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# Bangladesh
# Food Security and Vulnerability Monitoring (mVAM)
# July 2022

## *mVAM system*

The remote food security monitoring system (mVAM) was launched in July 2022 and collects data via telephone interviews from households in locations across Bangladesh. Data was collected from a sample of 1,200 respondents across eight divisions. The mVAM survey was launched to provide near real-time analytics on food security and essential needs analysis across the country. It allows to assess the impact of shocks, including the developing global food crises, the COVID-19 pandemic and floods.

*Note that phone interviews are more prone to bias and should be interpreted carefully.*

## Highlights

- In July 2022, 32 percent of the surveyed households were moderately food insecure, with less than one percent of households severely food insecure. Still, about half of the households applied crisis and emergency coping mechanisms (43 percent). This finding is alarming as applying negative coping mechanisms may have severe consequences for the future social-economic situation of the households. Due to the May and June 2022 floods, 75 percent of households in Sylhet and 38 percent of households in Mymensingh were food insecure, higher than the national average.

- The war in Ukraine impacted households' capacity to meet their food needs because the prices of major food commodities sharply increased. The increased fuel and elevated export-import costs influence production and transportation costs negatively, impacting the entire economy.

- The recent floods in Sylhet and Mymensingh affected households directly as well as indirectly. Negative coping mechanisms applied by households - indicating exhausted savings and including compromising on preferred food, having irregular meals, selling productive assets, borrowing from friends and families, sending kids to work - may threaten households' capacity to meet future food and basic needs.

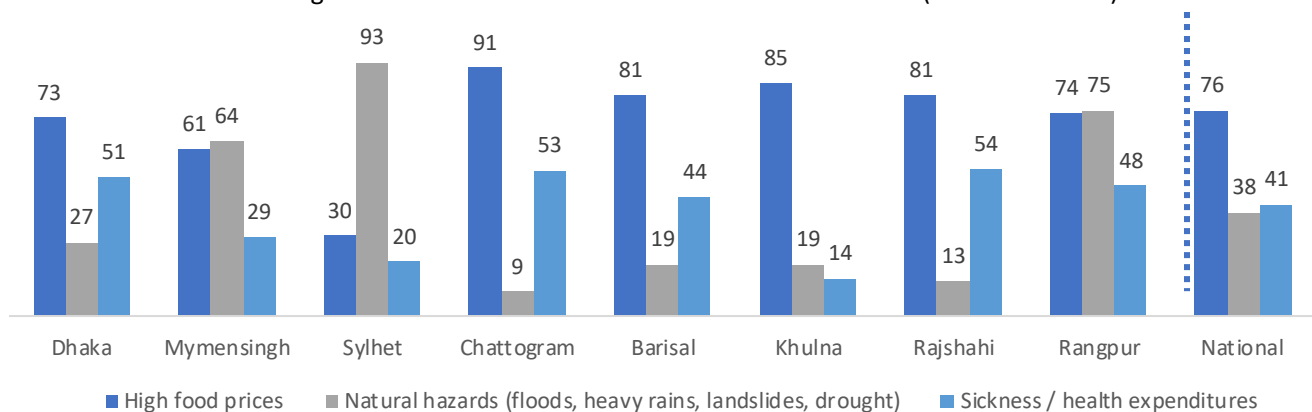Figure 1: Map of Bangladesh with survey area coverage

## Situation Overview

- The world is facing a global food crisis which results from the ripple effects caused by a combination of the war in Ukraine, climate shocks, and the COVID-19 pandemic. All those events are resulting in rising prices for food, fuel and fertilizer, while putting vulnerable populations at risk, also affecting the people of Bangladesh.
- **Food Security and Nutrition Implications**: Bangladesh was the third major export market for Russian and Ukrainian wheat in the 2020-21 financial year, when it imported 1.5 million MT of wheat from Ukraine and 1.9 million MT from Russia respectively.[i] On 13 May, India banned exports of wheat and onion seeds.[ii] This resulted in market prices increasing in Bangladesh. Similarly, market prices went up following the temporary exports bans on palm oil by Indonesia in May 2022, given 80 percent of Bangladesh palm oil requirements came from Indonesia. [iii]
- The **global market volatility** also affected Bangladesh's foreign currency reserves. In June, annual inflation rose to 7.6 percent, the highest since July 2013.[iv] The price of wheat soared by 18 percent in July compared to April. The IMF and the Government of Bangladesh are negotiating a USD 4.5 billion bailout. With fertiliser prices spiking 38 percent by end-July and currency reserves only sufficient to cover five months of imports due to an acute shortage of dollars, importing fertilizer and fuel has become challenging.
- From mid-July, the government-imposed **electricity rationing** ("load-shedding") across the country, while **fuel prices increased drastically** – around 50 percent - due to high international market prices, widely impacting the national economy.
- **Inflation** in June 2022 reached the highest in last 8 years mainly on the back of very high **food inflation** at 8.3 percent.  However, inflation in July 2022 was slightly reduced by 1 percent.

