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Iraq High Frequency Phone Survey (IHFPS)

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To Monitor Impacts of COVID-19

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RESULTS FROM AUGUST, SEPTEMBER, AND OCTOBER 2020 ROUNDS



Table of Contents

Acronyms	5
Acknowledgement	6
Highlights	7
Key Figures	9
1. Background	12
2. Data and Methodology	16
3. Labor market	19
3.1. Labor force participation and unemployment rates	21
4. Food consumption	26
5. Cash and in-kind transfers	31
6. Access to market and healthcare services	34
7. Child learning during pandemic	36
8. Discussion and Conclusion	39
References	44
Annex I: Sampling Design	46
Annex II: Reweighting for the High Frequency Phone Survey in Iraq (IHFPS 2020)	47
1. Household and population weights:	48
2. Adult weights:	50
Annex III: Labor market indicators	52
Annex IV: Labor market and food security	57
Annex V: Cash assistance from government and other sources	57

List of Tables

Table 1: Respondents and household characteristics (by survey round)	18
Table 2: Share of population with Public Distribution System (PDS) benefits and other in-kind assistance	32
Table 3: Share of population with the government and cash assistance	33

List of Figures

Figure 1: Daily cases and deaths attributed to COVID-19 in Iraq	13
Figure 2: Cumulative cases and deaths attributed to COVID-19 as of January 23, 2021	13
Figure 3: Cumulative cases per 1 million population as of January 23, 2021	14
Figure 4: Cumulative deaths attributed to COVID-19 per 1 million population as of January 23, 2021	14
Figure 5: Number of working members per household	20
Figure 6: Share of households by number of working members	21
Figure 7: Labor force participation rate (% of working-age population)	22
Figure 8: Unemployment rate (% of labor-force population)	23
Figure 9: Unemployment by region and environment type	23
Figure 10: Employment status in August by sector of employment prior to pandemic	24
Figure 11: Employment status in August by pre-lockdown formal/informal employment type prior to pandemic	25
Figure 12: Share of population with insufficient food consumption	27
Figure 13: Insufficient food consumption by household work status	28
Figure 14: Number of household members working by food consumption score (FCS) quintile	29
Figure 15: Average household reduced Coping Strategy Index (rCSI) score	30
Figure 16: Share of population with difficulty accessing market	35
Figure 17: : Share of population with difficulty accessing healthcare	35
Figure 18: Share of households with children attending school and the type of school they were attending pre-lockdown	37
Figure 19: Share of households with children engaging in any catch-up/learning activities during the pandemic	38
Figure 20: Type of employment by expenditure deciles	40

Acronyms

ALMPs	Active Labor Market Policies
CFSVA	Comprehensive Food Security and Vulnerability Analysis
EFPM	Enhanced Frequency Price Monitoring
GDP	Gross Domestic Product
GOI	Government of Iraq
IDPs	Internal Displaced Peoples
IHFPS	Iraq High Frequency Phone Survey
ILO	International Labor Organization
KRG	Kurdistan Regional Government
MENA	Middle East and North Africa
MICS	Multi Indicator Cluster Survey
MNO	Mobile Network Operators
MoP	Ministry of Planning
mVAM	mobile Vulnerability Analysis and Mapping
NGO	Non-Governmental Organization
PDS	Public Distribution System
PSM	Propensity Score Matching
rCSI	reduced Coping Strategy Index
SSNs	Social Safety Nets
UCT	Unconditional Cash Transfer
UNICEF	United Nations International Children's Emergency Fund
UPGI	Ultra-Poor Graduation Initiatives
WFP	World Food Programme
WHO	World Health Organization
BeneMark	Beneficiary Market Perspectives Survey
CCI	Cash Consortium for Iraq

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Highlights

Since the onset of the pandemic in late February 2020 in Iraq, it has brought about a surge in unemployment and important food security concerns. The pandemic has resulted in a significant drop in both in-kind and cash transfers. Moreover, Iraqis faced significant challenges accessing both market and healthcare services. School-going children have also been negatively impacted as only a very small share of children received any catch-up or learning activities during the school closure due to the coronavirus. Below is a summary of the key statistics from Iraq's High Frequency Phone Survey for the months of August, September, and October.

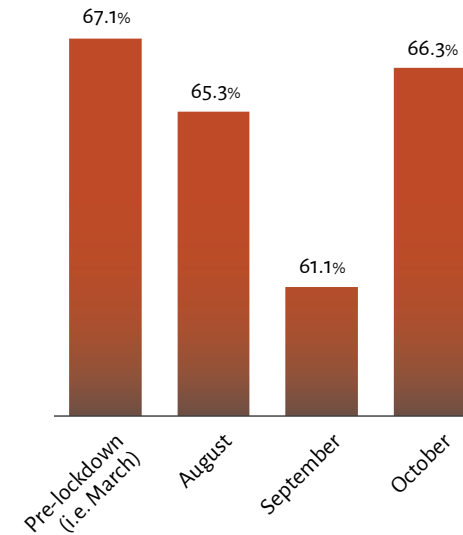
1. The average number of household members who work in gainful employment fell from 1.2 in the pre-lockdown period (first two weeks of March) to 0.9 members in August. It went up to 1.0 in September and to 1.1 members per household in October.
2. The share of households with at least one working member decreased by 16 percentage points from 78 percent in pre-lockdown (first two weeks of March) period to 62 percent in August. It climbed to 72 percent in September and further to 76 percent in October. The decline from pre-lockdown to August was significant, especially, in rural Iraq (22 percentage points).
3. Although labor force participation in Iraq remained comparable to the pre-lockdown period (above 61 percent throughout), the unemployment rate increased significantly during the pandemic. Compared to 12.7 percent in the pre-lockdown period, the unemployment rate climbed to 29 percent in August and then fell to 23.7 percent in September, and 22 percent in October. After the initial increment, the unemployment rate among males decreased gradually but remained high and stable among women.
4. Pre-pandemic public sector workers were most successful in holding onto their jobs. Compared to more than 30 percent of private sector workers (34.3 percent) and self-employed (32.6), only 12.6 percent in the public sector had lost their jobs permanently or temporarily or gotten out of the labor force in August. Among those unemployed prior to lockdown, 13 percent were out of the labor force in August.
5. An estimated 6.0, 5.2, and 5.1 percent of Iraqis consumed inadequate diets in August, September, and October, respectively. The prevalence of an insufficiently diverse diet was more pronounced among households with no working member(s) and in rural areas. The North and Kurdistan region experienced an increasing trend in the share of population who consumed insufficient diets over the three months period.

6. More than 43 percent of the population between August and October employed at least one negative coping strategy due to lack of food or money to buy food.
7. The share of the population receiving any ration food from Public Distribution System (PDS) decreased from 72.5 percent in February to 40.4, 50.5, and 54.6 percent in July, August, and September. Although the figures are trending upward after July, they are yet to fully recover to pre-lockdown levels. The reduction was relatively more pronounced in the Kurdistan region.
8. While more than 11.0 percent of the respondents reported facing challenges accessing market/grocery stores in all three rounds of the survey, about 24.0 percent of the respondents indicated that their household faced challenges accessing market/grocery store in August. Travel restrictions (49.0 percent) and concerns about coronavirus outbreak (20.0 percent) were the main indicated reasons.
9. About 33.5, 33, and 30.9 percent of households in August, September, and October reported seeking medical care. Among those needing health services, 31.5, 31.7, and 24.6 percent reported facing challenges. While lack of money remained the main challenge throughout, travel restriction was of main concern for many in August.
10. Only 22.7 and 21.3 percent of households with children attending school before the pandemic in September and October indicated that their children were involved in any catch up or learning activities during the school closure because of coronavirus.

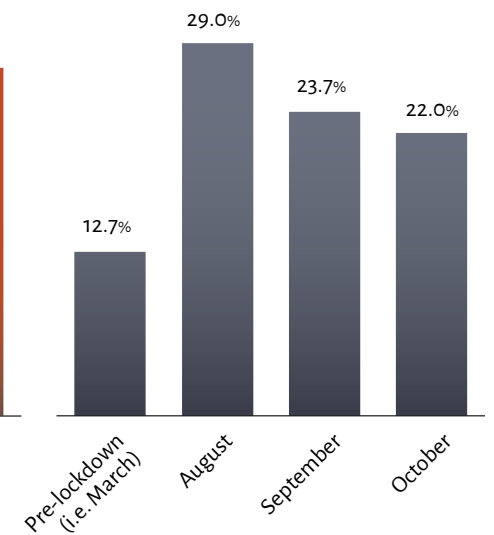
Key Figures

Socio – economic indicators

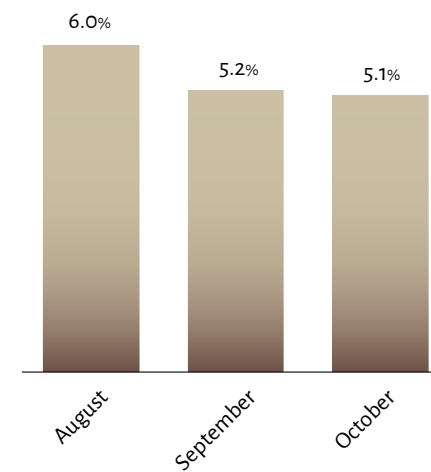
Labor force participation



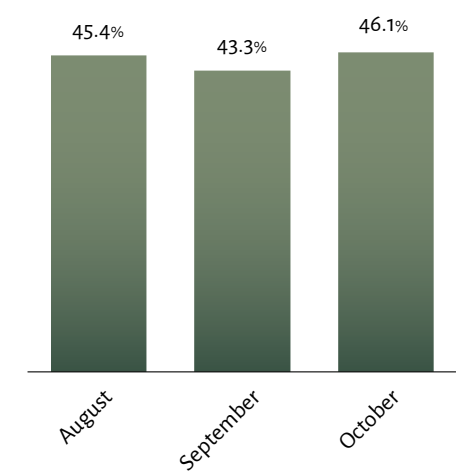
Unemployment rates among respondents



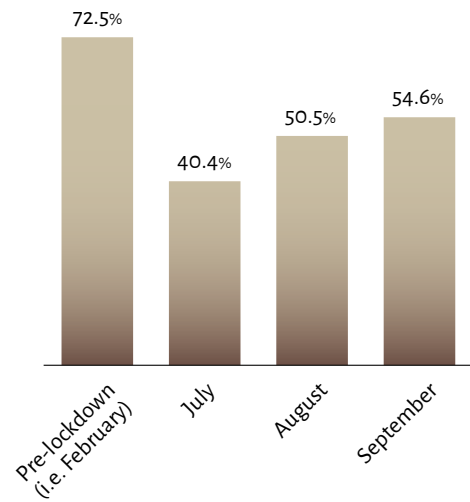
Proportion of the population that consumed inadequate diets



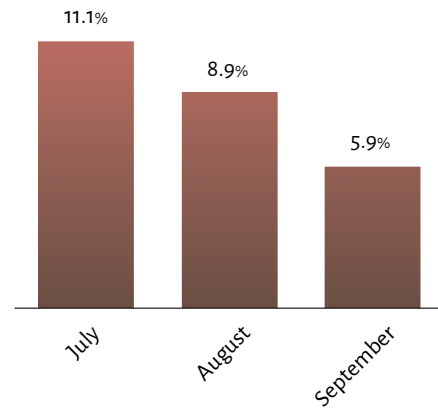
Proportion of the population that implemented at least one of the five consumption-based coping strategies when they did not have enough food / enough money to buy food



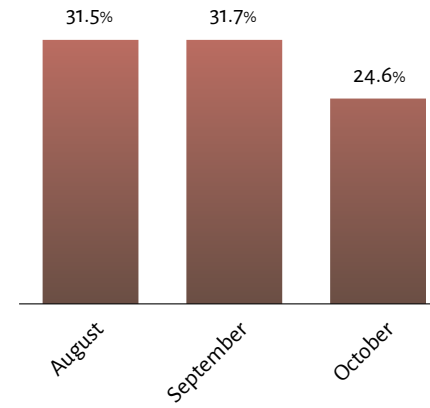
Proportion of population who received PDS Transfers



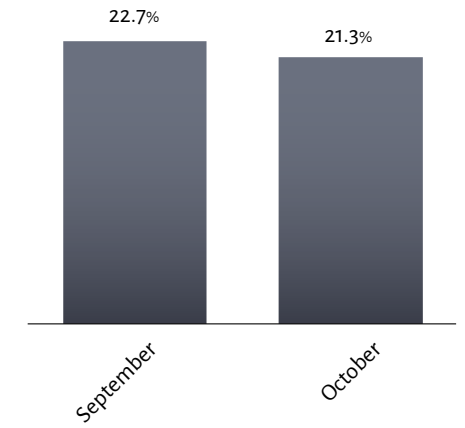
Proportion of population who received in-kind assistance from sources other than PDS



