

# The Impact of COVID-19 on Households in Nepal

Second round of mVAM Household Livelihoods, Food Security and Vulnerability Survey





September 2020



# THE IMPACT OF COVID-19 ON HOUSEHOLDS IN NEPAL SEPTEMBER 2020

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# Highlights

The second round of the mVAM Household Survey conducted in August 2020 shows food insecurity across the country has decreased slightly compared to April 2020, however it remains higher than 4 years ago. The survey found that 20.2 percent of households had inadequate food consumption and 4.7 percent of households had poor dietary diversity. Overall, 11.8 percent of households adopted at least one negative coping strategy to address food shortages and about 6.7 percent of households reported that the food they had in stock was insufficient to meet their needs. Minimum recommended dietary diversity was not met by about 43.1 percent of children between 6 and 23 months of age.

In comparison, in the first round of mVAM Household Survey conducted in April 2020, 23.2 percent of households had inadequate diet, while based on the Annual Household Survey V  $(2016/17)^1$ , 14.9 percent of households consumed an inadequate diet in 2016. Similarly, 7.2 percent of households had poor dietary diversity and around 45.9 percent of children between 6-23 months of age did not meet minimum dietary diversity in April, while in 2016, 5 percent of households had poor dietary diversity.

Sudurpaschim and Karnali provinces, the most food insecure provinces of the country, have the highest proportion of food insecure households, with 23.8 and 23.3 percent of households consuming inadequate diet respectively. Inadequate food consumption was also relatively high in Province 2 (22.1%).

Two thirds of respondents reported to have food stocks, of which nearly 50 percent had more than one-month worth of food stock. Meanwhile, about 54 percent of households acquired food through market purchase and 46 percent relied on their own production for household consumption.

The COVID-19 crisis has continued to negatively impact livelihoods of Nepalese households, with 11 percent of households reporting job loss and 31.2 percent a reduction in income. Income reduction was the highest in Province 1 (40.5%), followed by Sudurpaschim (38.8%) and Province 2 (38.3%), with loss of livelihood reported in Sudurpaschim province (19.3%), Province 1 (18.6%) and Province 2 (14.1%).

While the overall proportion of households reporting income loss increased only marginally (by 0.6%) in August compared to April 2020, more households are reporting severe (11.1%) and moderate (16.5%) income loss in August than April (severe 3.7%; moderate 9.3%). This indicates that the households are facing increasing pressure and that the already precarious situation these households are facing is worsening.

<sup>&</sup>lt;sup>1</sup> The Annual Household Survey V 2016/2017, Central Bureau of Statistics

The findings show that both loss of income source and reduction in income was more prevalent in certain types of livelihoods, namely for daily wage labourers both in farm and off-farm sectors, households receiving remittances and small businesses and trade. The most severe income reduction was experienced by daily wage labourers in the off-farm sector, cash and high value crops producers, and large and medium businesses. Likewise, job loss and income reduction was more common among households with a disabled and chronically ill household member.

Similarly, food insecurity was more prevalent among certain types of income sources, namely daily wage laborers in farm and off-farm sectors and migrant workers. Likewise, households with less diversified and more volatile livelihoods were relatively more food insecure. Higher prevalence of food insecurity was found among households that relied on market purchase.

In terms of the socio-economic characteristics, households with low education levels, vulnerable households with a member with a disability, female-headed households, and households living in rural areas were found to be more food insecure.

Overall, job loss and income reduction caused by the COVID-19 crisis affected household food security: inadequate food consumption and food insufficiency were more common among households that reported job loss and income reduction, compared to households that did not experience job loss and income reduction.

More than 20 percent of respondents reported that increases in food price were their major concern during the COVID-19 crisis, followed by shortage of food (16.3%), reduction in income (15.5%) and lack of work opportunities (14.8%).

In total, 12.7 percent of respondents received assistance to mitigate the impacts of the COVID-19 crisis, either from government or non-government organizations. The most common form of assistance was food. Additionally, 11 percent of households interviewed in this survey are recipients of social benefits, mainly senior citizen support, followed by support for single women.

The second round of the nation-wide household survey confirms continued pressure on food security, livelihoods and incomes of Nepalese households. Given that food insecurity was more common among households who reported job loss and income reduction, and more than half of the interviewed households rely on market purchase, the overall vulnerability of households can be further exacerbated. The upcoming harvest and welltargeted mitigation measures will be of critical importance for minimizing the negative and long-term impact on households in Nepal.

# I. COVID-19 Impact on Households

The prolonged COVID-19 crisis has created unprecedented challenges in the social and economic sectors, further worsening the already precarious situation of the most vulnerable households in Nepal. Food security and livelihoods have also been affected: the limited availability of agricultural inputs and restrictions for supply and transportation put availability of food in markets at risk, while limited job opportunities and income losses hinder access to food.

In collaboration with the Ministry of Agriculture and Livestock Development, WFP conducted a second round of a nation-wide phone-based surveys to assess the impact of the prolonged crisis on Nepalese households in August, to compare to the early phase of the COVID-19 crisis. Similar to the first round conducted in April, the objective of this survey is to examine the multifaceted impacts of the COVD-19 crisis on food security, livelihoods, and vulnerability as well as to identify profiles of households that were relatively more affected by the ongoing crisis.

In August 2020, 4,614 randomly selected households were interviewed, covering all 7 provinces and producing a nationally representative sample. The questionnaire included standard WFP modules where possible, covering: i) demographics; ii) livelihood and income; iii) access to food and market; iv) food consumption; v) breastfeeding practices and diet diversity, vi) coping behaviors, and vii) health status and COVID-19 cases (further detail on methodology is presented in the following sections and in the Annex).

# Impact on household food security

To assess the changes in food security situation, two dimensions were examined: (1) households' food consumption patterns and changes in food consumption habits, and (2) households' access to food. Additionally, the survey measured diet quality of children between 6 and 23 months of age through assessing minimum dietary diversity.

# Food consumption patterns

The Food Consumption Score<sup>2</sup> (FCS), a tool commonly used as a proxy indicator to assess the food security situation, is a composite score calculated on the basis of dietary diversity, food frequency, and the relative nutritional weight of different food groups. The FCS broadly categorizes households into three groups: poor, borderline, and acceptable food consumption. Poor food consumption corresponds to less than 1500 kilocalories (kcal) eaten per person per day. Generally, households with poor food consumption consume mainly staples, oil, and vegetables. This diet normally does not meet the recommended energy requirement, lacks essential micronutrients and is associated with chronic food insecurity and malnutrition. Borderline food

<sup>&</sup>lt;sup>2</sup> FCS uses information on food diversity, food frequency (the number of days each food group is consumed over a reference period of 7 days), and the relative nutritional importance of different food groups to measure food security. It is a standard WFP indicator of household food insecurity.

consumption corresponds with energy intake of 1500-1800 kcal per person per day. In comparison, an average recommended energy intake is around 2100 kcal per person per day. Poor and borderline food consumption groups represent inadequate diets in terms of macro- and micro-nutrient requirements and are hence referred to as having inadequate food consumption.

Overall, the results show that 20.2 percent of households had inadequate food consumption, with 3.6 percent of these households consuming poor diets and another 16.6 borderline diets. Compared to the April 2020 survey, the proportion of households with poor food consumption decreased from 9 to 3.6 percent in August 2020, however the households with borderline food consumption increased from 14.2 to 16.6 percent (see Figure 1).



