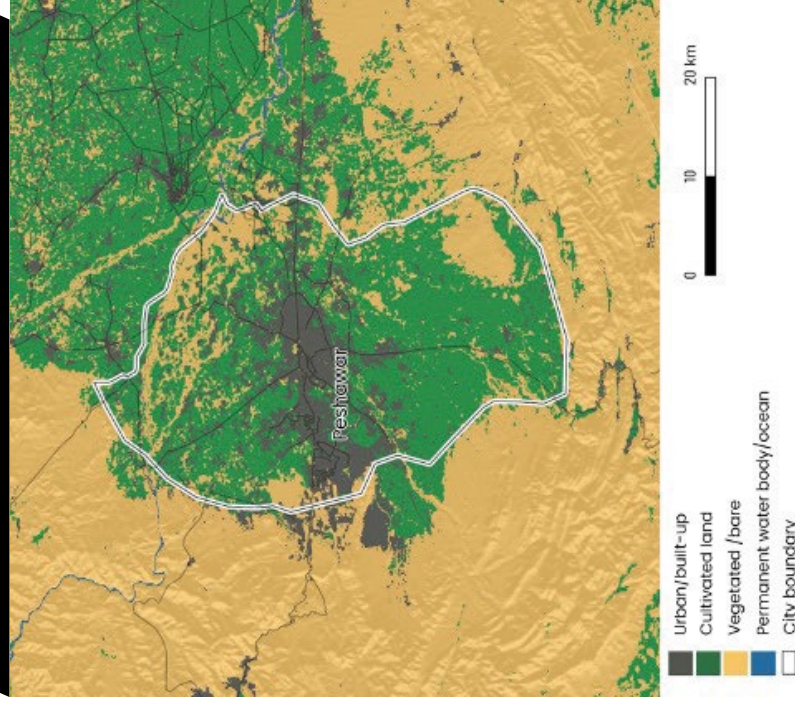


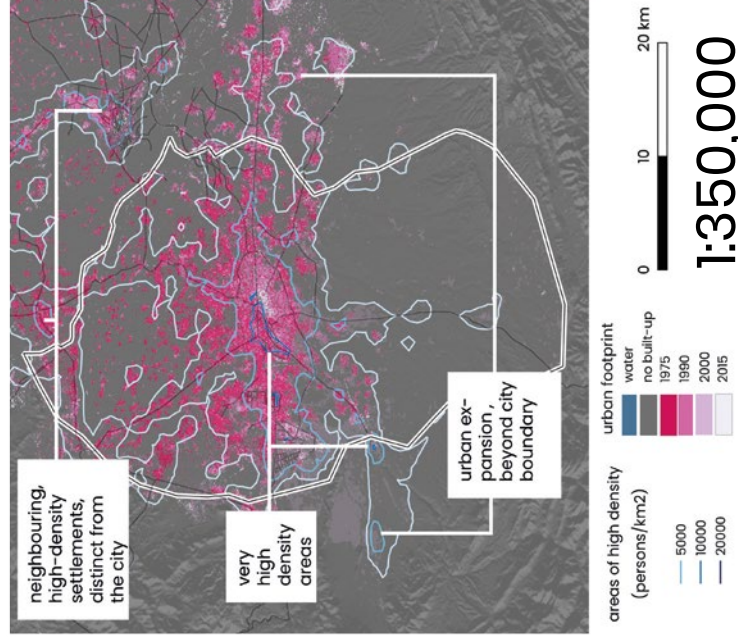
External drivers

The landcover and urbanisation maps illustrate some key external drivers that shape the food system in Peshawar. 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



Peshawar is the sixth largest city in Pakistan and capital of the Khyber Pakhtunkhwa province (formerly North West Province), around 50km from the border with Afghanistan. The city has grown broadly east-west along the Peshawar Valley, and several high-density suburbs have grown up including Hayatabad to the west of the city. Around 20% of the population of the urban agglomeration living outside the formal, Peshawar Municipal Corporation area. The neighbouring city of Charsadda lies around 15km away across the Kabul River, where a further 100,000+ persons live.