## Shocks

Figure 2: Main shocks and stresses in the last 6 months (% of households)



Legend: ■ High food prices  ■ Natural hazards (floods, heavy rains, landslides, drought)  ■ Sickness / health expenditures

In July, rising global food prices as a result of the global food crisis amid of COVID-19 pandemic have adversely affected the population of Bangladesh.  On top of these global events, Bangladesh has experienced heavy monsoon rains which have inundated large parts of north-eastern Bangladesh, leaving an estimated 7.2 million people affected by sudden flooding and water logging. The survey saw most of the sampled households reported high food prices, natural hazards and sickness/health expenditures as top three shocks and stresses in the past six months. It is noteworthy that households in Mymensingh, Sylhet and Rangpur reported experiencing floods, which have severely impacted with their livelihoods, putting vulnerable people at risk.

Figure 3: Priority needs (% of households)



### Priority Needs

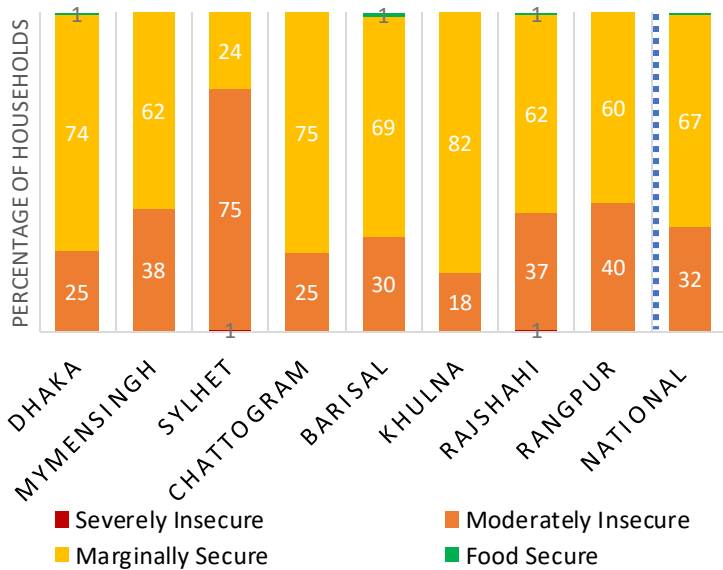**Food (65%)**   **Livelihoods (80%)**   **Health (41%)**   **Education (28%)**

## Comprehensive Food Security – rCARI

Figure 4 : Comprehensive food security
(% of households)



*The remote comprehensive food security index (rCARI) is an aggregated food security index used to report on a population's comprehensive food security. The indicators used to calculate this are: (i) food consumption scores, (ii) livelihood coping mechanisms, (iii) income sources, and (iv) income changes due to the shocks.*

**In July, the household comprehensive food security analysis showed that 33 percent of households were food insecure** (rCARI). These households exhibited food consumption gaps and applied crisis coping mechanisms to meet their required food needs. Almost none of the households were food secure.

This can be explained by the fact the majority of the interviewed households are engaged some type of farming activities, making them more resistant to food price related shocks by keeping their source of income (farming). Cumulative shocks however resulted in higher food insecurity as seen among households in Sylhet and Mymensingh where they experienced floods on top of the market price volatility.

## Food-Based Coping Strategy (rCSI)

*Reduced food-based coping strategies (rCSI) scores are used as a proxy variable for food insecurity. The rCSI is based on the frequency and severity of coping mechanisms for households reporting food consumption problems and assesses the stress level of households due to a food shortage. A high score indicates a higher stress level, and a lower score means that the household is less stressed.*

On average, 46 percent of households showed higher stress levels in accessing food, as indicated by medium to high coping mechanisms. Households in Sylhet (60 percent) and Mymensingh (55 Percent) depicted a more severe scenario with high stressful coping mechanisms, resulting from the impact of the floods. The destruction of markets and household infrastructures, including loss of food stocks, made households consume less preferred food and depending on support from friends and relatives.