Figure 1 Food consumption groups in April and August 2020

At provincial level, the food security situation in August 2020 was relatively worse in provinces that are chronically more food insecure - Sudurpaschim and Karnali provinces - with 23.8 and 23.3 percent of households having inadequate food consumption respectively (see Figure 2). Inadequate diet was also more common in Province 2 (22.1%). Likewise, prevalence of poor diets was higher in the same provinces, accounting for 5.9 and 4.3 percent of households in Karnali and Sudurpaschim provinces respectively, followed by Provinces 1 (3.7%) and Bagmati (3.6%). Borderline food consumption was relatively more common in Sudurpaschim (19.5%), followed by Province 2 (19.1%) and Karnali (17.4%)



Figure 2: Food consumption group by province

Overall, these results show that the proportion of households consuming inadequate diets declined by 3 percent in August 2020 - from 23.2 to 20.2 percent, indicating a slight improvement in their food security situation. Partial easing of restrictions, measures taken by the Government and non-governmental organizations to support the most affected households together with the harvest<sup>3</sup> have likely contributed to the improvement in the food security situation.

While FCS is a comprehensive measure of the overall diet quality, a simpler indicator (Dietary Diversity Score - DDS<sup>4</sup>), measuring the frequency of consumption of specific food groups provides useful insights into household dietary diversity. Dietary diversity score is also a better proxy for micronutrient intake than FCS.

Out of total 8 food groups, the surveyed households consumed 6.7 food groups during the 7-day recall period (see Figure 3). Households with poor food consumption ate only 3.3 food groups on average, while households with borderline food consumption ate 5.3. Households that consumed adequate diets consumed 7.05 food groups on average.

Overall, 4.7 percent of surveyed households had poor dietary diversity - 2.5 percent fewer households than during the first round of surveys in April 2020. Similar to the Food Consumption Score, poor dietary diversity was more common in Sudurpaschim and Karnali provinces, with 7.8 and 7.1 percent of households consuming a diet that lacks basic diversity, followed by Province 5 (4.4%) and Provinces 1 and 2 (4.1% each).

<sup>&</sup>lt;sup>3</sup> Since April 2020, several crops have been harvested: 100 percent of **wheat** across Nepal; 100 percent **maize** in Province 1 and Gandaki; around 80 percent in Sudurpaschim, 70 percent in Province 5 and 20-50 percent in Karnali; 100 percent of **potatoe**s across Nepal; nearly 100 percent of **barley** across the country except for high mountain areas in Karnali. <sup>4</sup> See for details: <u>https://docs.wfp.org/api/documents/WFP-0000007074/download/</u>



Figure 3: Average days of consumption of food groups by province

Compared to 2016, the diversity of diets has slightly improved: in  $2016^5$  the proportion of households with poor dietary diversity was higher (5.3%), however households consumed more food groups (6.9) compared to August 2020 (6.7).

Despite the slight improvement in food security situation in August compared to April 2020, large parts of the population remain at risk of further deterioration of their food security status. The results from both April and August indicate that food security status on Nepalese households has worsened compared to 2016 when 14.9 percent of households had inadequate food consumption. Additionally, given that a phone-based survey likely under-represents the most vulnerable households, prevalence of food insecurity is potentially higher than presented in this survey. As such the continued COVID-19 crisis can further exacerbate the food security status of households that are already food insecure and expose more households at risk.

Household food stock is another key indicator to assess the food security situation at household level. The importance of this indicator is particularly critical during the COVID-19 crisis, as the combined effect of economic slowdown and the COVID-19-related market restrictions on food access means that food stocks can be major source of food for many households. In this module, households were asked whether they had sufficient quantities of food to meet their basic needs during two recall periods - in the last week before the survey was conducted and at any time since the start of COVID-19 lockdown in March 2020. This can provide useful insights on

<sup>&</sup>lt;sup>5</sup> The Annual Household Survey V 2016/2017, Central Bureau of Statistics

the impact of the current situation on household vulnerability, particularly when combined with the reported reasons for insufficiency and impact on livelihoods.





Overall, 6.7 percent of households reported having insufficient quantity of food to meet their needs in the last 7 days and 11.9 percent reported experiencing food insufficiency sometime since the start of the COVID-19-related lockdown. At provincial level, the highest proportion of households experiencing food insufficiency in the week prior to the interview was found in Province 1 (9.3%), followed by Province 2 (8.9%), Sudurpaschim (8.3%) and Karnali province (8%). Food insufficiency experience at some point since the start of the COVID-19 lockdown was also more common in these provinces - 18 percent of households reporting inadequate quantity of food in Province 2, followed by Karnali Province with 17.4 percent of households and Province 1 with 16.8 percent.

More than half of these households reported having no money to buy food as the most common reason reported by the respondents for facing food insufficiency, followed by a shortage of food in the markets and groceries (22.1%)(see Figure 4).

# Household coping strategies

To assess households' response to food insecurity, questions were asked about the severity of engagement in food related coping strategies. The Reduced Coping Strategy Index (rCSI)<sup>6</sup> and livelihood coping strategies were used, capturing changes in diet and behavior that households adopted due to reduced access to food during two recall periods - first in the past week and second in the last 30 days.

Overall, 2.3 percent of households adopted at least one coping strategy to address food shortages during one week before the interview was taken. Relying on less preferred and less expensive food was the most employed change (by 91% of those that adopted coping strategies), followed by reduction in portion size (72%) and reduction in the number of meals eaten per day (69%) (see Figure 5).

Figure 5: Changes in dietary habits due to reduced access to food (among the 2.3 percent that reported food related coping strategies)



Taking the past 30 days as the recall period, 11.8 percent of households adopted at least one coping strategy, with 10.1 percent adopting stress livelihood coping strategies, such as borrowing money, selling non-productive animals, and selling households assets. Another 1.1. percent of households adopted crisis livelihood coping strategies, such as harvesting immature crops, and selling productive assets. The proportion of households adopting emergency livelihood coping strategies such as selling the last female animal or selling land or their house was nominal (0.6%).

<sup>&</sup>lt;sup>6</sup> rCSI measures the frequency and severity of the behaviour households engage in when faced with shortage of food.

# Diet quality of children between 6 and 23 months of age

Minimum dietary diversity (MDD), a proxy for adequate micronutrient density of foods, measures the consumption of diversified foods for children between 6 to 23 months. MDD is an indicator to measure a diet's micronutrient adequacy which is an important dimension of its quality. Globally more than two thirds of malnutrition related child deaths are associated with inappropriate feeding practices during the first two years of life<sup>7</sup>. The households surveyed were asked questions about the consumption of 7 food groups within the 24-hour recall period to those households with children between 6-23 months of age. A total of 555 children were reported to be aged between 6-23 months, and of these 536 children were breastfed.

At national level, 43.1 percent of children between 6 and 23 months of age did not meet the minimum recommended dietary diversity. The highest prevalence of children whose diet did not meet the minimum diversity standard was in Karnali (48.1%), followed by Province 2 (45.3%) and Sudurpaschim province (44.7%). In comparison, based on the 2020 Nepal Multiple Indicator Cluster Survey (2019<sup>8</sup>), MDD was not met by 39.7 percent of children between 6 and 23 month of age (MICS, 2019), while compared to the mVAM Household Survey April 2020, 45.9 percent of children aged 6-23 months did not meet the minimum recommended dietary diversity.