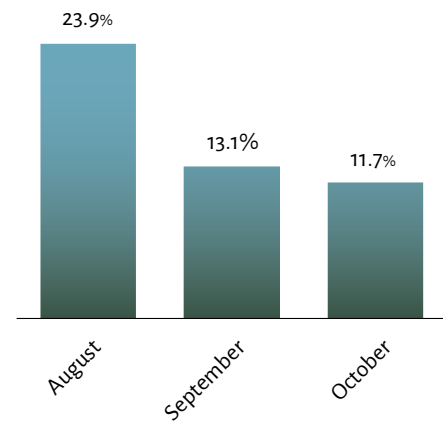
Among the population who needed to access to health care services, proportion that faced challenges



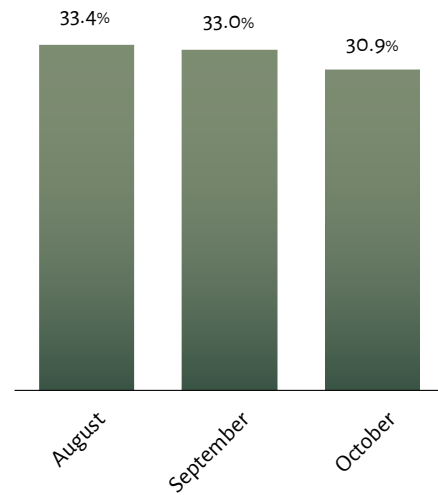
Share of households that reported their children were engaged in some catch up or learning activities during the school closure



Proportion of population who faced challenges accessing market



Proportion of population that needed to access health care service



1. Background

Iraq is one of the most COVID-19 impacted countries in the MENA region in terms of number of cases and deaths. Since the detection of the first case at the end of February 2020, the number of COVID-19 cases and related deaths increased drastically in June (Figure 1). Although, the number of daily new deaths have stabilized after the peak of July, daily detection and death rates have remained alarmingly high above the global average. Among its peers in the region, Iraq is the second most COVID-19 affected country after Iran in absolute terms (Figure 2). As of January 23, 2021, more than 600 thousand people in Iraq had contracted the virus, with total deaths attributed to COVID-19 reaching 12,984, or 323 deaths per million persons (Figure 4). Yet, these numbers are likely to be underestimated. Given vastly urbanized population, including refugees and IDPs, with many living in close quarters and the limited healthcare capacity and testing, which remains below the global average, the spread of the virus is likely to be higher than the reported.

Figure 1: Daily cases and deaths attributed to COVID-19 in Iraq

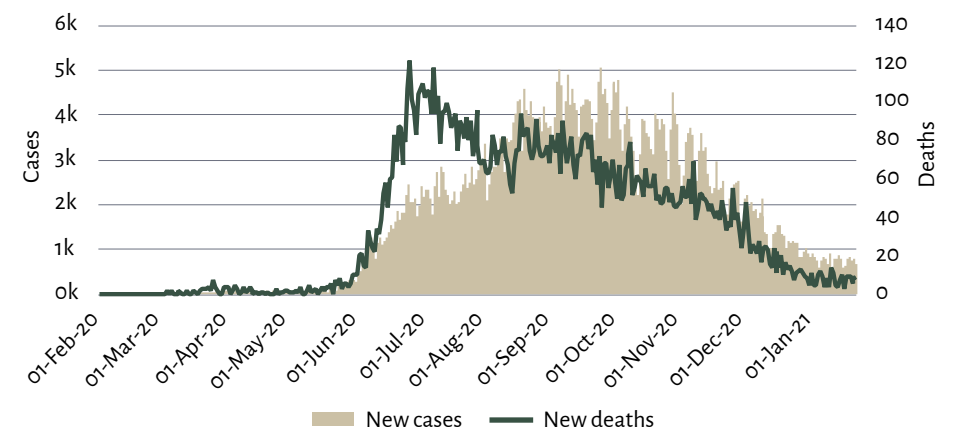


Figure 2: Cumulative cases and deaths attributed to COVID-19 as of January 23, 2021

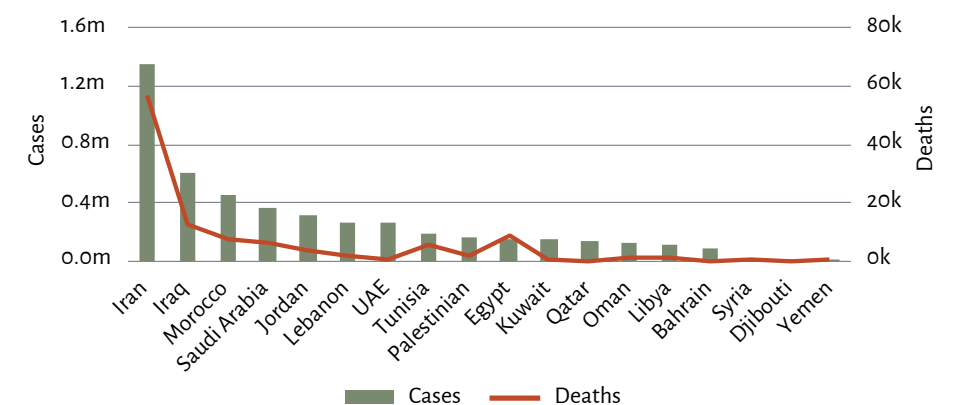


Figure 3: Cumulative cases per 1 million population as of January 23, 2021

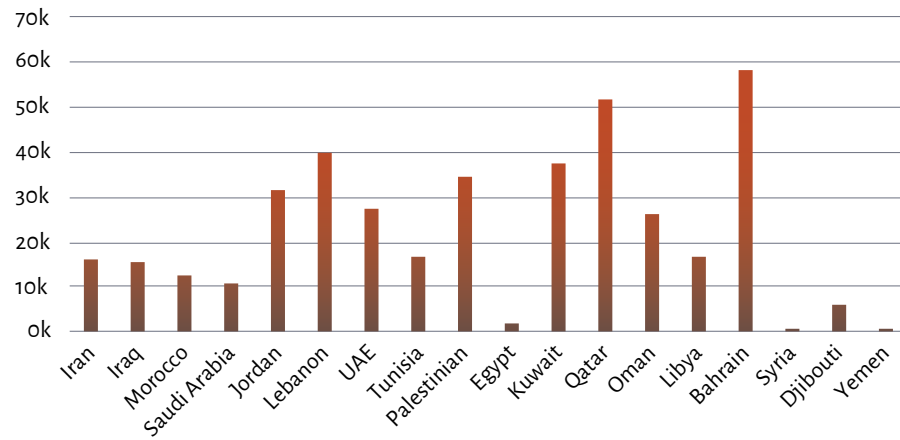
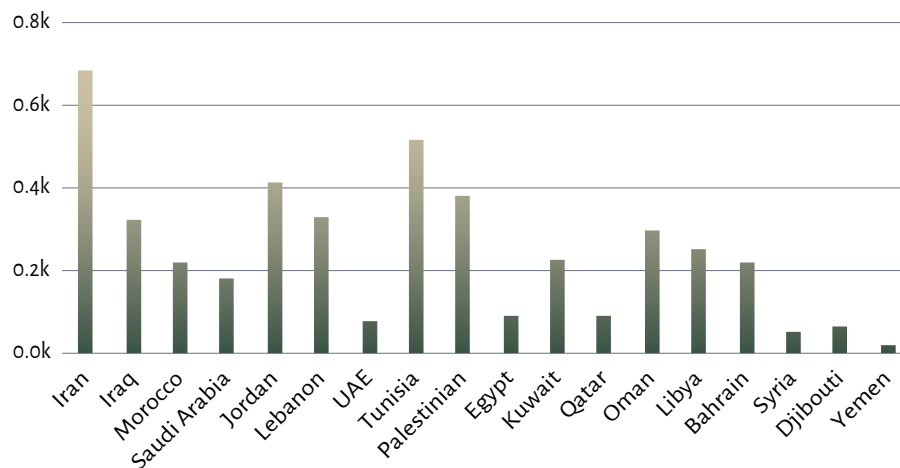


Figure 4: Cumulative deaths attributed to COVID-19 per 1 million population as of January 23, 2021



Source: World Health Organization (WHO) Coronavirus Disease (COVID-19) Dashboard.

As an early response, both the Government of Iraq (GoI) and Kurdistan Regional Government (KRG) took strict mitigation measures to limit the spread of the virus.

For instance, all airports in Iraq suspended operations for both outgoing and incoming passenger flights between March 17, 2020 and April 5. Further, as part of the measures to restrict the transmission of the COVID-19 virus, the whole country was locked down with curfew in major cities including the Capital Baghdad and Erbil (regional Capital of Kurdistan Region). Only essential businesses such as grocery shops and pharmacies were opened. Despite all the measures employed, COVID-19 cases are still of concern.

Like in many other countries, the spread of the virus and government’s containment measures are likely to affect the household welfare and delivery of government support programs.

While disruption in supply chains could increase basic prices, households’ labor and non-labor incomes are likely to decrease due to the economic slow-down and reduced remittances. Tightening fiscal space due to decreased government revenues caused by the plunge of oil prices in the international market and the slowed economy could affect food and public cash transfers. Although not nationally representative, results from the CCI Enhanced Frequency Price Monitoring (EFPM) and CCI Beneficiary Market Perspectives Survey (BeneMark) show significant increases in prices of basic items and households reporting severe constraints in accessing markets (Cash Consortium for Iraq 2020). ILO’s telephone survey of vulnerable households in June 2020 showed significant job-losses and decreased household labor income. Further, the recent World Bank’s Economic Monitor released in Fall 2020 indicates that the economic outlook of the country is highly uncertain and will depend on the evolution of COVID-19 globally and domestically.

This report presents results from the first three rounds of the Iraq’s High Frequency Phone Survey (IHFPS).

It provides an overview and status of employment, household food consumption, cash and in-kind transfers, market and health access, as well as child education and learning during the months of August, September, and October 2020.

2.

Data and Methodology

Since August 2020, the World Bank has been collaborating with the World Food Programme (WFP), leveraging its expertise and utilizing its mVAM infrastructure to implement IHFPS. While this report is focused on households, the phone survey covers both households and business to understand how households and registered firms are coping and responding to the changes due to the pandemic. In addition to the WFP's food consumption module, the household survey covered employment, education, public transfers, and access to market and healthcare. More than 1,600 adult respondents took part in the survey each month as a part of the regular mVAM sample. We note that after the September round, the sample size was expanded to accommodate IDPs, Refugees, and Returnees.

The data collection methodology consists of a countrywide survey covering the 18 governorates in Iraq. The sample size is disaggregated by 18 governorates and the survey firm applied a random sampling approach to reach participants from different governorates in order to reach the given geographical quotas. The governorate population and details of quota are provided in Annex I. All major Mobile Network Operators (MNOs) active in the country were included within the sampling frame to ensure a representative sample. The sample size is designed to detect changes in the prevalence of food insecurity (mainly people with inadequate food consumption) at governorate level as reported in the 2016 Comprehensive Food Security and Vulnerability Analysis (CFSVA) survey in Iraq.¹

The response rate for each round of the survey remained above 75 percent. For example, in August, a total of 1,843 individuals were contacted out of which 1,621 (each from a unique household) agreed and completed the survey; yielding a response rate of 80.1 percent. While the survey is designed to be a panel, households that could not be tracked are replaced with new households to meet the required quota. Response rate for both September and October rounds were above 75 percent. The survey allowed for maximum of 5 telephone contact attempts to reach the targeted respondents. Average number of attempts per phone number was below 1.5 calls for all three rounds.

To ensure representativeness at national level, we construct cross-sectional survey weights for each round. Although, cost-effective, flexible and can be implemented rapidly, lack of national representativeness of phone surveys is of concern. Therefore, using the nationally representative Multi Indicator Cluster Survey (MICS) 2018 as a reference survey, we reweight the initial sampling weights through propensity score matching (PSM) and

¹ Sampling strategy based on the prevalence of food insecurity will yield greater required sample sizes for governorates with higher food insecurity. Therefore, it is vital that this is accounted for while calculating indicators at national level using the phone surveys. Otherwise, while the governorate level statistics will be consistent, the phone survey will likely overestimate the prevalence of food insecurity at national level.

post-stratification procedures. Three set of weights - household, population, and adult – are created to make the phone survey resemble the distribution of the specific population in the MICS survey. Weight calculation and reweighting procedure are detailed in Annex II. While adult weights are used to calculate respondents' labor market (e.g. unemployment rates) indicators and household weights for indicators like the number of household members working, rest of the statistics are weighted using population weights.

