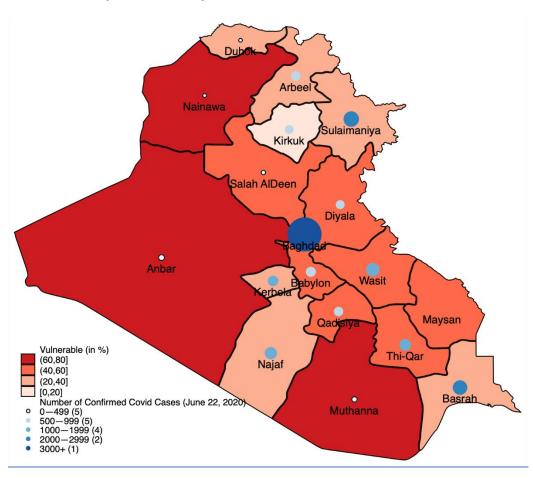
Assessment of COVID-19 Impact on Poverty and Vulnerability in Iraq

Map of Vulnerability and Confirmed Cases of Covid-19









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1. Introduction

Today the world is facing the novel Coronavirus "COVID-19" pandemic, to which countries all over the world are stepping up their response to control the spread of infection and to strengthen prevention and health care programs. In that direction, on the onset of discovering the first case, the Iraqi government and the regional government of Kurdistan started adopting a multitude of measures and keeps on adjusting and expanding their scope following the spread pattern of the virus and placing the highest priority to preserving the lives and safety of citizens. At the same time, the government is cognizant that the measures deployed (including curfews, limiting mobility, and the associated confinement of businesses beyond those considered essential, and the closure of schools and universities) would have negative socio-economic consequences on population and their living conditions.

The impacts of the pandemic will be further exacerbated by the economic shock from the plunge of oil prices in the international market tightening Iraq's fiscal space further. The largest impact of the twin e crises will fall on the poorest and those who suffer from weak resilience to face and overcome shocks, and families whose breadwinner works in economic sectors most affected by the crises.

Within this context and in response to the request of the Ministry of Planning, the World Bank and UNICEF are providing technical support within the framework of their ongoing partnership with the Ministry to support its efforts in responding to this crisis. This work is also benefiting from the technical support of the Oxford Poverty and Human Development Initiative through its partnership with UNICEF. This support consists of:

- 1. conducting a rapid assessment of the impact of the crisis on poverty and vulnerability (including number of scenarios),
- 2. simulating the impact of mitigation measures including social protection interventions in containing the repercussions of the crisis on poverty and vulnerability,
- 3. quick update of poverty maps to guide interventions, and
- 4. monitoring poverty and vulnerability indicators and offer feedback on mitigation measures.

The current brief provides a summary of the methodology and preliminary results under item (1) above.

2. Methodology and data

2.1 Important definitions

Poverty: lack of basic needs of food, clothing, education, health and mainly housing.

Poverty line: The total cost of the basket of commodities required to meet the cost of basic needs such as food, clothing, housing, education and health, as this line divides the concerned community into two categories, namely the poor and the non-poor, and some have defined it as the expenditure level required so that the individual is not considered poor. Based on the 2017-18 SWIFT data, the national poverty line was IQD 110,881 per person per month.

Poverty Headcount Ratio: It is an indicator that measures the share of the population that is below the poverty line.

Poverty gap (Depth of poverty): It captures, on average, how far below the poverty line the poor are (as a percentage of the poverty line). Multiplying the poverty gap index by both the poverty line and the total number of poor individuals in the country yields the total budget required to bring all the poor in the country out of poverty and their expenditures up to the level of the poverty line, assuming perfect targeting of transfers.

Vulnerability to monetary poverty (Near poverty rate): It is a share of the population whose expenditure is above but close to the poverty line and may have high probability of becoming poor within the next period (usually the next few years). In the brief, it is defined as the share of population whose expenditure is between the poverty line and 1.5 times the poverty line.

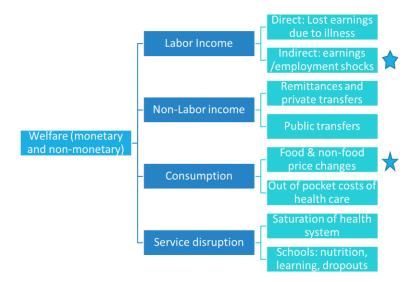
Multidimensional Vulnerability Index: a multidimensional index tailored to measure social deprivation in dimensions affected by the crisis. The index includes four dimensions measured at household level, namely education and health dimensions capturing access to services, and living conditions and financial security dimensions capturing household living standards and resilience to cope with shocks. The index is calculated as the product of the percentage of the population that is vulnerable and the average intensity of deprivations among vulnerable people. The Household is considered vulnerable if they are deprived in more than a quarter of the weighted indicators.

2.2 Poverty

Besides the immediate and tragic impacts of the COVID-19 pandemic on health, the preventive behavioral responses by households and the government's transmission control policies are likely to affect Iraqi households' livelihoods and welfare through multiple channels. First, the need to attend sick family members or to recover from the illness and the sharp decline in national economic activities will reduce households' labor earnings from wages and self-employment. Second, the economic slowdown will reduce domestic and international remittances, impacting households' non-labor income. In addition, fiscal pressures due to significantly lower oil prices could affect food (Public Distribution System or PDS) and public cash transfers. Third, disruption in domestic and international supply chains may increase prices, particularly for food, while reduced access to education, healthcare, transport and other services will also significantly impact the welfare of the Iraqis.

Figure 1 below summarizes these potential impacts of COVID-19 on household welfare. These short and medium-term effects can have lasting impacts on economic growth, intergenerational mobility and the ability to escape poverty or remain above it.

FIGURE 1: A SIMPLE ILLUSTRATION OF POTENTIAL IMPACTS OF COVID-19 ON WELFARE



The study uses the 2017-18 Rapid Welfare Monitoring Survey (SWIFT) and micro- simulations in assessing impacts of the crises on poverty in Iraq. The analysis focuses on losses in labor income and food price increases as the most likely channels and assume no change in PDS transfers.¹

The exercise, first, examines the partial impact of increase in food prices ranging from 5% to 50% with the value of PDS held constant under all the scenarios. The brief considers an increase of 20% in food prices as a baseline scenario, however, it also presents results when food prices would increase by only 10%.

Second, the analysis focuses on the partial impacts of losses in households' labor income. It exploits the employment status of the household head to classify households into five categories: self-employed in rural areas; self-employed in urban areas; public sector; private sector; and not working.