In terms of changes in breastfeeding practices, a majority of respondents reported no change in the practice (86.2%), while 5.5 percent reported breastfeeding more often than usual, 4.8 percent reported less often, 3.5 percent reported having stopped.

# Access to food

An important component of food security is a household's ability to acquire food. The households surveyed in this assessment were asked several questions on food access – focusing on sources of food consumption and food stocks. Livelihoods and income, another essential element for gauging a household's ability to access food was also examined and is presented in the following section.

The results show that 58.5 percent of households had food stock while 41.5 percent reported no food stock at all (see Figure 6). In terms of stock duration, 28.4 percent of households had more than a month-worth of stock, 13.7 percent one month-worth of stock and 8.9 percent for 2-3 weeks as shown in Figure 6. At the provincial level, the highest portion of households without food stocks was in Province 2 (50.5%), followed by Gandaki (49.2%) and Province 1 (42.7%). While normally household food stocks are relatively higher in Province 2 and Gandaki, current stock level is likely indicative of COVID-19 impact on household income and markets, as majority of households in these provinces rely on market purchase.

<sup>&</sup>lt;sup>7</sup> <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5639776/pdf/12939\_2017\_Article\_680.pdf</u>

<sup>&</sup>lt;sup>8</sup> https://www.unicef.org/nepal/media/9076/file/NMICS\_2019 - Key\_findings.pdf





At national level, 54 percent of respondents reported acquiring food through market purchase and 45.8 percent reported consuming food from their own production (see Figure 7). Proportion of households sourcing food through gifts or assistance was nominal. Relying on market purchase was more prevalent in Bagmati (69.7%), Gandaki (56.9%) and Province 5 (56.8%). Own production as food source was found to be more common in provinces that are relatively remote and/or largely rural depending on agriculture sectors such as Sudurpaschim (66.7%) and Province 2 (56.4%).



Figure 7: Food source by province

In general, sourcing food by market purchase is conditioned by proper functioning of markets and stable income flow. In the current context, due to restrictions on accessing markets and certain livelihood activities, households relying on this food source are relatively more vulnerable. Normally, this would disproportionally affect poor households or households with volatile livelihoods (such as daily wage labour or seasonal labour). However, given the current situation the exposure is potentially broader, as even relatively more stable income sources have become volatile. Additionally, as markets are of critical importance to households' ability to access food, restrictions on physical access to markets and disruptions to their functioning can negatively affect households' ability to acquire adequate food. The reported reasons for experiencing food insufficiency further highlight these concerns and illustrate the importance of food access on the overall food security of households.

# **II. COVID-19 Impact on Livelihoods and Income**

One of the most telling questions was on the impact of COVID-19 on livelihoods and income sources. Livelihood and income sources are central to assessing households' access to food as well as their vulnerability to shocks. Despite the potential respondent bias (self-reporting and attribution of COVID-19 as a causal effect), this question has shown meaningful results, particularly when combined with the current food security status described earlier.

Overall, 31.2 percent of households reported a reduction in income in the last 3 months. A severe loss in income was reported by 11.1 percent of households. Another 16.5 percent of households reported a moderate reduction, while a small proportion of households (3.6%) noted a slight reduction.



Figure 8: Impact of COVID-19 on income reduction at national level

At provincial level, the highest proportion of respondents reporting reduction in income caused by the COVID-19 crisis was in Province 1 (40.5%), followed by Sudurpaschim (38.8%) and Province 2 (38.3%). On the other hand, the least affected province was Gandaki, with 19.1 percent of households reporting a reduction in income, followed by Bagmati (28.7%).

While the overall proportion of households reporting income loss increased marginally (by 0.6%) in August compared to April 2020, more households are reporting severe (11.1%) and moderate (16.5%) income loss in August than in April (severe 3.7%; moderate 9.3%). This indicates that the households are facing increasing pressure and that the already precarious situation these households are facing is worsening.



Figure 9: Impact of the COVID-19 crisis on income reduction by province

Nationally, 11 percent of households reported losing at least one source of income in the last 3 months. At the provincial level, job loss was more common in Sudurpaschim province, with 19.3 percent of interviewed households reporting job loss, 18.6 percent in Province 1, and 14.1 percent in Province 2. On the other hand, the reported loss of livelihood source was lowest in Gandaki province (6.7%).



# Figure 10: Impact of the COVID-19 crisis on loss of income source by province in April and August 2020

In line with income reduction, overall job loss increased slightly in August compared to April. At provincial level, reported job loss more than doubled in Province 1 and Province 2 and increased substantially in Sudurpaschim province as shown in Figure 10. Meanwhile, job loss reduced significantly in Province 5 and Karnali province.

The impact of COVID-19 on the livelihoods of Nepalese households' highlights increasing pressure on households' ability to access food, and their vulnerability to shocks. The results indicate a worsening of the already precarious conditions many Nepalese households are facing. This may lead to a deepening of existing vulnerabilities, as well as the expansion of exposure to other parts of the population that would normally be less vulnerable.



# III. Household Profiles of the Populations Most Affected by COVID-19

As in the first round of the survey, the impact of the COVID-19 crisis on specific livelihoods and household types was examined. This is intended to indicate the characteristics of households that were found to be relatively more affected by the COVID-19 situation.

# Livelihoods and income

Consistent with the household survey conducted in April 2020, certain types of livelihoods and households were more affected by the crisis. The loss of livelihoods was most prevalent among daily wage labourers, mainly in the non-farm sector (22%) and farm labourers (16.6%), followed by households receiving remittances (14.7%), and small businesses and trade (12.7%) as shown in Figure 11. Similarly, job loss was relatively more common for households that had a member of the family working abroad (13.9%) compared to households without a migrant (10.5%).

Households with a disabled household member experienced more job loss (16.8%), compared to 10.6 percent of households without a disabled person. Likewise, more households with a member with chronic illness reported job loss (15.7%) compared to households without a chronically ill member (10.2%). The same types of livelihoods and households were found to be

more affected during the first round of the household survey conducted in April 2020.



Figure 11: Loss of income source by livelihood type

\* Livelihood types that showed a statistically significant association with job loss

Figure 12: Loss of income source by household categories



In line with job loss, a reduction in income was more prevalent for certain livelihood types. The largest proportion of livelihoods that encountered an

income reduction was found among daily wage labourers in the non-farm sector (48.6%) and agricultural wage labourers (43.7%), followed by small businesses (38.7%), remittance incomes (36.7%) and large or medium trade and businesses (33.7%).

Households engaged in more volatile livelihood activities experienced the most severe income reduction. Out of those who reported reduction a in income, daily wage labourers in the farm sector were most severely affected, with more than 67 percent reporting a severe income loss, followed by daily wage labourers in the off-farm sector (59%), cash and high value crops (57.3%) and large or medium businesses and trade (56%) as shown in Figure 14.

Similarly, reduction in income was more common among households with a chronically ill member (39.6%) than for households without a chronically ill member (29.6%).



