Indeed, less than 10 percent of the respondents reported eating less than 3 meals a day the week before the survey, skipped a meal the last month, or went to bed hungry during the last month. Compared to wave 3⁴, the food security indicators have improved or stayed similar (indicators varied between 15 and 8 percent in wave 3). Despite female respondents being less likely to have skipped a meal than male, they are more likely to have eaten less than 3 meals per day and have gone to bed hungry. Moreover, respondents from a household whose breadwinner was not working the week before the survey are much more likely to suffer from food insecurity than a respondent from a household with a working breadwinner.

Figure 8.1: Food security indicators by characteristics of the respondent (%)



Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

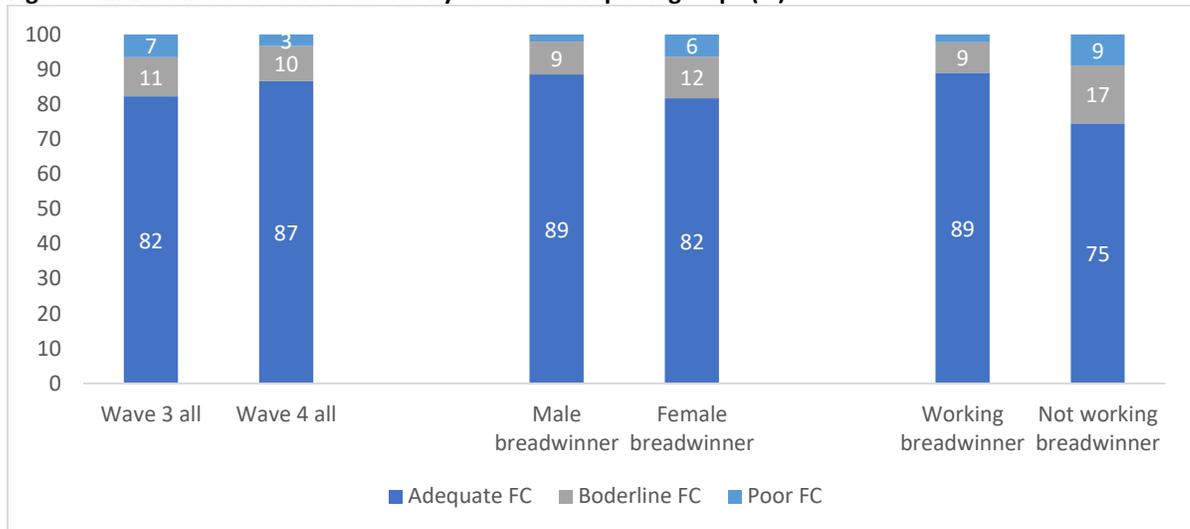
Notes: The category "female respondent" refers to households with a female respondent while "male respondent" refers to households with a male respondent. The category "working breadwinner" refers to households whose breadwinner was working the week before the survey while "not working breadwinner" refers to the households whose breadwinners did not work the week before the survey.

Compared to wave 3, food security as expressed by the food consumption score⁵ has improved (Figure 8.2). As in wave 3, a food consumption score is computed to capture issues related to food frequency and dietary diversity. The proportion of households with an adequate food consumption has increased from 82 percent in wave 3 to 87 percent in wave 4. Moreover, only 3 percent of the households record a poor food consumption compared to 7 percent in wave 3. However, differences according to the characteristics of the breadwinner are observed. Households with a female breadwinner are slightly less likely to have an adequate food consumption than households with a male breadwinner (82 percent and 89 percent, respectively). Moreover, only 75 percent of the households whose breadwinner was not working the week before the survey had an adequate food consumption score (compared to 89 percent for the households with a working breadwinner). Thus, households with a female breadwinner or a non-working breadwinner are more likely to have a poor food consumption.

⁴ However, both waves results are not perfectly comparable as in wave 3 the question was asked about any child in the household, while in wave 4 the question focused on the respondent herself.

⁵ Following the World Food Program's approach, the food consumption of a household is calculated using the frequency of consumption of different food groups on a 7 days recall period. The food consumption is considered poor if the score is inferior or equal to 28, borderline for a score ranging from 28.5 and 42, and adequate for a score between 42.01 and 160.

Figure 8.2: Distribution of households by food consumption groups (%)

