



The Impact of COVID-19 on Households in Nepal

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

March 2021



Ministry of Agriculture and Livestock Development



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THE IMPACT OF COVID-19 ON HOUSEHOLDS IN NEPAL

March 2021

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Highlights

WFP in collaboration with the Ministry of Agriculture and Livestock Development conducted the third round of the mVAM Household Survey in December 2020. The overall food insecurity across the country has improved compared to April and August 2020, however it remains slightly worse than 4 years ago. The survey result show that 16.8 percent of households had inadequate food consumption and 2.5 percent of households had poor dietary diversity in December 2020. Overall, 7.4 percent of households adopted negative livelihood coping strategy to address food shortages and about 2.7 percent of households reported that the food they had in stock was insufficient to meet their needs. About 42.7 percent of the children between 6-23 months of age did not meet the minimum recommended dietary diversity.

In comparison, 23.2 and 20.2 percent of households had inadequate diet respectively based on the mVAM Household Survey conducted in April and August 2020, 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 and 4.7 percent of households had poor dietary diversity in the first and second round of surveys respectively. Around 45.9 and 43.1 percent of children between 6-23 months of age did not meet minimum recommended dietary diversity in April and August respectively.

Karnali and Sudurpaschim provinces, the most food insecure provinces of the country, have the highest proportion of food insecure households, with 24.1 and 21.2 percent of households consuming inadequate diet respectively. Inadequate food consumption was also relatively high in Province 2 (16.8%).

Nearly three fourth of respondents reported to have food stocks, of which nearly 50 percent had more than one-month worth of food stock. Meanwhile, nearly 62 percent of households acquired food through market purchase and 38 percent relied on their own production for household consumption.

The surveys showed a reduced yet still notable impact of the COVID-19 crisis on livelihoods of Nepalese households, with 5 percent of households reporting job loss and 21 percent a reduction in income attributed to COVID-19 crisis. Income reduction was the highest in Province 2 (26.7%) and Karnali (23.6%), and loss of livelihoods in Province 2 (6.8%), Bagmati (5.4%) and Lumbini provinces(5.1%).

The results show that loss of income source was found to be more prevalent in certain types of livelihoods such as daily wage labourers in farm and off-farm sectors and tourism sector. Similarly, reduction in income was more prevalent for daily wage labourers in off-farm sector, households receiving remittances and large and medium businesses and trade. The most severe income reduction was experienced by tourism sector, daily wage labourers in the off-farm sector, selling livestock and livestock products, and cash and high value crops producers. Likewise, job loss and income reduction were more common among households with a disabled and chronically ill household member.

Comparable pattern was observed for impact on food security. Food insecurity was more prevalent among certain types of income sources, namely daily wage laborers in farm and off-farm sectors and cereal based agriculture, together with migrant workers. Higher prevalence of food insecurity was found among households that relied on market purchase.

¹ The Annual Household Survey V 2016/2017, Central Bureau of Statistics

In terms of the socio-economic characteristics, households with low education levels, vulnerable households with a member with 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 negatively 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 17 percent of respondents reported that reduction in income was the major concern during the COVID-19 crisis, followed by getting sick (17.3%), disruption of educational institutions (16.6%), and increase in food prices (16.5%).

Nearly 8 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, 17.5 percent of households interviewed in this survey are recipients of social benefits, mainly senior citizen support, followed by support for single women.

The findings from the survey indicate gradual improvements in terms of the impact of COVID-19 crisis on food security and livelihoods. Yet, the aggravated conditions persist and continue to affect Nepalese households. The impact of the COVID-19 crisis on job loss and income reduction remains notable and can further put pressure on income generation and livelihoods. Such prolonged exposure to adversary conditions, together with the upcoming lean season, can in turn lead to further risk of food insecurity in Nepal, particularly for certain types of households. Adequate and timely response and targeting of assistance will be therefore critical.

I. COVID-19 Impact on Households

Nepal has been affected by the prolonged COVID-19 crisis that created unprecedented challenges in the social and economic sectors, further exacerbating the pressure on food security and livelihoods of the most vulnerable households. Despite some relief presented by the harvested summer crops, steady reviving of the employment sector and stimulus package aimed at recovery of the economy, access to food remains to be of concern as well as the overall impact of the crisis on household vulnerability.

In collaboration with the Ministry of Agriculture and Livestock Development, WFP conducted a nation-wide phone-based survey to assess the impact of the prolonged crisis on Nepalese households in December, focusing on the impact of COVID-19 crisis on food security and livelihoods. This is the third in the series of surveys WFP conducted in 2020 (in April and August) with a view to examine the multifaceted impacts of the COVID-19 crisis on food security, livelihoods, and vulnerability as well as identifying profiles of households that were relatively more affected by the ongoing crisis.

In December 2020, 4,526 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

In order to examine the impact of COVID-19 crisis on food security situation over time, 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

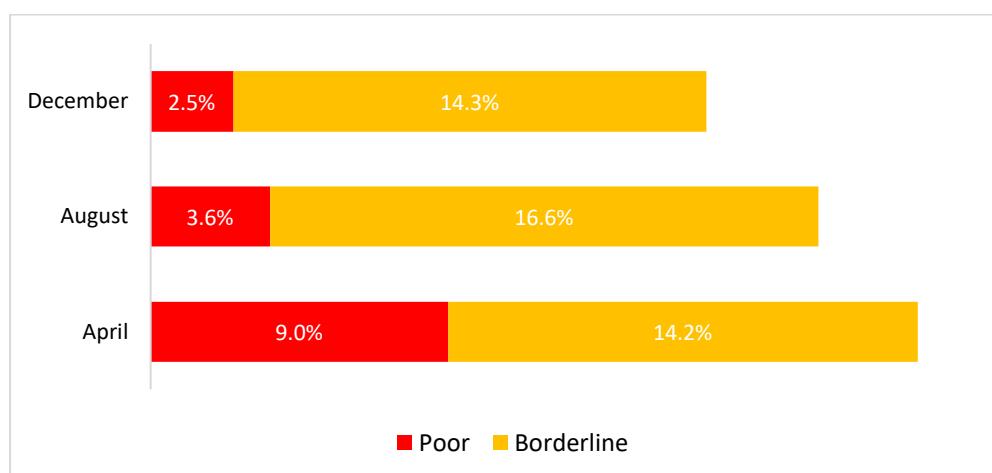
The Food Consumption Score² (FCS), a tool commonly used as a proxy indicator to assess the food security situation, is a composite score calculated on the basis of dietary diversity, food frequency, and the relative nutritional weight of different food groups which are categorized in 8 groups based on the food types and nutritional values. 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 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.

The survey results show that 16.8 percent of households had inadequate food consumption – with 2.5 percent of households having poor diets and another 14.3 percent borderline diets. The proportion of households with inadequate food consumption in December was lower than in April and August 2020 as presented in Figure 1. Similarly, compared to the April and August 2020 surveys, the proportion of households with poor food consumption decreased from 9 and 3.6 percent in April and August 2020 respectively to 2.5 percent in December 2020. Number of households with borderline food consumption remained nearly same as observed in August 2020, however improved compared to April 2020. Nevertheless, the proportion of households with inadequate food consumption still remains higher than four years ago. Based on the findings the Annual Household Survey V (2016/17)³, 14.9 percent of households consumed an inadequate diet in 2016, which is 1.9 percent less households than in December 2020.

² 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.

³ The Annual Household Survey V 2016/2017, Central Bureau of Statistics

Figure 1 Food consumption groups in April, August and December 2020

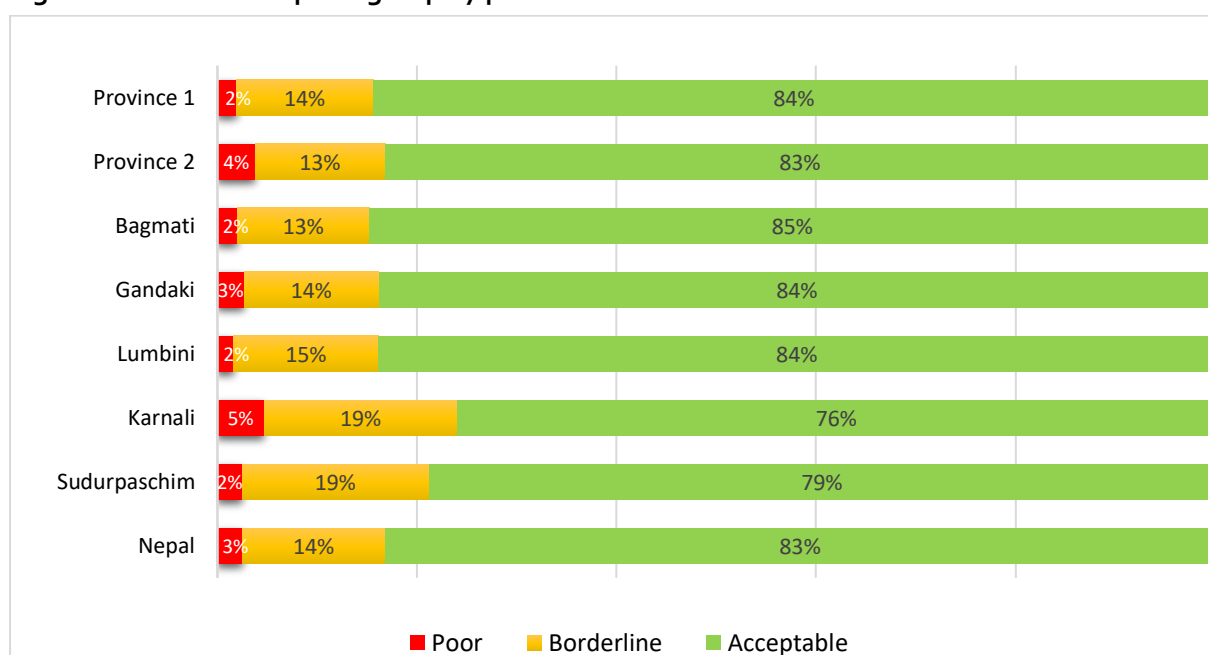


At provincial level, the food security situation deteriorated slightly in Karnali province- the most chronically vulnerable province in Nepal. In December 2020, 24.1 percent of households in Karnali had inadequate food consumption while in August it was 23.3 percent.

The food security situation improved the most in Province 2, with 5.3 percent less households with inadequate food consumption in December compared to August 2020, followed by Province 1 and Bagmati province, with 3.1 and 2.7 percent less households with inadequate food consumption respectively. Nevertheless, while the proportion of households with inadequate diet declined, the prevalence of poor diets increased slightly in Province 2 and Gandaki province, by 0.7 and 0.6 percent respectively.