Key spatial indicators

Indicator	Peshawar	Average, similar size, LMIC cities in the region (excl. CxB)	Average, similar size, LMIC cities in the region
Population density, persons per km ²	7,533	9,468	9,107
Slum population	+250,000		
Total built-up area in 2015, km ²	81.2	471.0	76
Total resident population in 2015	2,764,734	11,002,460	
Surface of the built-up area per person in 2015, m ²	29.4	37.3	20.3
Proportion of total resident population potentially exposed to floods in 2015 (%)	7%	38%	
Proportion of cultivated land in 50km radius	35.8%	33.3%	
Cultivated land in 50km radius per 100,000 persons, km ²	40.3	44.0	
Number of supermarkets per 100,000 persons	0.7	4.8	
GDP per capita	2,014.1	4,200.4	
Growth rate	2.0	2.4	1.3
Proportion of population of the urban agglomeration living outside the formal boundaries of the city	19%	37%	

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.

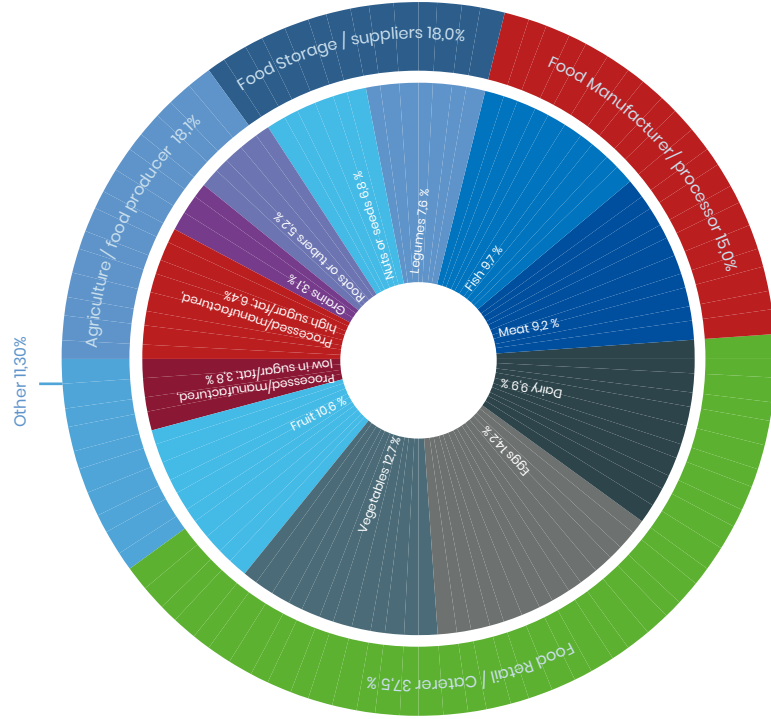
The proximity of food supply chains to the city

	Markets/ Customer locations	Supplier locations
Within the city	48.80%	34.40%
Surrounding region	41.30%	43.10%
Other regions of the country	9.40%	21.30%
Internationally	0.60%	1.30%

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



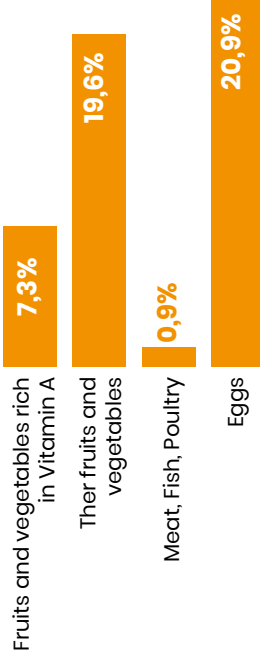
4. Outcomes & Pre-COVID-19 vulnerability

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.