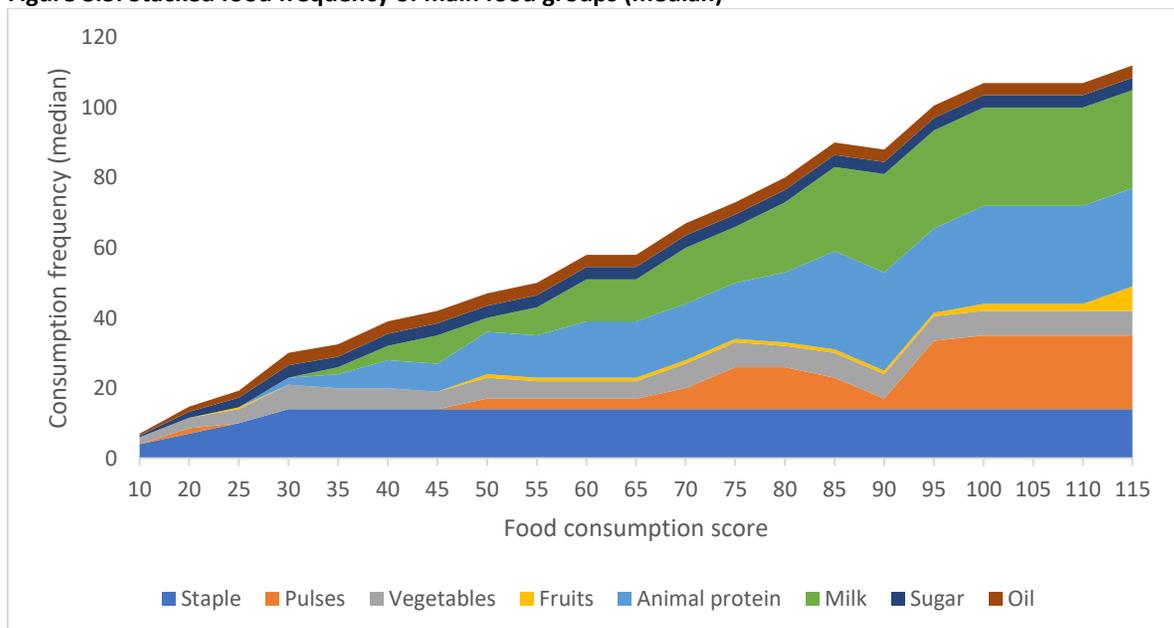


Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

Notes: The category "female breadwinner" refers to households with a female breadwinner while "male breadwinner" refers to households with a male breadwinner. The working status "working" refers to households whose breadwinner was working the week before the survey while "not working" refers to the households whose breadwinners did not work the week before the survey.

Households who have a poor food consumption score are also characterized by an unbalanced diet composed mainly to staples (Figure 8.3). Indeed, milk and animal protein enter the diet of the households who have at least a borderline food consumption. Consumption of vegetables is present for all the levels of food consumption score but is more frequent for households with an adequate food consumption score, while fruits are absent of the consumption of households with a poor or borderline consumption score. Even at high levels of consumption score, fruits represent a very small part of the households' diet. Compared to wave 3, fruits enter the diet of households at lower food consumption scores (75 in wave 3 compared to food consumption score equals to 45 in wave 4), and the same is observed for milk and animal protein.

Figure 8.3: Stacked food frequency of main food groups (median)



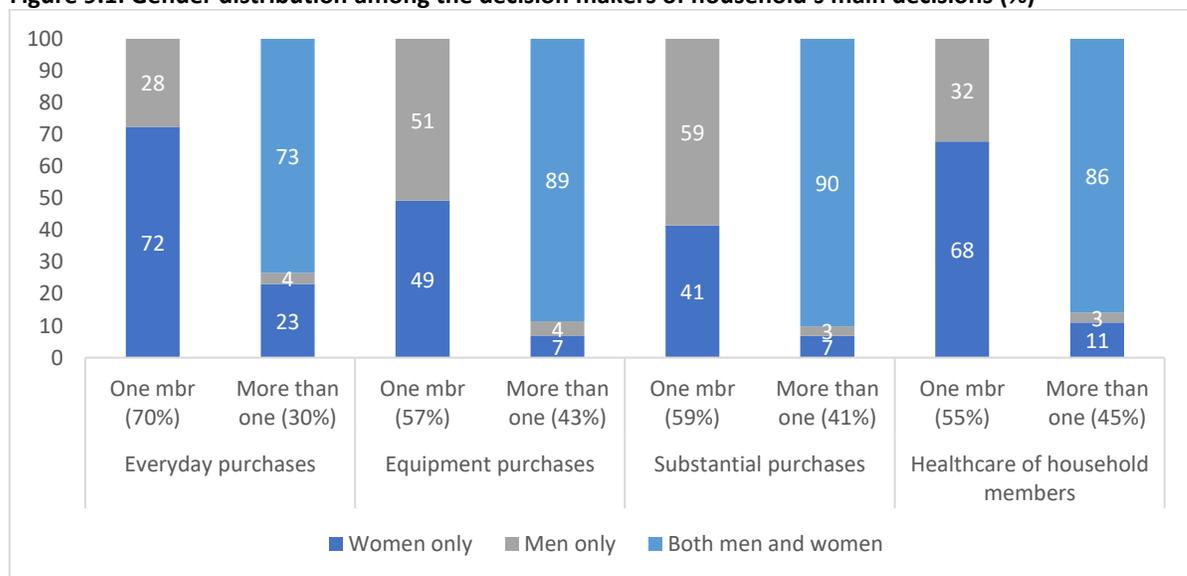
Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

GENDER



In the fourth wave of this survey, a new module was added on gender, intra-household decision making, and time-use. Respondents were asked who makes decisions within the household on a variety of issues: everyday purchases, equipment purchases, substantial purchases, and healthcare of household members. Figure 9.1 reflects the distribution of decision makers by gender. Where multiple decision makers are involved, the second bar reflects women’s participation in the decision-making process. In general, the main decisions of households are taken by one member rather than several, but this varies by type of decision the household takes. For example, 70 percent of the households have only one member involved in the decision making regarding everyday purchases, whereas it is 55 percent of the households for decisions related to healthcare of household members. When there is only one decision maker in the household, women are more likely than men to make the decision around everyday purchases and healthcare of household members, whereas men are more likely to be responsible for the decisions on equipment and substantial purchases. In the case of a decision-making with several household members, both men and women are most of the time involved for all types of decision. For example, the decision regarding substantial and equipment purchases is made by both men and women in 90 percent and 89 percent of the households, respectively.