Poverty impacts are assessed under two scenarios: (1) a "moderate-low" scenario in which employees in the public sector and self-employed in rural areas are assumed to maintain full incomes while employees in all the other sectors are assumed to lose some portions of their pre-crisis income and (2) a "moderate-high" scenario, which is same except public sector employees also lose portion of their incomes due fiscal pressures from much lower oil prices. This note, however, only focuses on the former i.e. "moderate-low" scenario and try to incorporate the evolving containment policies and, hence the level of economic activities in Iraq.²

The analysis starts with the government's immediate response - a full lockdown (curfew) scenario, in which complete stoppage of mobility would have severely impacted the economic activities in the country. This scenario assumes employees in private sector, self-employed in urban areas, and none-employed are able to maintain only 80% of their pre-crises incomes and refer to it as "full curfew" scenario. Then it incorporates the

¹ The microsimulation employed is a partial equilibrium analysis and does not account for behavioral responses. A one-to-one income to consumption adjustment is assumed. Household expenditure is used as the main measure of welfare, in line with national poverty estimates, and household welfare is nowcasted based on macroeconomic outcomes to create a current baseline for the simulation.

² Results under the "moderate-high" scenario are available on request.

removal of the daytime curfew during weekdays and create a "partial-low" and a "partial-high" scenarios referring to potential levels of economic activities.³ The assumptions are same as in the "full curfew" scenario except while in "partial-low" only half of the private sector employees and urban self-employed are able to maintain 90% of their pre-crises income levels, in "partial high" all the three impacted groups (private sector, urban self-employed and none-employed) are able to maintain 90% of their pre-crises incomes.

Finally, the brief explores the combined impacts of changes in food prices and labor income. The "baseline-low" scenarios are increase of 10% in aggregate food prices compounded with the "full curfew", "partial-low", and "partial-high" under the "moderate-low" labor income scenario. The analysis also examines the combined impacts under a scenario in which food prices would increase by 20% and called them the "baseline" scenarios.

The results section elaborates these scenarios further but more plausible is the combined scenarios given the developments on the ground and containment measures adopted.

2.3 Vulnerability

The impact on vulnerability adopts a multi-dimensional vulnerability index. The methodology for the index is developed to measure social deprivation of dimensions affected by the crisis such as the disruption of social services on one hand and the weak ability and resilience of the households to cope with shocks on the other hand. In particular, as shown in Table 1, the vulnerability index methodology includes four dimensions that are calculated at the household level, namely education and health dimensions capturing access to services, and living conditions and financial security dimensions capturing household living standards and resilience to cope with shocks. Each dimension includes a set of indicators. Table 1 shows the definition of deprivation with each indicator and the weights adopted. The Household is considered vulnerable if they are deprived in more than a quarter of the weighted indicators.

TABLE 1: METHODOLOGY OF THE MULTIDIMENSIONAL VULNERABILITY INDEX

Dimension	Indicator	Deprivation Cut-off	Weight
Education	School Attendance	Household is deprived if any child aged 6-17 is not attending school	1/8
	School Attainment	Household is deprived if no adult member (aged 15+ has completed at least basic schooling	1/8
Health	Food Security	Household is deprived if over the last 30 days any member has eater fewer meals, had no food, or gone to sleep hungry because of lack of food	1/12
	Water	Household is deprived if the main source of water is tanker, river/canal/creek/wheel, open/covered well, spring, or other, OR the household reported having insufficient water	1/12

³ Scenarios "partial-low" and "partial-high" refer to "partial curfew and low economic activities" and "partial curfew and high economic activities" respectively.

	Sanitation	Household is deprived if the main means of sewage disposal is covered drain, open drain, or other	1/12
	Dwelling Ownership	Household is deprived if the household does not own its house	1/12
Living Standards	Electricity	Household is deprived if it does not have electricity from a generator	1/12
	Garbage	Household is deprived if the main means of garbage disposal is thrown outside the housing unit, buried, burnt, or other	1/12
	Child Labor	Household is deprived if any child aged 6-17 has worked in the last 7 days	1/16
	Informality	Household is deprived if any adult household member is in self- employment or unpaid family work	1/16
Financial Security	Assets	Household is deprived if it owns fewer than 3 of the following: car, TV, smart-mobile phone, personal computer, motorcycle, refrigerator, freezer	1/16
	Shocks	Household is deprived of over the last 4 years it has experienced more than one of the following shocks: forced displacement, job loss or loss of business, loss of rations, loss of government assistance, violence/insecurity, damage or destruction of dwelling/assets, or death/illness/injury of family member and did not fully recover	1/16

Data source: The primary source of data is the Rapid Welfare and Poverty Monitoring Survey (SWIFT 2018) which was implemented with support from the World Bank and was used in the analysis of poverty and vulnerability. The analysis uses additional indicators from the Multiple Indicator Cluster Survey (MCQ 2018), which was implemented in partnership with UNICEF.

3. Pre-crisis situation

Prior to presenting the results it is important to highlight the pre-crisis poverty and characteristics relevant to the channels examined in the analysis. This section discusses key characteristics of Iraqi population observed in the SWIFT 2017-18 data.

3.1 Poverty

Figures 2 and 3 present poverty headcount rates by geographic regions and age in 2017/18. Overall, 20 percent of Iraqis were living under the poverty line. While, historically poorer South still had the highest poverty rate

(31.1 percentage), the 2014 twin crises resulted in a poverty rate of the North (30.2 percentage) that is as high as of the South. Additionally, Iraqi children under 15 years (22.8 percentage) faced significantly greater incidences of poverty compared to non-elderly and elderly adults (15.0 and 12.5 percentage respectively). The poverty rate for children under 18 years is 22.1%.

FIGURE 2: POVERTY HEADCOUNT RATE BY REGION (%)

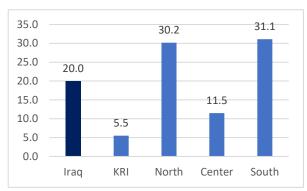


FIGURE 3: POVERTY HEADCOUNT RATE BY AGE (%)

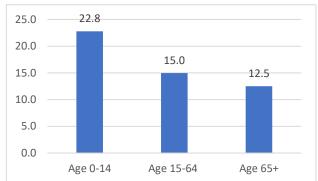


FIGURE 4: POVERTY GAP (%)

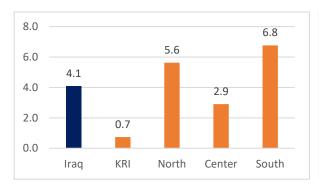
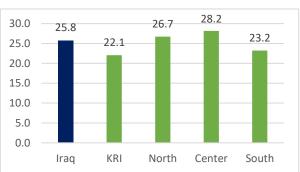


FIGURE 5: NEAR POVERTY HEADCOUNT RATE (%)

