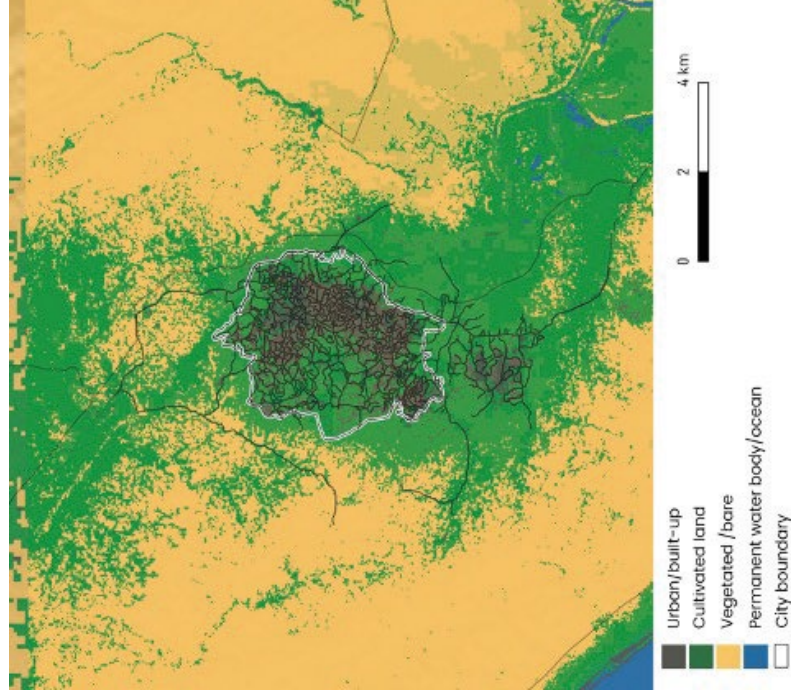


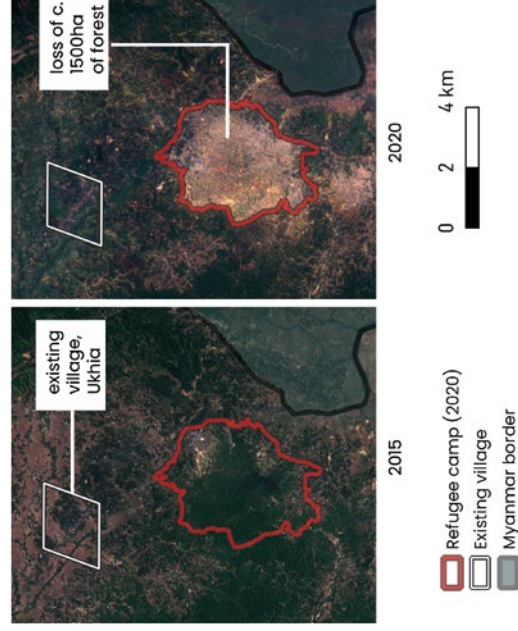
External drivers

The landcover and urbanisation maps illustrate some key external drivers that shape the food system in Cox's Bazar refugee camp. These include the use of land and indications of where population density and growth are most intense, highlighting the relationship cities have with food production, and suggesting areas of higher vulnerability during crises that affect the food system

Landcover 2015



Urbanisation trends

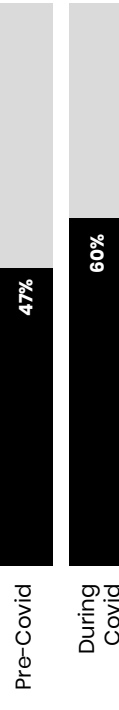


Key spatial indicators

Key indicators were not available for Cox's Bazar from the GHSL database as for the other cities. Other indicators describing the external drivers have been used.

Indicator	Cox's Bazar	Average, 7 cities (excl. CXB)
Total refugee population in 2021	87,924	11,002,460

Change in prevalence of households that are multi-dimensionally poor (Rohingya)



Food supply chains

The following table illustrates the location of the suppliers and customers of surveyed private sector entities, giving an indication of the proximity of food supply chains to the city.