Figure 5: Food-based coping mechanisms (% of households)
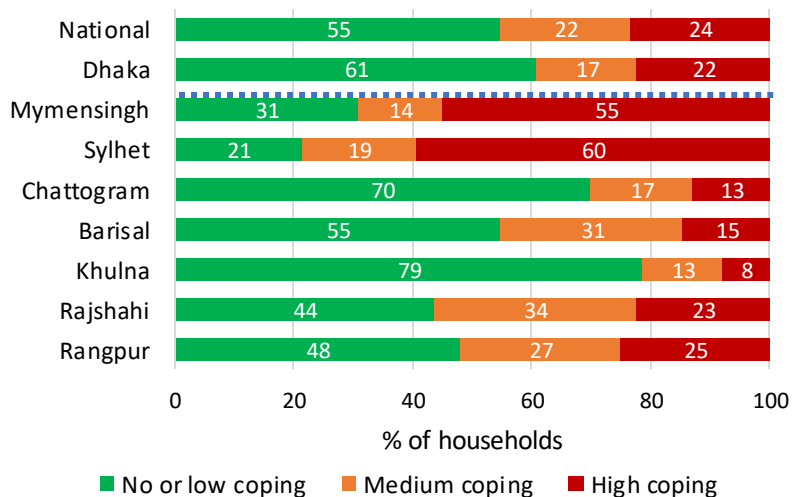


## Livelihood-Based Coping Strategy (LCSI) strategy

Figure 6: Livelihood-based coping mechanisms
(% of households)
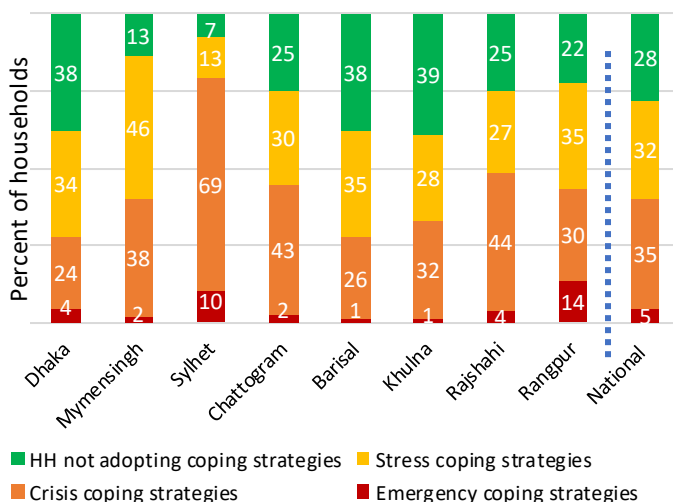


*The Livelihood Coping Strategies Index (LCSI) builds on the understanding of the behaviours vulnerable households engage in to meet their immediate food security needs in times of crisis or shock.*

On average, a  significant portion of households (36 percent) was employing crisis coping mechanisms. These are often associated with a direct reduction of future productivity. Sylhet had the largest proportion of households (68 percent) employing coping mechanism given the floods in the area. About 32 percent of the overall households were employing stress mechanisms. This indicates a reduced ability to deal with future shocks due to a current reduction in resources or increased debts. A higher proportion of households employing crisis and stress coping mechanisms indicated a further worsening situation as they are struggling with the higher prices, health issues, and natural shocks. In Sylhet division 10 percent of households were using emergency coping mechanisms to access food and basic needs. The overall picture in Sylhet and Mymensingh divisions is one of deteriorating abilities to maintain adequate production capacity, and manage emergency family needs, let alone deal with future shocks. Borrowing money, buying food on credit, and spending savings were recuring coping behaviours in these two divisions.