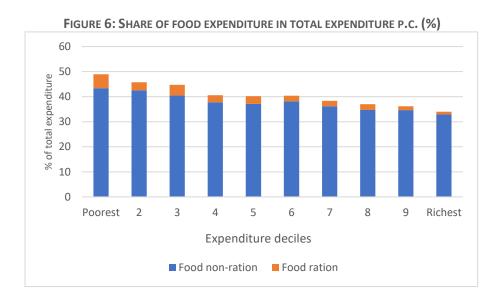


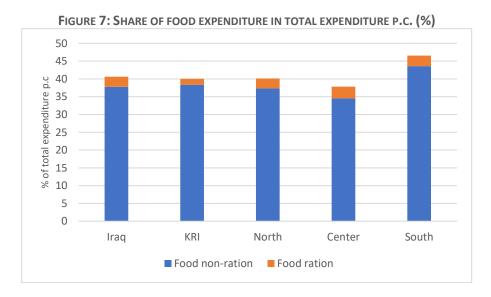
Poverty gap or depth of poverty, which captures the average fraction of the poverty line the poor are missing to escape poverty, is presented in Figure 4. It follows the similar pattern as the poverty headcount with south and North having significantly greater poverty gap compared to the Kurdistan and Central regions. Figure 5 present a near poverty headcount (vulnerability to monetary poverty) rate, which is defined as the share of population whose expenditure is between the poverty line and 1.5 times the poverty line. Vulnerability to monetary poverty was high at 25.5 percent in Iraq. Pre-crises, the Central and Northern regions, in particular, had the most vulnerable individuals, 28.2 and 26.7 percentages respectively, and faced greatest risk of increased poverty due to the crises.

3.2 Food Spending

With regards to first channel, the SWIFT survey shows that food expenditures constitute about 41% of the household budget. And as shown in the figures 6 and 7 below this share is higher for individuals in lower deciles – 45 percent or more for the poorest three deciles. Almost half (47 percent) of the budget is spent on food in the Southern region.

Compared to 8 items in 2012, Public Distribution System (PDS) currently subsidized only 4 items. Overall it constitutes 3 percent of total expenditure, with significantly higher (6 percent) for the individuals in the poorest decile and may offset some of the losses due to changes in food prices.

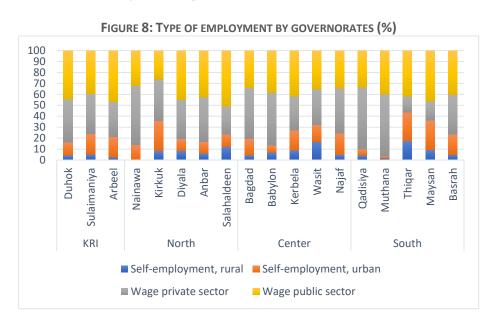


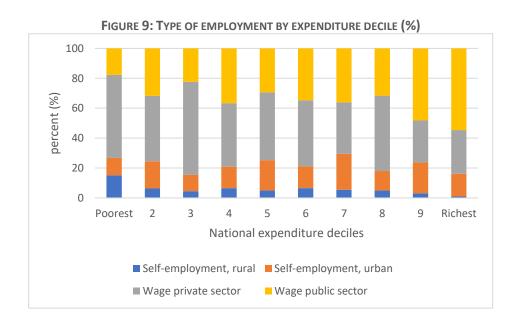


3.3 Pre-crisis Labor Market

Self-employment in urban areas and wage employment in private sector are likely among the first sectors to be impacted by the crises. Qadisiya and Muthana governorates in southern and Nainawa in northern region, in particular, have greater shares of workers in the private sector (Figure 8).

While significant portion of individuals in wealthier households are employed in public sector, poorer Iraqis are mostly employed in private sector (Figure 9). Meanwhile, over one-third (35.5 percent) of the Iraqi youths are neither in employment nor in education or training. Anbar, Salah al-deen, Wasit and Maysan governorates have the NEET rate more than 40 percent (Figure 10).





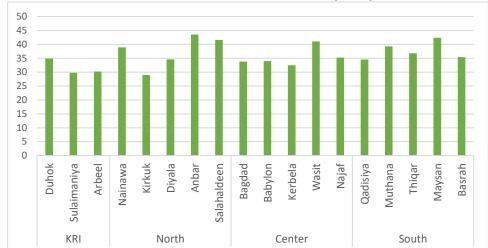


FIGURE 10: NEITHER IN EMPLOYMENT NOR IN EDUCATION OR TRAINING (NEET) AMONG 15-24 YEARS OLD (%)

4.Results

4.1 Poverty indicators during COVID-19 Pandemic

4.1.1Partial impacts of food price changes:

Figure 11 shows the partial impact of food price changes on monetary poverty. Not surprisingly, poverty headcount increases with increase in food price for all four regions and the country overall (Figure 11.1). While a 20% increase in food prices in Iraq would increase poverty by 4.4 percentage points (pp), the impact would be 1.6 percentage points if the prices were to increase by only 10%.

Southern region which has the highest poverty and vulnerability (near poverty) at the baseline, would suffer the most at the lower levels of price increase, whereas central region will be affected the most at greater levels of price change.

FIGURE 11: PARTIAL IMPACT OF INCREASE IN FOOD PRICES ON MONETARY POVERTY

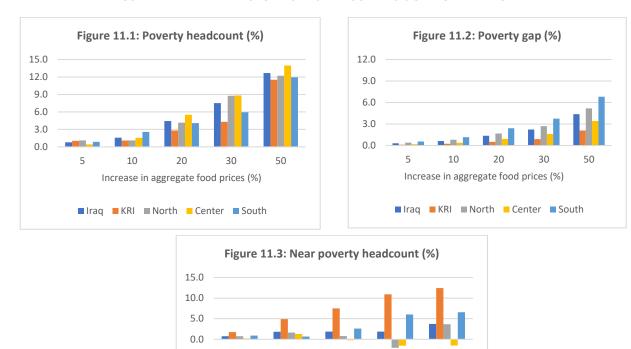


Figure 11.2 presents the impact on poverty gap, which captures the average fraction of the poverty line the poor people are missing to escape poverty. The impact on poverty gap follow similar pattern as on the poverty headcount. If we assume an increase in food prices by 20%, the impact on poverty gap is 1.6 percentage points.

20

■ Iraq
■ KRI
■ North
■ Center
■ South

30

50

10

Impact on the near poverty (monetary vulnerability) are presented in Figure 11.3 Overall an increase of 20% in food prices would increase near poverty headcount by only 1.9 percentage points, however, Kurdistan region would experience an increase of 7.5 percentage points.

4.1.2 Partial impact of labor-income changes:

-5.0

The results presented here are under the <u>moderate-low scenario</u> as defined in the methodology and data section.⁴ The micro-simulation tries to incorporate the level of economic activities given the government's COVID-19 containment strategies:

(a) the initial "<u>full curfew</u>" in which the country was in full lockdown and potentially economic activities were limited;

⁴ The analysis also perform a similar exercise under the "moderate-high" scenario and the results are available on request.

- (b) the recent partial opening of the country and with potentially low level of economic activities ("partiallow"); and
- (c) the recent partial opening with potentially higher level of economic activities ("partial-high").