The highest prevalence of food insecurity, as measured by poor food consumption, was found in Karnali Province, , accounting for 4.7 percent of households, followed by Province 2 (3.8%), Gandaki (2.7%) and Sudurpaschim (2.5%). Borderline food consumption was relatively more common in Karnali (19.4%), Sudurpaschi m (18.8%), followed by Lumbini province (14.5%)

Figure 2: Food consumption group by province



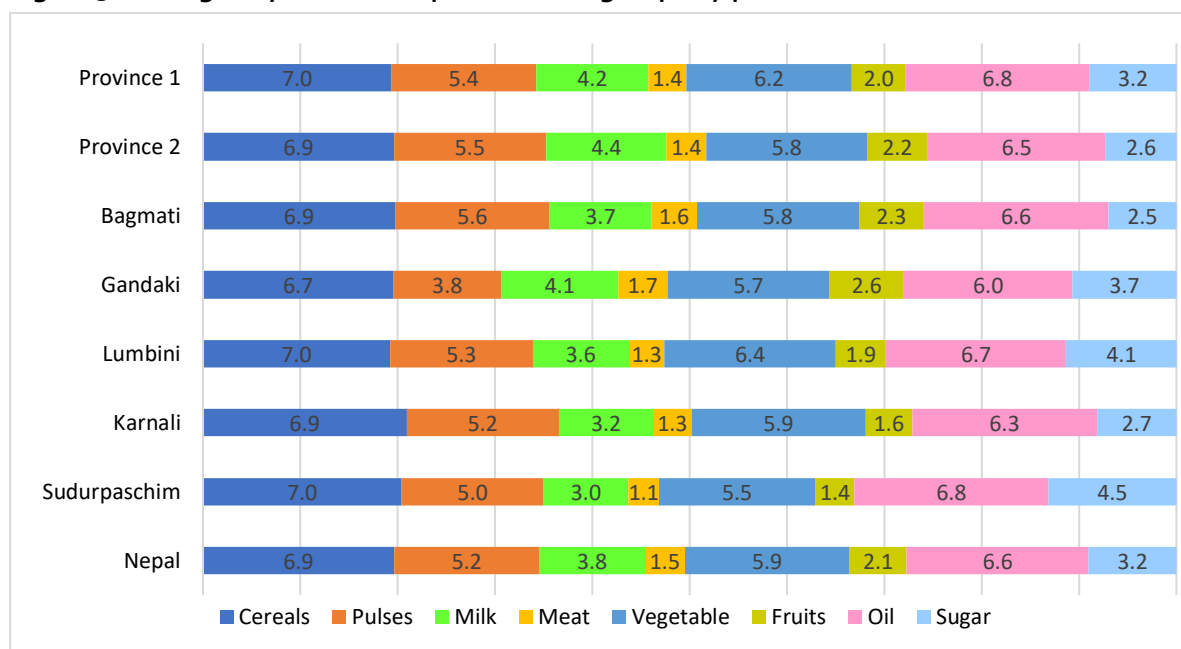
Overall, the findings indicate that food security situation has been gradually improving, with smaller proportion of households consuming inadequate diets in December 2020 compared August and April 2020. This improvement is likely a result of increased availability from the recently harvested summer crops, easing of restrictions and opening of economic activities, and measures taken by the Government and non-governmental organizations to support the most affected households. Nevertheless, the findings indicate deepening of food insecurity in areas that are chronically more vulnerable, raising concerns about vulnerability of the most vulnerable groups.

While FCS is a comprehensive measure of the overall diet quality, a simpler indicator (Dietary Diversity Score - DDS⁴), 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.

The results presented in Figure 3 show that out of total 8 food groups, the surveyed households consumed 6.9 food groups during a 7-day recall period. Households with poor food consumption ate only 2.9 food groups on average, while households with borderline food consumption ate 5.8 food groups. Households that consumed adequate diets consumed 7.2 food groups on average.

Overall, only 1.7 percent of surveyed households had poor dietary diversity - 3 percent fewer households than in August and 5.5 percent lower than in April 2020. Similar to Food Consumption Score, poor dietary diversity was found to be relatively higher in Karnali province, with 3.9 percent of households consuming a diet that does not meet basic diversity, followed by Province 2 (3.4%).

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



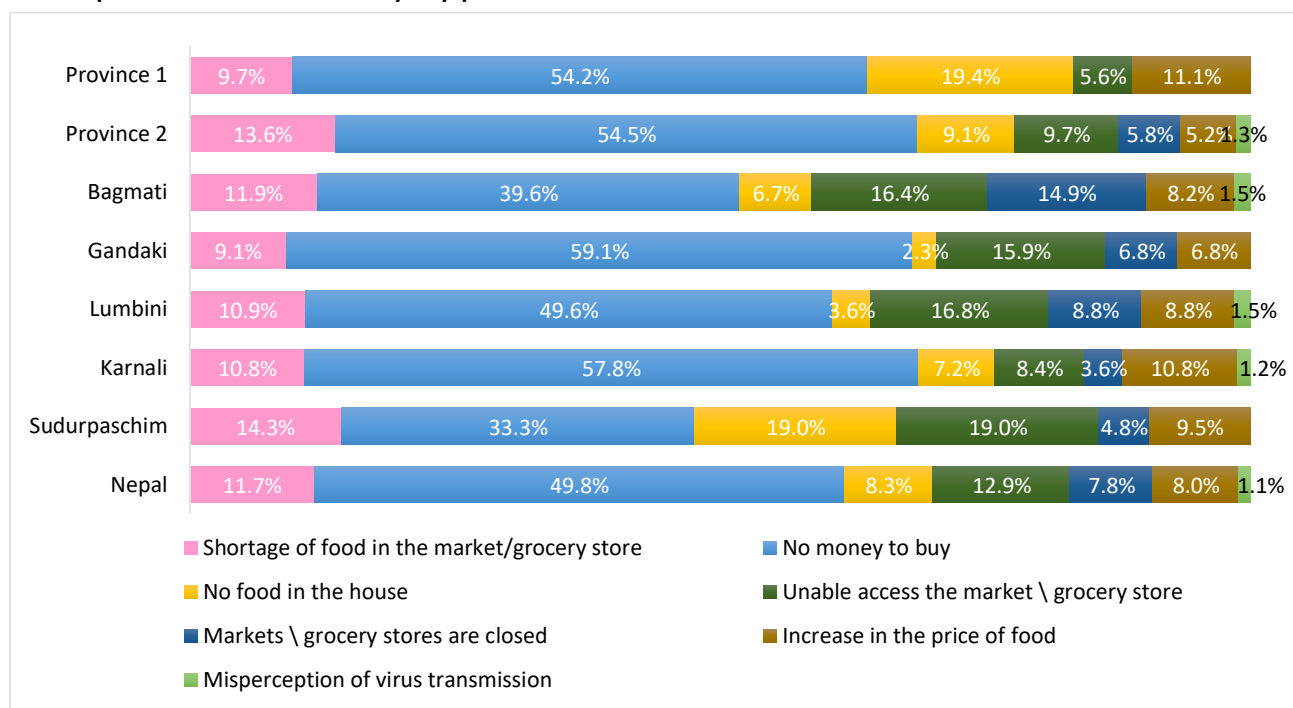
⁴ See for details: <https://docs.wfp.org/api/documents/WFP-0000007074/download/>

Dietary diversity improved in December 2020 compared 2016- with the proportion of households with poor dietary diversity declined from 5.3% in 2016⁵ to 2.5 percent in December 2020. In terms of the overall diet diversity, no changes were found as households consumed an average of 6.9 food groups in 2016 and in 2020.

Despite the significant improvement in food security situation in December compared to April and August 2020, a notable proportion of population remains at risk of further deterioration of food security status. The results from the three rounds of the household surveys conducted in 2020 show that COVID-19 crisis has negatively affected the food security vulnerability of Nepalese households, and more households remain food insecure in December 2020 than in 2016 (April 2020- 23.2% of households had inadequate food consumption, August 2020 20.2%, December 2020 16.8 and 14.9% in 2016). Moreover, given that a phone-based survey likely under-represents the most vulnerable households, prevalence of food insecurity could potentially be higher than presented in this survey.

Household food stock is considered as one the key indicators to assess the food security situation at household level, mainly in the rural setting where own production often dominates the household food consumption. This indicator is particularly relevant as a measure of food security situation during the COVID-19 pandemic, as market and movement restrictions have been frequently implemented across the country. 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 the impact of the current situation on household vulnerability, particularly when combined with the reported reasons for insufficiency and impact on livelihoods.

Figure 4: Reported reasons for food insufficiency by province (among the 2.7 percent of households that reported food insufficiency) by province



⁵ The Annual Household Survey V 2016/2017, Central Bureau of Statistics

Nearly 3 percent of households reported that they did not have sufficient quantity of food to meet their needs in the last 7 days and 13.7 percent reported experiencing food insufficiency sometimes since the start of the COVID-19 pandemics. At provincial level, the highest proportion of households experiencing food insufficiency in the week prior to the interview was found in Karnali (3.9%), followed by Province 2 (3.1%), Lumbini (2.9%) and Province 1(2.6%). Household food insufficiency at some point since the start of the COVID-19 lockdown shows the same pattern- 21 and 20.6 percent of households reporting inadequate quantity of food in Karnali and Province 2 respectively, followed by Lumbini (16.8%) and Bagmati province (13.3%).

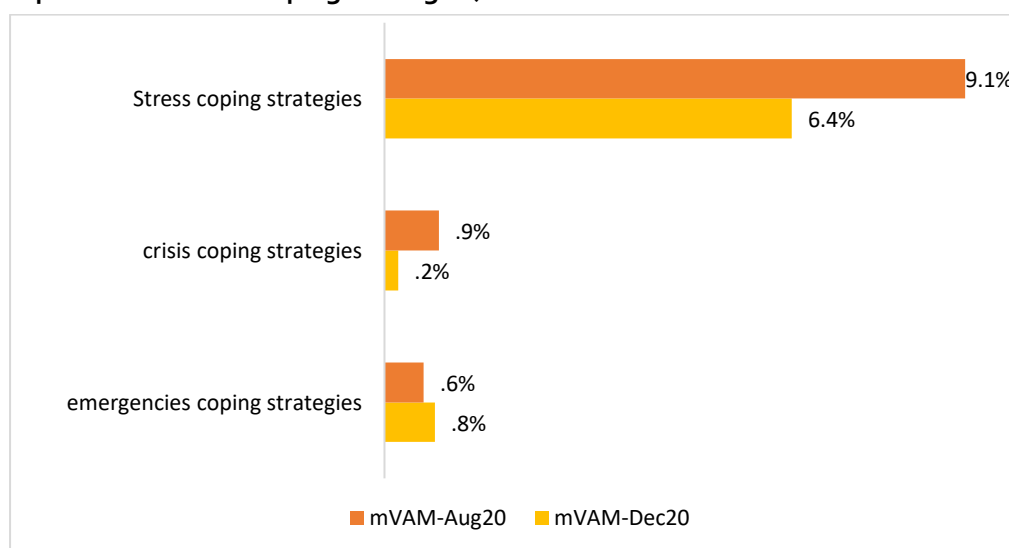
In terms of the reported reasons for experiencing food scarcity among those who reported food scarcity, having no money to buy food was the most commonly reported reason (by nearly 50 percent of households), followed by inability to access markets or grocery stores (12.9%) and shortage of food in markets(11.7%) (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)⁶ 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 week prior to the interview and second in the last 30 days.

Overall, proportion of households adopting at least one coping strategy to address food shortages during one week before the interview was taken was nominal. The low prevalence detected in December 2020 compared to August and April 2020 is likely a result of the combination of the recent summer crops harvest, improved market access in terms of supply and physical access to feather roads and COVID-19 assistance from the government and non-government organizations.

Figure 5: Livelihood coping strategies adopted by the households (among the 7.9 percent that reported livelihood coping strategies)



⁶ rCSI measures the frequency and severity of the behaviour households engage in when faced with shortage of food.

With the longer recall period- the past 30 days since the interview- relatively higher proportion of household- 7.4 percent- reported to adopt at least one coping strategy. Stress coping strategies such as borrowing money, selling household unproductive and other household assets was adopted by 6.4 percent of households, followed by emergency coping strategies such as selling last female animal, or selling land and house (0.8%) and crisis coping strategies such as harvesting immature crops and selling productive assets (0.2%)(see Figure 5).