## Food Consumption

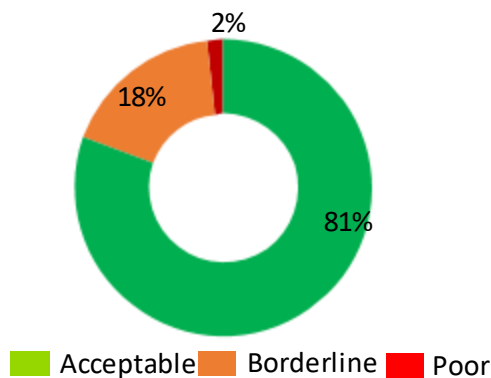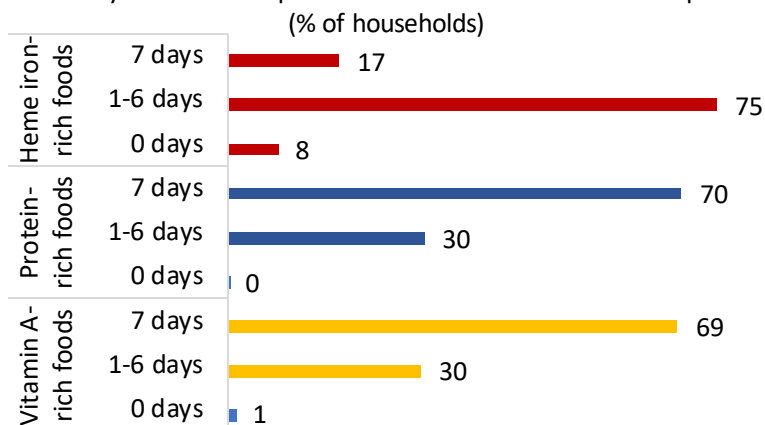Figure 7: Food consumption status (% of households)



Figure 8: Days with consumption of nutrient rich food over the past week (% of households)



Seasonal availability of food impacts food consumption scores (FCS) positively and negatively, as it does not consider the quantity or quality of food consumed. During the monsoon season, there is abundance of fish and local fruits in the markets, especially vitamin-A-rich fruits like mango and jackfruit. Thus, 81 percent of surveyed households had an acceptable diet. Their primary source of protein came from fish and they significant amounts of local fruits.

The food consumption score nutrition FCS-N for seven days showed 67 percent of households consuming Vitamin-A-rich food every day, and 70 percent of households had regular protein intake. The intake of iron rich food though was much lower with only 17 percent of households regularly consuming haem rich food , and 75 percent having it on an irregular basis. Still, it's noteworthy that the households reported consuming lower-quality fruits and cheaper, small, fish to keep it affordable, something not captured in acceptability percentages. Consumption of vegetables was found to be minimal as vegetable scarcity is common during floods.

According to the in-depth analysis, 40 percent of households in Sylhet were the group of households with acceptable food with crisis coping who were vulnerable in the short and long run. Also, 24 percent of households in Sylhet had poor food consumption. Altogether 65 percent of households cannot meet adequate food needs in this region. Likewise, the situation in Mymensingh is similar.

## Livelihoods, Income and Expenditure

In July, 37 percent of households reported loss of their income source – or part of – over the last six months. Primary causes are loss of employment, reduced daily labour opportunities, disruption in market functionality, price hikes, reduced assistance, illness, health expenditure increases.

For 33 percent of households expenditures increased with more than 20 percent. Reviewing respondents' primary income sources, indicated that most households lived below the upper poverty line, but marginally above the poverty line.

Figure 9: Primary source of income (% of households)
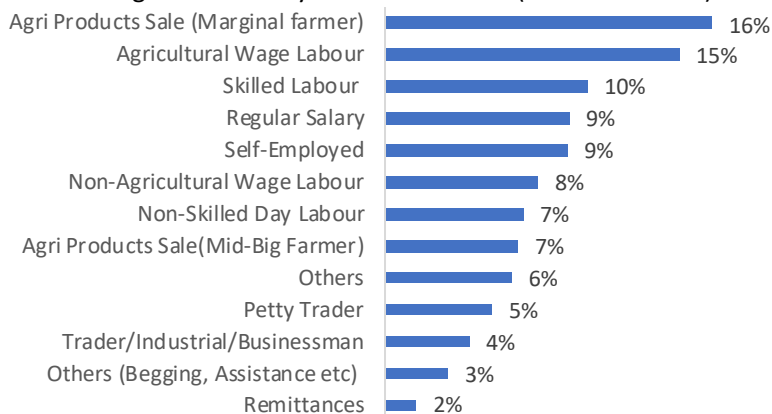
**References**

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[ii] FAO.(2022). FPMA Bulletin #6. Retrieved from https://reliefweb.int/attachments/774e45d8-2c0f-499d-a536-0c77ff76e88c/cc0908en.pdf

[iii] FAO. (2022).  Indonesia lifts temporary ban on palm oil exports. Retrieved from https://www.fao.org/giews/food-prices/food-policies/detail/en/c/1529567/#:~:text=On%2023%20May%202022%2C%20the,began%20on%2028%20April%202022.

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