Characteristics of the survey respondents and their households are presented in Table 1. In all the three rounds of the survey (i.e. August, September, and October), most of the respondents are males (62 percent), have secondary or higher level of education (about 64 percent) and likely be breadwinners in their families (63 percent). The average age of the respondents is about 37 years. While the average household size is approximately 7, most (71 percent) reported currently living in the dwelling that their family owned.

Table 1: Respondents and household characteristics (by survey round)

Characteristic	August round	September round	October round
Percent of respondents who are male	61.0	62.2	64.2
Percent of respondents with secondary or higher level of education	63.4	63.9	66.5
Percent of respondents who are breadwinners	64.1	61.5	63.5
Average age of respondents	37.6	37.4	37.1
Average household size	7.6	7.6	7.7
Percent of respondents living in a dwelling that their household owned	71.4	68.4	71.0

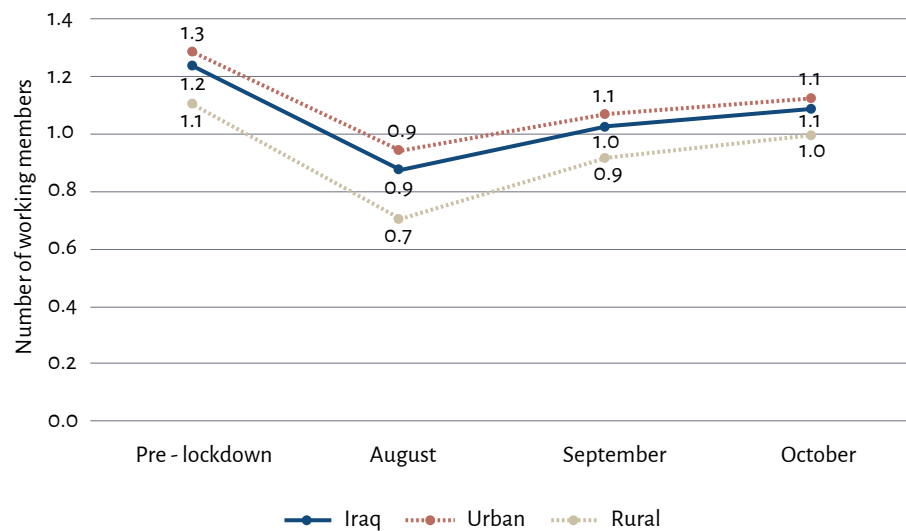
Source: Author's calculation using IHFPS 2020. The figures are weighted using population survey weights.

The rest of the note details the findings from the three rounds of the survey and is structured as follows. Section 3 documents results on labor market and household food consumption is discussed in section 4. Both public and private in-kind and cash transfers are discussed in section 5. Section 6 presents findings on access to market and healthcare and results on child education and learning during the pandemic are discussed in section 7.

3. Labor Market

After an initial drop, households experienced gradual increase in number of members engaging in economic activities as lockdown eased. Besides their current situation, the respondents in the August round were asked about their employment situation just before the lockdown in March providing a benchmark to compare against. On average 1.2 members per households were engaged in income generating economic activities prior to lockdown.² It dropped to 0.9 in August and gradually increased to 1.0 and 1.1 in September and October (Figure 5). While the trends are similar, average number of household members working before the lockdown was higher in urban than in rural areas (1.3 vs 1.1 per household).

Figure 5: Number of working members per household



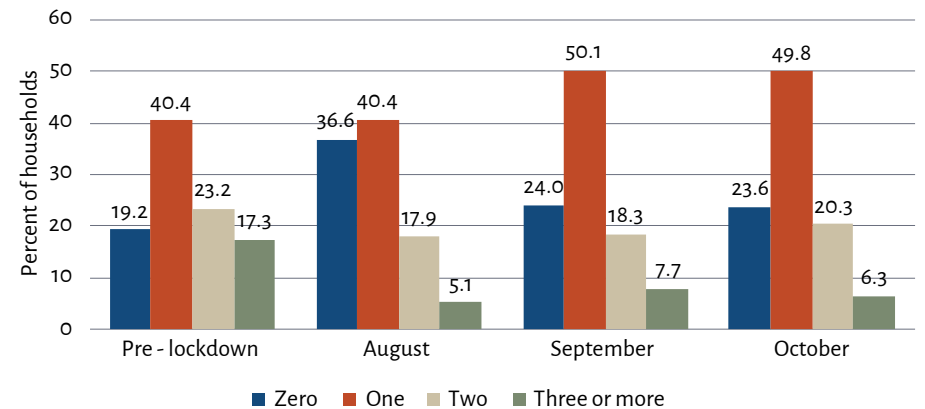
Source: Author's calculation using IHFPS 2020. The figures are weighted using household survey weights.

The average number of working household members masks an important fact: the share of households with only one income earner has increased after the lockdown. After a significant increase of 17.7 percentage points in August, the share of household with zero working members fell-down to a level similar to the pre-crisis in September and October (Figure 6). However, most of the recovery is due to households shifting to a single income earner rather than depending on multiple members that many relied on pre-pandemic. Compared to more than 40 percent prior to the lockdown, only 23 percent of the households reported multiple members working throughout August

² Economic activities refer to any work for pay, any kind of business, farming or other activities that generate income.

to October. In particular, the share of households with three or more income earners dropped from 17.3 percent in early March to 5.1, 7.7, and 6.3 percent in August, September, and October respectively (Figure 6).

Figure 6: Share of households by number of working members



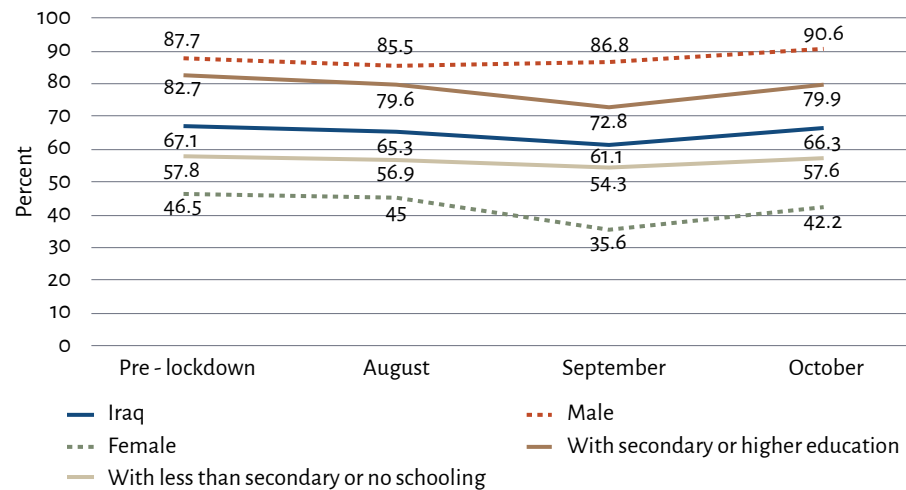
Source: Author's calculation using IHFPS 2020. The figures are weighted using household survey weights.

3.1 Labor force participation and unemployment rates

Participation in labor force among working-age³ population remained comparable to the pre-crisis level, above 61 percent throughout, with significant heterogeneity across population groups. After a slight dip in August and September, the labor force participation rate reached 66.3 percent in October catching up to the pre-crisis level of 67.1 percent (Figure 7). Among working-age male population, the fluctuation was even smaller, and by October the figure reached 90.6 percent climbing above the pre-lockdown level of 87.7 percent. However, following a smaller drop in August, female labor force participation deteriorated significantly during September and remained considerably low in October (Figure 7). The rate among those with less than secondary or no education remained somewhat stable at pre-crisis level throughout and, in contrast, significantly a greater share of those with higher education (Secondary or above) remained out of labor force after September. The difference in the trends could be indicative of choice i.e. high-skilled (with higher education) workers may have greater savings and can afford to sit out of labor force unlike their low-skilled counterparts.

³ The survey collected information on adults that are at least 18 years old. Working-age population in this report, therefore, is defined as those that are between the ages of 18 and 64 (inclusive).

Figure 7: Labor force participation rate (% of working-age population, 18-64)



Source: Author's calculation using IHFPS 2020. The figures are weighted using adult survey weights.

Unemployment rate increased significantly during the lockdown in August and started to fall with the opening of the economy but still remained almost double of the pre-lockdown rate. Among those in the labor force, only 12.7 percent of the adults were unemployed before the lockdown in early March. The unemployment rate increased by almost two and half folds to 29 percent in August. Although it started to trend downward, it remained worryingly high at 23.7 and 22.0 percent in September and October (Figure 8).

The impact of the outbreak on unemployment has been especially severe on female workers and in the North. Following the initial surge across the board, unemployment rate decreased gradually for men. In contrast, it remained stable at significantly higher level than in the pre-crisis period for women (Figure 8). While those with lower educational attainment experienced some recovery with increased likelihood of being employed, those with higher education saw no such recovery. This could be due to the type of jobs the women groups vie for (formal vs informal, type of industry, easy to stop and restart etc.) and the differential impact the pandemic might have had on those jobs. Similarly, while unemployment rate in the South and to some extent in the Kurdistan region started to fall after the peak of August. Unemployment was almost unchanged in the North and the Center (Figure 9).

The pandemic has left unequal footprints across sectors with government/public sector workers being least likely to lose their jobs during the pandemic. About 88 percent

Figure 8: Unemployment rate (% of labor-force population between ages 18 and 64)

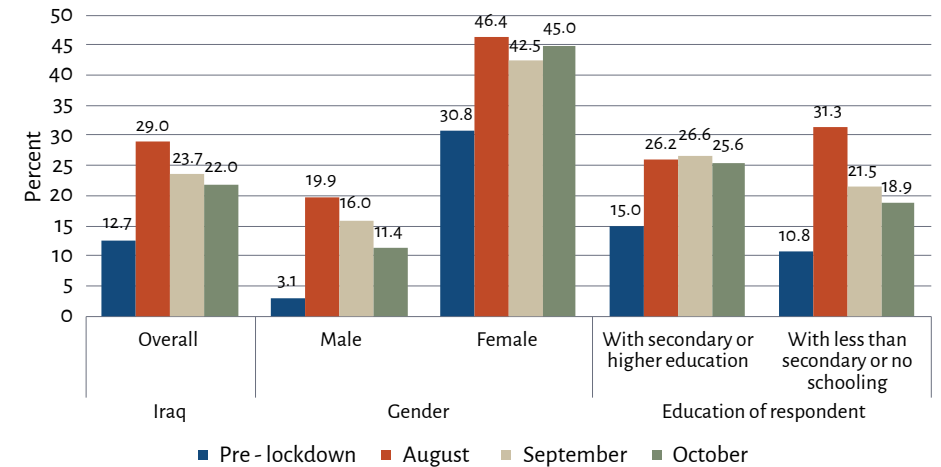
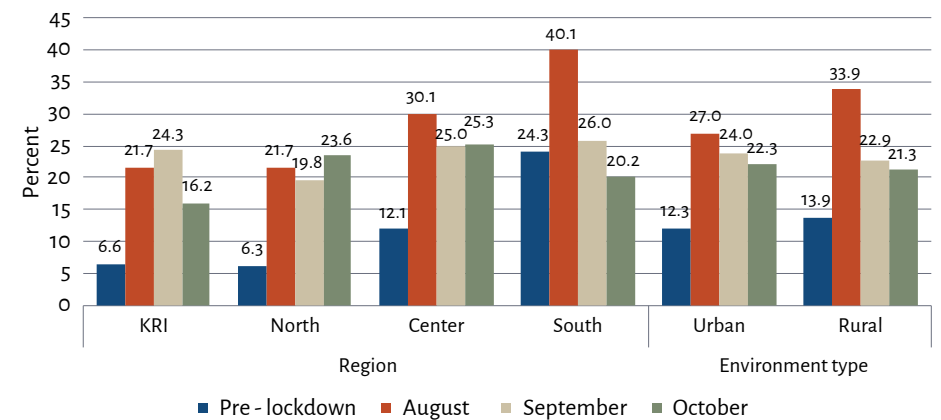


Figure 9: Unemployment by region and environment type



Source: Author's calculation using IHFPS 2020. The figures are weighted using adult survey weights.

of the pre-pandemic public⁴ workers were able to hold onto their jobs either working as usual (42.2 percent) or reduced hours (45.2) in August. In contrast, more than 29 percent of private sector workers (29.4) and those self-employed (29.7) became unemployed. Furthermore, the outbreak has left many discouraged pushing them out of the labor force. In August, 13 percent of the survey participants who were unemployed

⁴ Note: Public sector workers are those employed in the government/public sector, whereas those employed in private domestic and foreign firms, NGOs and private households are classified as private sector workers. Self-employed are those working in a family business/working on farm/working for self.

but searching for a job before the outbreak reported having stopped looking for jobs. Similarly, 5 percent of private sector workers and 3 percent of self-employed also left the labor force.