The proximity of food supply chains to the city

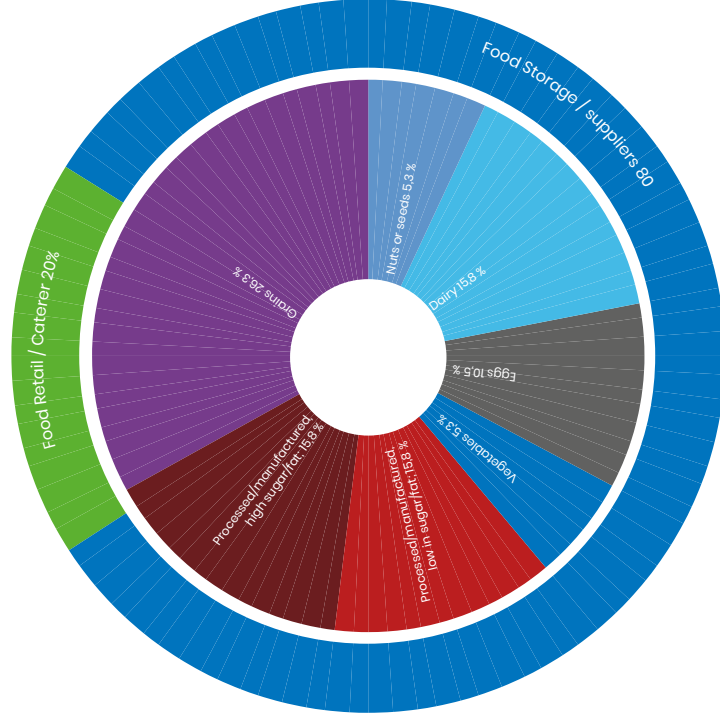
	Markets/ Customer locations	Supplier locations
Within the city	40%	60%
Surrounding region	40%	20%
Other regions of the country	0%	0%
Internationally	20%	20%

The refugee camp has grown very rapidly from virtually nothing to a settlement with urbanised characteristics over around 5 years, from 2017 to present. Since this time around 900,000 people have settled in this camp, constructing housing, buildings, shops, market places and a network of roads and footpaths. An estimated 1500ha of land has been cleared, 20% of which to house the camp and 80% deforested.

Food environment

The local food system actors and the types of food available in the local market are shown in the below figure. The inner circle consists of the types of food businesses while the outer circle shows the types of food the system produces, processes or sells.

Food system actors & foods available in the local market



4. Outcomes & Pre-COVID-19 vulnerability

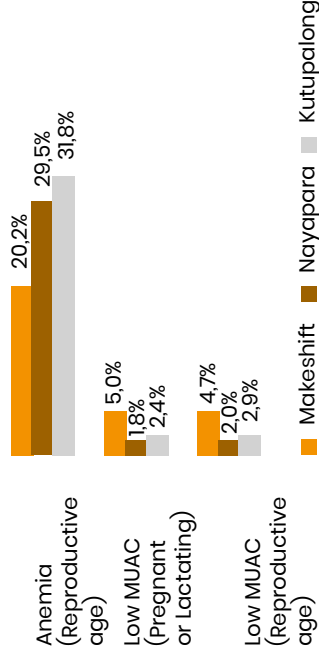
Nutritional status, dietary diversity and consumption of unhealthy foods

The following figures date from pre-COVID-19 and indicate vulnerabilities before the crisis, unless recent figures are available in which case a comparison between pre-COVID-19 and recent data is presented.