Diet quality of children between 6 and 23 months of age

Minimum dietary diversity (MDD), a proxy indicator to measure the dietary quality of children between 6 to 23 months of age for adequate micronutrient density of foods, measures the consumption of diversified foods. Globally more than two thirds of malnutrition related child deaths are associated with inappropriate feeding practices during the first two years of life⁷. 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 454 children were reported to be aged between 6-23 months, and of these 432 children were breastfed.

Overall, 42.7 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 province (53.6%), followed by Sudurpaschim (42.6%) and Gandaki (42.5%). In comparison, based on the 2020 Nepal Multiple Indicator Cluster Survey (2019⁸), 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 Surveys conducted in April and August 2020, 45.9 and 43.1 percent of children aged 6-23 months did not meet the minimum recommended dietary diversity respectively.

Looking at the change in breastfeeding practices, a majority of respondents reported no change in breastfeeding practice (83.7%), while 4.2 percent reported breastfeeding more often than usual, 7.2 percent reported less often, and 4.9 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 related to food access – focusing on sources of food consumption and household 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 findings from the survey show that 62.7 percent of households reported food stock while 37.3 percent did not have food stock at all (see Figure 6). In terms of stock duration, 30.5 percent of households had more than a month-worth of stock, 12.3 percent one month-worth of stock and 9.9 percent reported having food stock for 2-3 weeks as shown in Figure 6.

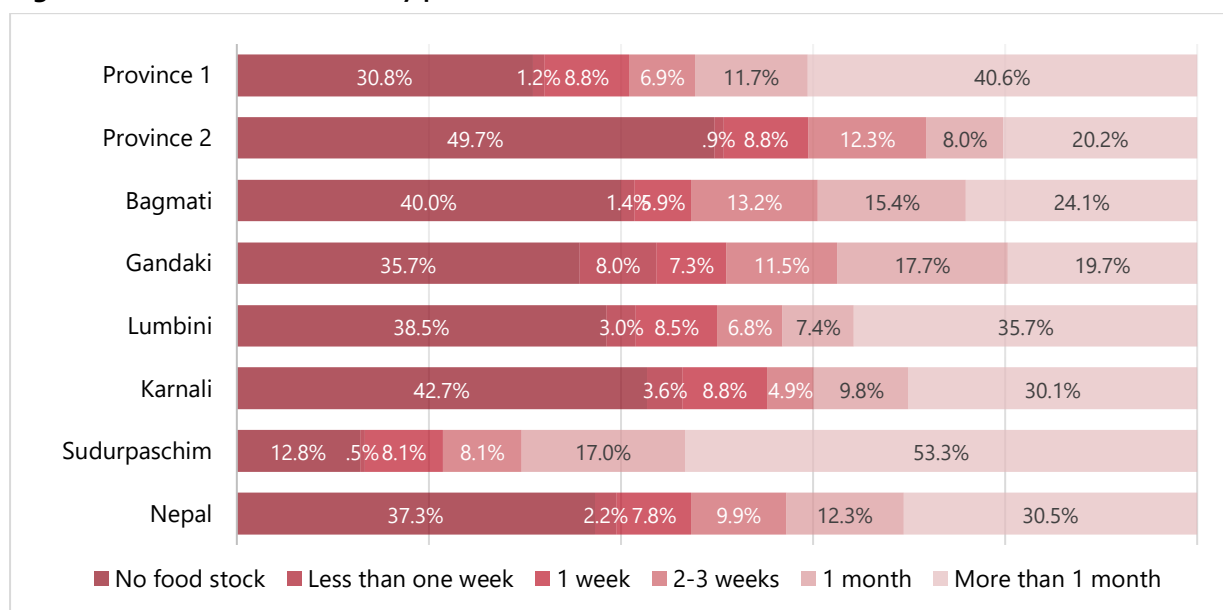
At provincial level, the highest portion of households reporting no food stocks were in Province 2 (49.7%), followed by Karnali (42.7%) and Bagmati (40%). While normally household food stocks are relatively higher in Sudurpaschim and Province 1, the survey indicates that food stock seems to be high in provinces where the major source of food is own production while

⁷ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5639776/pdf/12939_2017_Article_680.pdf

⁸ https://www.unicef.org/nepal/media/9076/file/NMICS_2019_-_Key_findings.pdf

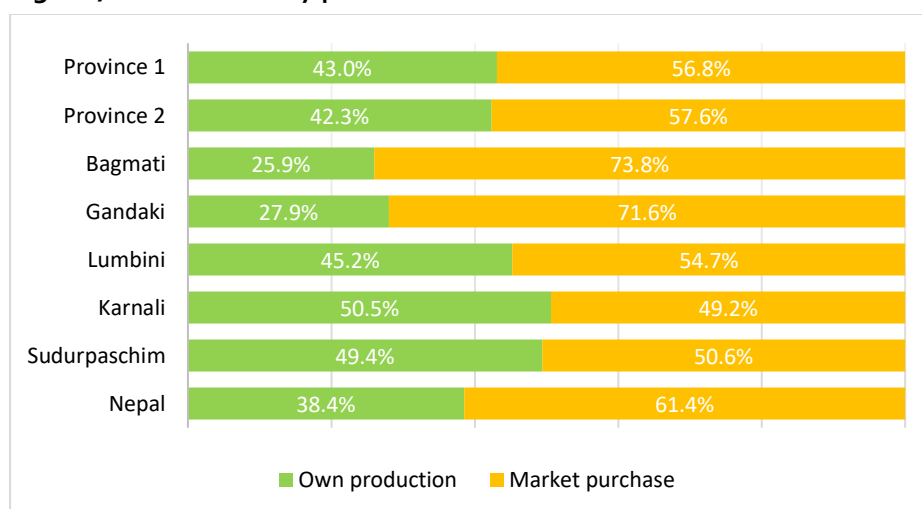
provinces relying more on market purchase for household consumption have relatively lower food stock at home.

Figure 6: Food stock duration by province



In regard to the major sources of food for household consumption, at national level, 61.4 percent of respondents reported acquiring food through market purchase, while only 38.4 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 provinces where urban inhabitants are higher. For example, 73.8 percent of households reported to source food through market purchase in Bagmati, 71.6 percent in Gandaki and 57.6 percent in Province 2. Own production as food source was found to be more common in provinces that are relatively remote and/or largely rural, depending on agriculture-based livelihoods, such as Karnali (50.5%) and Sudurpaschim (49.4%) and Lumbini (45.2%).

Figure 7: Food source by province



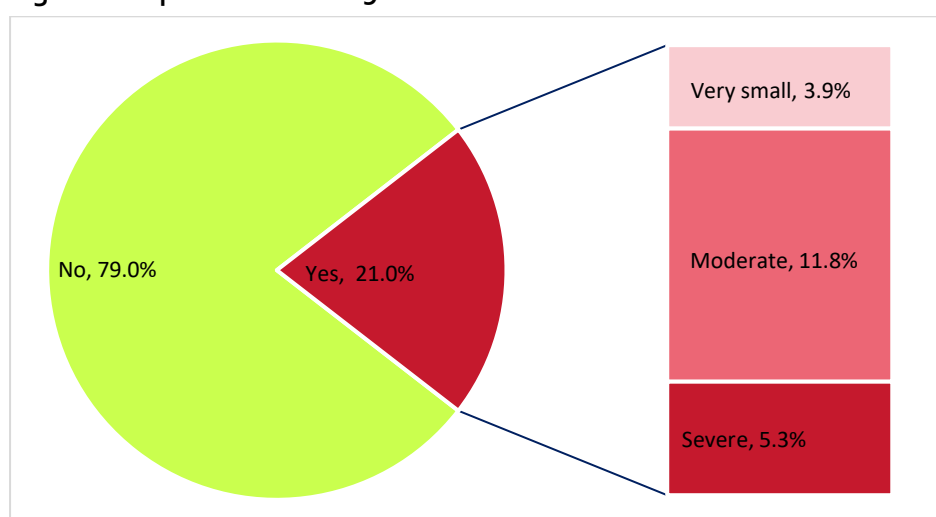
Given that 61.4 percent of Nepalese households rely on market purchase to source food for their consumption, food access is critical for ensuring their food security.

COVID-19 Impact on Livelihoods and Income

One of the major concerns among the researchers, policy makers and development community is the impact of COVID-19 on livelihoods and income sources. Livelihoods 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 provided valuable insights into the impact of COVID-19 pandemic on livelihoods and food security, particularly when combined with the current food security status described earlier.

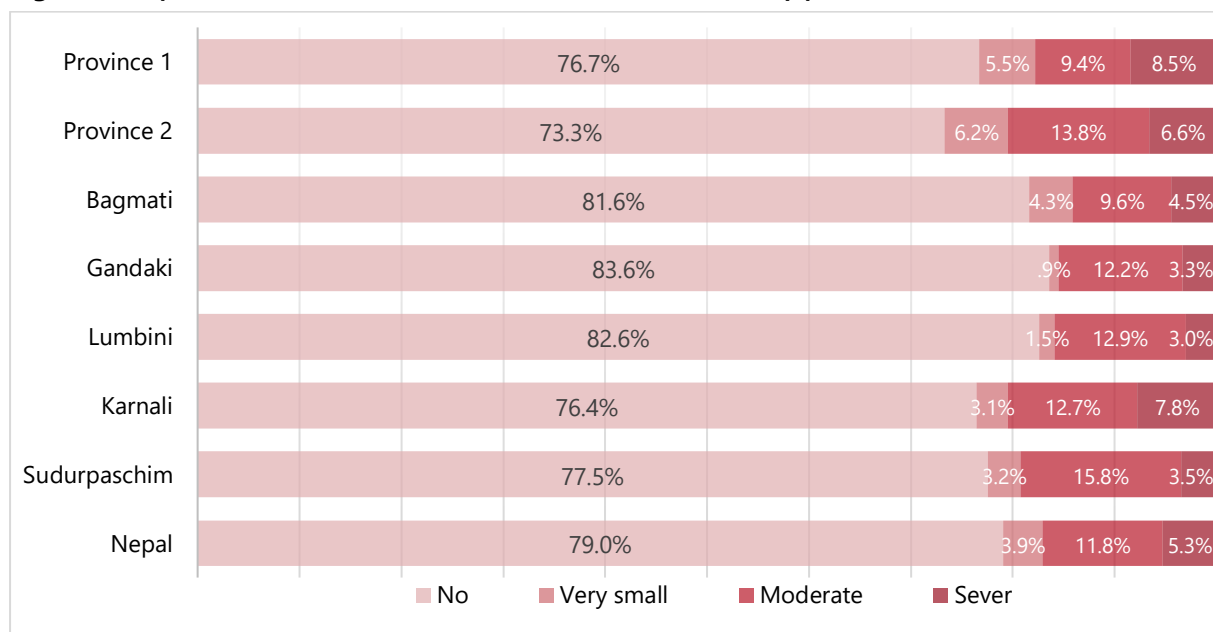
At national level, 21 percent of households reported a reduction in income in the last 3 months as presented in Figure 8. A severe loss in income was reported by 5.3 percent of households, nearly 12 percent of households reported a moderate reduction, and a small proportion of households (3.9%) noted a slight reduction.