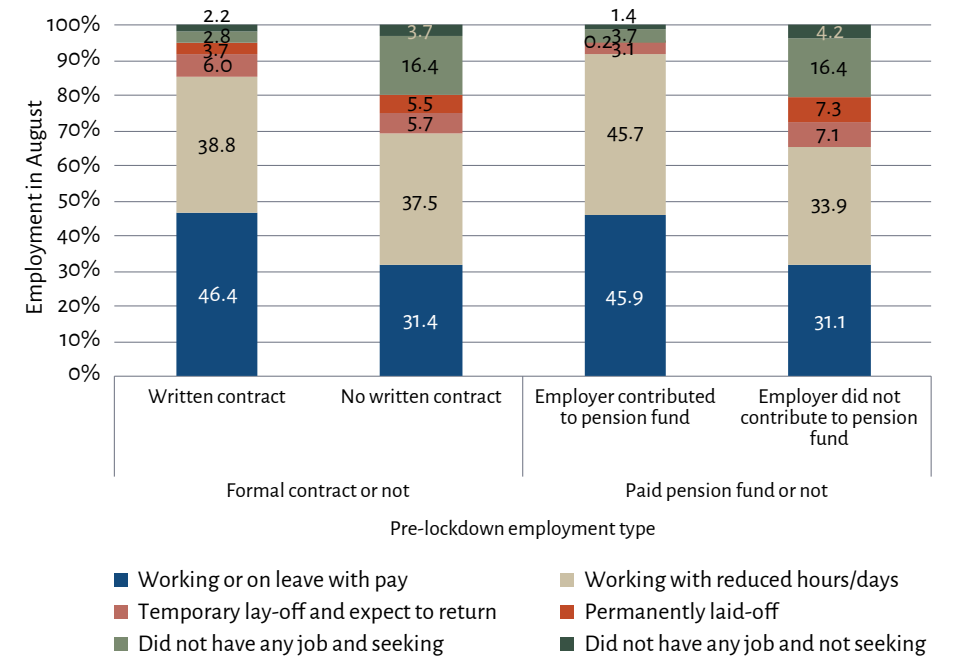
Figure 10: Employment status in August by sector of employment prior to pandemic



Source: Author's calculation using IHFPS 2020. The figures are weighted using adult survey weights.

Informal workers have suffered disproportionately. Among salaried workers with no written contract prior to the pandemic, more than 31 percent had lost their jobs by August (Figure 11). On the other hand, most (85.6 percent) of those with written contract were still working either fulltime (46.4) or with reduced hours (38.8) in August. Additionally, more than 35 percent of those whose employer did not contribute to pension fund were either unemployed temporarily/permanently or were no longer part of the labor force. In comparison the figure was only 8.4 percent among those whose employer did contribute to pension fund.

Figure 11: Employment status in August by pre-lockdown formal/informal employment type prior to pandemic



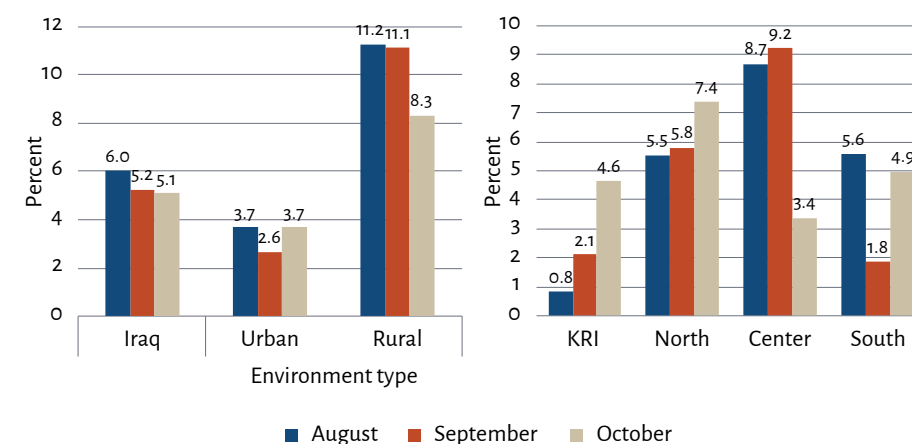
Source: Author's calculation using IHFPS 2020. The figures are weighted using adult survey weights.

4. Food Consumption

Albeit at higher level, the share of Iraqis who consumed insufficient diet decreased between August and October. While 6 percent of Iraqis consumed insufficient food in the month of August, 5.2 and 5.1 percent of Iraqis are estimated to have consumed insufficient food in the months of September, and October, respectively (Figure 12). This suggests a slight decreasing trend in the prevalence of households who consume inadequate diets in Iraq.

The overall trend, however, masks spatial heterogeneity both in level of prevalence and trend of food consumption. In comparison to the urban population, significantly more rural population consumed inadequate diets during August-October period (Figure 12). However, following a drop of one percentage point in September, the share of population consuming inadequate food increased to 3.7 percent and reached the August level in urban areas, whereas it continued to drop from 11.2 percent in August to 11.1 and to 8.3 percent in September and October in rural areas. Similarly, starting from lower levels of 0.8 and 5.5 percent in August, share of population with insufficient diet rose throughout and reached 4.6 and 7.4 percent in Kurdistan and the North in the months of October (Figure 12). The Center and the South, however, experienced no such trend and saw a greater monthly fluctuation.

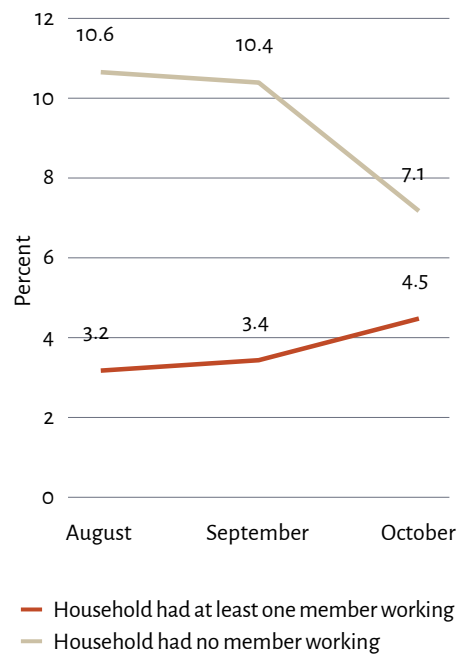
Figure 12: Share of population with insufficient food consumption



Source: Author's calculation using IHFPS 2020. The figures are weighted using population survey weights.
Note: Households with Food Consumption Score (FCS) less than 35 are considered as households with insufficient food consumption. The method for calculating the FCS is described in Vulnerability Analysis and Mapping (World Food Programme 2008).

The pandemic's differential impacts on food consumption is also apparent across groups with a strong correlation between household employment and food consumption. Figure 13 presents a relationship between household food consumption and whether the household had at least one working member. Among households with at least one working member only 3.2, 3.4, and 4.5 percent consumed inadequate diet in August, September, and October, respectively. In contrast, more than double i.e. 10.6, 10.4, and 7.1 percent of households with no member working consumed insufficient diets in August, September, and October.

Figure 13: Insufficient food consumption by household work status

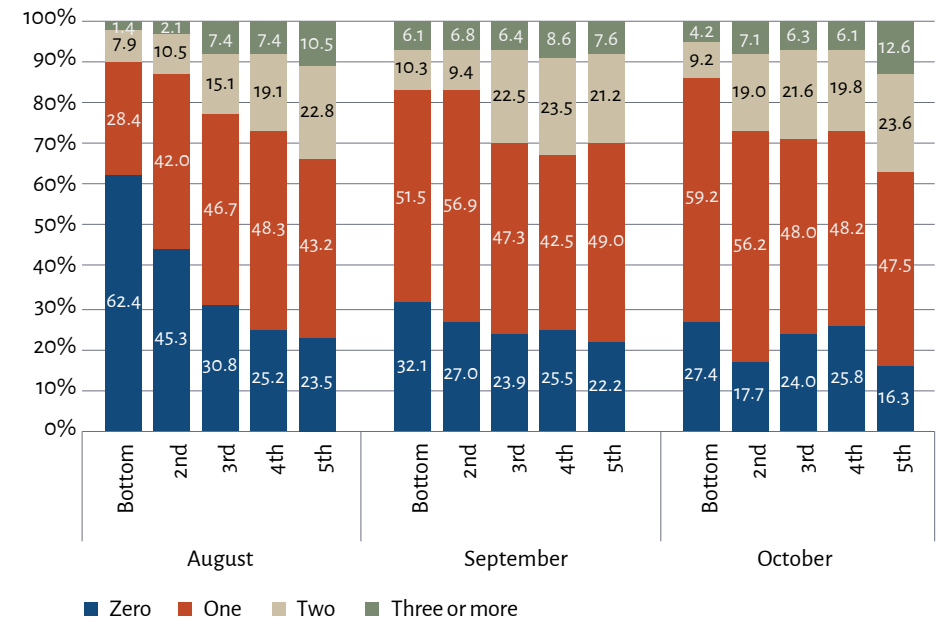


Households that consume inadequate diet also tend to have less members engaging in economic activities to generate income. Figure 14 shows number of working members in a household by food consumption quintile. About 62 percent of households in the bottom quintile did not have any members who worked in August. Share of households with one, two or more than three members who worked increased with the quintile. While share of households with zero working members decreased across quintile in September and October, the positive correlation between food consumption score quintile and number of members working remained. Additionally, more than 28 percent of the households with relatively adequate food consumption had two or more members working in all the three months.

The implementation of consumption-based coping strategies among Iraqi households when they did not have enough food or money to buy food followed similar pattern as food consumption score and with significant heterogeneity across places. While the average reduced Coping Strategy Index (rCSI)⁵ score for the month of August

⁵ The reduced Coping Strategy Index (rCSI) is designed to inform how households cope/manage when faced with shortfall in food consumption. It reveals how households manage/cope with shortfalls in food consumption (Maxwell and Caldwell 2008). It accounts for both the frequency and the severity of each of the five pre-identified strategies household may employ. Survey respondents are asked how many days

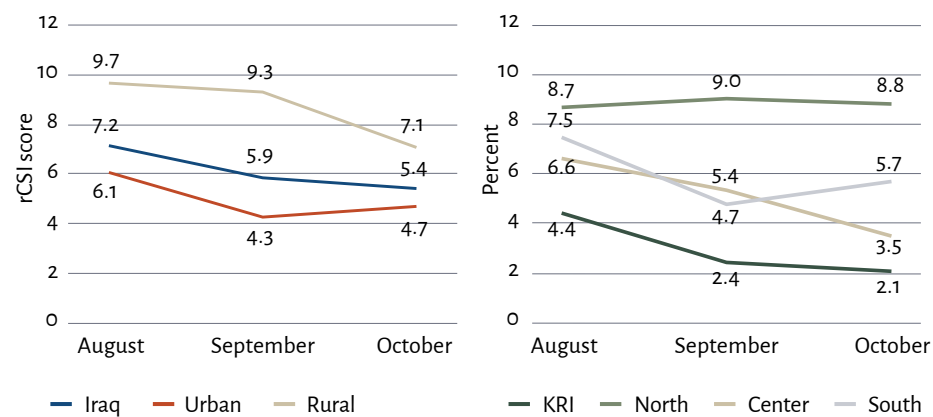
Figure 14: Number of household members working by food consumption score (FCS) quintile



was 7.2, it decreased to 5.9 in September and further dropped to 5.4 in October (Figure 15). However, there was significant heterogeneity in average rCSI across urban/rural Iraq and its four regions. The North with the highest average rCSI in August (8.7) recorded an increase in September to 9.0. While the score decreased in October, it remained above the August level. The Center and Kurdistan region both saw significant reduction in the average rCSI between August and October – reduction of 3.1 and 2.3 points respectively. The average rCSI score in the South increased to 5.7 in October following an initial drop of 2.7 points between August and September.

in the previous 7 days did the household (i) rely on less preferred and less expensive foods, (ii) borrow food or rely on help from friends or relatives, (iii) limit portion size at mealtime, (iv) restrict consumption by adults in order for small children to eat, and (v) reduce number of meals eaten in a day. Based on the information on the 5 strategies, a weighted index is created with the maximum possible rCSI score being 56. The higher the score, the higher the stress level of the household. See (Maxwell and Caldwell 2008) for discussion on the methodology and interpretation.