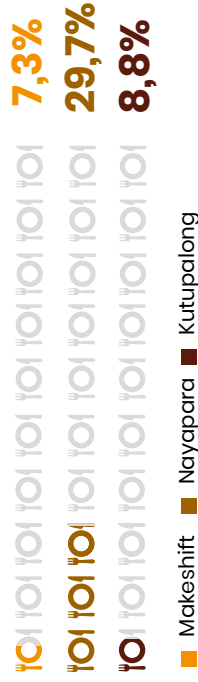
Women

Pre-COVID anemia and MUAC of women of reproductive age



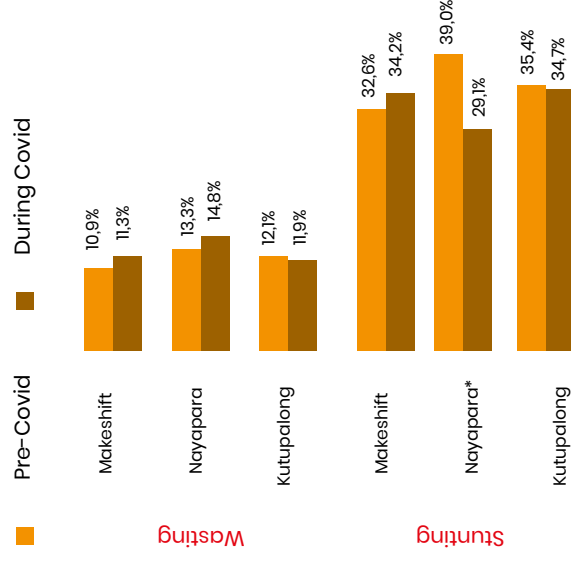
children, 6-23 months

Minimum acceptable diet



children under 5 years

Change in the proportion of wasted (WHZ) and stunted (HAZ) children in Cox's Bazar

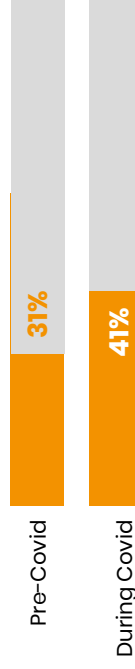


*Only change which is statistically significant.

Food security

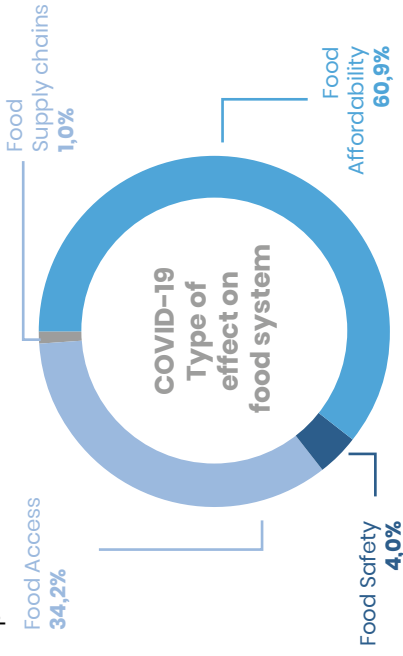
Changes in the food security levels of Cox's Bazar's population before and during COVID-19 is presented based on the available data, using the Food Consumption Score (FCS) and the Livelihood Coping Strategy Index (LCSI). Data using the Food Insecurity Experience Scale (FIES) was not available.

Change in poor to borderline food consumption score, mean of Rohingya and host community



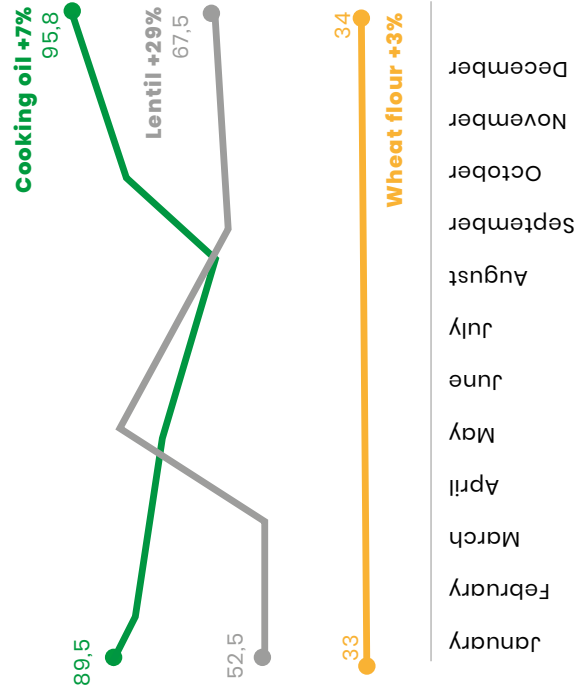
5. COVID-19 impact & response

This section explores the effects of COVID-19 on Cox's Bazar's food system, examining supply chains, food prices and responses.