Figure 12 reports the impact of income changes under all three response scenarios. Impacts on both the poverty and poverty gap decrease with increase in economic activities. While the poverty in Iraq under the full curfew scenario would increase by 10.1 percentage points, it would increase by 8.5 pp and 4.3 pp under the partial-low and partial-high scenarios. The poverty gap impact under the three scenarios are 2.9, 2.3 and 1.2 percentage points. The partial consequences are highly heterogeneous across regions. Most of the near-poor individuals in the pre-crises period in northern and central regions would fall into poverty - while poverty would increase by 11.5 and 13.4 percentage points respectively, near poverty rate would decrease by 1.8 and 2.0 percentage points respectively. Kurdistan region, again, would experience highest increase in near poverty rate (11.0, 9.9, and 8.3 percentage points respectively under the three scenarios).

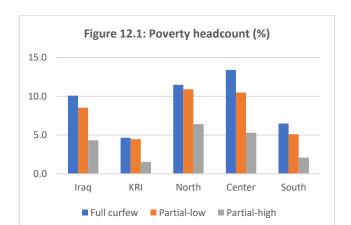
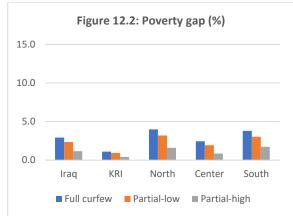
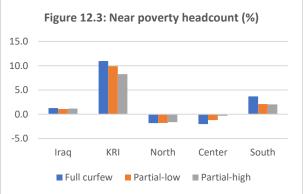


FIGURE 12: PARTIAL IMPACT OF CHANGES IN LABOR INCOME ON POVERTY





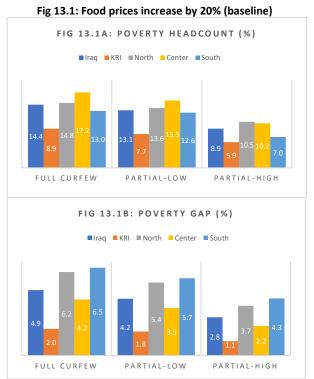
4.1.3 Dual effects of changes in food prices and declining income:

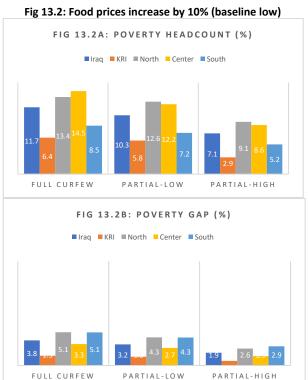
The baseline combined scenario considers a 20% increase in food prices and changes in labor-income based on the three economic activity levels under the moderate-low scenario (Figure 13.1). Figure 13.2 reports the combined results from a second scenario called "baseline-low", when food prices increase by 10% but the level of economic activities remain the same as in the baseline scenario. Poverty in Iraq under the baseline full curfew, partial-low and partial-high scenarios would increase by 14.4, 13.1 and 8.9 percentage points respectively.

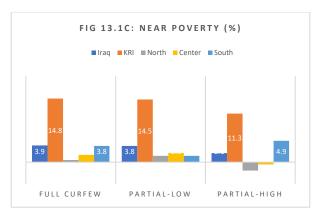
Northern and central regions, in particular, will be impacted the most under all three levels of economic activities. The poverty gap impacts follow the same pattern with Northern and central regions, again, having the highest impacts. Children under 18 years who faced a higher poverty rate before the crises face under the "baseline-low" scenario a higher increase in poverty by 15.8%.

As with the partial impacts, the near poverty impacts are highest in Kurdistan region (14.8, 14.5 and 11.3 pp under the three economies). Not surprisingly, the poverty impacts under the "baseline-low" scenario are relatively smaller compared to the baseline scenario. In this scenario poverty in Iraq would increase by 11.7, 10.3 and 7.1 percentage points respectively under the full curfew, partial-low and partial-high scenarios.

FIGURE 13: COMBINED IMPACTS OF CHANGES IN LABOR INCOME AND FOOD PRICES ON POVERTY (%)







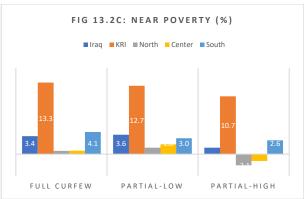


Figure 14 reports the number of "new-poor" under the baseline and baseline-low scenarios. There were 6.9 million Iragis under the poverty line before the crises. The combined consequence of the 20 percent increase in food prices and the reduced labor income would be an additional 5.5, 5.0 and 3.4 million Iragis under the poverty line. Compared to the pre-crises, 4.5, 3.9 and 2.7 million more people will fall into poverty when food prices increase by 10% (baseline-low). The situation on the ground in terms of curfew measures adopted, level of economic activity, and food price changes informs on which of the different scenarios is more plausible in depicting the impact on poverty. The low-base scenario is considered as such given that over the past four months change in food prices did not exceed 10%. Accordingly, under that scenario poverty increases by 11.7% bringing the national poverty rate to 31.7% and the total number of the poor to 11.4 million under full curfew assumption. The revival of economic activity observed recently alongside the lifting of curfew measures indicate that a more plausible scenario under which poverty increases by 2.7 million bringing the total number of the poor to 9.6 million. Figure 14.2 reports poverty headcount under the baseline-low scenario at national and regional level and its level in 2018. As was the case in 2018, the highest poverty headcount is in the northern governorates (43.6%) followed by southern governorates (39.6%). While the poverty headcount is lower in center and Kurdistan Region governorates 26% and 11.9% respectively, these levels are more than double of where they were in 2018.

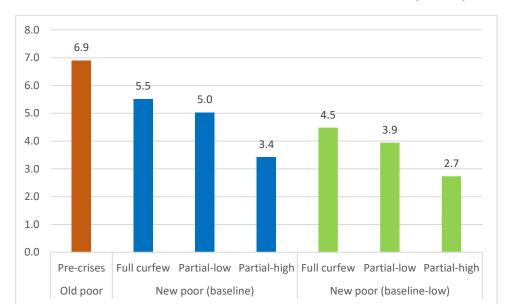


FIGURE 14.1: NUMBER OF NEW POOR INDIVIDUALS DUE TO THE CRISES (MILLION)



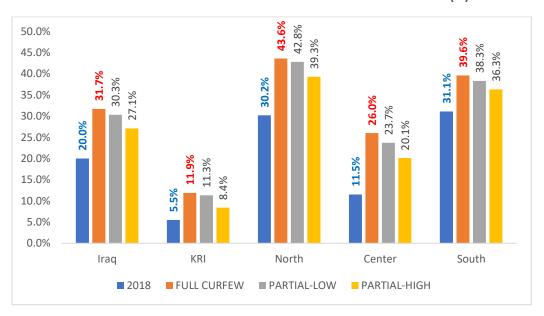


Table 2 below underlines key characteristics of the new-poor under the moderate-low baseline scenario. The new poor (under full curfew scenario) are represented by a household with an average size of 9 members, the percentage of households headed by a female is 13.5%, the average age of the head of the household is 49 years, and the percentage of households in which the head did not complete secondary education 89%. Given the assumptions for the micro-simulation analysis, most of the new poor live in a household in which the head of the household is either unemployed (44.7%) or works in a private sector (32.1%). It is important to note that while poverty rates continue at higher rates among the internally displaced and those who faced shocks in the

past, the largest share of the new-poor are households who did not face any shock in the past. The new-poor under partial-low and partial-high scenario exhibit similar characteristics.