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



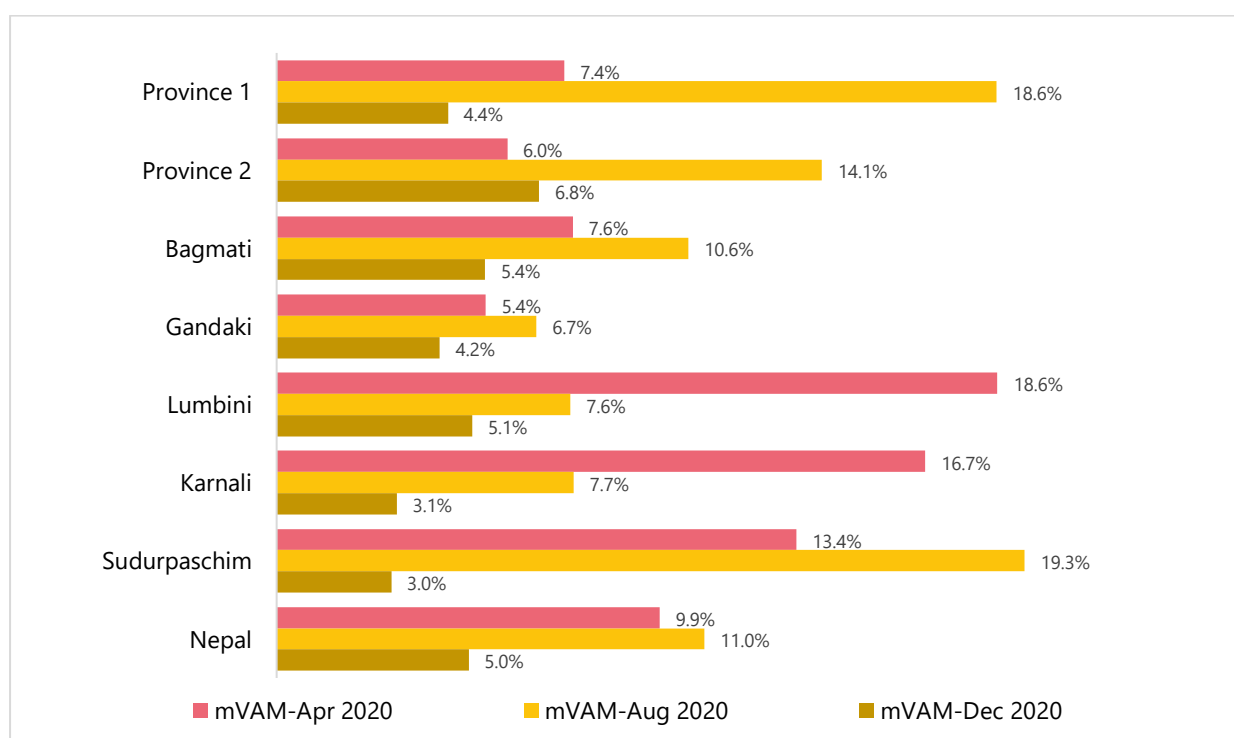
At provincial level, the highest proportion of respondents reporting reduction in income caused by the COVID-19 crisis was in Province 2 (27%), followed by Karnali (24%), Province 1 (23%) and Sudurpaschim (22%). On the other hand, the least affected province was Gandaki, with 16 percent of households reporting a reduction in income, followed by Lumbini province (17%). The overall proportion of households reporting income loss decreased significantly by 10.2 percent in December compared to August and by 10.8 percent compared to April 2020. Proportion of households reporting severe (5.3%) and moderate (11.8%) income loss also declined in December compared to August 2020 (severe 11.1%; moderate 16.5%). This indicates that the households are gradually recovering from impact of the COVID-19 crisis with the ease of COVID-19 related restrictions, improvement of market functioning and transportation services and gradual recovery of economy. Nevertheless, certain livelihoods remain severely affected, and with the prolonged secondary impact of the crisis, their food and livelihood security can further deteriorate.

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



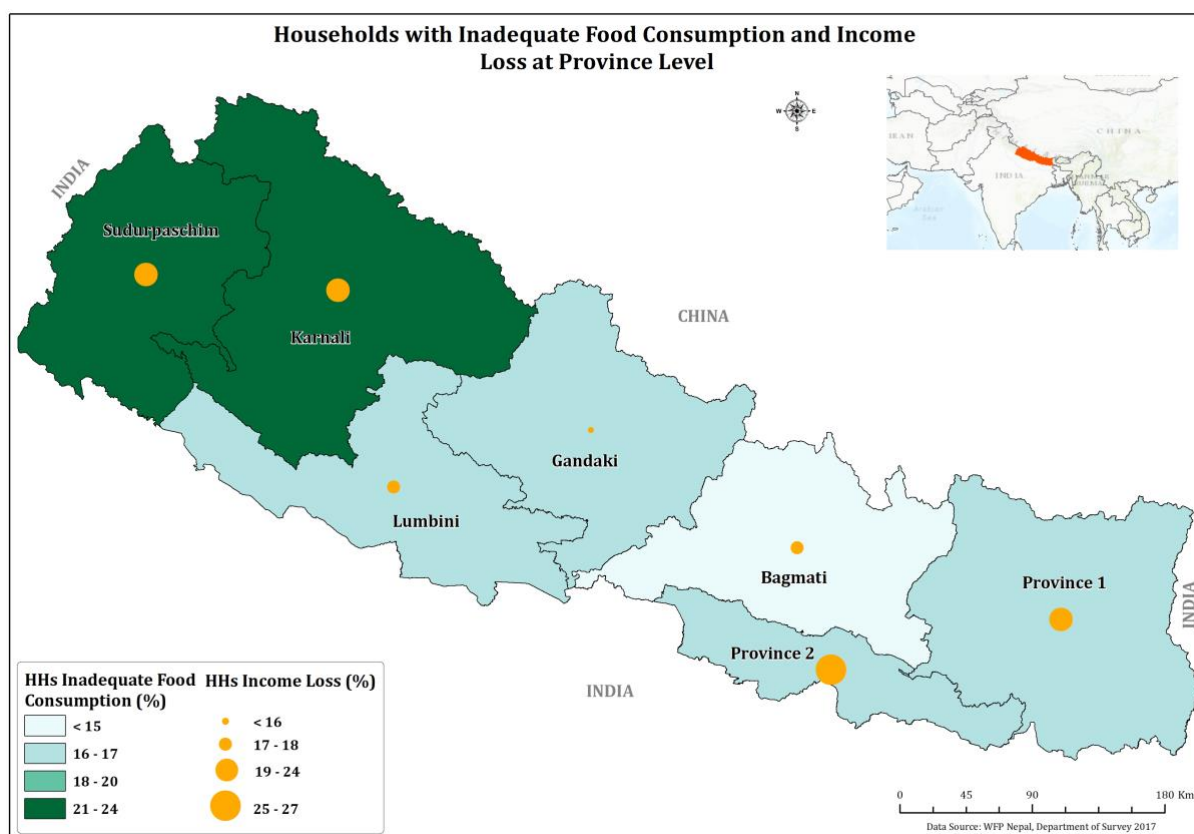
At national level, 5 percent of households reported losing at least one source of income in the last 3 months- about 6 percent less compared to August 2020. At provincial level, job loss was relatively higher in Province 2, with 6.8 percent of interviewed households reporting job loss, 5.4 percent in Bagmati, and 5.1 percent in Lumbini, while loss of livelihood source was the lowest in Sudurpaschim province (3%).

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



In line with income reduction, overall job loss also showed a decrease in December, compared to August and April 2020. At provincial level, significantly lower proportion of households reported income reduction in Sudurpaschim and Province 1 in December 2020, compared to August and April 2020. The only province where a slight increase in the proportion of households reporting income reduction was observed was in Province 2 as presented in Figure 10.

Despite the observed improvements, COVID-19 crisis continues to negatively impact livelihoods of Nepalese households. The prolonged exposure can lead to an increasing pressure on households' ability to access food, and greater risk of vulnerability. While there might be fewer households that continue to be negatively affected by the crisis, their capacity to respond to shock and overall resilience is at risk. As such, appropriate targeting and identification of these household will be critical to mitigate the impact of the crisis.



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

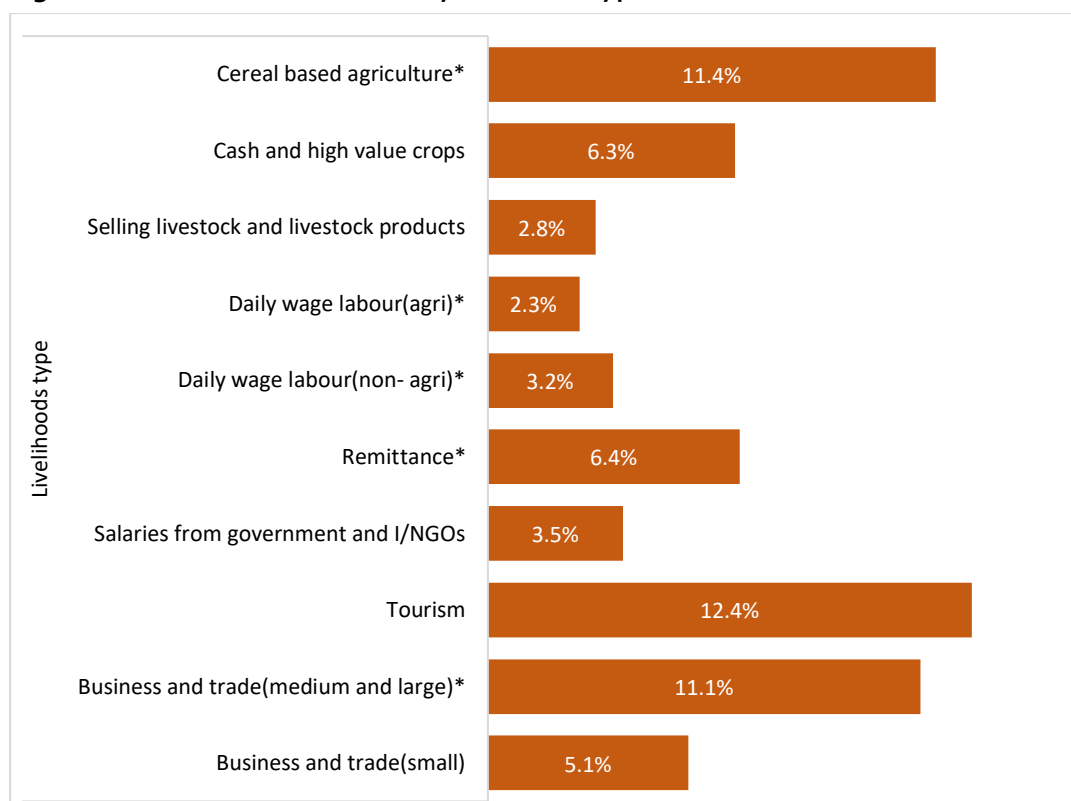
As indicated in the previous section, with the COVID-19 crisis prolonged impact on food security and livelihoods, it is important to understand the profiles of relatively more affected households. Following the first and second rounds of the survey, the impact of the COVID-19 crisis on specific livelihoods and household types was examined in this round as well, with a view to assess which types of households have been relatively more influenced by the COVID-19 situation.

Livelihoods and income

In line with the April and August 2020 rounds, certain types of livelihoods and households were more affected by the COVID-19 crisis. The loss of livelihoods was most prevalent among people engaged in tourism sector (12.4%), and daily wage labourers, mainly in the farm (11.4%) and non-farm sector (11.1%), followed by households dependent on sale of livestock and livestock products (6.3%) as shown in Figure 11. Similarly, job loss was relatively more common for households that had a member of the family working abroad (or households with a migrant worker) (8.3%) compared to households without a migrant worker (4.3%).