Figure 9.1: Gender distribution among the decision makers of household’s main decisions (%)

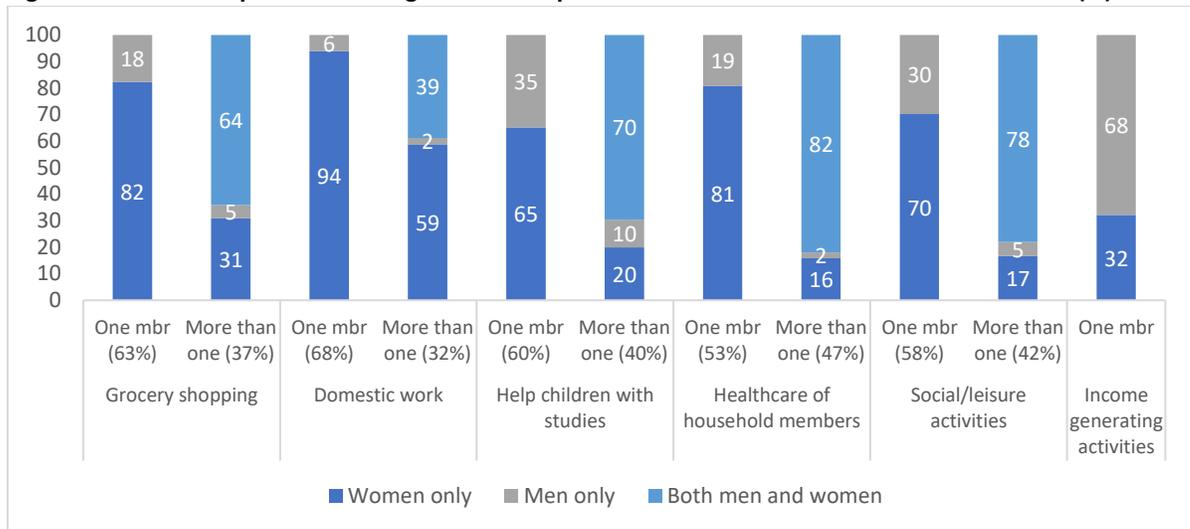


Source: Authors’ calculation based on Djibouti COVID-19 phone survey, 4th wave.

Notes: Only households with both adult men and women are included. Percentages in parentheses represent the proportion of households who declared having one member making each type of decisions, and those who declared multiple members.

When it comes to time-use, in most cases, households declare that only one member spends the most time undertaking the certain tasks, which could suggest specialization in certain tasks by gender (Figure 9.2). For example, in 68 percent of the households, one member devotes the most time to domestic work, meaning that this task is shared between several household members in 32 percent of the households. For most of the basic household chores, such as domestic work, grocery shopping and healthcare of household members, women dedicate the most time to the task (in more than 80 percent of the households in which there is only one member spending the most time). Among activities that men spend most time on, income-generating activities are mostly undertaken by men, but it is also help with children’s studies (compared to other tasks) that men are more likely to devote time to compared to other activities (35 percent of the households in which only one member spending the most time helping children report that a man spends the most time in helping children with studies). Even when there is more than one member devoting time to domestic work, women undertake this activity in 59 percent of the households. However, both men and women devote the most time to main tasks in the majority of the households where several members share the burden of the time spent (between 64 percent to 82 percent of the households depending on the task). Moreover, men are more likely to spend the most time on income generating activities than women (in 68 percent of the households).

Figure 9.2: Gender repartition among those who spend the most time on main tasks since COVID (%)