TABLE 2: CHARACTERISTICS OF THE "NEW-POOR"

	Entire	Old	New poor (baseline)		ine)
	population	poor	Full curfew	Partial-low	Partial-high
Household Size	7.4	10.0	9.0	9.2	8.6
Head age	47.2	45.9	49.0	49.7	48.3
Dependency ratio (%)	42.4	52.1	46.5	45.8	45.3
Head is female (%)	9.0	8.8	13.5	14.8	11.1
Rural (%)	26.1	40.0	36.5	37.8	40.1
Head Education (%)					
Secondary completed or more	28.0	24.3	11.1	12.2	12.0
Secondary incomplete or less	72.0	75.7	88.9	87.8	88.0
<u>Head Employment (%)</u>					
Self-employment (rural)	5.3	9.1	1.5	1.6	2.4
Self-employment (urban)	15.8	11.9	16.1	13.2	18.4
Private sector	22.6	33.5	32.1	30.0	31.9
Public sector	28.8	19.4	5.6	6.1	9.0
Not-working	27.5	26.1	44.7	49.0	38.3
Resilience (%)					
Displaced	3.8	8.4	3.2	3.2	2.6
Other shocks & not recovered	11.3	12.8	13.5	12.3	13.5
Other shocks & partial recovered	16.7	19.6	25.8	24.1	18.8
No shocks or fully recovered	68.2	59.2	57.5	60.3	65.1
Location (%)					
Kurdistan	15.8	4.8	9.8	9.3	10.3
North	26.2	35.3	27.0	27.3	30.9
Center	37.1	23.8	44.4	43.4	42.3
South	20.9	36.1	18.9	20.1	16.5

Note: Old poor are defined as those who were poor at the baseline and remained poor. New poor are those who were not poor at the baseline but became poor after the crises. Partial-low and partial-high refer to partial curfew and low economic activities and partial curfew and high economic activities respectively.

4.2 Vulnerability indicators under COVID-19 Pandemic

This rapid assessment aims to use existing data to understand the current situation in Iraq and the vulnerability of the population to poverty as a result of the Covid-19 pandemic and resulting economic slowdown. It is intended to guide the Ministry of Planning in developing interventions that mitigate the negative impacts of the crisis. A fuller analysis, using new data where possible, may follow to help simulate impacts and evaluate the interventions.

4.2.1 Deprivation analysis in light of multidimensional vulnerability index:

Key Results: At the national level, the vulnerability index identifies 42.1% of the population as being particularly vulnerable to poverty as a result of the pandemic, meaning that they are deprived in more than one quarter

(equivalent to more than one dimension) of weighted indicators. The overall MVI, calculated as the product of the percentage of the population that is vulnerable and the average intensity of deprivations among vulnerable people, is 0.173.

Figure 15 breaks up the intensity of vulnerability, defined as the weighted percentage of deprivations experienced by the vulnerable, into four bands. We can see that over half of the vulnerable experience the lowest intensity band—26% to 40%--of the weighted deprivations, while approximately 15% have a high intensity, experiencing deprivations in more than 55% of the weighted indicators. Pro-poor policies may want to focus at very least on that 15% who are experiencing many simultaneous deprivations, and possibly at some of the other vulnerable segments.

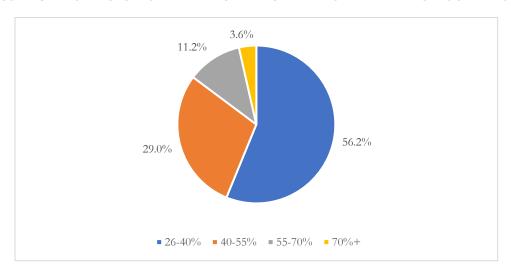


FIGURE 16: PERCENTAGE OF VULNERABLE PEOPLE WHO EXPERIENCE DIFFERENT DEGREES OF INTENSITY

We can also see which indicators have the highest levels of deprivation among the vulnerable. Figure 16 shows the censored headcount ratios—the percentage of the total population that is both vulnerable and deprived in a given indicator. A reduction in any of the censored headcount ratios will also reduce the MVI. School attainment, garbage disposal, and drinking water are the three indicators with the highest ratios. More than one-fifth of the population of Iraq is both vulnerable and deprived in those indicators. The fourth highest indicator is school attendance, and this indicator is also crucial, both because of its higher weight and also because of the disruption of schooling during the pandemic.

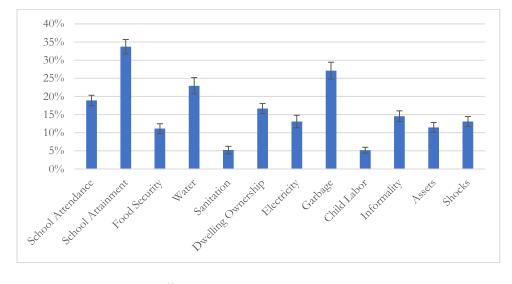


FIGURE 17: DEPRIVATION RATES AMONG THE VULNERABLE

Using this MVI, we can analyze how different areas and groups may be particularly vulnerable to shocks from the virus and the resulting economic downturn. Figure 17 presents a map of governorates in Iraq based on the percentage of people who are identified as vulnerable and a second map of governorates in Iraq by the total number of vulnerable people. We can see that while the highest rates of vulnerability are in the West and South, Baghdad has the most people who are vulnerable because of its larger population.

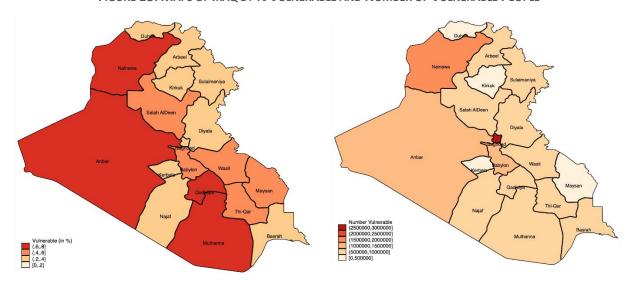


FIGURE 18: MAPS OF IRAQ BY % VULNERABLE AND NUMBER OF VULNERABLE PEOPLE

4.2.2 The analysis of Multidimensional vulnerability index in light of household characteristic:

This MVI can also be used to look at different relevant household characteristics that may be risk factors for vulnerability to poverty as a result of Covid-19. For instance, Figure 18 shows the MVI for different household sizes, with the population shares for those household sizes listed alongside. It is clear from the graph that larger

families are disproportionately vulnerable to negative impacts, and further that nearly 54% of the population live in households of 7 or more persons.