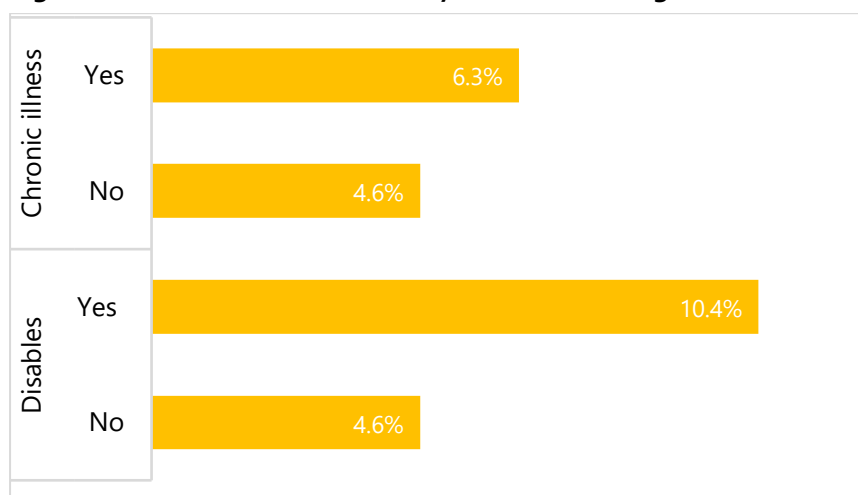
Households with a disabled household member were more likely to experience job loss (10.4%), compared to households without a disabled person (4.6 %). Likewise, relatively higher proportion of households with chronically ill member reported job loss (6.3%) compared to households without a chronically ill household member (4.6%).

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

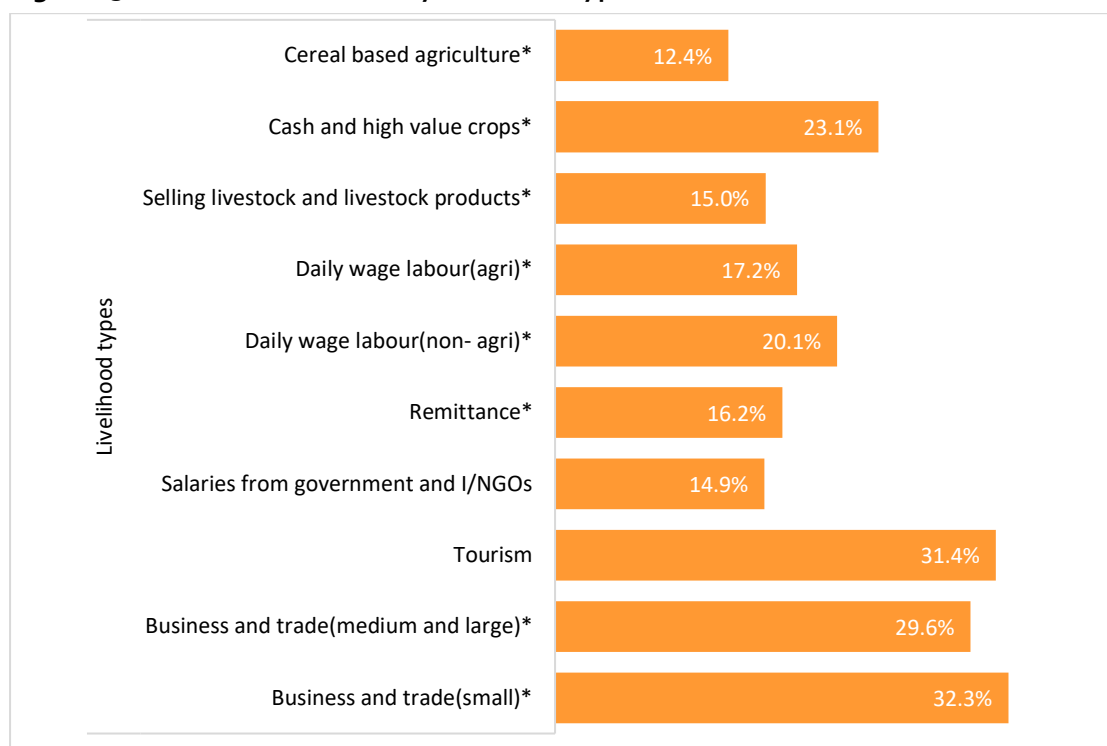


Reduction in income was also more prevalent among certain livelihood types- mainly in trade and business sectors, and tourism. For example, the largest proportion of livelihoods that encountered some reduction in income was found among business and trade (small), with 32.3 percent reporting a reduction in income, followed by tourism (31.4%), business and trade (medium and large) (29.6%) and cash and high value crops (23.1%).

Income reduction was found to be more severe for households with relatively more volatile livelihood activities as well as the sectors highly affected by COVID-19 crisis. Out of those who reported reduction in income, tourism sector was the most severely affected, with more than 79 percent reporting severe income reduction due to COVID-19 pandemic, followed by daily wage labourers in the farm sector (57.3), sale of livestock and livestock products (43.5%), and daily wage labourers in the off-farm sector & cash and high value crops (37.2 as shown in Figure 14.

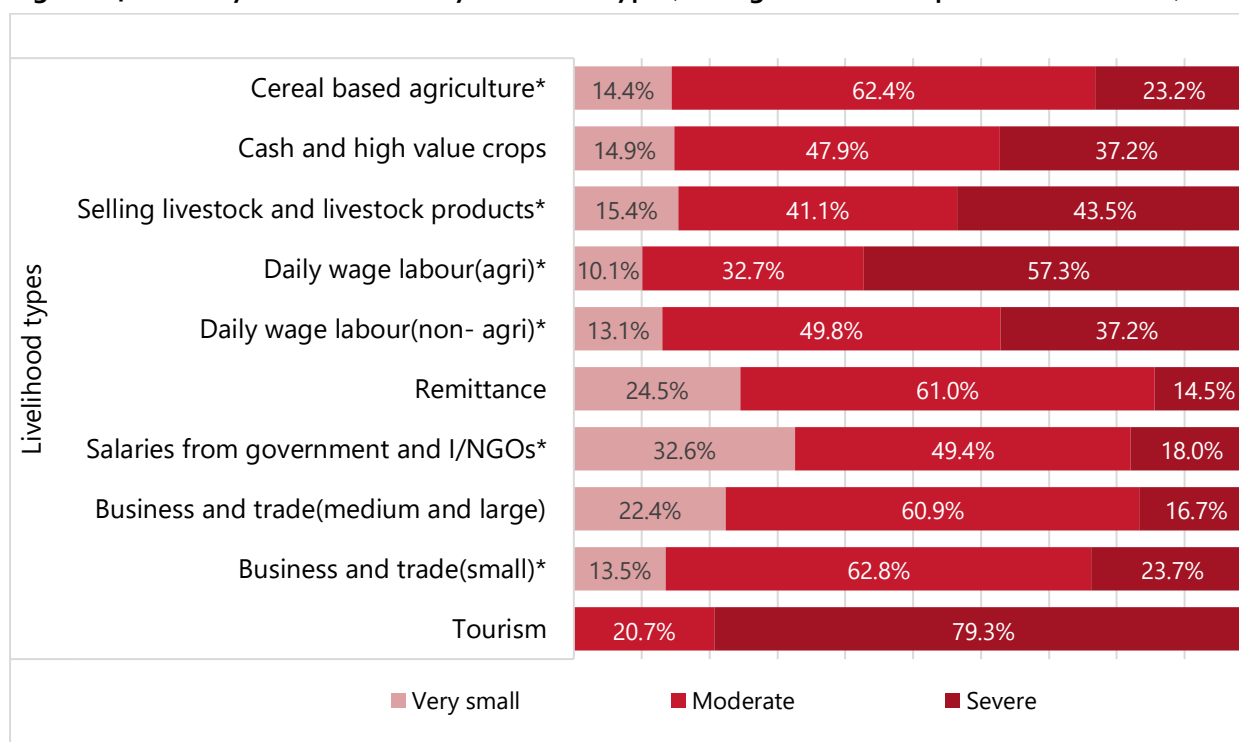
Reduction in income was relatively more common among households with a disabled member (29.9%) than for households without disabled member (20.4%). Similar to job loss, income reduction was also more prevalent among households with chronically ill member (25.1%) than for households without a chronically ill member (19.9%) as presented in Figure 15.

Figure 13: Reduction in income by livelihood type



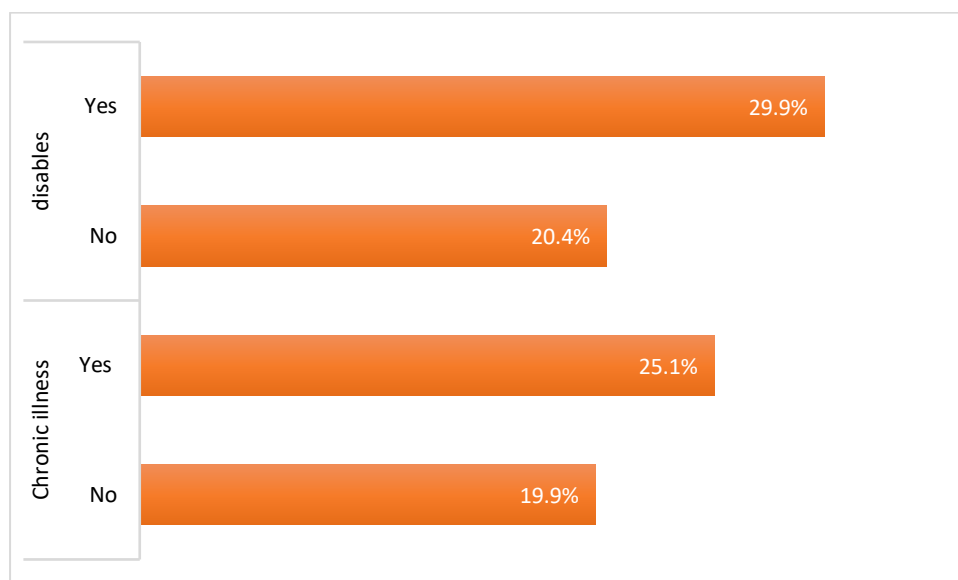
* Livelihood types that showed a statistically significant association with income reduction

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



* 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)



Despite the observed improvement the December 2020 Survey confirms that the COVID-19 crisis continues to put pressure on livelihoods and incomes of Nepalese households. The findings from the three rounds of the household survey confirm certain households have been consistently more affected by the COVID-19 crisis since the beginning of the crisis. During the three rounds, reductions in income and loss of livelihood sources were more common for households with volatile income sources but also traditionally more stable livelihoods. Combined with the pre-existing vulnerabilities, this can have a detrimental impact on these 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

The COVID-19 crisis has negatively affected the lives and livelihoods of the people, increasing the risk of food insecurity for more household and potentially acute food insecurity. As captured in the April and August 2020 surveys, certain types of households were more affected by the COVID-19 crisis in terms of their food security status and livelihoods. In order to get better insights of the impact on different sectors and household types, and in turn better direct response options, it is important to examine the household profiles of relatively more affected households.