Figure 13: Reduction in income by livelihood type

 $\ensuremath{^*}$  Livelihood types that showed a statistically significant association with income reduction

# Figure 14: Severity of income loss by livelihood type (among those who reported income loss)



 $\ensuremath{^*}$  Livelihood types that showed a statistically significant association with income reduction

# Figure 15: Reduction in income by household type (among those that reported a reduction in income)



The COVID-19 crisis has been putting increased pressure on the livelihoods and incomes of Nepalese households. The findings from the second round of the household survey confirm that those already precarious conditions continued to worsen: the same type of households that were relatively more affected by the COVID-19 crisis in April were also more affected in August 2020. During both rounds, reductions in income and loss of livelihood sources have impacted households with volatile income sources but also traditionally more stable livelihoods both in April and August 2020. Combined with the pre-existing vulnerabilities, this can have a detrimental impact on households' ability to access food, and also on their underlying vulnerability to shocks. This is particularly concerning as a majority of those who reported income reductions depend on this income to access food.

# Food security status

While the food security status assessed in this study cannot be directly attributed to the COVID-19 crisis only, it provides useful insights on the type of households that associate with current food insecurity levels. Combined with the livelihood and socio-economic profiles of households that experienced negative impact on livelihoods, this is illustrative of the overall household's vulnerability and will be particularly relevant, should the current situation continue.

In terms of the livelihood profile, food insecurity was more common for certain types of income sources and less diversified livelihoods. Higher levels of food insecurity were also observed among households that sourced food in the market. In terms of the socio-economic characteristics, households with low education levels (of the household head), with a household member with disability and female-headed households were found to be more food insecure. Additionally, a higher proportion of households that reported job loss and income reductions had inadequate food consumption relative to those that reported no job loss and no reduction in income.

Nearly 15 percent of households with at least a secondary education (of the household head) had inadequate food consumption, while it stood at 27 percent for households with an illiterate household head. As presented in Figure 16, dietary diversity shows a similar pattern - poor dietary diversity was prevalent among households with an illiterate household head (7.6%) compared to households with at least a secondary education (2.9%).

Female-headed households were found to be more food insecure than maleheaded households. About 25 percent of female-headed households had inadequate food consumption, and 5.4 percent had poor dietary diversity. In comparison, inadequate food consumption was found among 19.4 percent of male-headed households and around 4.5 percent had poor dietary diversity.

Food insecurity was also more prevalent among vulnerable households, or households with a member with a disability (29.5%), compared to households without a disabled member (19.5%). In the meantime, while in April a relatively higher proportion of households with pre-existing conditions, such as chronic illness, had poor food consumption levels (19.1%) compared to households without chronic illness (9%); this difference was nominal in the August round. In August, similar proportion of households with (20%) and without chronic illness (22%) had inadequate diet.

# Figure 16: Inadequate food consumption and poor dietary diversity, by gender and education level of the household head



Sourcing food in the market showed an association with higher levels of food insecurity. Inadequate food consumption was found among 23.2 percent of households that sourced food through market purchase, while inadequate consumption was found for 16.6 percent of those who consume food from their own production. Moreover, prevalence of food insecurity was slightly higher in rural areas (21.6%), compared urban (18.5%), as shown in Figure 17.

Interestingly, having food stocks had nominal impact on household food consumption – as nearly the same proportion of households with (16.8%) and without (17.1%) food stocks consumed an inadequate diet. The possible explanation of the low difference between households with inadequate food consumption and households with and without food stock could be due to availability of only cereal foods as household food stocks which might not necessarily ensure the requirement of adequate diversified foods to meet the acceptable food consumption score.



# Figure 17: Households with inadequate food consumption by type of food source, food stock and area

In terms of livelihoods, inadequate food consumption was relatively more prevalent among households dependent on a single livelihood (22.5%), compared to households with more diversified livelihood sources - 18 percent of households with two income sources and 17 percent of households with three income sources (see Figure 18).

Similarly, some livelihood types showed an association with a higher prevalence of inadequate food consumption. The highest proportion of households with inadequate food consumption was found among daily wage labourers (in non-agriculture 37.4% and agriculture 33.7%), followed by households receiving remittances (23.3%) and small businesses and traders (21%).



Figure 18: Inadequate food consumption by livelihood type

\*These livelihood types showed a statistically significant association with food consumption

Relatively more households that had experienced a loss of income source were food insecure, compared to households that did not report job loss as shown in Figure 19. Similarly, a reduction in income was associated with higher prevalence of food insecurity, as 30.4 percent of households who experienced a reduction in income had inadequate food consumption, while 15.6 percent of households that did not experience a reduction in income consumed an inadequate diet.

Likewise, loss of livelihoods and reduction of income caused by the COVID-19 crisis affected household food sufficiency. The findings show that 24.3 percent of households that reported job loss had insufficient food stock at home compared to 4.5 percent of households that did not report job loss (see Figure 20). Similarly, 13.7 percent of households who reported a reduction in income had insufficient food stocks compared to 3.5 percent of households who did report reduction in income.





Figure 20: Household food insufficiency by the loss of job and income (among those that reported an insufficient food stock)



 $\ensuremath{^*}$  Household food insufficiency showed a statistically significant association with job loss and income reduction

Given that income reduction and job loss affect the food security status of the surveyed households, the continued pressure on income generation that is caused by the COVID-19 crisis may result in further deterioration in the food security situation in Nepal.

Additionally, the widespread presence of food stocks among surveyed households suggests that for the time being households are consuming their stocks. In this case, even households that have encountered income reductions would not necessarily present higher levels of food insecurity yet. Should the current conditions continue that affect the livelihoods and incomes of Nepalese households, and as household food stocks continue to run out, food insecurity may increase. In this context, adequate and welltargeted assistance will be critical.

# Major Concerns during the COVID-19 Crisis

The COVID-19 pandemic has affected many facets of society, including of socio-cultural, economic, health, education, and lifestyle. Respondents were asked questions about their current major concerns related to the COVID-19 pandemic. The increase in prices of food commodities was one of major concerns reported by nearly 20 percent of respondents (see cloud below) followed by shortage of foods (15.9%), reduction in income (15.2%) and lack of work opportunities (14.4%).



The survey also examined concerns and key problems that households who rely on agriculture as their primary livelihood face during the COVID-19 crisis. Overall, 49.8 percent of the total 4,614 surveyed households reported agriculture as their primary livelihood sources. Out of these, around 13 percent encountered problems related to marketing of their products (See Figure 21). Among those who reported these problems, 57.7 percent considered transportation of goods, mainly vegetables and cash crops as a key problem, followed by low demand in the markets (56.5%) and low price of their products (50.9%). At provincial level, the problem of transporting goods from farm to market was found to be high in the Karnali province. Meanwhile most farmers (62.9%) in Bagmati province reported decreased prices for their products as the key concerns. The reported problems related to low demand were more common in Gandaki province (69.6%), followed by Province 2 (65.4%) and Karnali (57.9%). Around 7.5 percent of households mentioned that other problems such as floods and limited human resources at home were also hindering supply of food commodities to the markets.



# Figure 21: Problems faced by households relying on agricultural production as a primary income source during the COVID-19 crisis

# Support for the COVID-19 Crisis

Appropriate and timely support is critical for minimizing the negative impact of the COVID-19 crisis on livelihoods and food security of the Nepalese households. Since the beginning of the COVID-19 crisis, the Government of Nepal as well as other non-governmental organizations have provided assistance to the most-affected households.

In line with the April survey, about 13 percent of the interviewed households reported receipt of some form of COVID-19 assistance either from the governments or from non-governmental organizations during past 3 months to August 2020 (See Figure 22). Most of the reported assistance was food (10.3%), followed by in-kind support (2.1%) such as sanitation implements, masks or other health related materials, while cash support was nominal.