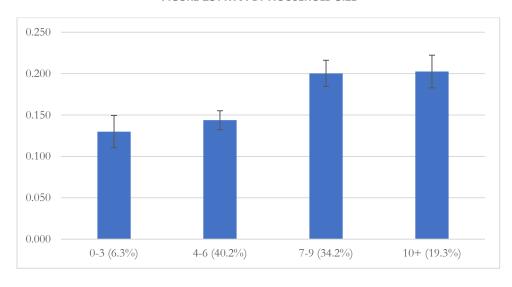


FIGURE 19: MVI BY HOUSEHOLD SIZE

An additional risk factor in the context of Covid-19 is the presence of an elderly member of the household, as they are more likely to suffer severe symptoms of the virus. Figure 19 shows how the MVI and its composition differs for households with or without a member over the age of 65. This shows that key sanitation indicators such as water and garbage disposal contribute more to vulnerability in households with an elderly member.

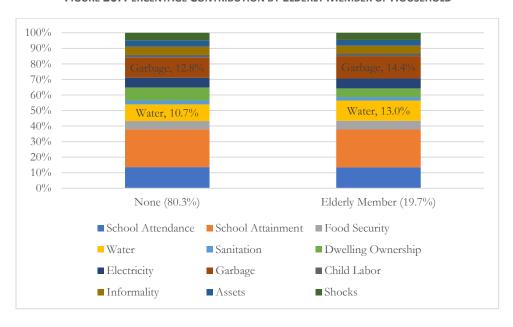


FIGURE 20: PERCENTAGE CONTRIBUTION BY ELDERLY MEMBER OF HOUSEHOLD

Finally, we can analyze the MVI by age group to see how different ages may be more vulnerable to living in households impacted by the crisis. Note that this is not related to risk of the virus itself. Figure 20 shows clearly

that children under 18 experience greater vulnerability than older age groups. While they may be less likely to be affected by the virus directly, they are still likely to be affected due to school closures, child labor as a result of the economic downturn, and shocks to other members of the household. Further, as children comprise 45% of the population, their plight is also of policy note. Results show that 48.8% of children under 18 years are vulnerable underlining elevated risk impacting this group by the crisis and disruption of services.

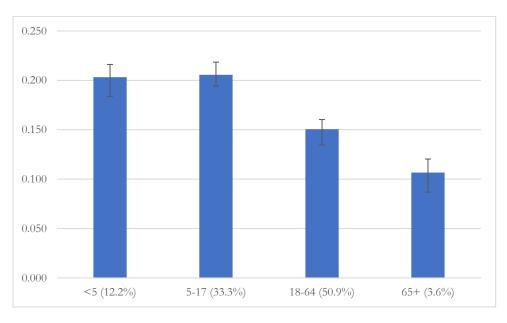


FIGURE 21: MVI BY AGE GROUP

Unfortunately, there were some relevant variables—e.g. handwashing and overcrowding—that were not collected in the SWIFT data. However, they were collected in the MICS 2018 survey, which can also be used to make estimates at the governorate level. Table 3 presents the key figures by governorate for both the MVI and the relevant variables from MICS. There is a clear pattern in that many of the most vulnerable governorates also have the highest percentage of the population either without a suitable handwashing facility or in an overcrowded house, meaning that they may be more likely to be infected by Covid-19. In both Anbar and Muthanna, more than 60% of people are vulnerable and nearly half are living in a household with more than 3 people per sleeping room. Handwashing is not generally an issue across Iraq, but in Qadisiya, which also has a high rate of vulnerability, more than 10% of people do not live in a household with a place to wash hands with water and soap.

TABLE 3: MVI AND OTHER RELEVANT VARIABLES BY GOVERNORATE

Governorate	Pop. Share	MVI	н	Α	Share of Poor	Overcrowding	Hand Washing
Duhok	4.3%	0.101	27.6%	36.5%	2.8%	37.3%	2.4%
Naynawa	7.9%	0.290	63.1%	46.0%	11.8%	36.3%	3.3%
Sulaimaniya	6.1%	0.096	26.4%	36.2%	3.8%	25.5%	0.3%
Kirkuk	4.5%	0.085	22.6%	37.7%	2.4%	13.5%	3.3%
Arbeel	5.3%	0.101	29.3%	34.6%	3.7%	27.9%	1.1%
Diyala	4.4%	0.150	38.5%	39.0%	4.0%	37.4%	4.8%
Anbar	4.8%	0.291	68.9%	42.3%	7.8%	44.6%	6.9%
Baghdad	21.1%	0.147	35.1%	41.9%	17.6%	24.7%	2.8%
Babylon	5.3%	0.213	54.1%	39.4%	6.9%	35.0%	5.9%
Kerbela	3.2%	0.143	37.7%	38.0%	2.9%	35.4%	1.7%
Wasit	3.5%	0.195	46.2%	42.3%	3.9%	40.7%	4.4%
Salah Al-Deen	4.7%	0.214	51.4%	41.7%	5.7%	27.2%	2.8%
Najaf	3.9%	0.145	39.5%	36.8%	3.6%	32.8%	7.6%
Qadisiya	3.3%	0.288	60.9%	47.4%	4.8%	24.2%	11.8%
Muthanna	2.1%	0.258	63.5%	40.6%	3.1%	46.5%	7.4%
Thi-Qar	5.3%	0.213	49.0%	43.5%	6.2%	37.0%	2.5%
Maysan	2.8%	0.207	45.4%	45.6%	3.1%	43.8%	5.6%
Basrah	7.4%	0.123	33.7%	36.6%	5.9%	34.9%	5.2%
Iraq	100%	0.173	42.1%	41.2%	100%	31.6%	3.9%

4.2.3 Comparison between multidimensional poverty and Monetary Poverty:

The advantage of using the SWIFT survey is that it allows for a direct comparison with monetary poverty. Table 4 shows a comparison of the households that are identified as vulnerable and those that are identified as monetarily poor. Note that this is using a subsample of the population for whom a long-form questionnaire

was used to collect information on monetary poverty, which explains the slight difference in the vulnerability rate compared to the estimate above using the full survey sample. While 71% of the monetary poor are also vulnerable, only 33% of the vulnerable are monetary poor. So more than two-thirds of the vulnerable people are not identified as being monetary poor. Results show that 13.5% of population are both monetary poor and vulnerable, facing multiple deprivations including in health, education, and living standards and financial security which underlines the need for integrated response including economic to addressing monetary poverty, as well as interventions on social sectors to improve access to quality services.