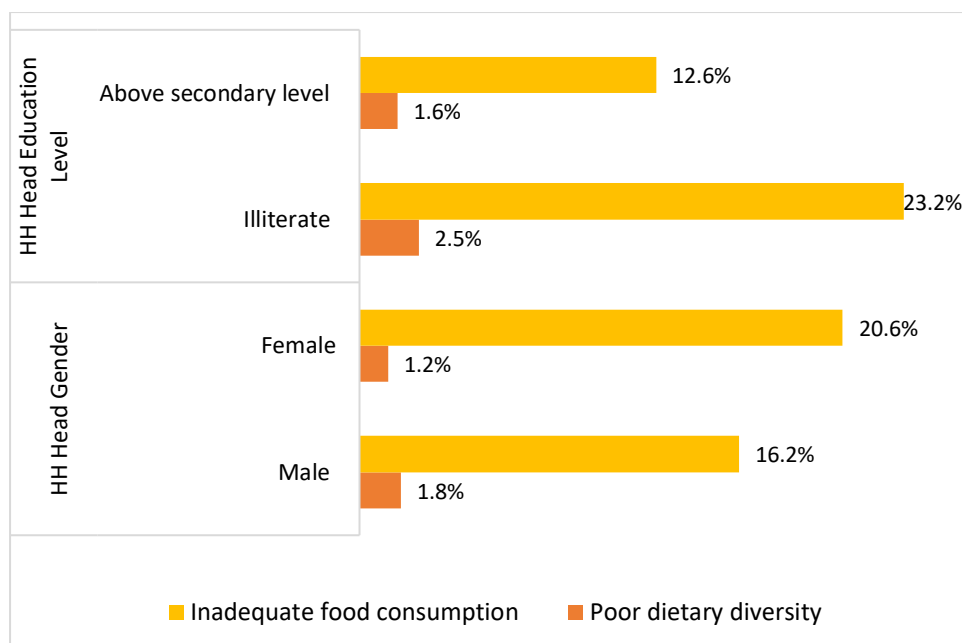
In terms of the livelihood profile, food insecurity was more prevalent for certain types of income sources and less diversified livelihoods. In terms of the socio-economic characteristics, households with low education levels (of the household head), with a household member with disability, chronically ill household member and female-headed households were found to be more food insecure. Moreover, a higher proportion of households that reported job loss and some reduction in income had inadequate food consumption compared to those that reported no job loss and no reduction in income.

Education level of the household-head again presented a strong association with household food security status. Inadequate food consumption was more common for households with an illiterate household head (23 percent) while it was only 12.6 percent for those with secondary and higher education level as shown in Figure 16. Similarly, dietary diversity shows a similar pattern - poor dietary diversity was prevalent among households with an illiterate household head (2.5%) compared to households with at least secondary education level (1.6%).

Likewise, female-headed households were found to be more food insecure than male-headed households. Nearly 21 percent of female-headed households had inadequate food consumption compared to male headed household 16.2. However, there was a nominal difference in dietary diversity with marginally higher proportion of poor dietary diversity in male-headed household (1.8%) compared to the female-headed household (1.2%).

The findings also show a variation in the prevalence of food insecurity among vulnerable households. For example, the proportion of food insecurity in the households with a disabled member was 23.2 percent, compared to households without a disabled member (16.4%). However, households with a chronically ill member had relatively lower proportion of inadequate food consumption (15.4%), compared to without chronically ill member (17.2%).

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



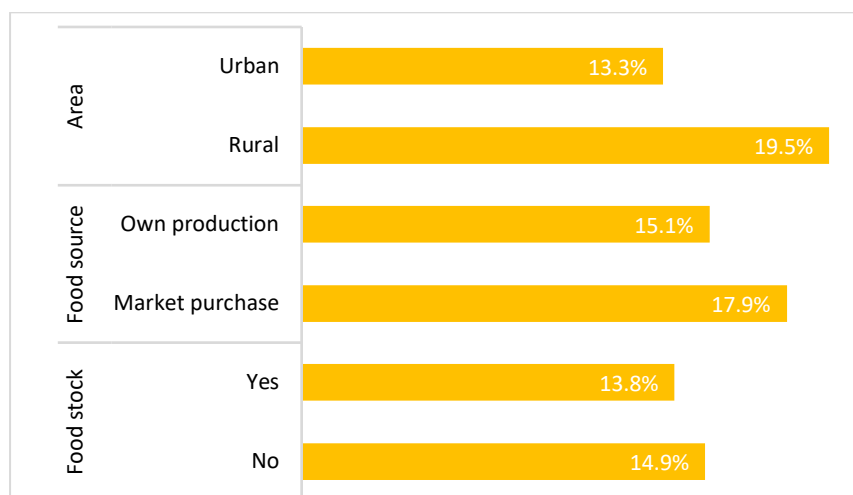
Moreover, the proportion of food insecurity was higher in rural areas (19.5%) compared to households residing in urban areas (13.3%), as shown in Figure 17.

While the type of food source for household consumption is one of the key indicators to assess food security situation, it shows a relatively smaller impact on household food security status. The prevalence of food insecurity, as measured by inadequate food consumption, was relatively higher among households that source food through market purchase (17.9%) compared to households that rely on own production (15.1%).

Similarly, only a marginal difference was observed for households who reported to have food stock (13.8%), compared to households without any food stocks (14.9%). While in the April

2020 survey this difference was higher, already in the August round the difference was small as observed in December 2020. This pattern is in accordance with the overall improvement in the food security situation in Nepal and gradual return to the pre-COVID-19 crisis conditions. Additionally, given that the type of food normally used for food stocks is mainly cereals, households with and without food stocks might still have similarly inadequate food consumption. Even with cereal food stock, their overall diet might not be sufficiently diversified, hence resulting in poor or borderline food consumption.

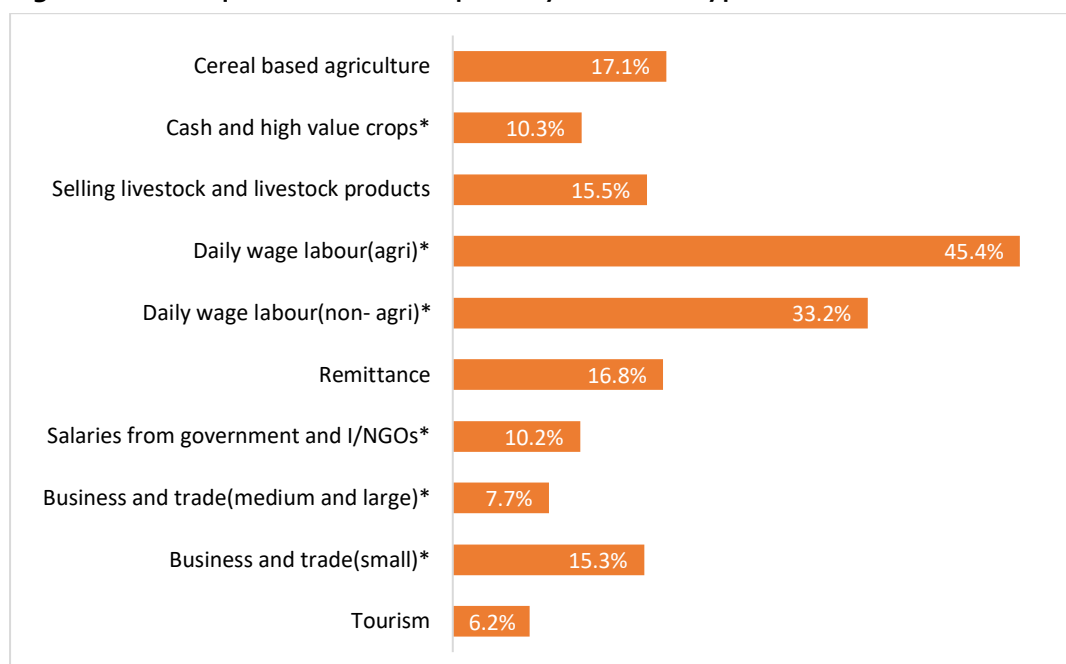
Figure 17: Households with inadequate food consumption by type of food source, food stock and area



In terms of livelihoods, inadequate food consumption was relatively more prevalent among households dependent on a less sustainable and volatile livelihoods, compared to households with more sustainable livelihoods such as salaries from government and non-government sectors, trade and business (see Figure 18).

The most affected livelihoods were daily wage labour both farm and non-farm sectors, as based on the data collected in the December survey, there is an association for these livelihoods with a higher prevalence of inadequate food consumption. The highest proportion of households with inadequate food consumption was found among daily wage labourers (in agriculture 45.4% and non-agriculture 33.2%), followed by cereal-based agriculture (17.1%), households receiving remittances (16.8%) and selling livestock and livestock products (15.5%).

Figure 18: Inadequate food consumption by livelihood type



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

The December survey confirms that the COVID-19 crisis has continued to negatively impact lives and livelihoods of the Nepalese households. The results show that relatively more households that experienced a loss of income source were food insecure, compared to households that did not report job loss as shown in Figure 19. Prevalence of food insecurity was 41.7 percent among households that reported job loss of at least one household member compared to 15.5 percent of reporting no job loss. This indicates a significant impact of COVID-19 crisis on household food adequacy and income source. Likewise, a reduction in income due to COVID-19 crisis was strongly associated with higher prevalence of food insecurity. Around 31.1 percent of households who experienced some reduction in income had inadequate food consumption, while 15.1 percent of households that did not experience reduction in income consumed an inadequate diet.

As the COVID-19 crisis affected many spheres of the society, it has also influence household food sufficiency. The results show that 11.9 percent of households that reported job loss due to the COVID-19 crisis had insufficient food stock at home compared to 2.2 percent of households that did not report job loss (see Figure 20). Similarly, 6.7 percent of households that reported a reduction in income had insufficient food stocks compared to 1.6 percent of households who did report reduction in income.

Figure 19: Inadequate food consumption by COVID-19 impact on livelihoods

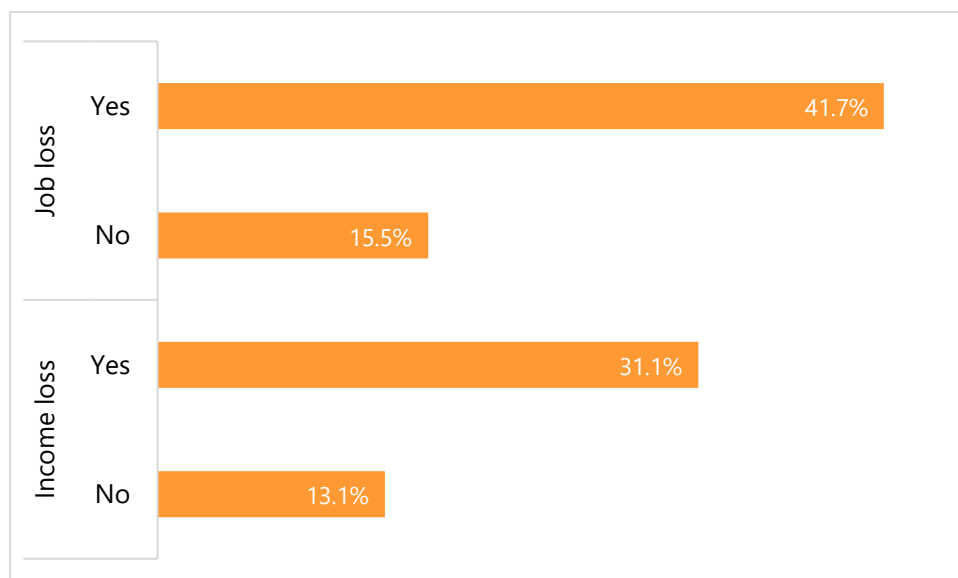
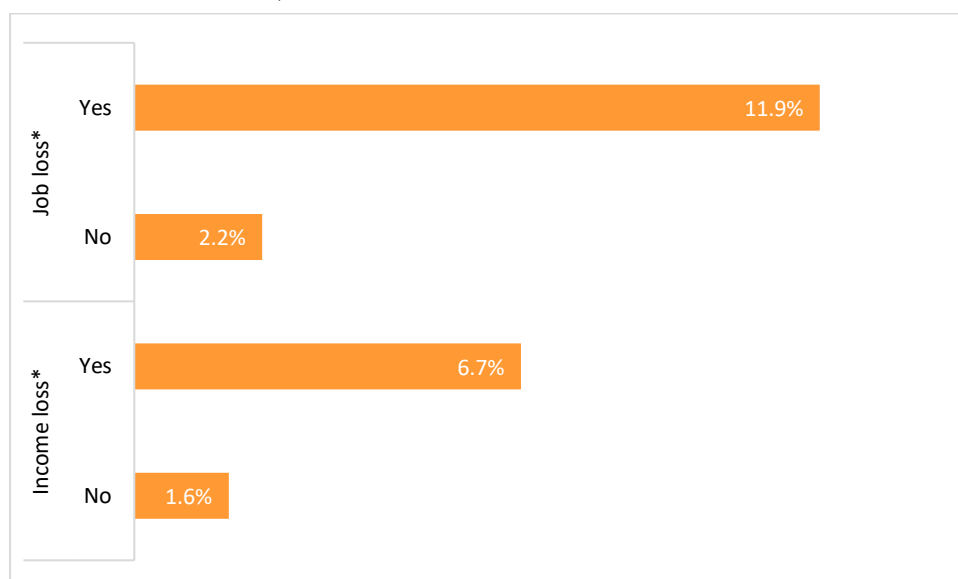