Figure 22: The reported COVID-19 assistance

Those that received some form of COVID-19 assistance were relatively more food insecure, with 14.3 percent of households consuming an inadequate diet. In comparison, inadequate food consumption was found among 11 percent of households that did not receive any food assistance. In terms of household characteristics, the recipients of COVID-19 assistance were more commonly households with pre-exiting conditions, such as chronic illness and disability, and female-headed households as shown in Figure 23.



Figure 23: COVID-19 assistance household characteristics

# **IV. Household Characteristics**

The second round of mVAM household survey conducted in the first half of August 2020; a total of 4,614 random and 575 repeated respondents interviewed. The average household size of the sampled household is 5.13 for a random survey, ranging from the lowest in Gandaki Province (4.8) to the highest in Sudurpaschim Province (5.7). The average age of respondents is 35 years old, with the youngest being 18 years old to the oldest, at 97 years of age. Out of the total 4,614 interviewed, 36 percent of respondents are female, while female-headed households accounted for 14 percent of total sampled households.

The majority of the respondents are from rural areas (56%) and the remaining from urban areas. About 22 percent of the household heads in the survey had a primary education, followed by those with secondary (21.6%), illiterate (19.2%) and primary (17.9%) level of education. A higher proportion of female-headed households (36%) were illiterate, compared to male-headed households (16.4%).

About 8 percent of the households had at least one disabled person in the household, with the highest rate in Karnali and Sudurpaschim (10%), while province 5 had the lowest rate of disabled household members (5.1%), followed by Province 2 (6%) and Bagmati (6.6%). More than 15 percent of the surveyed households have at least one member with chronic illness, with the highest prevalence in Bagmati (23.5%), followed by Province 2 (20.3%) and Province 5 (19.7%). Nearly 16 percent of surveyed households have at least one migrant member. Out of which, the proportion of premature returnees is only 2 percent, while 7.5 percent of households were received remittance from a migrant member during the last 90 days since the date these households were interviewed.

More than 11 percent of surveyed households reported at least one member in the household being sick, of which 66 percent sought a COVID-19 test. Out of total COVID-19 tests, 6 percent of were COVID-19 positive cases.

It is noteworthy to highlight that nearly 98 percent of surveyed households have at least toilet access of some kind and more than 96 percent respondents reported that they observed good hand washing practices. It is interesting to highlight that COVID-19 pandemic has increased the awareness of good hand wash practices for almost all households.

Nearly 19 percent of respondents reported safety risks related to access to markets, hospitals, clinics, and healthcare centers for women and girls, 6 percent higher than the last survey conducted in April 2020. The highest proportion of the reported safety risks was found in Bagmati province (37.6%), followed by Sudurpaschim province (27.3%) and Province 1 (22.6%).

Province	Ave	Averag e HH	Gender of HH Head		Vulnerable households		Absente e HHs	Remittan ce	COVID- 19
	Age	Size	Female	Male	Disable	Chronic ill		recipient HHs	support recipient HHs
Province 1	36	4.84	11.2%	88.8%	7.3%	14.9%	23.0%	10.9%	16.0%
Province 2	33	5.76	7.9%	91.8%	6.0%	20.3%	14.1%	4.9%	15.6%
Bagmati	34	4.87	16.9%	83.0%	6.6%	23.5%	16.7%	7.8%	7.3%
Gandaki	37	4.80	21.5%	78.5%	7.1%	8.7%	14.4%	7.7%	5.5%
Province 5	35	5.03	16.5%	83.3%	5.1%	19.7%	18.2%	10.4%	7.0%
Karnali	35	5.41	13.3%	86.7%	10.0%	13.0%	14.2%	6.8%	12.7%
Sudurpaschim	32	5.70	11.0%	89.0%	10.0%	12.0%	15.5%	7.5%	21.1%
Nepal	35	5.13	14.5%	85.4%	7.7%	15.5%	15.7%	7.5%	11.5%

### Table 1: Household socio-economic characteristics

# V. Methodology

The information and data presented in this report was gathered from a nationally representative household survey conducted in the first half of August 2020 through live telephone interviews. Call interviews covered two national service providers (Nepal Telecom and Ncell) in all 7 provinces and the numbers were generated by using the random-digit dialing method. A total of 4,614 households were interviewed, with an average success rate of 12.4 percent (the ratio of successfully completed surveys to total dialed numbers, with 37,356 total dialed numbers). The success rate of telephone interviews ranges from the lowest at 6.2 percent in Mechi and Sagarmatha to the highest at 22.4 percent in Karnali zone, followed by Gandaki (20.6%), Bagmati and Koshi (20.2%) zones. The non-response and deadline phone numbers were replaced by the same location code. The survey method followed a standard operating guideline as described in Computer Assisted Telephone Interview (CATI) survey developed by WFP. The survey allowed participation by telephone interview for those at least 18 years of age.

A note on bias: Two main sources of bias exist in the design of this survey, both of which may result in under-estimating food insecurity. The first as already noted stems from using phones to reach people. The survey is able to do inference for the phone-owning population of Nepal, but research shows that phone ownership is correlated with higher levels of food security <sup>9</sup>. It is therefore reasonable to conclude that the results presented here may understate the extent of food insecurity in the country. The second main source of bias is from call failure. Calls can fail to result in a completed survey for several reasons. Some of these, like the number not existing, or it belonging to a business, do not bias results but others, which could themselves be related to food security or other outcomes (for example bad network connections which can occur in underserved areas of the country) may result in bias. This survey has call failure due to both of these types of reasons. In this case as well, the results would be biased upwards, meaning that our results might be underestimating food insecurity in the country. However, the magnitude of these biases is not readily estimated

<sup>&</sup>lt;sup>9</sup> Harman, P. 2020. "Sources of Bias in Mobile Phone Surveys in Developing Countries". Massey University.

# **ANNEX**

## Annex 1: Sampling design

A nationally representative sample was constructed, with the survey domain of 7 provinces.

Province Name	Number of interviewed households	Target sample
Province 1	786	769
Province 2	711	722
Bagmati	1,083	985
Gandaki	492	448
Province 5	804	686
Karnali	339	385
Sudurpaschim	399	405
Total	4,614	4,400

### Table 3: Sample size by province in April

	/ I I
Province Name	Number of interviewed households
Province 1	769
Province 2	673
Bagmati	1,022
Gandaki	500
Province 5	812
Karnali	251
Sudurpaschim	360
Total	4,416

### Annex 2: Food Security Indices

Food Consumption Score (FCS), a proxy indicator for food security, measures food diversity (the types of food consumed), food frequency (the number of days each food group is consumed over a reference period of 7 days), and the relative nutritional importance of different food groups by assigning weights to each food group<sup>[1]</sup>. The higher the FCS, the better the food consumption status of the household. FCS is calculated based on the past 7-day reference period and classified households into three categories: poor consumption (FCS=1.0 to 28); borderline (FCS=28.1 to 42); and acceptable consumption (FCS=>42.0). Due to high consumption of oil and fat, raised threshold for food consumption groups was used.

Food Consumption Groups	Standard Thresholds	Raised Threshold
Poor	0-21	0-28
Borderline	21.5-35	28.5-42
Acceptable	>35	>42

Table 3: Thresholds for food consumption groups

**Dietary Diversity Score** (DDS) is a measure of the number of food groups (out of a total of eight) that are consumed by the households in the past seven days preceding the survey. A diverse diet will help measure the consumption of diversified foods with adequate macronutrients and micronutrients<sup>[2]</sup>. Households that consume fewer than or equal to four food groups, out of 8, in a past 7-day reference period, are classified as low or poor dietary diversity.