Figure 15: Average household reduced Coping Strategy Index (rCSI) score



Source: Author's calculation using IHFPS 2020. The figures are weighted using population survey weights.
 Note: The reduced Coping Strategy Index (rCSI) is calculated based on the Maxwell and Caldwell (2008) methodology.⁵

5. Cash and in-kind transfers

Amid the COVID-19 pandemic, share of population that received a food ration from the Public Distribution System (PDS) declined. Although it takes up the majority of the country's social protection budget and stresses its finances, the universal Public Distribution System (PDS) supplies a significant portion of calorie intake and plays a salient, if inefficient, role in Iraqi households' overall welfare (World Bank 2010), and even during the time of crisis when accessible (Phadera, Sharma and Wai-Poi 2020). Thus, to monitor its accessibility during the pandemic, respondents in each round of the survey were asked whether they or any member of their families received any ration food from the PDS in the last completed month. Survey respondents in the August round, in addition, were asked if their households received the benefit in the month prior to the lockdown i.e. in February. Overall, share of population that received PDS benefit dropped from 72.5 percent in February to 40.4 percent in July – a drop of 32.1 percentage points. Although it picked up after July, the share of population that received ration food remained substantially below the pre-pandemic level (Table 2). Ration shops not having enough food and reduction in PDS quantity by the government were the two main reasons cited for not receiving PDS transfer during the pandemic.

Table 2: Share of population with Public Distribution System (PDS) benefits and other in-kind assistance

	Public distribution system (PDS)					Other in-kind assistance				
	Overall	KRI	North	Center	South	Overall	KRI	North	Center	South
February	72.5	47.8	78.5	66.3	83.3					
July	40.4	13.5	49.8	38.5	44.3	11.1	4.4	11.9	11.1	13.1
August	50.5	14.9	60.3	48.7	57.6	8.9	4.4	12.6	9.2	6.7
September	54.6	14.8	76.3	56.2	49.5	5.9	3.0	7.9	7.7	3.4

Source: Author's calculation using IHFPS 2020. The figures are weighted using population survey weights.
 Note: Other in-kind assistances are those from relatives, friends, NGOs, UN agencies (UNHCR, WFP etc.), religious organizations and others.

Share of PDS recipients remained significantly below the pre-pandemic levels across all the regions, except in the North where it has increased back to the pre-crisis level.

Share of population that received any food ration from PDS dropped by more than 30 percentage points between February and July across all the four regions (Table 2). While the North experienced a steep increase after July and almost reached the pre-crisis level by September, access to PDS remained very low in the other three regions. Particularly, in the South and the Kurdistan region where it still remained below the pre-lockdown level by more than 30 percentage points.

Following the one-time transfer under the Minha (“Grant”) initiative, share of Iraqis receiving cash assistance from the government programs such as the poverty-targeted unconditional cash transfer (UCT) have fallen below the pre-pandemic levels.

About 10 percent of Iraqis received cash benefits from the government in February (Table 3). This number increased to 15.3 percent in July when Minha program was active but decreased significantly to 1.4 percent in August and to 0.9 percent in September. This trend is observed across all four regions.

Both in-kind and cash transfers from sources other than the government decreased after July nationally and across places.

While 11.1 percent of Iraqis received in-kind assistance from sources other than the PDS in July, only 8.9, and 5.9 percent reported receiving such assistance in the months of August, and September (Table 3). Similarly, 3.7, 3.3, and 2.4 percent of the respondents across Iraq indicated receiving cash assistance from sources other than the government in July, August, and September (Table 3). The downward national trend for both type of assistance is also consistent across regions.

Table 3: Share of population with the government and cash assistance

	Cash assistance from the government					Cash assistance from other sources				
	Overall	KRI	North	Center	South	Overall	KRI	North	Center	South
February	9.9	4.2	12.4	5.8	14.2					
July	15.3	9.5	18.2	10.6	20.2	3.7	2.2	5.1	3.3	3.4
August	1.4	0.0	0.6	1.5	2.7	3.3	2.4	5.7	3.2	1.6
September	0.9	1.0	0.1	1.3	1.2	2.4	2.1	4.7	1.8	1.1

Source: Author's calculation using IHFPS 2020. The figures are weighted using population survey weights.

6.

Access to market and healthcare services

Overall access to markets and grocery stores improved after August but a substantial portion of the population continued to face challenges. When respondents were asked if they or any member of their households experienced any challenge(s) accessing market/grocery stores, 23.1 percent in August indicated that they faced difficulties (Figure 16). Similarly, 13.1, and 11.7 percent of the households in September and October reported such challenges. Travel restrictions and concerns about contracting the coronavirus were the main cited reasons for the challenge in August. With the ease on curfew, travel restrictions were less of a concern in September and October but contracting the virus continued to be a major reason among those who faced difficulty accessing markets and grocery stores.

The coronavirus pandemic has also imposed difficulty on households' access to healthcare service in Iraq. Nationally 33.4, 33, and 30.9 percent of the population needed to access health center/hospital/clinic or other health services in August, September, and October, respectively. Among those with the healthcare needs, 31.5, 31.7, and 24.6 percent reported difficulty in accessing the services during the three months. While lack of financial resources (40.5 percent) and travel restrictions (14.1 percent) were the two most specified reasons in August, the majority (65.4 and 70 percent) of those with healthcare needs in September and October cited lack of financial resources as the sole reason why they struggled and could not access healthcare/services.

Figure 16: Share of population with difficulty accessing market

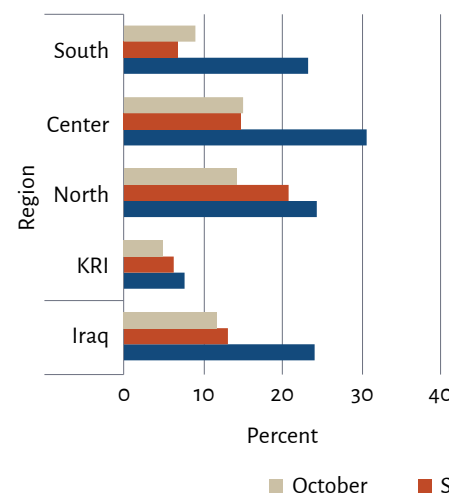
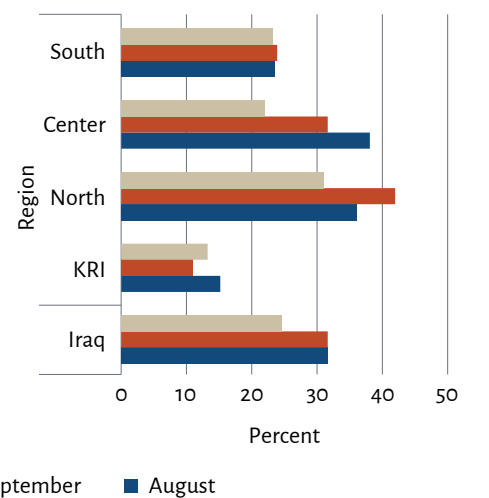


Figure 17: Share of population with difficulty accessing healthcare



Source: Author's calculation using IHFPS 2020. The figures are weighted using population survey weights.

7.

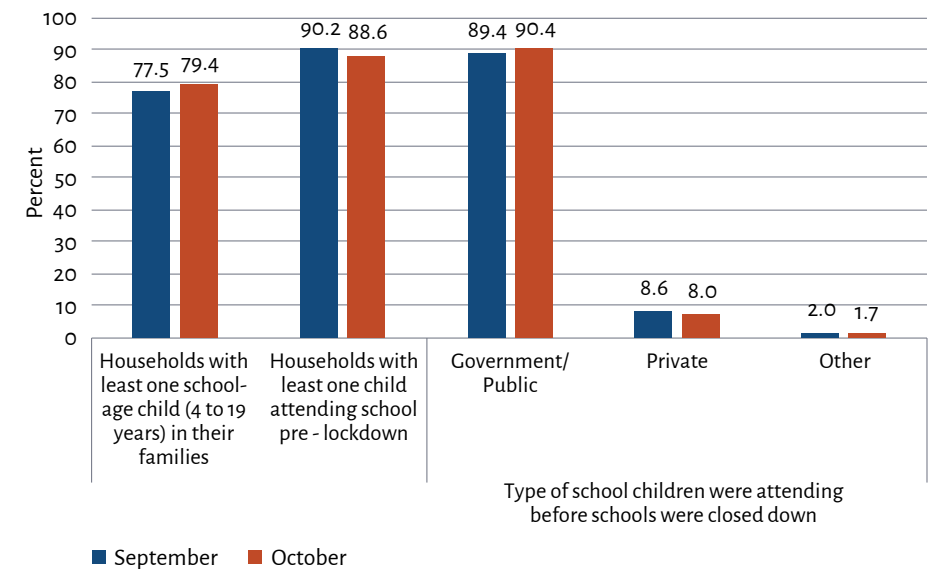
Child learning during pandemic

The majority of children in Iraq attended government/public schools prior to the pandemic but a significant portion of children in Kurdistan region attended private schools.

Households interviewed in September and October rounds, when most of the schools in the country were closed, responded to questions regarding child education and learning during pandemic. The survey shows that 77 and 79 percent of the households in September and October reported having at least one school-age child (4 to 19 years) in their families and 90 and 89 percent reported that at least one of the children was attending school before the lockdown. While majority of the children attended government/public schools (i.e. 89 and 90 in September and October), significant share in Kurdistan region attended private schools – 26.7 and 26.5 percent of households in September and October reported their children were attending private school before the crisis (Figure 18).

A small share of children, mostly attending private schools prior-to the pandemic, engaged in some catchup or learning activities when schools got closed due to the coronavirus. Among households with children attending school prior to lockdown, only 23 percent indicated their children engaged in any catch-up or learning activities in September.

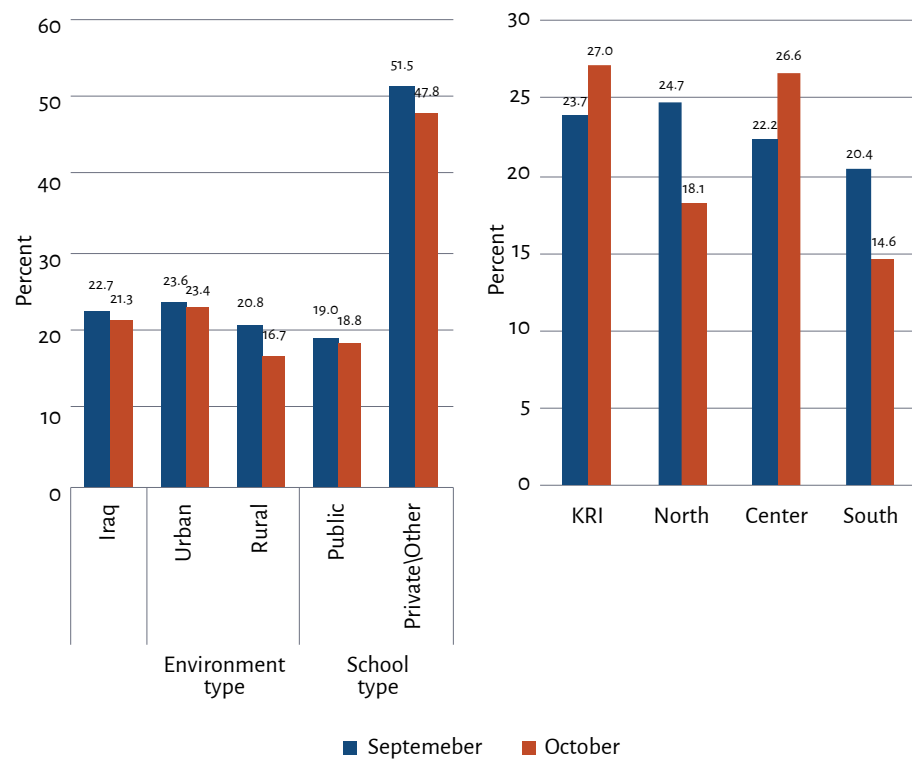
Figure 18: Share of households with children attending school and the type of school they were attending pre-lockdown



Source: Author's calculation using IHFPS 2020. The figures are weighted using household survey weights.

Even a smaller share, 21 percent, reported their children participated in additional learning activities in October (Figure 19). Compared to those attending public schools, students in private school were significantly more likely to receive the extra learning support during school closures. Although at a smaller extent, similar discrepancy exists between the students in rural and urban areas. Furthermore, trends across regions of children receiving additional learning support differ significantly. While it increased for Kurdistan and the Center, the North and the South experienced a significant drop over the two-months period. Share of households with children engaged in the learning activities dropped by more than 5 percentage points in those two regions. The South with the lowest rate in September (20 percent) after the Center, is of particular concern.