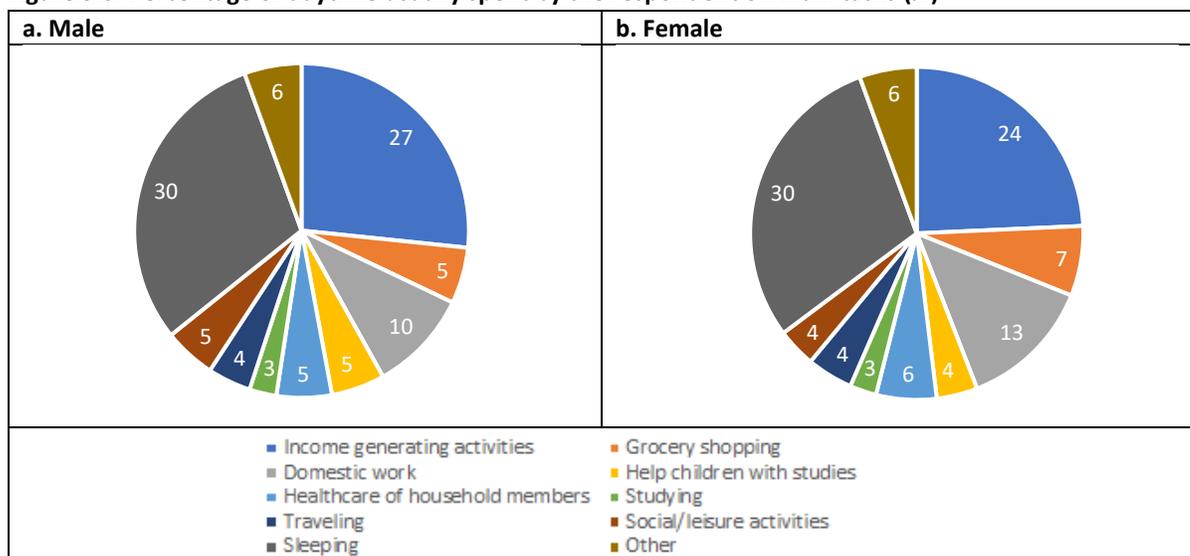


Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

Notes: Only households with both adult men and women are included. Percentages in parentheses represent the proportion of households who declared having one member making each type of decisions, and those who declared multiple members.

The 4th wave survey asked respondents⁶ to estimate the amount of time devoted usually to main tasks (Figure 9.3). Male respondents spend on average more time than female respondents on income generating activities (27 percent of daytime for men compared to 24 percent for women), as well as on social or leisure activities and helping children with studies. In contrast, women are likely to dedicate more time than men to tasks such as grocery shopping, domestic work and healthcare of household members. It is worth noting that the distribution of daytime use by the respondent may not be representative of the time-use of women in Djibouti. The respondents are in most of the cases the household head or spouse of the household head, which means they are more likely than others household members to work. For this reason, this result cannot be directly compared to Figure 9.2, especially as the latter refers to the person who spends “most” time on tasks, including income generating activities.

Figure 9.3: Percentage of daytime usually spent by the respondent on main tasks (%)

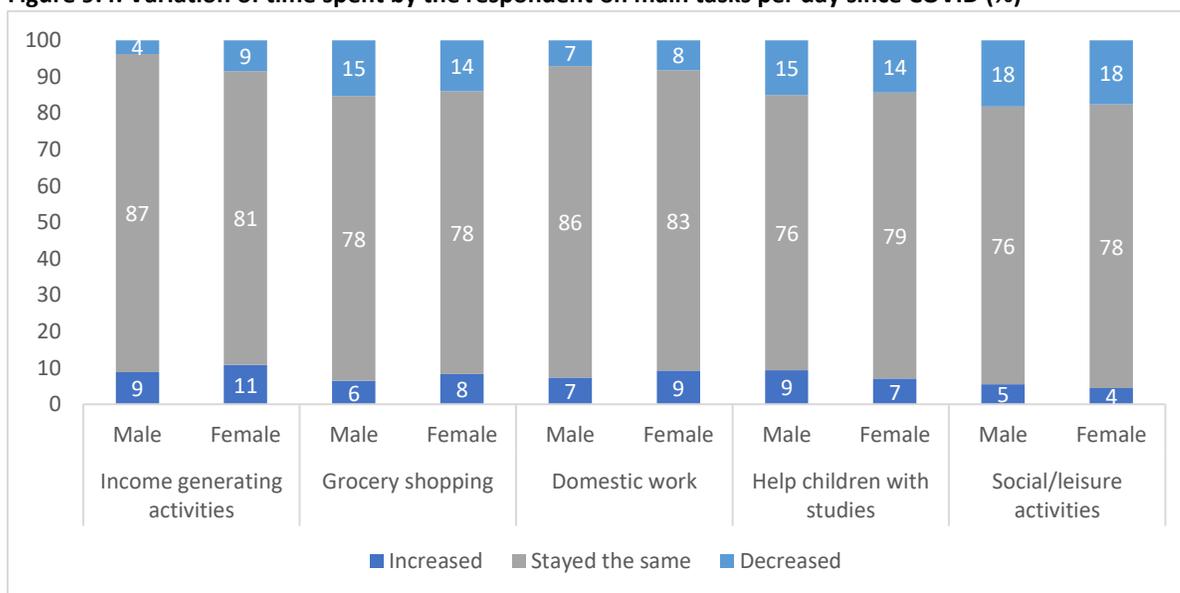


⁶ During this 4th wave, the respondent was randomly chosen among the household head and the spouse to allow an even distribution between male and female respondents across households.

Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

For most of the male and female respondents, the time spent by the respondent on the main tasks of the day has not changed since COVID (Figure 9.4). However, female respondents are more likely than male respondents to have increased their time dedicated to income generating activities (11 and 9 percent, respectively for women and men), grocery shopping and domestic work since COVID. That said, twice as many women respondents (9 percent) also reported decreasing time spent on income-generating activities compared to men (4 percent). Thus, income generating activities is the task where gender differences in variation of time spend since COVID are the highest compared to other tasks. In contrast, men are more likely to have increased their time spent on helping children with studies and social/leisure activities. Regarding the reduction of daytime devoted to certain tasks, men and women have on average the same likelihood to have decreased it on most of the daily tasks, except on income generating activities.