**Coping Strategy Index**<sup>[3]</sup> (CSI) is a tool to measure the frequency and severity of the behaviour households engage in when faced with a shortage of food or financial resources to buy foods. The CSI is based on the many possible answers to one single question: "what do you do when you don't have adequate food, and don't have the money to buy food?" Reduced CSI is a sub-set of context specific CSI that uses a standard set of five individual coping behaviours which can be employed by households anywhere. The coping behaviours are as follows:

- 1. Eating less preferred foods/ eating less expensive foods
- 2. Reduced quantities consumed by adults/ mother in favour of young children
- 3. Reduced portion size of meals
- 4. Reduced number of meals eaten per day
- 5. Borrow food or relied on help from friends and relative

**Livelihood Coping Strategies** (LCS<sup>10</sup>) is a WFP's standard indicators for understanding behavior households engage to meet their immediate food security needs at the time of crisis or shock. LCS captures types of coping strategies households adopted during the crisis of shock during the 30-days recall period. The behaviours are classified based on the type of coping strategies they adopted and the impact of particular coping strategies on the longer-term productive ability. The specific coping strategies utilized in this survey were adapted to suit the country context. As such following three categories and corresponding coping actions were examined:

<sup>&</sup>lt;sup>10</sup><u>https://documents.wfp.org/stellent/groups/public/documents/manual\_guide\_proced/wfp271449.pdf?\_ga</u> =2.32997694.1468088556.1601188637-1476716381.1565168719

- 1. **Stress livelihood strategies** such as borrow money or food from a formal/informal lender (e.g., banks and financial institutions, relatives, neighbors and local money lenders), sale of animals mainly non-productive that usual, and sale of households assets or goods such as radio, furniture, refrigerator, tv, jewellery etc.)
- 2. **Crisis livelihood strategies** such as harvesting immature crops and sale of productive assets such as agriculture tools, wheelbarrow, power tiller, sewing machine etc., and
- 3. *Emergency livelihood strategies* such as sale of last female or productive animals such as milking cow or buffalo, and sale of house or land.

# Annex 3: Test of statistical significance

To assess statistical significance of association between variables of interest in this study, Chi-Square test was conducted<sup>11</sup>. As the key variable of interest are categorical, Chi-Square test is suitable. The statistical significance of association between following variables was tested:

- household food consumption (adequate or inadequate) and household socio-economic characteristics (education level gender of household's head, disability or chronic illness, head education, gender characteristics, type of food sourcing and presence of food stocks
- household food consumption (adequate or inadequate) and household livelihood type
- household food consumption (adequate or inadequate and COVID-19 impact on livelihood (income reduction and job loss)
- Job loss and household socio-economic characteristics (education level gender of household's head, disability or chronic illness, head education, gender characteristics, type of food sourcing and presence of food stocks)
- Job loss and household livelihood type
- Income loss and household socio-economic characteristics (education level gender of household's head, disability or chronic illness, head education, gender characteristics, type of food sourcing and presence of food stocks)
- Income loss and household livelihood type

<sup>&</sup>lt;sup>11</sup> <u>https://stats.idre.ucla.edu/other/mult-pkg/whatstat/</u>

# Annex 4: Repeated surveyed for households interviewed in April and August 2020

Using the probability proportionate to size method a total of 600 households were randomly selected from the 4416 households surveyed in the first round in April 2020. Total of 575 households were interviewed again in August 2020, to assess the changes in the food security and livelihood situation impacted during the COVID-19 crisis.



Overall, food insecurity as measured by the food consumption score improved in August compared to April 2020, with the proportion of households with inadequate food consumption declining from 23.2 to 15.2 percent. While the proportion of households with poor food consumption decreased substantially from 9 to 0.8 percent of households, borderline food consumption remained relatively same. Likewise, poor dietary diversity was less common in August than in April, decreasing from 7.2 percent in April 2020 to 2.7 percent in August 2020.

An improvement in the food security situation is likely associated with the types of livelihoods of the households interviewed in the repeated survey in August. On the one hand, relatively more households surveyed in the repeated August round had more stable livelihood source than in the first round in April. The primary livelihoods of a relatively large proportion of households were salaries from government and non-government sectors, large and medium business, cash and high value crops and small business and trade were interviewed. These types of livelihoods are relatively more stable, and therefore could associate with the observed lower food insecurity prevalence. The results from the April and August full sample rounds indicate that certain types of livelihoods, income reduction and job loss associate with higher prevalence of food insecurity.

However, despite a decline in the proportion of households with inadequate food consumption and poor dietary diversity, there is a substantial increase in the proportion of children who did not meet minimum recommended dietary diversity, increasing from 46 percent to 65 percent. The finding from repeated survey indicates that large numbers of children are at risk of malnutrition due to insufficient intake of diversified food required for healthy life and growth.

The prevalence of food insecurity as measured by the household with inadequate food consumption is found to be high in the households having at least one disable person, illiterate household head, losing livelihoods and income, no or limited food stock at home and living in rural areas. These findings are in line with the first round of survey and the full sample survey in August 2020. Likewise, the proportion of households adopting some kinds of coping strategies such as eating less expensive and preferred foods, reducing meal frequencies and portion size seemed to be more common as in the previous survey, indicating a consistent method and analysis used in the report.

Similar to the overall food security trend, a slight decrease in the number of households who reported a reduction and income and job loss was observed among the households who were surveyed both in April and August 2020. As mentioned, this is likely due to over-representation of more stable livelihoods in the repeated sample.

In repeated survey, 39 percent of respondents are female, while 12 percent of households were female headed. The results show a relatively high proportion of households with chronic illness (18.2%) and also absentees (18.3%). However, the proportion of households with a disabled household member was relatively low in this round of survey- 5.6 percent. Nearly 24 percent of respondents reported that there were safety risks to women and girls when accessing markets, workplace, and hospital and health centers. Majority of respondents had toilet facilities with regular handwashing practices.

Province	Number of interviewed households	Target sampled households		
Province 1	119	105		
Province 2	69	98		
Bagmati	147	134		
Gandaki	68	61		
Province 5	104	94		
Karnali	30	53		
Sudurpaschim	38	55		
Total	575	600		

# Annex 5: Questionnaire

### **DEMOGRAPHIC SECTION**

VARIABLE NAME	QUESTION			
RESPAge	How old are you? [INELIGIBLE IF THE AGE IS LESS THAN 18]			
RESPSex	What is the sex of the respondent? [OPERATOR: LISTEN TO THE VOICE AND CHECK THE BOX WHETHER THE RESPONDENT IS MALE OR FEMALE] 1. MALE 2. FEMALE 3. Other			
ADMIN1Name	Currently, which province [ADM1] does your household reside in? [DROP DOWN LIST]			
ADMIN2Name	Currently, which district [AMD2] does your household reside in? [DROP DOWN LIST]			
ADMIN3Name	Currently, which municipality [ADM3] does your household reside in?			
HHCurrentLocation	4.1. Is your current location urban(city) or rural(village) 1. Urban 2. Rural			
PERResi	Where has been your usual place of residence over the past 6 months? Province: District: Municipality: Current Location: Urban/Rural			
RESPCaste	What is the caste/ethnicity of the respondent?			
HHHGender	What is the sex of the head of household? 1. Male 2. Female 3. Other			
HHHEdu	What is the highest level of education of the head of household? (Number of years)			
HHSize	How many children and adults are PERMANENTLY living in this household?			
HHUnder2	How many members of the household are under 2 years old?			
HH2to15	How many members of the household are between 2 and 15 years old?			
HHOver64 HHDisability	Do you or does anyone in your household have a disability (physical or mental)? 1. Yes 2. No			
HHchronic	Do you or does anyone in your household have a chronic illness? 1. Yes 2. No			
HHmigration	Does your household currently have a labour migrant abroad? 1. Yes 2. No			
HHreturnee	Does your hh have a labor migrant who returned home prematurely in the past 40 days? 1. Yes 2. No			
HHremit	Have you received remittances in the past 40 days? 1. Yes 2. No			