Figure 19: Share of households with children engaging in any catch-up/learning activities during the pandemic



Source: Author's calculation using IHFPS 2020. The figures are weighted using household survey weights.

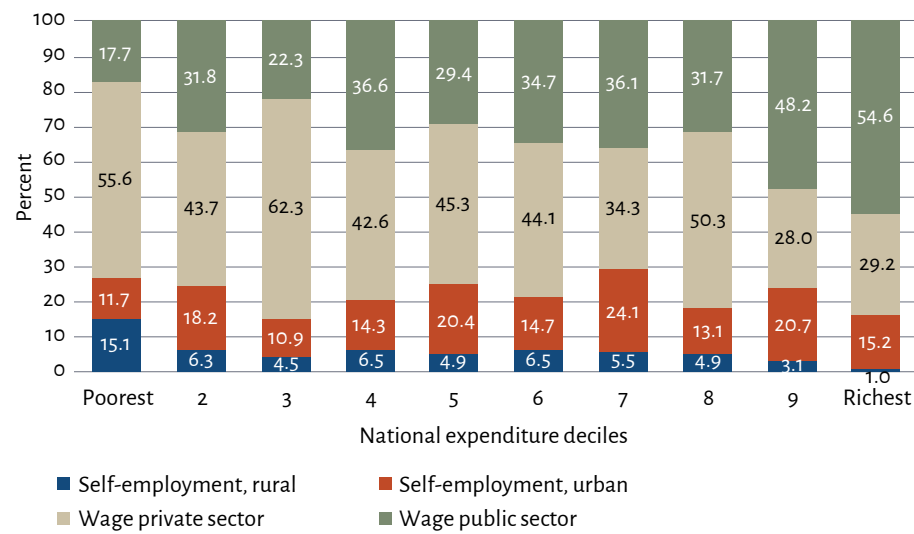
8.

Discussion and Conclusion

The COVID-19 outbreak and the associated measures from the government to limit the spread of the virus have severely impacted the economic wellbeing of Iraqi households. The pandemic has brought about a surge in unemployment and important food security concerns. The crisis has resulted into a significant drop in both cash and in-kind transfers from the government and other sources. Moreover, Iraqis faced significant challenges accessing both market and healthcare services. School-going children have also been negatively impacted as only a very small share of children received any catch-up or learning activities during the school closure due to the pandemic.

Given the disproportional impact on the informal private sector workers, the crisis will likely increase poverty and inequality in Iraq. Results from the survey are consistent with the rapid ex-ante assessment of the pandemic's impact on poverty in Iraq (see World Bank and UNICEF, 2020). The joint report by the Ministry of Planning (MoP), World Bank and UNICEF projected that 2.7 to 5.5 million Iraqis would become poor in the immediate-term due to the pandemic in addition to the existing 6.9 million pre-crisis poor. A uniform public sector wage reduction could push 0.4 to 1.7 million additional Iraqis into poverty, highlighting the need to consider distributional consequences while making those cuts. The analysis considered scenarios with disproportional impacts on the private informal sector, which are confirmed by the survey results. This, however, will likely increase inequality as well. While majority of the wealthier Iraqis are employed in public sector, private sector is mostly dominated by the poorer segment of the workforce (Figure 20). Among workers in

Figure 20: Type of employment by expenditure deciles



Source: Author's calculation using the Rapid Welfare Monitoring Survey (SWIFT) 2017/18.

the richest decile, more than 55 percent were employed in public sector and only 29 percent were working in private sector in 2017/18. In contrast, among workers in the poorest decile only 18 percent held a public sector job while more than 56 percent were employed in private sector. Given the resiliency of the public sector and the high level of vulnerability of the private sector jobs during the pandemic, poorer segment of the Iraqi population are impacted disproportionately and, therefore, will likely increase inequality.

With mass inoculation against the virus, disruptions in services and spike in poverty will recede somewhat but these short-term impacts such as in child learning and health services, can lead to persistent long-term negative consequences. As the economy recovers, the short- and medium-term surge in unemployment, poverty, and challenges to market and healthcare access and schooling will decline gradually. Nonetheless, for some the crisis is likely to have long-term and potentially permanent effects. Besides lower employment, many Iraqis consume inadequate diet and are employing negative coping strategies. A significant portion of the population still faces challenges accessing market/grocery shops and health care services. Furthermore, the crisis has severely limited child learning as evidenced by only a small proportion of students engaging in any catch-up/learning activities during school closure due to coronavirus. These short-term impacts can be profound and persistent, especially, when faced during early childhood which can limit one's lifetime human capital accumulation and economic mobility.

Drawing on lessons from around the world and its own past, Iraq can consider a range of social protection measures to cope with the crisis. Gentillini, et al. (2020) provide a comprehensive review of public responses to the pandemic around the globe. More than 200 countries and territories have put in place some form of social protection programs either through social assistance, social insurance or labor market intervention totalling around 1,200 programs. While most of the programs are social assistance, half of all the responses are some form of cash-transfers. Majority of these transfer programs tend to be new, one-off and of a short duration just like Iraq's own one-off cash transfer under the Minha initiative. While the crisis continues for a longer period, Iraq could consider either revisiting the responses such as its Minha initiative or expand coverage under its poverty targeted Unconditional Cash Transfer (UCT) program at least temporarily.

In the immediate term, it is vital that the Government of Iraq keeps the existing safety net programs/systems well-functioning and leverage them to reach out to the most impacted and vulnerable Iraqis to cope with the crisis. While the share of universal Public Distribution System (PDS) transfer recipients increased gradually after a significant drop between February and July, the figures are yet to fully recover to pre-lockdown levels. Although fiscally taxing, the PDS supplies a significant portion of household calorie intake and plays a salient, if inefficient, role in Iraqi households' budgets (World Bank

2010), even during the time of crisis (Phadera, Sharma and Wai-Poi 2020). Constant supply of the PDS transfers during the pandemic could help mitigate the risk of heightened food insecurity in the country. Furthermore, following the one-time transfer under the Minha initiative during the summer, share of Iraqis receiving cash assistance from the government have fallen below the pre-pandemic level. For example, the Ministry of Social Affairs' (MoLSA) poverty targeted Unconditional Cash Transfer Program (UCT), is currently designed to cover 1.35 million Iraqi households. While maintaining its current coverage, the Government of Iraq can expand the program to eligible households that are in the waiting list either permanently or for a sustained period of time to avoid further deterioration in conditions.

Given the increased number of job losses during the pandemic and chronic underemployment and unemployment among the youth, women and displaced, it is essential that the job protection is prioritized in the short-term and in the medium-term the focus should shift towards job creation and addressing the gap between labor supply and demand. Unemployment increased by 16.3 percentage points between March (pre-lockdown) and August (i.e., from 12.7 to 29 percent). The high rates of unemployment increase Iraqis' vulnerability and places Iraq on a trajectory of rising deprivation on key wellbeing and development indicators both in the medium- and longer-term, as job losses affect households' ability to meet their basic needs and render them poor. Increase in the number of unemployed compromises household food consumption, as evidenced by the estimated number of households consuming inadequate diets and employing negative coping strategies to meet their food needs. While the formal public sector remained resilient even during the pandemic, private sector and self-employment that are mostly informal have suffered significantly. The government could step in and help private sector cover some of the wages conditional on retaining the workers during the downturn. Similarly, Iraq should consider launching active labor market policies (ALMPs) and poverty targeted ultra-poor graduation initiatives (UPGI) that provides a sustained support for a period of time while addressing the skill and capital constraints the poor face through direct transfers and trainings. Improving access to credit and finance through mobile banking, micro-finance, or other instruments will be vital in promoting a vibrant private sector entrepreneurship.

While addressing its short-term needs, Iraq must strive towards building a resilient social protection system and equip itself better to face future crises in the medium-term. For example, while maintaining a robust database of the UCT program will be vital in quickly identifying possible beneficiaries and scaling-up during emergencies, it is equally important to keep the targeting formula up to date. Continuous data renewal through household and other surveys, therefore, is important for targeting but also to monitor social economic status on the ground and understand timely needs and

concerns of citizens. Additionally, given severe setback in child learning and access to market and services during the pandemic, Iraq must focus on a secure and innovative approaches for continuation of learning and service delivery by improving its broadband internet, television, and other digital platforms. Current fiscal space provides limited room for additional public expenditure, but a fiscally sound restructuring of the existing social protection programs could free up a significant space. Iraq spends almost 3 percent of its GDP on Social Safety Nets (SSNs), which is greater than the regional average of 1 percent and global average of 1.5 percent but most of it is exhausted by the universal and untargeted PDS program. As proposed in the Gol reform agenda, reforming the PDS, at least gradually, and moving towards poverty targeted and more efficient SSNs such as cash transfers could ease some of the country's fiscal pressure and potentially provide space for other programs.

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Annexes

ANNEX I: Sampling Design

To ensure representativeness, the sample size for the survey was disaggregated by the 18 governorates with a quota set for each governorate. Given a 4% margin of error and 95% confidence level, the sample size of 1620 was the minimum required to ensure a representative sample across governorates. This was calculated by considering the *population proportion, margin of error and the confidence level as follows:*

$$\text{Unlimited population: } n = \frac{z^2 * \hat{p} (1 - \hat{p})}{\varepsilon^2}$$

$$\text{Finite population: } n' = \frac{n}{1 + \frac{z^2 * \hat{p} (1 - \hat{p})}{\varepsilon^2 N}}$$

Where $z = z$ score, $\varepsilon =$ margin of error, $N =$ population size, $\hat{p} =$ population proportion

A minimum of 1620 households/individuals were interviewed monthly. With approximately 405 interviews carried out every week. The call center applied a random sampling approach to reach the given geographical quotas. Table A presents detailed information about Governorate Population, Target Sample Size and Quotas.

Table A: Governorate Population, Target Sample Size and Quotas

ADM1 Name	Population	Monthly target per governorate	Weekly target per governorate	Bi-weekly target per governorate	Monthly Adjusted Target
Anbar	2,069,768	81	21	42	84
Basrah	3,383,447	126	32	64	128
Muthanna	990,453	34	9	18	36
Qadisiya	1,873,089	66	17	34	68
Najaf	1,653,244	66	17	34	68
Erbil	2,681,017	96	24	48	96
Kirkuk	1,792,045	66	17	34	68
Babil	2,330,682	81	21	42	84
Kerbala	1,470,412	50	13	26	52
Missan	1,338,393	50	13	26	52
Ninewa	4,215,084	154	39	78	156
Salah al-Din	1,628,457	66	17	34	68
Sulaymaniyah	2,282,730	81	21	42	84
Baghdad	8,242,789	262	66	132	264
Wassit	1,548,814	50	13	26	52
Thi-Qar	2,500,447	96	24	48	96
Dahuk	2,703,872	96	24	48	96
Diyala	1,657,588	66	17	34	68
Total	44,362,331	1587	405	810	1620

Note : Population information is from: <https://sedac.ciesin.columbia.edu/data/collection/gpw-v4>

ANNEX II: Reweighting for the High Frequency Phone Survey in Iraq (IHFPS 2020)

The spread of COVID-19 and government-imposed social distancing practices across the globe has severely limited the use of traditional, face-to-face interviews in population-based surveys to address the data needs. Recently, a more commonly adopted strategy for collecting household survey data is through phone surveys, which do not require face-to-face interactions and can elicit information from individuals and households rapidly and at low cost. Furthermore, these platforms offer flexibility to alter sampling and/or questionnaire design in response to evolving information needs.

The biggest concern with the phone surveys, however, is the lack of national representativeness. Presumably, people who could be more easily reached by phone should have very different characteristics from people with no phone. For example, it is likely that households who own a phone are wealthier than those without. Additionally, households with a phone installed are more likely to reside in urban areas with better infrastructure, whereas households with no phone are more likely to be located in remote/rural areas. Therefore, phone surveys only represent a certain group of households with particular characteristics, thereby failing to be nationally representative.

To address such concern in the Iraq's High Frequency Phone Surveys (IHFPS), we follow the reweighting procedure developed by the World Bank's Poverty and Equity Global Practice.⁶ It calibrates the phone surveys against a nationally representative reference household survey and readjusts the phone survey to make it nationally representative.

The 2018 Multiple Indicator Cluster Survey (MICS) was selected as the reference survey. It is a nationally representative survey with a representative sample at the national and governorate levels of more than 20 thousand families throughout Iraq. The readjustment of the phone survey is done as described below.

⁶ See Annex 2 of "High Frequency Mobile Phone Surveys of Households to Assess the Impacts of COVID-19 Guidelines on Sampling Design", Version: April 29, 2020, which provides various ways to implement re-weighting procedures.