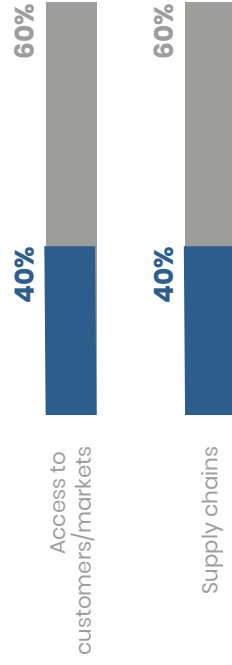
Change in food prices since COVID-19

Change in food prices from May 2020 to March 2021 on four selected food items, BDT

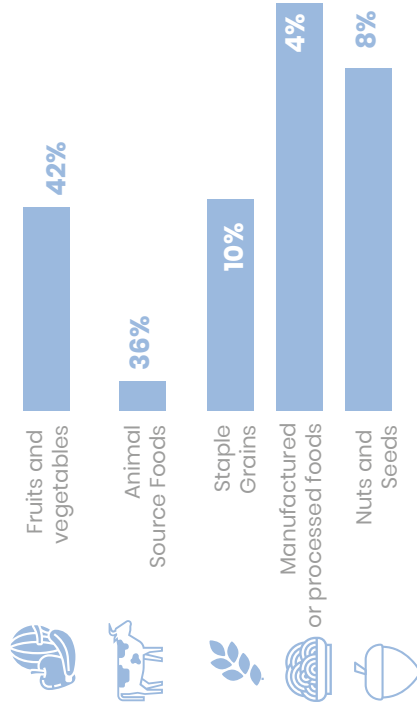


Extent of disruption of the COVID-19 pandemic on markets and supply chains

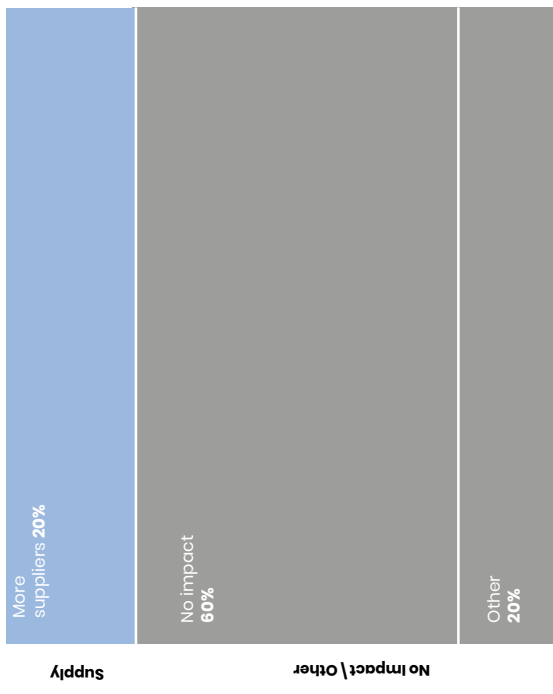
■ Yes - Severely ■ Yes - Moderately ■ No



Foods that were short in supply



Effects of COVID-19 on company supply chains



Proportion of surveyed businesses whose income decreased between 25% and 50%



Business income: there was no business whose income had decreased between 25% and 50 since the start of the pandemic; businesses had not experienced a change in income. Source: Dikoda 2021.

Data Sources

Total refugee population in 2021 Inter Sector Coordination Group ISCG: Cox's Bazar Refugee Population as of 31 January 2021
Households that are multi-dimensionally poor REVA 4
Women's anemia and MUAC Action Against Hunger, Emergency nutrition and health assessment round 2, May 2018
Minimum acceptable diet Action Against Hunger, Emergency nutrition and health assessment round 2, May 2018, Kutupalong; 2017
Proportion of wasted and stunted children Action Against Hunger, Emergency nutrition and health

assessment Round 4 Oct 2019; Action Against Hunger, Emergency Nutrition assessment Nov 2020. Stunting and wasting prevalence are each classified as high by WHO standards.

Food Consumption Score (FCS) REVA

Livelihood coping strategy Index (LCSI) REVA 1 and REVA 4

Monthly food prices WFP VAM

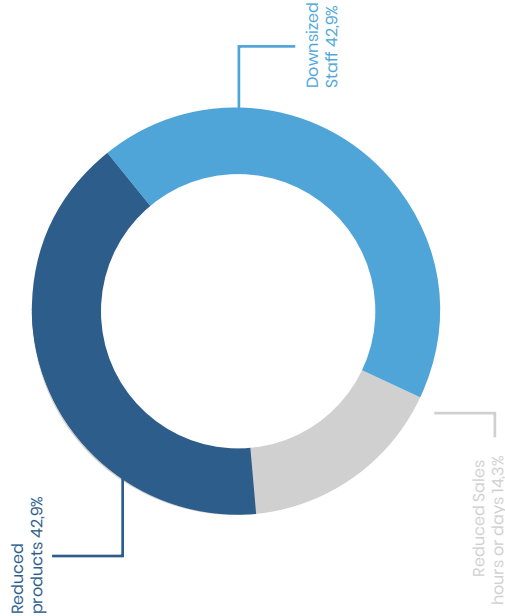
Assistance received in the past 30 days REVA 4