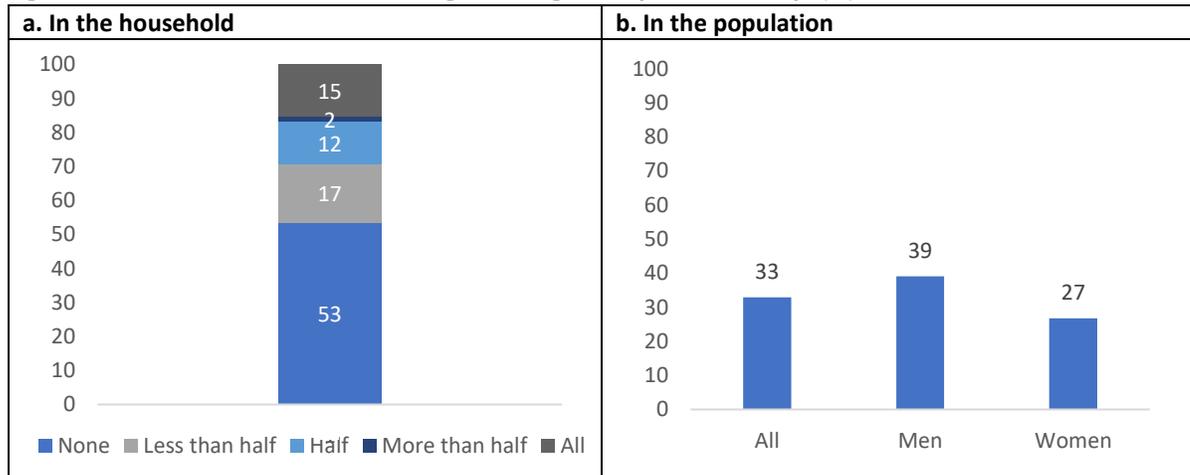
Figure 9.4: Variation of time spent by the respondent on main tasks per day since COVID (%)



Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

Djiboutian women are in general less likely to work than men (Figure 9.5). Around 27 percent of all the interviewed women aged between 15 and 64 years old had an income generating activity the week before the survey, against 39 percent of men. No difference is observed compared to the period before COVID. Among households that have both men and women adults, half have no working age women with an income generating activity the last 7 days to the survey. In 15 percent of the households, all the adult women were working.

Figure 9.5: Women who had an income generating activity the last 7 days (%)

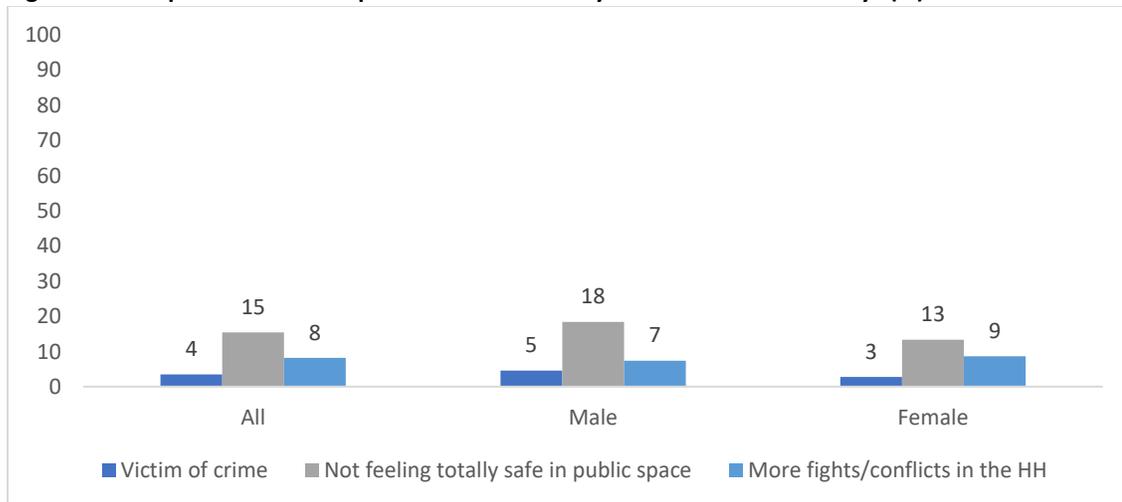


Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

Note: Only households with both adult men and women are included in the Figure 9.5.a.

Male respondents are on average more likely than female ones to report having been victim of a crime in the last 14 days (Figure 9.6), as well as reporting not feeling totally safe in public space (18 percent of men and 13 percent of women). However, female respondents are more likely to declare experiencing more fights or conflicts in the household during the last 14 days than male respondents.