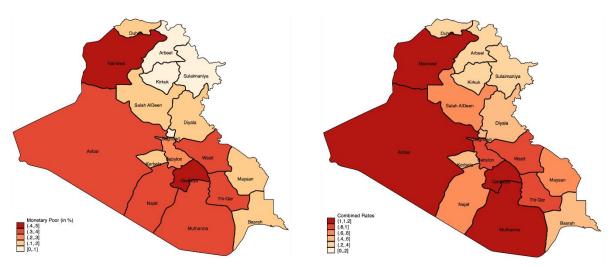
TABLE 4: COMPARISON OF MVI AND MONETARY POVERTY

		Monetar		
		Not Poor	Poor	
MVI	Not Vulnerable	52.9%	5.6%	58.5%
	Vulnerable	28.1%	13.5%	41.5%
		81.0%	19.0%	

The monetary poverty data cannot give direct estimates below the regional level. However, using the World Bank's imputations of governorate poverty rates, we overlay those with the MVI vulnerability rates to see which regions have high rates of both, as in Figure 21. This cannot show us the joint deprivation—the percentage of households deprived in both—but it can give a sense of where there might be issues. Compared to the MVI, which shows similar levels of poverty across the West and South of the country, when paired with monetary poverty, the focus shifts a bit more to the South.

FIGURE 22: MAPS OF IMPUTED MONETARY POVERTY AND COMBINED MVI VULNERABLE AND MONETARY POVERTY RATES BY

GOVERNORATE



Finally, using data on confirmed cases of Covid-19 in Iraq as of 22 June 2020, we can map the outbreak alongside the vulnerability figures by governorate, as in Figure 22. So far, the outbreak seems concentrated in areas that are has low to moderate level of vulnerability to negative impacts from the virus, but it is unclear if this is in part due to testing inconsistencies across the governorates or if this pattern will continue into the future.

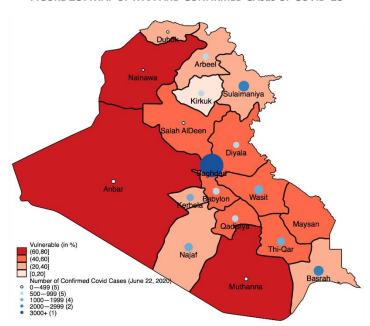


FIGURE 23: MAP OF MVI AND CONFIRMED CASES OF COVID-19

5. Conclusion

5.1 Conclusion related to poverty

The baseline-low scenario is considered as more plausible in capturing the situation on the ground. Under that scenario, the main findings for poverty can be summarized for Iraq as a result of the Corona-19 pandemic and the accompanying economic and financial conditions as follows:

- Poverty increases by 11.7% to make the poverty rate 31.7% compared to 20.0% in 2017-2018. This
 translates to 4.5 million additional f poor as a result of the crises, adding to the 6.9 million already
 living in poverty before the crises. The revival of economic activity observed recently alongside the
 lifting of curfew measures indicate that a more plausible scenario under which poverty increases by
 2.7 million bringing the total number of the poor to 9.6 million.
- Children under 18 face a higher increase in poverty by 15.8% bringing the poverty rate to 37.9% under the baseline scenario.
- The highest rate of increase in poverty is 14.5 percentage points in the central governorates, followed by the governorates in the northern, southern, and Kurdistan region (13.4, 8.5 and 6.4 pp respectively).

- In light of this increase the highest poverty headcount following the crisis is found in northern governorates 43.6% followed by the southern governorates (39.6%). While the poverty headcount is lower in center and Kurdistan Region governorates 26% and 11.9% respectively, these levels are more than double of where they were in 2018.
- The overall impact on the near poverty headcount (those whose expenditure exceed the poverty line but is less than 1.5 multiplied by the poverty line) is 3.4 percentage points, which is comparable to the impacts on all the regions of Iraq except Kurdistan which would experience an increase of 13.3 percentage points.
- 42% of the new poor are from families that reported they have experienced shock and have not recovered, partially recovered, or that they have suffered from displacement, while the bulk of the 58% are from families that did not suffer or have recovered completely from shocks.
- The characteristics of the new poor: an average household size is 9 members, percentage of households headed by a female is 13.5%, average age of the head of the family is 49 years, and the percentage of families in which the head of the family did not complete secondary education is 89%.
- Majority of the new poor live in a family in which the head of the household is either unemployed (44.7%) or works in a private sector (32.1%).

5.2 Conclusion related to Vulnerability

In light of measuring and analyzing population vulnerability in facing poverty as a result of the mentioned conditions, the study showed the following:

- 42% of the population suffers from deprivation in more than one dimension of the vulnerability index (education, health, living conditions and financial security), which makes them more vulnerable to disease and to the increase of severe deprivation as a result of the crisis and the accompanying disruption in social services and exposure to shocks. 15% of population suffer from severe vulnerability which means deprivation in more than two dimensions. Children face a higher vulnerability rate 48.8% underlining the elevated risk children face in times of shock and social services disruption.
- The highest levels of vulnerability are in governorates of north and south, 46.4% and 45.3%, respectively, followed by the governorates of the center, 39.9%, and the governorates of Kurdistan region, 33.8%.
- taking population into consideration, we find that more than a third of the population (34.9%) who suffer from vulnerability are in the governorates of the center and the remaining percentages are distributed on the rest of the regions as follows: North (31.7%), South (23.1%), and Kurdistan Region (10.3%).
- Families with more than seven members, especially families with more than one child, have a high rate
 of vulnerability. The rate of vulnerability among families with a size of more than seven individuals
 exceeds 46%.
- When comparing data with MICS survey at the governorate level, we notice that Qadisiyah governorate has a higher rate of vulnerability (60.7%) and families shows the highest rate of deprivation in terms of the availability of a place for hand washing and the availability of soap and water, while the population in Anbar and Muthanna governorates have a higher rate of vulnerability 68.95% and 63.5%, respectively, at the same time, they show high rates of deprivation in the

overcrowding indicator (more than three individuals per bedroom inside the house) 44.6% and 46.5% and these are all factors that obstruct the efforts to prevent the disease and increase The possibility of infection.

- When comparing monetary poverty with the vulnerability index, we notice that 13.5% suffer from
 monetary poverty and vulnerability at the same time, which makes this group the most vulnerable to
 the deterioration of their living and social conditions, and this percentage increases in the
 governorates of south and north by 23.6% and 18.6%, respectively.
- 28.1% suffer from vulnerability, but do not suffer monetary poverty, and this group requires social services to ensure that the severity of social deprivation does not increase or that they fall into monetary poverty.