### LIVELIHOOD AND INCOME

INCSource	What are the primary, secondary and tertiary sources of household income?
	1. Cereal based agriculture
	2. Cash and high value crops
	3. Daily Wage labour (agri)
	4. Daily wage labour (non-agri)
	5. Remittances
	6. Salaries from Government and I/NGOs
	7. Business and trade (medium and large)

	8. Business and trade (small)
	9. Tourism
	10. Others (specify)
INCSOURCEAgriculture	1.2 If your primary livelihood is agriculture(cereal base, cash and livestock), did
5	you face any problems for marketing of your products?
	1. Yes
	2. No
INCSOURCELivelihoodProblems	1 3 If yes, what are the major problems?
	1 Transportation
	2 Price low
	3 Low demand
	4 Other (Specify)
INClobloss	Have you or a household member lest your job in the last 30 days?
INCJUDIUSS	
INCINCIOSS	Have you or a nousehold member lost income in your job in the last 30 days?
	1. Yes
	2. No
INCScaleloss	If yes, how significant of a loss was this to your household income?
	1. Very small/Insignificant
	2. Moderate
	3. Severe
INCSupport	Do you or anyone in your household receive regular government support?
	1. Yes
	2. No
INCSupport specify	If ves what kind?
	1 Senior citizen allowances
	2 Single women allowances
	3 Disability allowance
	A Endangered ethnic allowance
	4. Linddigered ethnic allowance
	5. Child protection grant
INCCovid ourport	Uniters
INCCOVIA_SUPPORT	5. Have you or anyone in your nousenoid received any assistance—either food
	or cash—from the government (local or provincial or federal) as a part of a
	COVID response in the last 30 days?
	1. F000
	2. Money
	3. Kind
	4. None
INCCovid_support_organization	5.1 If you receive assistance, from which organization?
	1. Government
	2. Non- government
	3. Both
INCCovid_support_specify	If it is cash, how much did you receive (in NPR)?
	If it is food, how much did you receive cereal foods (in KG)?
	If it is kind, how much did you receive (equivalent to NPR)

# ACCESS TO FOOD AND MARKET

VARIBLE NAME	QUESTION
@_1_How_many_time_to_e_	1. How many time to reach the market from your house?(One way in minutes)
One_way_in_ininutes	
HHFood	<ul> <li>What is the main source of food for your household?</li> <li>[OPERATOR: DO NOT READ OUT THE RESPONSE OPTION, SELECT THE</li> <li>RESPONSE OPTION THAT BEST FITS THE INFORMATION PROVIDED BY THE</li> <li>RESPONDENT, OTHERWISE SELECT OTHER] <ol> <li>Own production</li> <li>Market purchase</li> <li>Gift or assistance</li> </ol> </li> </ul>
HHFood oth	Please specify what is the main source of food for your household?
HHFoodConstr_7D_YN	In the past 7 days, has there been any time when your household <b>did not</b> <b>have sufficient</b> quantities of food needed for the household? 1. Yes 2. No

	If Yes, who are prioritized for serving the limited food available? Choose in the priority order (Children, senior citizen, male adult members, female adult members, member with disability, other) [OPERATOR: DO NOT READ OUT THE RESPONSE OPTION, SELECT THE RESPONSE OPTION THAT BEST FITS THE INFORMATION PROVIDED BY THE RESPONDENT, OTHERWISE SELECT OTHER
	What was the main reason why your household did not
HHFoodConstr	<ul> <li>have sufficient quantities of food needed?</li> <li>[OPERATOR: DO NOT READ OUT THE RESPONSE OPTION, SELECT THE RESPONSE OPTION THAT BEST FITS THE INFORMATION PROVIDED BY THE RESPONDENT, OTHERWISE SELECT OTHER] <ol> <li>Shortage of food in the market \ grocery store</li> <li>Increase in the prices of food</li> <li>No money to buy food</li> <li>No food in the house</li> <li>Unable access the market \ grocery store</li> <li>Markets \ grocery stores are closed</li> <li>Other</li> </ol> </li> </ul>
HHFoodConstr_oth	Please specify the <b>main reason</b> why your household did <b>not</b> <b>have sufficient quantities</b> of food needed? [OPERATOR: SUMMARIZE THE RESPONSE IN FEW WORDS]
	Does your household <b>currently</b> have food stock?
HHStock	1. Yes 2. No
HHStockDur	How long do you think the food stock would last? 1. Less than one week 2. 1 week 3. 2 - 3 weeks 4. 1 month 5. More than 1 month

### FOOD CONSUMPTION SECTION

VARIBLE NAME	QUESTION
FCS_Intro	Now I will ask you about the foods and drinks you and your household ate or drank in the last 7 days.
FCSStap	How many days over the last 7 days, did members of your household eat starches, roots and tubers such as rice, maize, pasta, bread, sorghum, millet, potato, yam, cassava, white sweet potato? [OPERATOR: RECORD NUMBER OF DAYS 0 - 7]
FCSPulse	How many days over the last 7 days, did members of your household eat pulses and nuts such as beans, lentils, cowpeas, soybean, pigeon peas and peanuts or other nuts? [OPERATOR: RECORD NUMBER OF DAYS 0 - 7]
FCSDairy	How many days over the last 7 days, did members of your household consume fresh milk, sour milk, yogurt, cheese or other dairy products? [Excluding margarine/butter or small amounts of milk for tea/ coffee] [OPERATOR: RECORD NUMBER OF DAYS 0 - 7]
FCSPr	How many days over the last 7 days, did members of your household eat meat [pork, lamb, goat, rabbit, chicken, duck, other birds, liver, heart and / or other organ meats], eggs or fish [Including fresh fish, canned fish, and / or other seafood] as a main dish, so not as a condiment? [OPERATOR: RECORD NUMBER OF DAYS 0 - 7]
FCSVeg	How many days over the last 7 days, did members of your household eat vegetables or leaves such as cauliflower, cabbage, carrot, red pepper, radish, pumpkin, orange sweet potatoes, spinach, cassava leaf, okra, and/or other leaves/vegetables? [OPERATOR: RECORD NUMBER OF DAYS 0 - 7]
FCSFruit	How many days over the last 7 days, did members of your household eat fruits such as banana, apple, mango, papaya, apricot, peach and/or other fruits]? [OPERATOR: RECORD NUMBER OF DAYS 0 - 7]
FCSFat	How many days over the last 7 days, did members of your household eat oil/fat/butter such as Mustard oil, soybean oil, sunflower oil, vegetable oil, palm oil, groundnut oil, margarine, other fats / oil?

