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## **CDES POLICY BRIEF**

# **Determinants and Dynamics of Food Insecurity During COVID-19**

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# DETERMINANTS AND DYNAMICS OF FOOD INSECURITY DURING COVID-19

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## Executive summary

Protecting the vulnerable from starvation and malnutrition during the pandemic is a new challenge that faces many developing countries. This policy brief reports evidence from rural households in Bangladesh showing an increasing number of households experiencing food insecurity—lack of access to sufficient and nutritious food to meet their dietary needs. It also provides evidence of the extent of jobs and income loss, and argues that addressing the COVID-19 crisis requires generous social support to nip the spread of food insecurity in the bud to mitigate adverse effects on physical and mental well-being of the affected households.

## Key messages

- **Majority of the households experienced negative income shock and were food-insecure immediately after lock down.**
- **Past savings, loans, and food stocks are the main coping strategies used by households during the time of crisis.**
- **Food insecurity is spreading rapidly and infiltrating formerly food-secure communities.**

## Introduction

COVID-19 threatens the lives and livelihoods of people globally. Following the outbreak, countries around the world took measures to restrict movements to prevent the spread of the virus. Although vital in containing the disease, these measures also cause a high cost to the poor and vulnerable in developing countries, as it disrupts their employment, earnings, and purchasing power.

Poor people in developing countries often rely on income from daily casual labour and the informal sector that only allows them to have little savings and food stock for the future. Besides, poor institutions and lack of social safety nets in the developing world often fail to protect the vulnerable during crises.

Thus, economic lock downs in developing countries threaten the livelihood, hunger, and economic welfare of the poor (Barrett, 2020). It is estimated that more than a quarter billion people could face starvation during the pandemic, which could further increase their vulnerability to various diseases. Therefore, protecting the vulnerable from starvation and malnutrition during the pandemic is an important challenge that many developing countries now face.

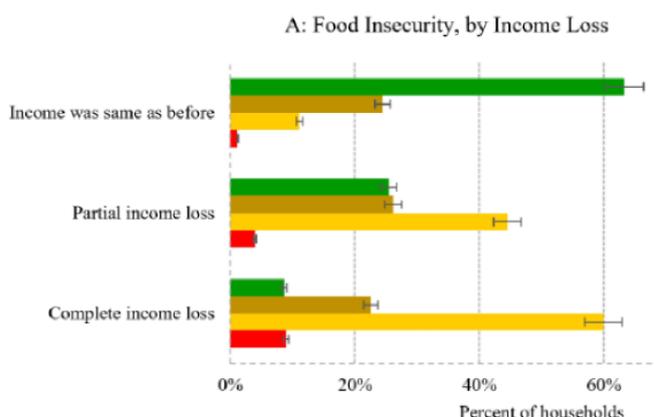


Figure 1: Food insecurity and income loss during the first wave

## Data, Methodology and Results

### Data and Methodology

To collect rapid information on food insecurity, we collaborated with a local NGO, Global Development Research Initiative (GDRI), to conduct a short telephone survey (or telesurvey) on these respondents. We collected data in two waves. We conducted a telephone survey in April on 9,847 rural households in southwestern Bangladesh to find out which households struggle with food security during the pandemic and how they cope with such adversity. We also followed up with 2,402 households, in May almost a month after our initial survey, to understand how food insecurity within households deteriorates over time. Our survey households have very similar characteristics to average rural households in Bangladesh.

Bangladesh ranks very poorly in the global food security ranking (83 out of 113 countries in 2019, worse than neighbours India, Nepal, Pakistan, and Myanmar) and the country has been adversely hit by the pandemic. For example, 13 millions of its working population has already been permanently laid off from work and an additional five million people are expected to be in extreme poverty due to COVID-19. Thus, the food security situation in Bangladesh is similar to many other developing countries and requires immediate attention from policymakers.

#### Key message 1: Majority of the households experienced negative income shock and were food-insecure immediately after lock down

From our initial survey (wave 1), we find that 90% of the households have experienced partial or complete income loss following lock down, more than 80% of the households experienced mild to severe food insecurities, and more than 50% of the households experienced moderate to severe food insecurities.

Our findings also show that households with no change in income are mostly food-secure, but food insecurity appears to increase with income loss as shown in Figure 1. Moreover, as expected households that suffered a complete loss of income are more likely to experience moderate to severe food insecurity compared to households that only lost part of their income.

Farm and day casual labourers have little job security and their households are affected the most in terms of food insecurity. On the other hand, households that own businesses and are involved in public sector jobs are the least affected in terms of food insecurity. This suggests that households with higher job security tend to be more food-secure than households with very low job security.