Figure 20: Household food insufficiency by the loss of job and income (among those that reported an insufficient food stock)



* Household food insufficiency showed a statistically significant association with job loss and income reduction

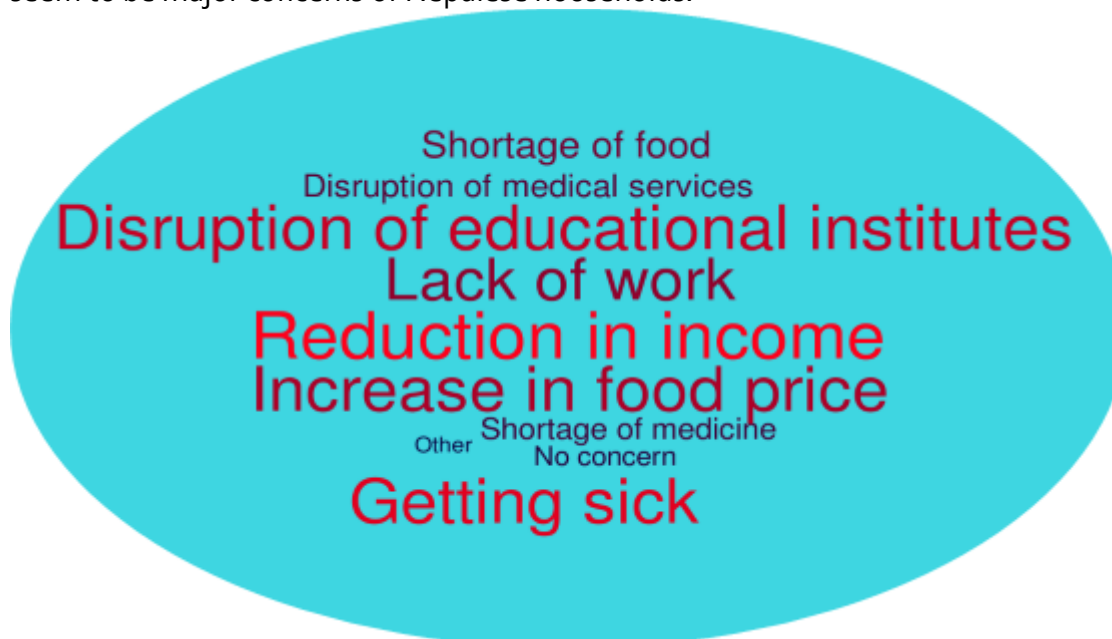
Despite the gradual improvements regarding the COVID-19 crisis, the aggravated conditions persist, and continue to affect Nepalese households. The impact COVID-19 crisis on job loss and income reduction remains notable, and can further put pressure on income generation and livelihoods. Such prolonged exposure to adversary conditions can in turn can lead to further risk of vulnerability and food insecurity in Nepal.

Moreover, the increased level of food stock was primarily a result of the harvest of summer crops during the survey period that may not ensure the sufficient stock of foods for a longer

period. Food stock may deplete with the end of harvest season and start of lean season that may lead to the deterioration of food security situation. In this context, adequate preparedness and response plan for a possible second COVID-19 pandemic outbreak will be critical.

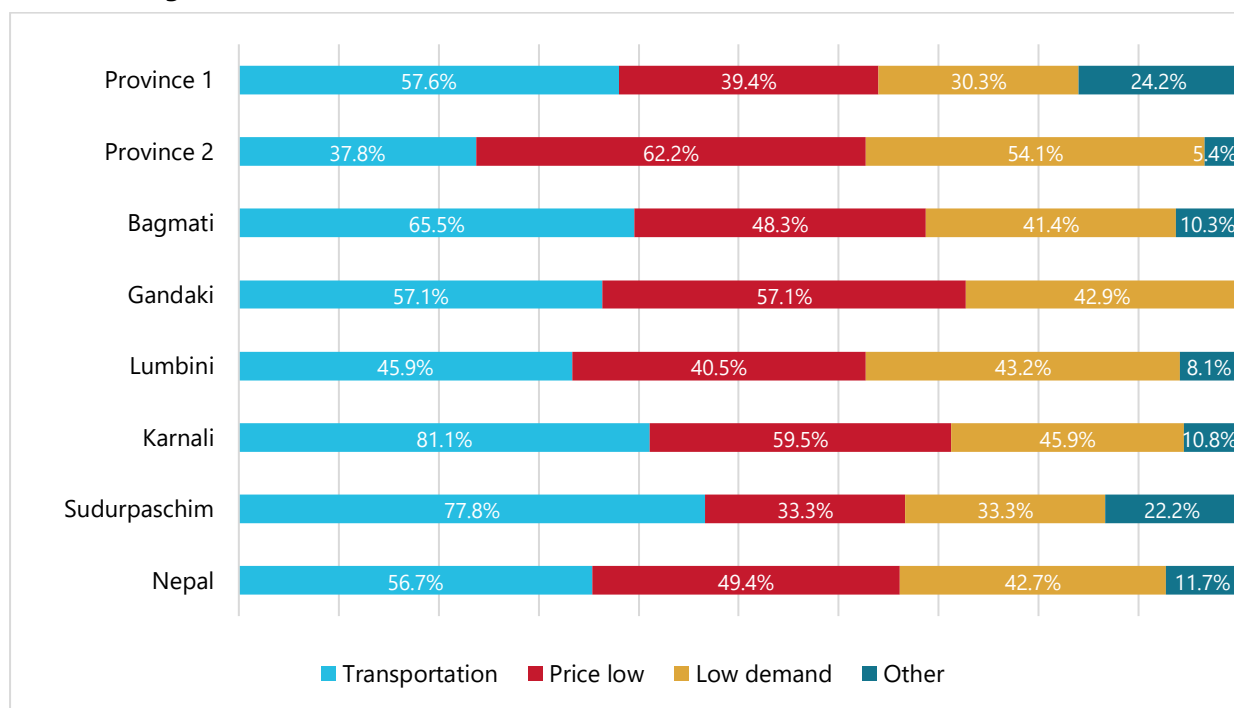
Major Concerns during the COVID-19 Crisis

The question was asked about the major concerns related to the COVID-19 pandemic to the respondents, as the COVID-19 pandemic has widespread impact on various sectors. The major concern reported by the respondents was reduction in income (17.7%), followed by getting sick (17.3%), disruption of education (16.6%), increase in food price (16.5%), and lack of work opportunities (14.8%). The findings indicate that income reduction together in limited employment opportunities, disruption of educational institutions and health related problems seem to be major concerns of Nepalese households.



The survey also assessed the key issues or problems caused by the COVID-19 crisis for households who rely on agriculture related activities as their primary livelihood. Overall, nearly 40 percent of the total 4,526 surveyed households reported agriculture as their primary livelihood sources. Out of these, around 11 percent encountered problems related to marketing of their products (See Figure 21). Among those who reported these problems, 56.7 percent considered transportation of goods, mainly vegetables and cash crops as a key problem, followed by low price of their products (49.4%) and low demand in the markets (42.7%). At provincial level, the problem of transporting goods from farm to market was found to be high in the Karnali province (81.1%), followed by Sudurpaschim (77.8%) and Bagmati (65.5%). Meanwhile most farmers (62.2%) in Province 2 reported decreased prices for their products as the key concerns. The reported problems related to low demand were more common in Province 2 (54.1%), followed by Karnali (45.9%). Around 12 percent of households mentioned that other problems such as diseases, lack of fertilizers and limited irrigation facilities were also hindering the production and 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

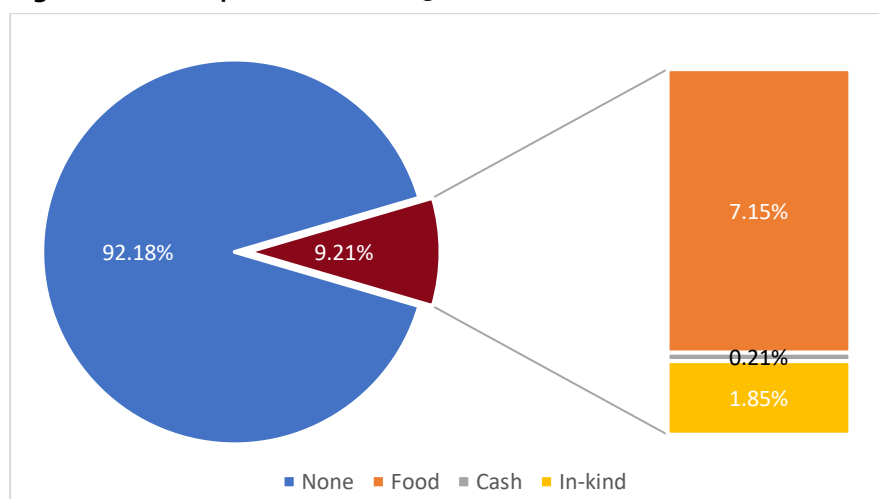


Support for the COVID-19 Crisis

Appropriate response aimed at the primary medical and secondary socio-economic crisis is critical for minimizing risk of COVID-19 pandemic, and this for saving lives and livelihoods of the Nepalese households. The Government of Nepal as well as other non-governmental organizations and individuals have provided assistance to the most-affected households after the first lockdown of COVID-19 that started in March 2020.

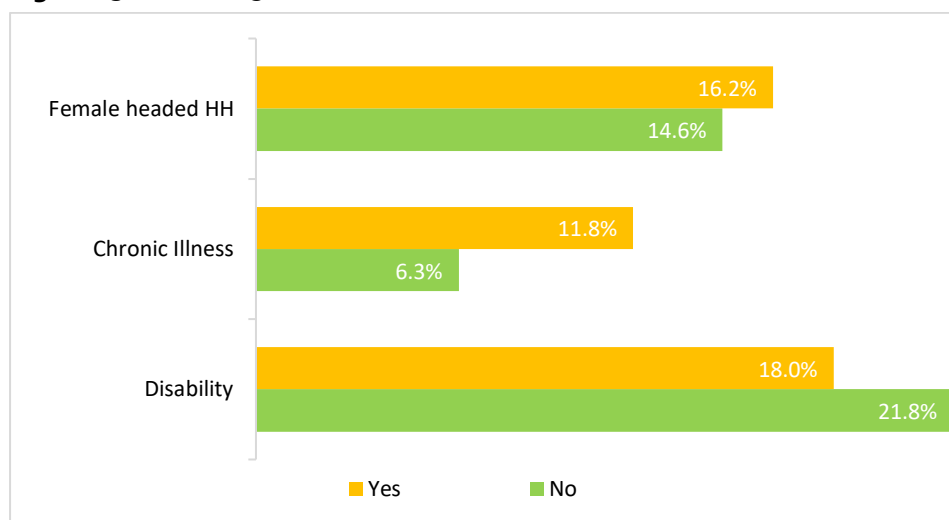
In line with the earlier surveys, about 9 percent of the interviewed households reported to receive some form of COVID-19 assistance either from the government or from non-governmental organizations during past 3 months since the survey was taken (See Figure 22). Food was the most common form of assistance as reported by 7.1 percent, followed by in-kind support (1.9%) such as sanitation, masks or other health related materials, while cash assistance was nominal.