Sections Food supply chains, Food environment, COVID-19 impact and response Dikoda 2021

Responses and coping mechanisms

Impacts of COVID-19 on the food system are mitigated by responses by development partners and the government and by adaptations taken by food companies to changing conditions. This section illustrates some of these adaptations and responses, highlighting possible vulnerabilities and opportunities presented by the crisis

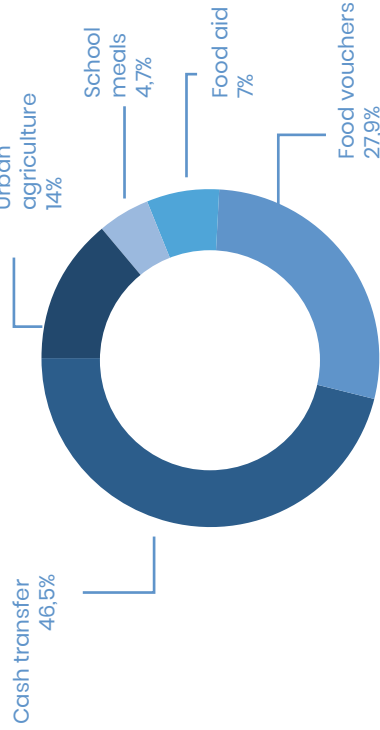
Actions taken by businesses to reduce costs around the pandemic (n=7)



Other methods of adaptation by companies during COVID-19

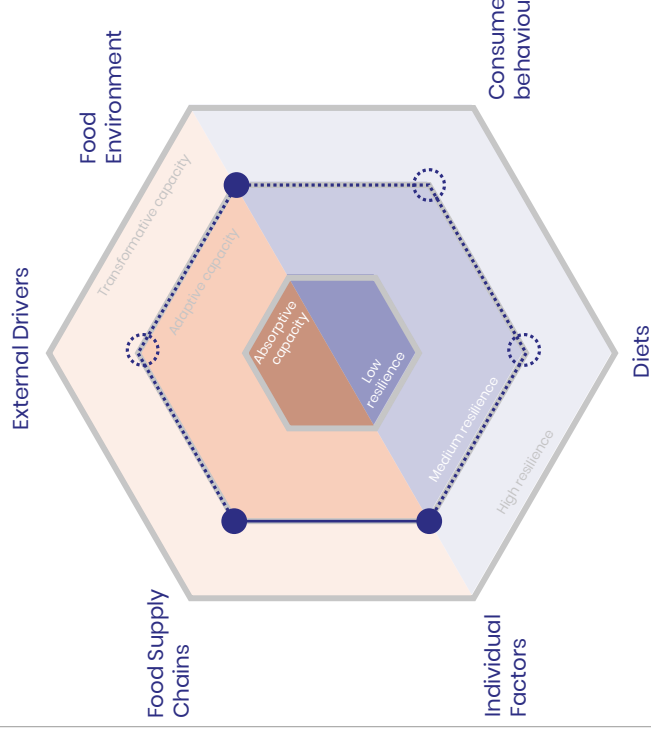


Response by Development Partners to food insecurity



Typology

The typology contains one core indicator for each dimension, giving an indication to the food system's vulnerability and resilience in the face of COVID-19. No indicator was chosen for consumer behaviour.



Methods and data sources

The brief describes the city's food system based on the Food Systems Framework presented in the report, with focus on available data and components that are likely to be impacted by COVID-19. All data is on city level unless indicated otherwise. Sources for the city brief include primary and secondary data and are listed after each figure or table. DHS data has been disaggregated to strata level to obtain figures specific to the city. Dikoda surveys took place in March 2021 and were carried out on governance, NGO and private sector stakeholders. The development of the typology and the full survey methodology is detailed in the report.