**Key message 2: Past savings, loans, and food stocks are the main coping strategies used by households during the time of crisis**

Figure 2 shows that the many households rely on previous savings, food stocks, and loans to cope with food insecurity that stems from income loss.

In particular, households with higher savings and food stocks are relatively less food-insecure, and households are more likely to take out loans when they are more food-insecure. Moreover, household borrowings increased with severely food-insecure households taking out more loans than households with mild to moderate food insecurities. It is also apparent that support from the government was inadequate.

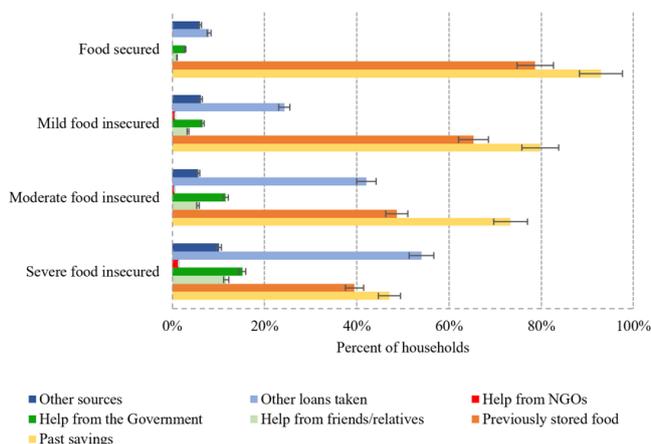


Figure 2: Coping strategies by food insecurities during the first wave

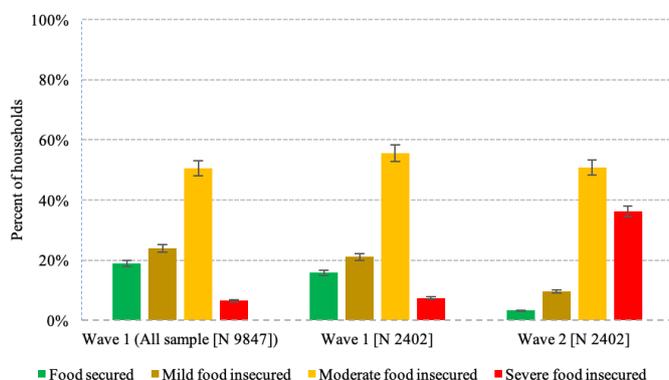


Figure 3: Food insecurity across the two waves

**Key message 3: Food insecurity is spreading rapidly and infiltrating formerly food-secure communities**

The follow-up survey—responses from 2,402 rural households out of the 9,847 households from the first wave—shows that food insecurity among households deteriorated further due to movement restrictions enforced.

Figure 3 shows that the proportion of food-secure and mildly insecure households dropped in the second wave (roughly by 10 percentage points), while the number of severely food-insecure households dramatically increased during the second wave (roughly by 30 percentage points), implying a probable shift.

Moreover, among the households that were food-secure in the first wave, roughly 88% of such households experienced a deterioration in food security—they experienced a negative shift in food security. In contrast, among the households that were food-insecure in the first wave, only 1.5% experienced an improvement in food security—experienced a positive shift in food security.

Our analysis suggests that food insecurities are dispersing rapidly into groups that were formerly food secure. Widely used coping mechanisms such as using informal borrowing or lending, past savings, and help from friends, relatives or neighbours have proven to be short term fixes. The food insecurity dynamics observed suggest that food insecurity would inevitably catch-up on the remaining food-secure households if drastic measures are not taken by policymakers as soon as possible.

## Conclusions

Despite reports in the national and international media, data are lacking on how food security is evolving during the COVID-19 pandemic, how to target households most at risk of acute food insecurity. Our rapid household surveys present an evidence of the relationship between income loss, and food insecurity during the pandemic. We find that households in occupations with little to no job security are the most food insecure. Besides, we also learn about the major coping strategies undertaken and the rapid dispersion of food insecurities across households. Our study identifies households most at risk of severe hunger and food insecurity in an already vulnerable population. Understanding these help governments, NGOs and humanitarian agencies to decide effectively during emergencies in resource-poor settings, on the optimum content and duration of food support, and on ideal target recipients.

## Policy recommendations

In this brief, we have shown that movement restrictions enforced to contain the COVID-19 spread has resulted in a drastic increase in income loss and threatening food security and nutrition of rural communities in Bangladesh. It is important for policymakers to focus attention where the risk is most acute—most vulnerable sub-populations and households with low and no job security. They can do this by ensuring that relief and stimulus packages reach the most vulnerable, as well as, continuous functioning of the critical aspects of the food system.



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