1. Household and population weights:

Step 1: Using the population and the monthly sample size (as reported in Annex I), starting or initial population weights are calculated as:

$$\text{popwgt}_{ig} = \frac{N_g}{S_g} \quad (1)$$

where popwgt_{ig} is the starting/initial population weight of household i in governorate g . While N_g is the governorate population, S_g is the number of complete phone interviews in a month from governorate g . Using the average household size in a governorate, hhsiz_g , (from the MICS 2018 survey) we calculate the initial household weights as below:

$$\text{hhwgt}_{ig} = \frac{\text{popwgt}_{ig}}{\text{hhsiz}_g} \quad (2)$$

and all the subscripts have same meaning as in equation 1.

Step 2: The calculated “initial weights” are then adjusted using the propensity score weighting procedure. The goal is to make the phone survey resemble the distribution of the nationally representative survey as much as possible. To achieve this goal, we need to compare variables that are time-invariant between the two surveys. If these variables are close enough across the two surveys, we can safely conclude that the phone survey has resembled the reference survey quite well, or, the reweighting has been implemented successfully.

In Iraq, we use the following time-invariant as the target to be matched across surveys:

- household size
- household size squared
- dependent share
- elderly share
- adult category (2 or less, between 3 to 5, 6 or more)
- urban/rural
- accommodation (dwelling ownership)
- residence of region (KRI, North, Center, or South)

Initial weights, from the reference and phone surveys serve as a starting point.⁷ Once, these variables are created in both the surveys, the two dataset are then appended generating a variable named “**append**”, which takes the value of 1 if an observation is from the phone survey, and takes the value of 0 if it comes from the reference survey.

Using “append” as the dependent variable, we implement a logit regression with the above listed variables as regressors (variables that are correlated with the respondent’s likelihood of being reached by phone). Based on the predicted probability, the combined appended data set is then divided into five quintiles. The rest of the procedure is as follow:

- I. Compute the **quintile-level sum** of predicted probability **for the reference and phone surveys**, respectively.
- II. Compute **the sum** of predicted probability **for both the reference and phone surveys**, respectively.
- III. Divide the quintile-level sum by the survey-level sum of predicted probability for both surveys.
- IV. Divide the quintile-to-total ratio from the reference survey by the quintile-to-total ratio from the phone survey and obtain a new ratio which we name as “**coefficient**”.
- V. Generate a new household weight by multiplying the initial household weights from the phone survey by the coefficient:

$$\text{hhwgt}_{ig,PSM} = \text{hhwgt}_{ig} \times \text{coefficient} \quad (3)$$

- VI. Generate a new population weight by multiplying the initial population weight from the phone survey by the coefficient:

$$\text{popwgt}_{ig,PSM} = \text{popwgt}_{ig} \times \text{coefficient} \quad (4)$$

Step 3: PSM adjusted weights are then calibrated to match governorate and other population sums. While the propensity-score-matching-based procedure makes the phone survey closer to “being nationally representative” by overweighing the group of people that were hard to be reached by phone, the population distribution in the phone survey

⁷ MICS 2018 survey reports only the normalized weights (the sum of the weights match to total sample size instead of population). In order to create the full weights, we multiply the normalize household weights by a constant - 6,056,089/20,214 (total households in Iraq in 2018/MICS 2018 sample size). Total households in Iraq was identified by dividing the population (as reported in World Development Indicator (WDI)) by average household size. We reproduce Table SR 4.1 “Age distribution of household population by sex” in the MICS 2018 report using the full weights to access its accuracy. The age distribution matched perfectly with the distribution produced by the normalized weights.

may still differ from the reference survey. At this stage, we implement a procedure named post-stratification or raking to exactly match the governorate-level and other population sums between the reference and phone surveys. To be exact, using the population sums (number of households and individuals for households and population weights, respectively) from the reference survey by (i) governorate; (ii) household size category – between 1 to 3, between 4 to 5, between 6 to 7, between 8 to 9, and 10 or more; (iii) dependency ratio category (number of children/household size) – 0-0.1, 0.1-0.3, 0.3-0.5, 0.5-0.6, and 0.6-1; and (iv) urban population, we use Kolenikov’s (2014; 2019) *ipfraking* procedure in Stata and calculate post-stratified weights.⁸

Finally, to correct for outliers, we re-run the above *ipfraking* procedure by controlling for smallest and highest raked weights allowed. While the value of 1st percentile of the post-stratified weight from the previous *ipfraking* procedure is used as the lower bound, the 99th percentile is used as the upper bound. Weights that are below (above) this lower (upper) bound are increased (trimmed down).

2. Adult weights:

Unlike the regular face-to-face household surveys, the Iraq’s High Frequency Phone Surveys do not collect information on all household members. They elicit household and individual level information from the survey respondents only. Moreover, by design only adult, 18 years or older, are selected as survey respondents. Therefore, to assess individual level indicator such as one’s employment status or labor force participation for adults, the calculated household and population weights are not adequate and need to adjust such that the adult population in the phone survey resemble the adult distribution in the nationally representative survey.

In order to create adult weights, we follow the similar procedure as described in section 1 for household and population weights and make the following adjustment:

Step 1: Since the sampling design did not use the adult population distribution to select the sample and there is no auxiliary data, all the observations are assigned a starting/initial weight of 1 i.e.

$$\text{adultwgt}_{ig} = 1 \quad (5)$$

⁸ See Kolenikov, S. 2014, “Calibrating survey data using iterative proportional fitting (raking).” Stata Journal 14: 22-59 and Kolenikov, S. 2019, “(Kolenikov, Updates to the ipfraking ecosystem 2019).” Stata Journal 19: 143-184.

Step 2: Here we follow all the steps as described in section 1, except that the MICS 2018 sample is limited to adults only when appending the two data sets. In addition to the 8 regressors used in section 1, respondents’ age, age squared, gender and education levels are added as extra regressors in calculating one’s propensity to be part of the phone surveys.

Step 3: The PSM adjusted adult weights then are calibrated to match adult population sums by (i) governorate; (ii) household size category; (iii) dependency ratio category; (iv) urban population; (v) region by gender adult population sums; (vi) region by education level (primary, secondary, bachelors or more), and (viii) region by age category 18-24, 25-29, 30-39, 40-49, 50-59 and 60 or more) population sums. Again, the outliers are corrected as described in section 1.

All three full (raw) sample weights are then standardized (or normalized) to make the weighted sum of the interviewed sample units equal to the total sample size. Normalization is done by multiplying the full sample weights by a constant factor equal to the unweighted number of total completed interviews (sample size) divided by the weighted total number of completed interviews i.e. total households, individuals, or adults.

ANNEX III: Labor market indicators

Figure A: Labor force participation by region (18-64)

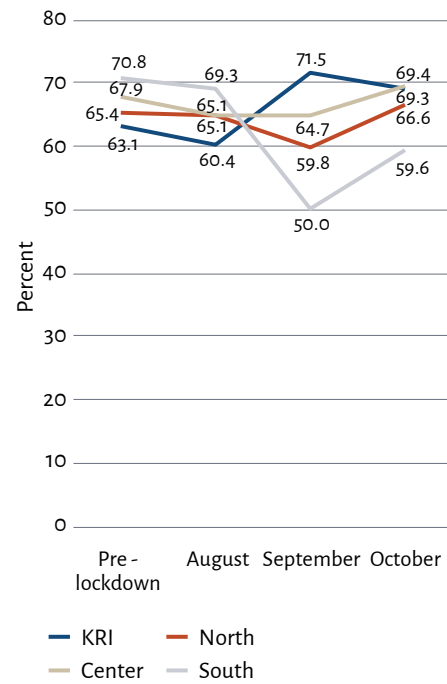


Figure B: Labor force participation urban vs. rural (18-64)

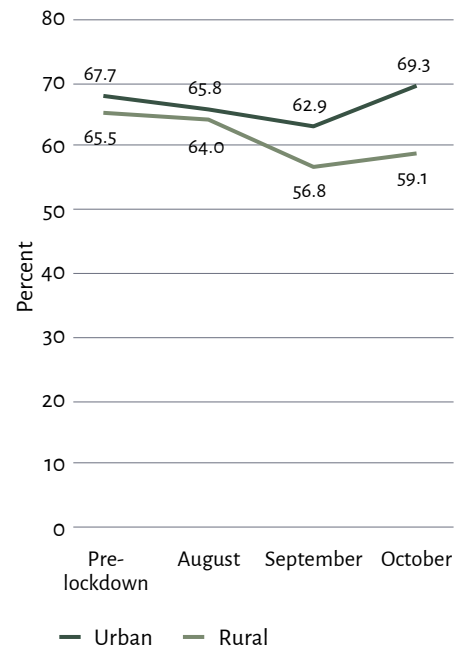


Table A: Labor force participation by gender (18-64)

Period	Iraq		Urban		Rural	
	Male	Female	Male	Female	Male	Female
Before lockdown	87.7	46.5	88.7	48.3	85.6	41.4
August	85.5	45.0	86.1	47.0	84.2	39.6
September	86.8	35.6	89.4	38.6	81.2	27.0
October	90.6	42.2	91.4	47.8	88.5	27.7

Figure C: Average number of household members working by region and environment type

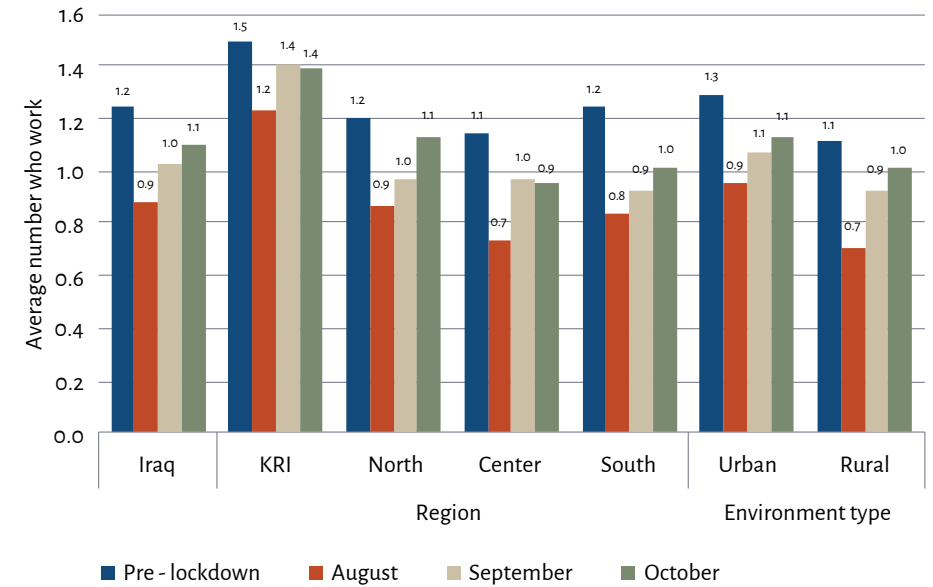


Figure D: Share of households with at least one member working by region and environment type

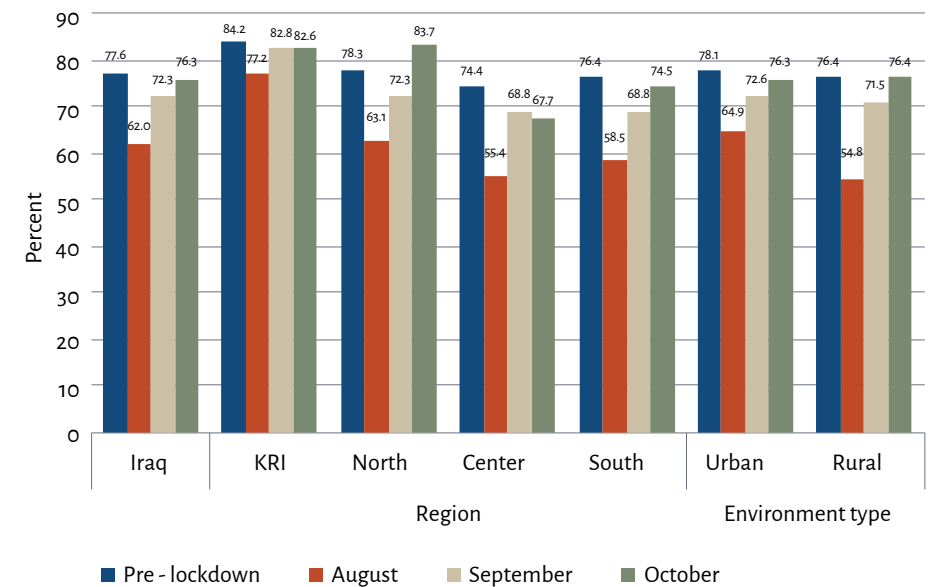


Figure E: Number of household members who did any work for pay, did any kind of business, farming or other activity to generate income