Figure 9.6: Respondents who experienced some safety issues in the last 14 days (%)



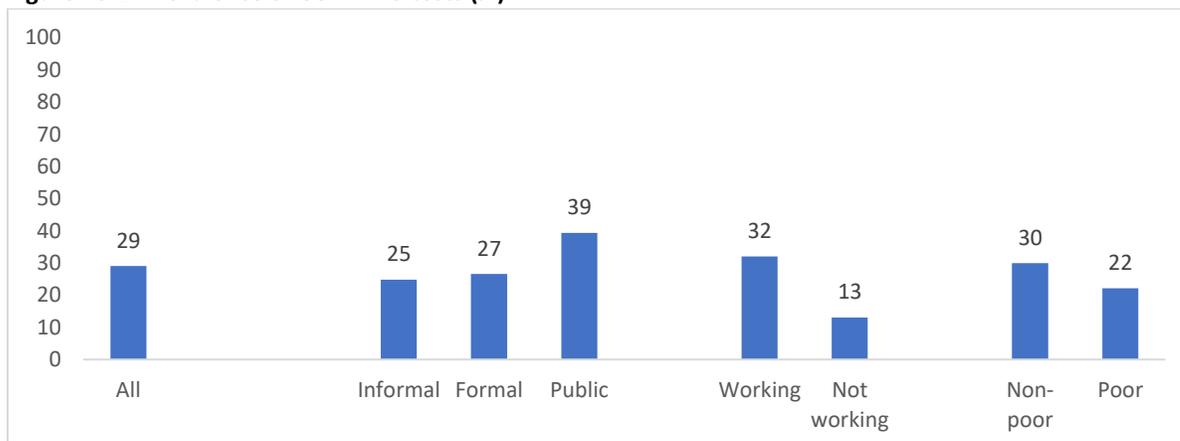
Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

IEWS ON VACCINATION



Less than a third of the sample (29 percent) declared having ever been tested for COVID-19 at least once since the beginning of the pandemic (Figure 10.1). Differences in likelihood to get tested are reported by poverty and working status. Respondents from a household with a non-working breadwinner are less likely to have taken a COVID-19 test than others (13 percent compared to 32 percent). And among respondents from households with a working breadwinner, those whose breadwinner works in the public sector are more likely to have already been tested for COVID-19 than others. This points out a risk of unequally access to COVID-19 tests in the population or a difference of interest to get tested. Once they did a COVID-19 test, only 4 percent of the respondents report a positive result.

Figure 10.1: Prevalence of COVID-19 tests (%)

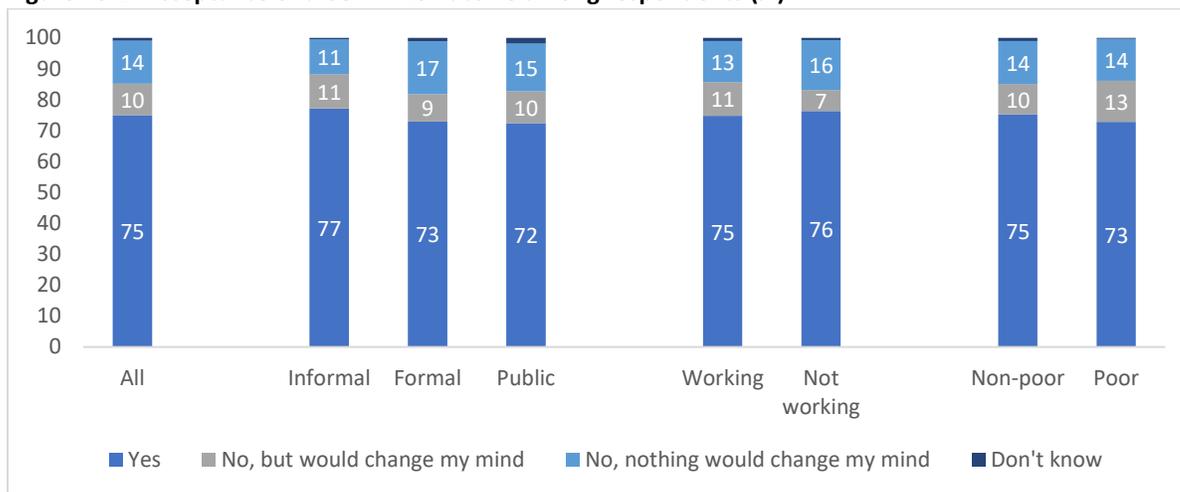


Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

Notes: The distinction by sectors of employment (public, formal, informal) concerns all the households whose breadwinner was working before the survey. The category "working" refers to households whose breadwinner was working the week before the survey while "not working" refers to households whose breadwinner was not working the week before the survey.

Most respondents would accept to take an approved and free COVID-19 vaccine (Figure 10.2). Compared to the previous wave, this proportion is slightly higher (75 percent in wave 4 compared to 73 percent in wave 3). The acceptance of a COVID-19 vaccine is higher among respondents from households whose breadwinner works in the informal sector (77 percent) compared to those with a breadwinner working in the formal and public sectors (73 and 72 percent, respectively). The main reasons for refusing a COVID-19 vaccine are worries about undesirable effects (for 31 percent of the respondents who are reluctant to take it) and the fact that respondents do not trust vaccines in general (23 percent). Around 10 percent of the respondents would not accept to take the COVID-19 vaccine but would be more likely to take it if someone, such as family, friends, religious leaders, recommends it. Indeed, among the respondents who would not accept to take a COVID-19 vaccine, 24 percent declared that they would be more likely to receive the COVID-19 vaccine if their family and friends receive or recommend it and 20 percent would do it if religious leaders receive or recommend it. However, 58 percent of those who would refuse the vaccine reported that nothing would change their decision, and these represent 14 percent of all the respondents. Respondents from poor households appear to be more likely than others to change their mind if someone recommends the vaccine, while respondents from a household with a non-working breadwinner are more likely than those with a working breadwinner to not change their mind.