Figure 22: The reported COVID-19 assistance



Those households received some form of COVID-19 assistance were relatively more vulnerable and food insecure, with 28.3 percent of households consuming an inadequate diet, compared to 15.1 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-existing conditions, such as chronic illness and female-headed households as shown in Figure 23.

Figure 23: COVID-19 assistance household characteristics



III. Household Characteristics

The nationally representative mVAM household survey started to conduct after COVID-19 pandemic lockdown with the aim of assessing the impact of COVID-19 crisis on the food security and livelihoods. This is a third round of survey conducted in the second half of December 2020; a total of 4,526 random respondents interviewed. The average household size of the sampled household is 5.04, ranging from the lowest in Bagmati Province (4.67) to the highest in Karnali Province (5.69). The average age of respondents is 33 years old, with the youngest being 18 years old to the oldest, at 93 years of age. Out of the total 4,526 interviewed,

39.7 percent of respondents are female, while female-headed households accounted for 14.7 percent of total sampled households.

The majority of the respondents are from rural areas (58.7%) and the remaining from urban areas. About 25 percent of the household heads in the survey had a secondary education, followed by those with illiterate (21%), primary (16.5%) and nonformal literate (13.5%) level of education. A higher proportion of female-headed households (37.1%) were illiterate, compared to male-headed households (18.4%).

Nearly 7 percent of the households had at least one disabled person in the household, with the highest rate in Karnali(11.4%), followed by Sudurpaschim (9.6%), while Lumbini province had the lowest rate of disabled household members (4.7%), followed by Bagmati (5.7%) and Province 2 (6.1%). More than 21 percent of the surveyed households have at least one member with chronic illness, with the highest prevalence in Bagmati (26.7%), followed by Province 2 and Lumbini (22.9%). Nearly 16 percent of surveyed households have at least one migrant member. Out of which, the proportion of premature returnees is only 3.2 percent, while 10.4 percent of households were received remittance from a migrant member during the last 90 days since the date these households were interviewed.

More than 20 percent of surveyed households reported at least one member in the household being sick, of which 75 percent sought a COVID-19 test. Out of total COVID-19 tests, 15.4 percent of were COVID-19 positive cases.

It is noteworthy to highlight that more than 98 percent of surveyed households have at least toilet access of some kind and more than 97 percent respondents reported that they observed good hand washing practices. This could be due to increased awareness of hand wash practices caused by COVID-19 pandemic.

Nearly 30 percent of respondents reported safety risks related to access to markets, hospitals, clinics, and healthcare centers for women and girls, 11 percent higher than the last survey conducted in August and 17 percent higher than the last survey conducted in April 2020. The highest proportion of the reported safety risks was found in Gandaki (49.2%), followed by Bagmati province (48.3%) and Province 2 (33.7%). More than 27 percent of respondents had some kinds of psychological stress to COVID-19 crisis, in which the highest proportion of the reported psychological stress was observed in Province 2 (38.2%), followed by Bagmati (31.6%) and Lumbini (29.8%).

Table 1: Household socio-economic characteristics

Province	Ave. Age	Average HHs Size	Gender		Vulnerable households		Absentee HHs	Remittance recipient HHs	COVID support recipient HHs
			Female	Male	Disable	Chronic ill			
Province 1	35.07	4.87	18.3%	81.5%	6.8%	20.0%	10.9%	9.8%	9.4%
Province 2	32.83	5.64	7.5%	92.5%	6.1%	22.9%	16.3%	15.0%	11.2%
Bagmati	32.26	4.67	15.1%	84.8%	5.7%	26.7%	15.4%	9.8%	5.0%
Gandaki	35.27	4.73	18.4%	81.6%	4.7%	20.0%	27.9%	12.4%	5.3%
Lumbini	33.26	4.97	15.4%	84.6%	7.4%	22.9%	17.9%	10.4%	6.3%
Karnali	34.20	5.69	14.5%	85.5%	11.4%	15.8%	11.7%	6.0%	10.1%
Sudurpaschim	31.83	5.27	15.6%	84.4%	9.6%	8.9%	9.6%	4.2%	17.3%
Nepal	33.37	5.04	14.7%	85.2%	6.8%	21.5%	15.7%	10.4%	8.4%

IV. Methodology

The information and data presented in this report was gathered from a nationally representative household survey conducted in the second half of December 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 4,526 households were interviewed, with an average success rate of 12.3 percent (the ratio of successfully completed surveys to total dialed numbers, with 36,530 total dialed numbers). The success rate of telephone interviews ranges from the lowest at 6.4 percent in Mechi to the highest at 27.8 percent in Mahakali zone, followed by Dhaulagiri and Janakpur (19.7%) zones. The non-response and dead-line 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 security⁹. 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.

⁹ 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.

Table 2: Sample size by province in December

Province	Number of interviewed households	Target sample
Province 1	769	769
Province 2	738	722
Bagmati	985	985
Gandaki	451	448
Lumbini	792	686
Karnali	386	385
Sudurpaschim	405	405
Total	4,526	4,400

Table 3: Sample size by province in April and August 2020

Province Name	Number of interviewed households in April	Number of interviewed households in August
Province 1	769	786
Province 2	673	711
Bagmati	1,022	1,083
Gandaki	500	492
Province 5	812	804
Karnali	251	339
Sudurpaschim	360	399
Total	4,416	4,614

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^[1]. 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.

Table 3: Thresholds for food consumption groups

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

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^[2]. 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^[3] (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 subset 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 (LCS¹⁰) 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:

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.

¹⁰https://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp271449.pdf?_ga=2.32997694.1468088556.1601188637-1476716381-1565168719

Annex 3: Test of statistical significance

To assess statistical significance of association between variables of interest in this study, Chi-Square test was conducted¹¹. 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

Annex 4: 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?

¹¹ <https://stats.idre.ucla.edu/other/mult-pkg/whatstat/>

	Province: District: Municipality: Current Location: Urban/Rural
RESPCaste	What is the caste/ethnicity of the respondent?
HHGender	What is the sex of the head of household? 1. Male 2. Female 3. Other
HHEdu	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?
HH15to64	How many members of the household are between 15 and 64 years old?
HHOver64	How many members of the household are above 64 years old?
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 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)
INCJobloss	Have you or a household member lost your job in the last 30 days? 1. Yes 2. No
INCInclloss	Have you or a household 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 yes, what kind?

	<ol style="list-style-type: none"> 1. Senior citizen allowances 2. Single women allowances 3. Disability allowance 4. Endangered ethnic allowance 5. Child protection grant 6. others
INCCovid_support	<p>5. Have you or anyone in your household 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?</p> <ol style="list-style-type: none"> 1. Food 2. Money 3. Kind 4. None
INCCovid_support_organization	<p>5.1 If you receive assistance, from which organization?</p> <ol style="list-style-type: none"> 1. Government 2. Non- government 3. Both
INCCovid_support_specify	<p>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)</p>

ACCESS TO FOOD AND MARKET

VARIABLE NAME	QUESTION
@_1_How_many_time_to_e_One_way_in_minutes	1. How many time to reach the market from your house?(One way in minutes)
HHFood	<p>What is the main source of food for your household? [OPERATOR: DO NOT READ OUT THE RESPONSE OPTION, SELECT THE RESPONSE OPTION THAT BEST FITS THE INFORMATION PROVIDED BY THE RESPONDENT, OTHERWISE SELECT OTHER]</p> <ol style="list-style-type: none"> 1. Own production 2. Market purchase 3. Gift or assistance <p>Other</p>
HHFood_oth	Please specify what is the main source of food for your household?
HHFoodConstr_7D_YN	<p>In the past 7 days, has there been any time when your household did not have sufficient quantities of food needed for the household?</p> <ol style="list-style-type: none"> 1. Yes 2. No
	<p>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]</p>
HHFoodConstr	<p>What was the main reason why your household did not have sufficient quantities of food needed? [OPERATOR: DO NOT READ OUT THE RESPONSE OPTION, SELECT THE RESPONSE OPTION THAT BEST FITS THE INFORMATION PROVIDED BY THE RESPONDENT, OTHERWISE SELECT OTHER]</p> <ol style="list-style-type: none"> 1. Shortage of food in the market \ grocery store 2. Increase in the prices of food 3. No money to buy food 4. No food in the house 5. Unable access the market \ grocery store 6. Markets \ grocery stores are closed 7. Other
HHFoodConstr_oth	<p>Please specify the main reason why your household did not have sufficient quantities of food needed? [OPERATOR: SUMMARIZE THE RESPONSE IN FEW WORDS]</p>
HHStock	<p>Does your household currently have food stock?</p> <ol style="list-style-type: none"> 1. Yes 2. No
HHStockDur	<p>How long do you think the food stock would last?</p> <ol style="list-style-type: none"> 1. Less than one week 2. 1 week 3. 2 - 3 weeks 4. 1 month 5. More than 1 month

FOOD CONSUMPTION SECTION

VARIABLE NAME	QUESTION
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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 6-23 months

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 (Name) ate yesterday during the day or night (whether at home or outside the home). Think about what (Name) ate from the time first he/she woke up yesterday until he/she slept. Did he/she eat anything else? Tell me what it was.	FOOD GROUPS	Examples	Coding
	A. Cereals Grains, roots or tubers	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. Vitamin A-rich plant foods	Pumpkin, carrot, squash, sweet potatoes that are orange inside, mango, papaya, ripe passion fruit, tree tomato,	Yes/ no/ don't know
C. Other fruits or vegetables	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	

DO NOT LIST, CIRCLE ANY ITEMS MENTIONED, AND WRITE 1 IF CONSUMED, 0 IF NOT CONSUMED	D.	Meat, poultry, fish, seafood	Beef, lamb, goat, wild game, pork, chicken, organ meat, dried or fresh fish	Yes/ no/ don't know
	E.	Eggs	Eggs	Yes/ no/ don't know
	F.	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

VARIABLE NAME	QUESTION	SKIP PATTERN
CopStrategy	1. In the last 30 days, there have been times when your household did not have enough money or food to buy food? 1. Yes 2. No	If the response is No -> skip to RESToilet
COPBorrowMoney	1. Did your household borrow money/food from a formal/informal lender (bank, relatives, neighbors etc)? 1. Yes 2. No	
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

VARIABLE NAME	QUESTION	Code
COPREDUCE	1. In the past 7 days, did your household adopt any coping strategies?	1=Yes 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

VARIABLE NAME	QUESTION
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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	5. If yes, did he/she have positive case? 1. Yes 2. No

ADDITIONAL

VARIABLE NAME	QUESTION
RESPWorryRsnFirst	What are is your most important concern (1st, 2nd and 3rd) 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 most important concern 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_o.pdf

^[3] https://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp211058.pdf

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