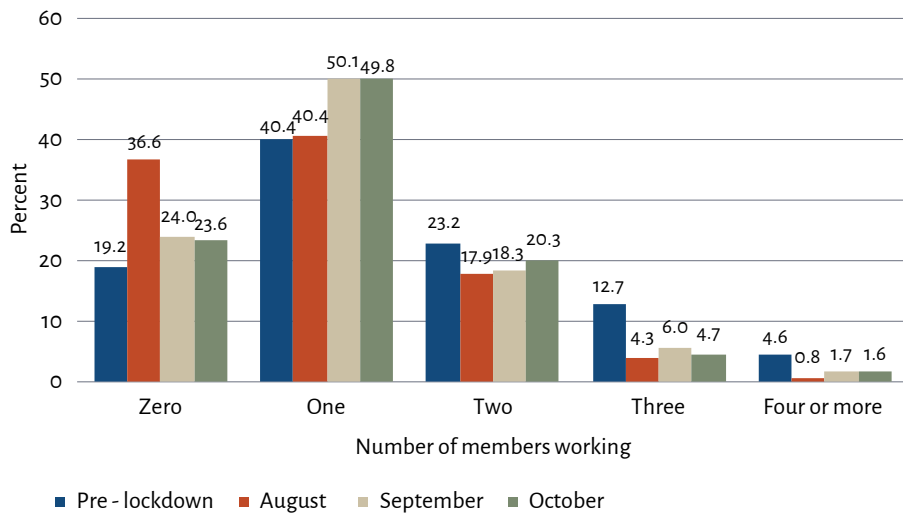


Figure F: Education level of respondent vs. employment status in August

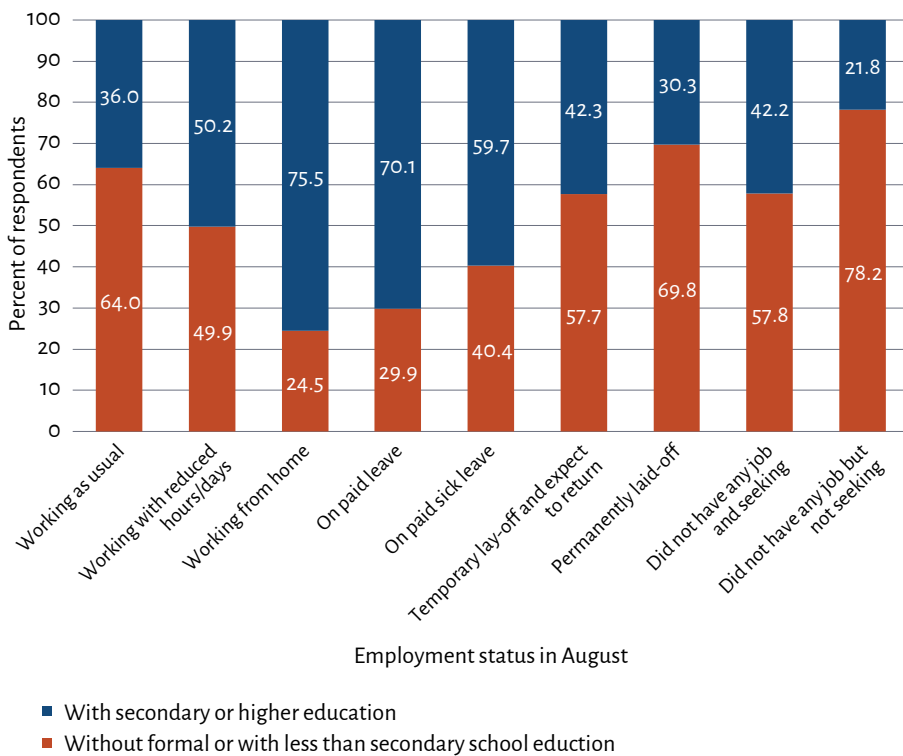


Figure G: Education level of respondent vs. employment status in September

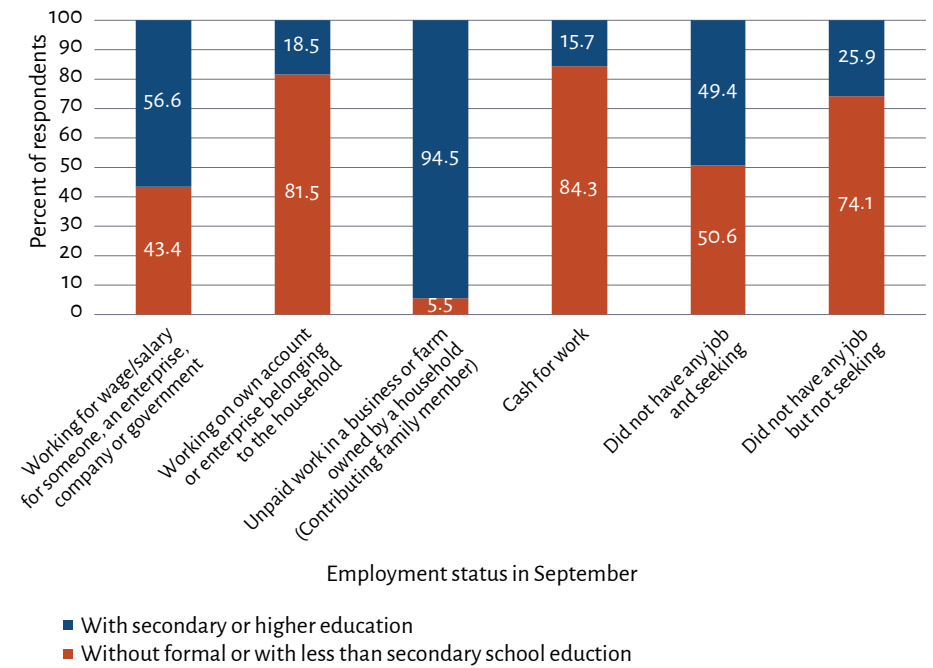


Figure H: Education level of respondent vs. employment status in October

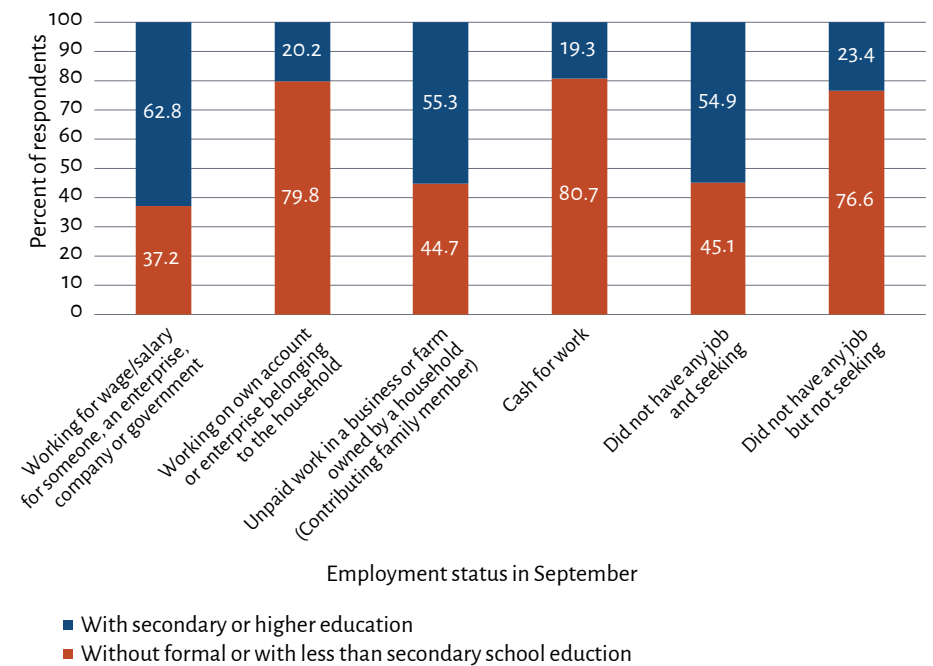


Figure I: Employment status in August vs. whether respondent was engaged in formal employment or not before lockdown

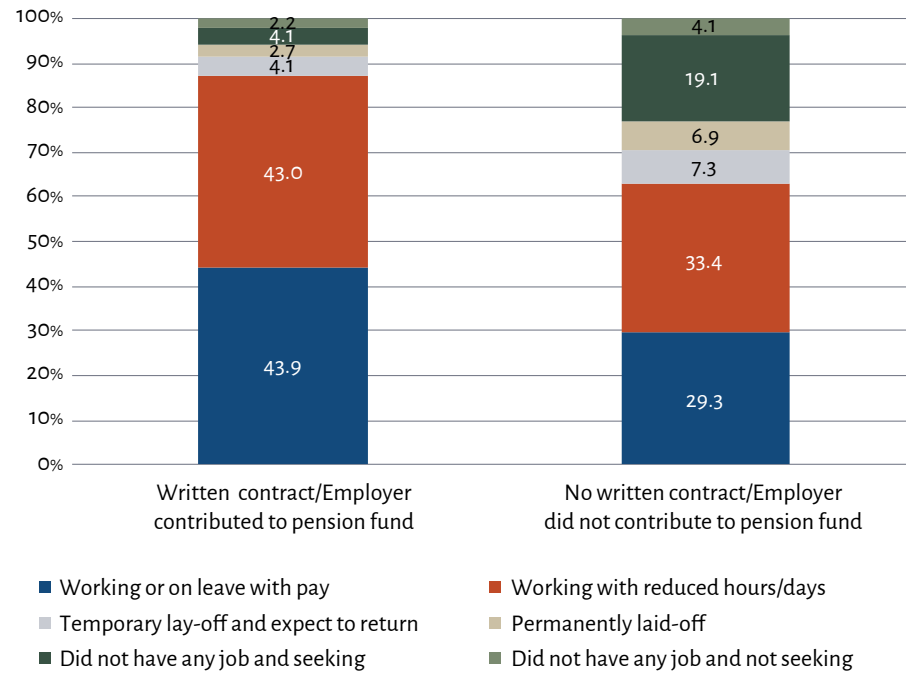
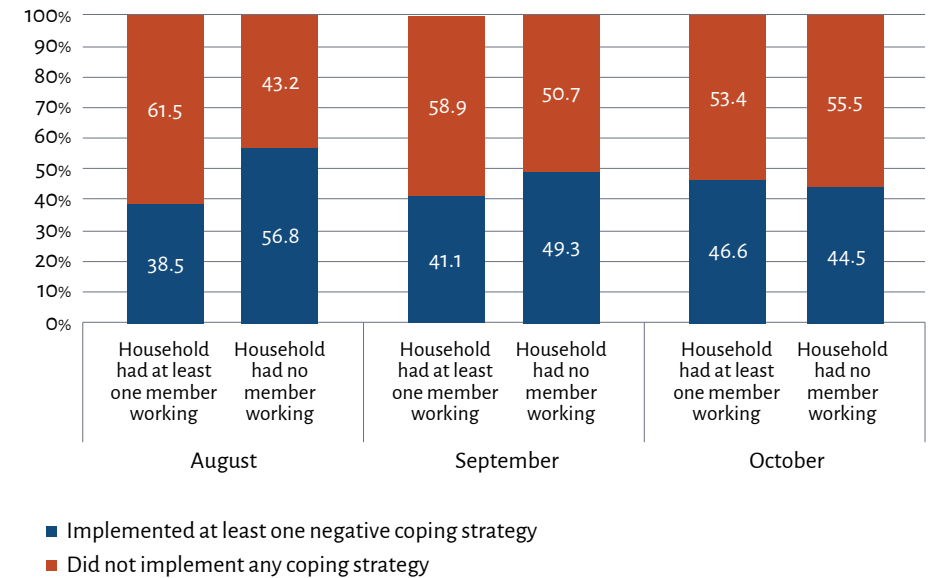


Table B: Unemployment among respondents (by gender)

Period	Iraq		Urban		Rural	
	Male	Female	Male	Female	Male	Female
Pre - lockdown	3.1	30.8	3.2	27.6	2.9	41.3
August	19.9	46.4	16.3	45.2	27.6	50.1
September	16.0	42.5	16.0	41.0	15.9	48.6
October	11.4	45.0	10.7	43.8	12.9	50.3

ANNEX IV: Labor market and food security

Figure J: Household's implementation of at least one negative coping strategy vs. Household has at least member working or not



ANNEX V: Cash assistance from government and other sources

Figure K: Share of population who received cash assistance from government and other sources