Figure 10.2: Acceptance of a COVID-19 vaccine among respondents (%)



Source: Authors' calculation based on Djibouti COVID-19 phone survey, 4th wave.

Notes: The distinction by sectors of employment (public, formal, informal) concerns all the households whose breadwinner was working before the survey. The category "working" refers to households whose breadwinner was working the week before the survey while "not working" refers to households whose breadwinner was not working the week before the survey.

CONCLUSION



This report aimed to provide an update on the monitoring of the impacts of COVID-19 in Djibouti based on a fourth wave of the COVID-19 survey, carried out between March and April 2021, which followed households since June 2020. The findings suggest that the economy is very much on a path to recovery. Indeed, 85 percent of households reported their breadwinner working the week before the survey, compared to 58, 77, and 83 percent in the first, second, and third wave of data collection. Additionally, more breadwinners in the fourth wave declared working as usual than in previous waves. The data reveals that certain groups of the population may be more adversely affected than others, notably informal workers and female breadwinners. Informal workers exhibit a higher propensity to work less than usual, and among those a higher proportion receive no pay. Similarly among the female breadwinners who report working less than usual or not at all (6 and 7 percent respectively), 66 percent report not receiving any pay.

Access to goods and services seems to have improved across the board for Djiboutian households: access to basic food and medicines, healthcare when needed, and education. Gender differences are however observed among children who need supplementary school activities, or catch-up activities. For instance, while 34 and 29 percent of girls and boys, respectively, are declared to need catch-up scholarly activities, only 70 percent of girls participate in them when needed compared to 92 percent of boys.

This wave also explores gender differences in decision making and time-use. Women tend to participate more than men in decisions related to everyday purchases and healthcare of household members, especially when household decisions are taken by a single household member. Where more than one household member is involved in making the decision, women participate in the decisions jointly with men in most of the cases. When decisions are made by one household member, it is typically made by men. On time-use, women are more likely to spend time on grocery shopping, domestic work, children's studies, healthcare and leisure activities, than they are on income-generating activities. This is particularly the case when it is one member who spends the most time undertaking the activity. With regards to public safety, men report a higher likelihood of being a victim of crime and not feeling safe in public spaces than women do, but women report a higher likelihood of experiencing domestic conflict.

As Djibouti had experienced an increase in the COVID-19 cases in March 2021, this survey also elicited respondents' attitudes towards vaccines. Most respondents (75 percent) reported that they would accept to take an approved and free COVID-19 vaccine. The main reasons for refusing a COVID-19 vaccine are worries about undesirable effects (for 31 percent of the respondents who are reluctant) and the fact that respondents do not trust vaccines in general (23 percent). Around 10 percent of the respondents would not accept to take the COVID-19 vaccine but would be more likely to take it if someone, such as family, friends, religious leaders, recommends it. Respondents from poor households report a lower propensity to accept the vaccine, but a higher likelihood to change their mind if someone recommended it.

Box 1. Sampling strategy and sampling weights in wave 4

Data from the national social registry of the Ministry of Social Affairs, restricted to urban households having at least one phone number and interviewed after July 1, 2017 (to increase the response rates), serves as the sampling frame for the Djiboutian sample of this survey. The social registry is an official database of households in Djibouti that may benefit from poverty alleviation efforts including as targets from public transfers. This data has been collected since 2014 and consists of about 70,000 households, with majority of the fieldwork conducted from 2017 onwards. Even though this database over-represents the poor, it provides an up-to-date sampling frame. The social registry collects a wealth of socioeconomic characteristics of households along with working phone numbers of household heads or spouses of household heads. The use of biometric information to record household level data negates the possibility of having duplicate entries.

This wave's sample combined a panel of households interviewed during the first three waves, to which was added a replacement sample to compensate for attrition. But unlike the three preceding waves, to keep consistency with the approach used for the refugee sample, households that were lost to follow up in the third wave were included in the sample. The data set consisted of 1,561 interviewed households with complete information that were representative of the urban population, out of which 932 households entered the survey since the first wave and 629 were added as replacement households in either wave 2, 3, or 4. The sampling strategy allows for disaggregation by poverty status⁷ and by three survey domains, being Balbala (539 households), rest of Djibouti city (527 households) and urban areas outside Djibouti city (495 households). Table A1 presents the breakdown of the sample of Djibouti nationals by survey domain.