6. Policy Pointers: / Suggested policies

Losses of jobs and incomes and rising prices erode households' ability to meet their basic needs and sap their resilience. The different scenarios of the unfolding crises examined in the present analysis depict an alarming picture for poverty in Iraq. Furthermore, rising poverty combined with disruptions to basic services increase households' vulnerability and puts Iraq on a path of rising deprivation and inequality on key wellbeing and development indicators on the medium- and longer-term. These deprivations include rising malnutrition, school dropouts, child and maternal mortality, and violations including child labor, gender-based violence and violence against children.

Against this backdrop, swift and strategic response is needed to contain poverty and deprivations, preserve progress achieved, and to situate Iraq on a sustainable path to recovery and development. The components of the response include:

6.1 Scaling-up social protection

Preventing and protecting all people against poverty, vulnerability and social exclusion throughout their lifecourse is the central goal for social protection. To achieve this goal, social protection systems integrate policies and programs geared towards supporting households with social transfers to overcome shocks, promoting their access to the labor market, and supporting investments and access to health, education, and basic services. Country experiences are increasing showing that effective implementation and integration of these components offers a transformative path to poor families to invest in human capital and escape poverty. The current crises increase the demand for scaling up social protection in all its components.

Over the past decade, significant milestones were marked in reforming social protection in Iraq. These include (1) at policy level a new law in 2014 instituting poverty targeting for assessing eligibility and addressing exclusion and offering a transformative framework to integrate social transfers and services. And (2) the implementation of a conditional cash transfer (CCT) pilot in 2018-2019 to implement the provisions and vision of the new social protection law and make the case for integrated social protection. Notwithstanding these important achievements more work is needed to address exclusion and to the fragmentation of social protection schemes and actors. Responding to the current crises requires scaling up social protection vertically increasing benefit levels to existing beneficiaries and horizontally including new beneficiaries and is urging for expediating the reform process.

As part of its response, the Government of Iraq took measures to increase benefit levels of existing social safety net beneficiaries and introduced an ad-hoc emergency cash transfer scheme targeting most affected groups. As the socio-economic takes on a protracted nature, it is important to capitalize on these steps and to revise and strategically scale up social protection schemes with focus on national systems.

1. Scaling up social protection system:

- Updating evidence on poverty levels and characteristics. While the present report is an important first step in that direction, it is important to inform the social protection response with up-to-date evidence to inform the social protection response. As the crises is rapidly changing the poverty and vulnerability situation and puts a cap on previous surveys ability to simulate with accuracy realities on the ground. The evidence required should combine household surveys (demand side) as well as assessment of social protection schemes and beneficiaries using administrative data (supply side).
- Adjusting social protection schemes design, registration, and disbursement of benefit guided by evidence generated, as well as the containment measures and health risks imposed by the current crises.
- Securing the fiscal space to scale-up social protection. This requires adopting a phased approach where
 on the short term work is made to assessing the fiscal space and prioritizing and increasing public
 spending to scale-up social protection, while on the medium term a work is needed to address financial
 leakages and inefficiencies in social protection which can lead to freeing resources.
- Convergence and mainstreaming of cash transfer programs under the social safety net. This include addressing fragmentation of the social protection provided by different ministries including the adhoc emergency cash transfer.

2. Reaching the poor with integrated protection and basic services:

- Awareness raising to prevent COVID spread and address negative coping strategies. The poor face a
 higher risk not only rising poverty but also higher risk of contagion given living conditions and resorting
 to negative coping strategies.
- Revising and adapting case management and referrals to basic services including health and nutrition, education, and protection. It is important to emphasize the central role of national systems starting with the role of Ministry of Labor and Social Affairs to assess the needs of families covered by the various social protection schemes and adapt registration as well as disbursement of cash transfers. Another important component is to use social protection system to monitor deprivations and incorporate in a pragmatic way case management and referrals to promote human capital accumulation and integrating relevant services such as rehabilitation and psychosocial support. This direction can capitalize on recent reform steps including the conditional cash transfer scheme recently introduced and supported by World Bank and UNICEF.

Moving forward requires an agile approach entailing innovation as well as ongoing monitoring and tailoring.

6.2 Addressing gaps and access constrains to basic services for the poor

- Maintain essential lifesaving health services to address rising risk of deaths from preventable or treatable conditions exceeding those from the outbreak. This risk is heightened for the poor facing access constraints prior to the crises.
- Maintain essential food and nutrition services with focus on infants and young children, women and particularly vulnerable populations (IDPs and returnees).

- Ensure continuity and quality of water and sanitation services, which will be highly affected by reduced workforce, disrupted supply chains, and payment challenges through close collaboration with federal and local authorities.
- Secure sustained learning for all children, and adolescents, preferably safely in schools. to scale up innovative approaches to continue learning at all levels during the crisis, via parenting programmes, tv, radio, various digital platforms and other delivery mechanisms. Furthermore, support is needed be provided to allow for a safe and quick return of children to schools. Children from poor families face additional barriers to access innovative approaches and are at a higher risk of not returning to schools as they reopen.
- Support the continuity of social services social services to ensure continuity of the first line of response for children, women, and families at risk of violence, abuse, exploitation, neglect and family separation. Fear, worry and acute stressors coupled with diminished availability of social workers and case workers leaves women and children exposed to violence, abuse, exploitation and neglect. Increased focus is needed on programs focusing on prevention as well as a continuum of care for children and women experiencing violence are available in school or health settings, in alternative care settings, in child justice or in community settings, and can be extended. Special attention is needed to victims of Gender Based Violence.

6.3 Economic response and recovery: protecting jobs, small and medium-sized enterprises, and vulnerable workers in the informal economy

The following are key short and medium-term measures that are critical for economic recovery, some of which must be informed by robust jobs/labor market analyses:

- Support unemployed Iraqis and informal workers through temporary financial support, revamping and strengthening training programs and intermediation services, selective public works programs and facilitating the registration and support for the self-employed. In the medium-term, efforts must be made to address structural labor market challenges such as productivity and worker protection, as well as relaunching pension system reform and building an effective unemployment benefit systems.
- Support formal waged workers through temporary suspension of social security contributions and wage support conditional on worker retention in the firms. Efforts must be made at the same time to introduce relevant active labor market policies such as subsidies for on-the-job training and internships of young job-seekers.
- Bolster microfinance and seed capital programs, from both the public and private sectors, to effectively and efficiently support the working capital of the self-employed and microenterprises, with a potential focus on innovative solutions. Efforts must be made to improve entrepreneurship training as well as launching economic inclusion programs to that target the sustainable livelihoods of the poor. In the medium-term, Iraq must continue to reform its business and investments environment.
- Guarantee a broad access to capital for the private sector and firms of various sizes, as well as
 introducing productive partnerships programs that connect suppliers with buyers. Efforts must be
 made to embark upon and implement financial sector reform.
- Foster the digital economy by improving and broadening the digital payments system, promoting the
 use of e-wallets to guarantee financial inclusion, and building the foundations for digital

entrepreneurship and digital solutions that can sustainably employ Iraqis and respond to their aspirations.