	[OPERATOR: RECORD NUMBER OF DAYS 0 - 7]
FCSSugar	How many days over the last 7 days, did members of your household consume sugar, or sweet such as sugar, honey, jam, cakes, candy, cookies, pastries, cakes and other sweets and sugary drinks? [OPERATOR: RECORD NUMBER OF DAYS 0 - 7]

BREAST FEEDING PRACTICES and MINIMUM DIETARY DIVERSITY (If there is a child aged 6-23 months in the household)

- 1. In the past month, have you breastfed your baby?
  - i.Less often than usual
  - ii.The same
  - iii.More often than usual

iv.Stopped breastfeeding

- 2. Randomly sample 1 child aged 6-23months Ask:
  - a. How many times did (name of child) eat yesterday?
  - b. Please tell me everything that (Name of child) ate yesterday during the
  - day or night (whether at home or outside the home).

Please tell me everything that ( <b>Name</b> ) ate yesterday during the day or night (whether at home or outside the home).		FOOD GROUPS	Examples	Coding
	A. :ubers	Cereals Grains, roots or	Rice, Bread, pasta, biscuit, porridge, thin porridge, foods made from sorghum, maize, wheat, Irish potato, sweet potatoes that are white inside, white yams, cassava, rice, millet	Yes/ no/ don't know
	B. foods	Vitamin A-rich plant	Pumpkin, carrot, squash, sweet potatoes that are orange inside, mango, papaya, ripe passion fruit, tree tomato,	Yes/ no/ don't know
Think about what ( <b>Name</b> ) ate from the time first he/she woke up yesterday until he/ she slept.	C. vegetab	Other fruits or les	Other vegetables: - tomato, onion, garlic, eggplant, cabbage, beetroot, mushroom, green pepper, fresh peas, wild vegetables, cucumber Other fruits: - avocado, apple, banana, guava, lemon, orange, pineapple, strawberry, watermelon, grapefruit, including wild fruits	Yes/ no/ don't know
anything else? Tell me what it was.	D. se <u>afood</u>	Meat, poultry, fish,	Beef, lamb, goat, wild game, pork, chicken, organ meat, dried or fresh fish	Yes/ no/ don't know
DO NOT LIST, CIRCLE ANY ITEMS MENTIONED, AND WRITE 1 IF CONSMED. 0 IF	Ξ.	Eggs	Eggs	Yes/ no/ don't know
	Ŧ.	Pulses/legumes/nuts	Beans, peas, chickpeas, lentils, Soya Bean, nuts, sesame, Harry cot bean, or foods made from these	Yes/ no/ don't know
	G.	Milk and milk products	Milk, cheese, yogurt, butter, other milk products, infant formula	Yes/ no/ don't know

# **COPING STRATEGIES**

VARIBLE NAME	QUESTION	SKIP PATTERN
CopStrategy	<ol> <li>In the last 30 days, there have been times when your household did not have enough money or food to buy food?</li> <li>Yes</li> <li>No</li> </ol>	If the response is No -> skip to RESToilet
COPBorrowMoney	<ol> <li>Did your household borrow money/food from a formal/informal lender (bank, relatives, neighbors etc)?</li> <li>Yes</li> <li>No</li> </ol>	

COPSellAnimalNonProductive	2. Did your household sell more animal(non	
	productive) than usual?	
	1. Yes	
	2. No	
COPSellHHsAssets	3. Did your household sell household	
	assets/goods (radio, furniture, refrigerator, tv,	
	jewelry etc)? 1. Yes	
	2. No	
COPImmatureCrop	4. Did your household harvest immature crops?	
	1. Yes	
	2. No	
COPSellProductiveAsset	5. did your household sell productive assets	
	(agriculture tools, wheelbarrow, power tiller,	
	sewing machine etc)?	
	1. Yes	
	2. No	
COPSellLastAnimal	6. Dis your household sell last female animals	
	(e.g. milking cow or buffalo)?	
	1. Yes	
	2. No	
COPSellHouse	7.Did your household Sell house or land?	
	1. Yes	
	2. No	

### **REDUCED COPING STRATEGIES**

VARIBLE NAME	QUESTION	Code
COPREDUCE	1. In the past 7 days, did your household	1=Yes
	adopt any coping strategies?	2=No
CopStra_less_expensive	1.1. How many days in last 7 days did your households rely on less preferred and less expensive food?	NUMBER OF DAYS 0 - 7
CopStra_Borrow	1.2. How many days in last 7 days did your households borrow food or relied on help from friends and relatives?	NUMBER OF DAYS 0 - 7
CopStra_Reduce_meal	1.3. how many days in last 7 days did your household reduce the number of meal eaten per day?	NUMBER OF DAYS 0 - 7
CopStra_Reduce_Portion_size	1.4. How many days in last 7 days did your household reduce portion size of meal?	NUMBER OF DAYS 0 - 7
CopStra_Reduce_Adult_Consum	1.5. How many days in last 7 days did your household reduce the quantities consumed by adults/mothers for young children?	NUMBER OF DAYS 0 - 7

# HEALTH AND ILLNESS SECTION

VARIBLE NAME	QUESTION
RESToilet	Does your household have access to toilet? 1. Yes 2. No
HANDWAAH	Does your household have hand washing facilities? 1. Yes 2. No
HHSICK_YN_1M	Has anybody in your household been sick since lockdown? 1. Yes 2. No
MEDCARE_test	Did you or your family members test coronavirus? 1. Yes 2. No
MEDCARE_test_YN	<ol> <li>If yes, did he/she have positive case?</li> <li>Yes</li> <li>No</li> </ol>

#### **ADDITIONAL**

VARIBLE NAME	QUESTION
<b>VARIBLE NAME</b> RESPWorryRsnFirst	QUESTION         What are is your most important concern (1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> ) under the current circumstances?         [OPERATOR: DO NOT READ OUT THE RESPONSE OPTION, SELECT THE RESPONSE OPTION THAT BEST FITS THE INFORMATION PROVIDED BY THE RESPONDENT, OTHERWISE SELECT OTHER]         1.       Shortage of food         2.       Increase in food prices         3.       Shortage of medicine         4.       Disruption of medical service         5.       Disruption of educational institutes         6.       Getting sick         7.       Lack of work         8.       Reduce in income         9.       No concern
	10. Other
RESPWorryRsnFirst_oth	Please specify what is your <b>most important concern</b> under the current circumstances? [OPERATOR: SUMMARIZE THE RESPONSE IN FEW WORDS]
ACCESS_PROTECT	Are there any safety risks for accessing to the Hospitals\Clinics\Health Centers or markets or working places for women and girls? 1. Yes 2. No

[1] WFP, 2008. "Food Consumption Analysis" WFP VAM Technical Guidance Sheet, World Food Programme, Rome. http://documents.wfp.org/stellent/groups/public/documents/manual\_guide\_proced/wfp197216.pdf

[2]Swindale, A. and Bilinsky, P. 2006. Household Dietary Diversity Score (HDDS) for Measurement of Household Food Access: Indicator Guide, Ver.2, Food and Nutrition Technical Assistance, USAID. http://www.fantaproject.org/sites/default/files/resources/HDDS\_v2\_Sep06\_0.pdf <sup>[3]</sup> https://documents.wfp.org/stellent/groups/public/documents/manual\_guide\_proced/wfp211058.pdf



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