Table A1: Sample of Djibouti nationals broken down by survey domain

Survey domain	Share of urban population (Household budget survey - EDAM, 2017) (%)	Sample size		
		Panel (# households)	Replacement (# households)	Total (# households)
Balbala	54.1	310	229	539
Rest of Djibouti City	35.5	327	200	527
Other urban areas	10.4	295	200	495
Total	100.0	932	629	1,561

Both cross-sectional and panel weights are designed to adjust for differences in selection probability due to either design or non-response. In addition, further adjustments in sampling weights were made to ensure that indicators produced are representative of the country's population, by poverty status and by location. The sampling frame of the Djibouti nationals, the social registry of the Ministry of Social Affairs, over-represents the poor and has an incomplete coverage of the upper distribution of income. To correct for these biases, we rely on a post-calibration approach, using the household budget survey of 2017 (EDAM 2017) as the reference data source. This is because EDAM 2017 survey was representative of the country's population by poverty status and survey domains. However, EDAM 2017 survey is restricted to the first four consumption quintiles to ensure sufficient overlap of the universes covered by both surveys.

⁷ Poverty status variable in the social registry database is based on consumption per capita, which is imputed for each household by the Ministry of Social Affairs and Solidarity (MASS) based on observable characteristics and using the Proxy Means test formula using household budget survey of 2013.

Box 2: Attrition between wave 1 and wave 4

Table A2.1: Composition of the wave 4 sample and panel status

Panel status	Frequency	Percentage
Households interviewed in waves 1, 2, 3 and 4	802	51.4
Households interviewed in waves 2, 3 and 4	149	9.5
Households interviewed in waves 1, 2 and 4	130	8.3
Households interviewed in waves 2 and 4	35	2.2
Households interviewed in waves 3 and 4	171	11.0
Households interviewed in wave 4 only	274	17.6
Observations	1,561	100

Source: Djibouti COVID-19 phone survey, 1st, 2nd, 3rd, and 4th waves.

Regressing a variable indicating whether households dropped out of the survey on household characteristics shows that there is no statistically significant correlation between attrition and observables characteristics, with the exception of the replacement status in wave 1 where households from the replacement sample are more likely to attrit in wave 4.

Table A2.2: Log-odds ratios of regressing an indicator of attrition on household characteristics

	1(Drop out)						
[Base=Balbala]							
Other urban areas	0.10	0.09	0.08	0.06	0.06	0.06	0.06
	[0.177]	[0.178]	[0.179]	[0.179]	[0.179]	[0.179]	[0.180]
Rest of Djibouti-Ville	-0.15	-0.16	-0.16	-0.19	-0.19	-0.19	-0.19
	[0.184]	[0.184]	[0.184]	[0.187]	[0.188]	[0.188]	[0.189]
Replacement in wave 1 (Yes=1)		-0.045**	-0.044**	-0.044**	-0.044**	-0.044**	-0.043**
		[0.021]	[0.021]	[0.021]	[0.021]	[0.021]	[0.021]
Log-household size			-0.08	-0.05	-0.05	-0.06	-0.05
			[0.119]	[0.122]	[0.123]	[0.131]	[0.131]
Sex of household head				0.20	0.20	0.20	0.19
				[0.156]	[0.157]	[0.157]	[0.157]
Age of household head					0.00	0.00	0.00
					[0.005]	[0.005]	[0.005]
Poverty status (Poor=1)						0.05	0.05
						[0.139]	[0.139]
[Base=Did not work the week before the survey]							
Worked week before survey							0.02
							[0.154]
Worked week before survey (Don't know)							0.56
							[0.604]
Constant	-0.502***	-0.347**	-0.22	-0.50	-0.49	-0.49	-0.50
	[0.126]	[0.145]	[0.246]	[0.347]	[0.395]	[0.394]	[0.403]
Observations	1,486	1,486	1,486	1,486	1,486	1,486	1,486

Robust standard errors in brackets

*** p<0.01, ** p<0.05, * p<0.1

Source: Djibouti COVID-19 phone survey, 1st and 4th waves.

Box 3: Output of a principal-components factoring analysis on food consumption score

A principal-components factoring analysis is used to validate consistency in the data based on eight food groups recommended by the WFP (excluding condiments). It indicates that food consumption can be regrouped along two main dimensions explaining approximately 51 percent of the variance in consumption frequency. Staple, vegetables, milk, sugar, and oil represent the main dimension of food consumption (explained variance = 29 percent), while pulses, fruits, and animal proteins define the second component of food consumption (explained variance = 22 percent). Examination of these two components suggests no redundant grouping of food items, as most food groups have high unique contribution to the explained variance.

Number of obs = 1,561

Factor	Eigenvalue
Factor1	2.33
Factor2	1.78
Factor3	0.96
Factor4	0.85
Factor5	0.72
Factor6	0.59
Factor7	0.43
Factor8	0.34

Factor	Variance	Difference	Proportion	Cumulative
Factor1	2.27	0.43	0.28	0.28
Factor2	1.84	.	0.23	0.51

LR test: independent vs. saturated: $\chi^2(28) = 2431.05$ Prob> $\chi^2 = 0.0000$

Pattern matrix and unique variances

Variable	Factor1	Factor2	Uniqueness
Staple	0.50	0.20	0.72
Pulses	0.14	0.50	0.73
Vegetables	0.68	0.07	0.53
Fruits	-0.34	0.68	0.43
Animal protein	0.00	0.83	0.31
Milk	0.39	0.62	0.47
Sugar	0.72	0.06	0.48
Oil	0.87	-0.10	0.24

Source: Djibouti COVID-19 phone survey, 4th wave.