Children, 6–23 months

Foods consumed by breastfeeding children (6–23 months), Peshawar



Minimum diet diversity (6–23 months), Peshawar

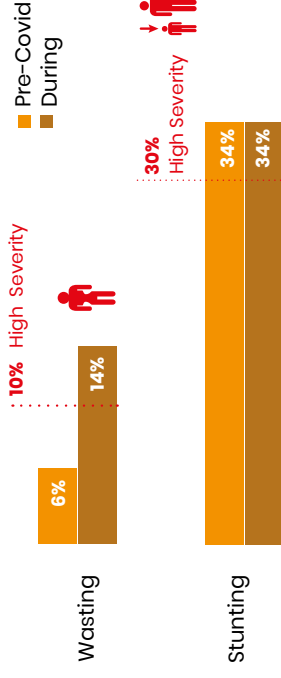


Minimum acceptable diet (6–23 months), Peshawar



Children under 5 years

Proportion of wasted and stunted children before and during COVID-19, Peshawar



Food security

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

Change in the prevalence of moderate or severe food insecurity (Food Insecurity Experience Scale)

Pre-COVID, KP province 2018

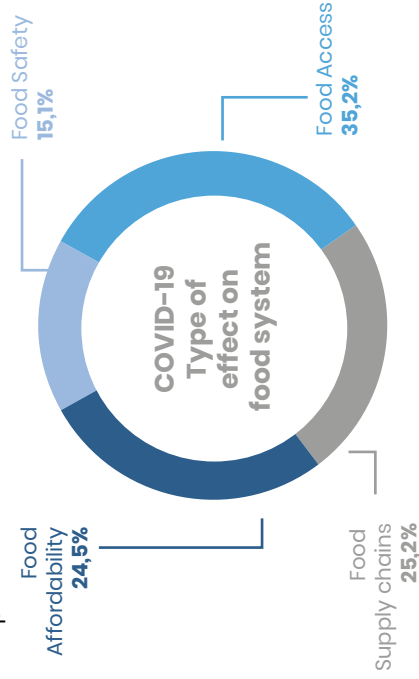
18%

During COVID Peshawar 2020

37%

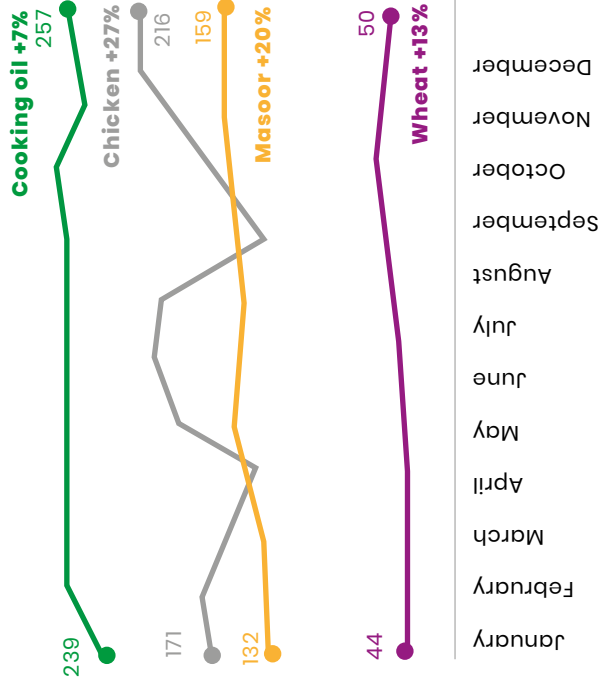
5. COVID-19 impact & response

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

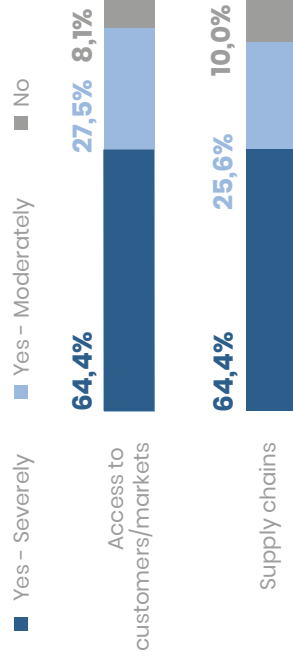


Change in food prices since COVID-19

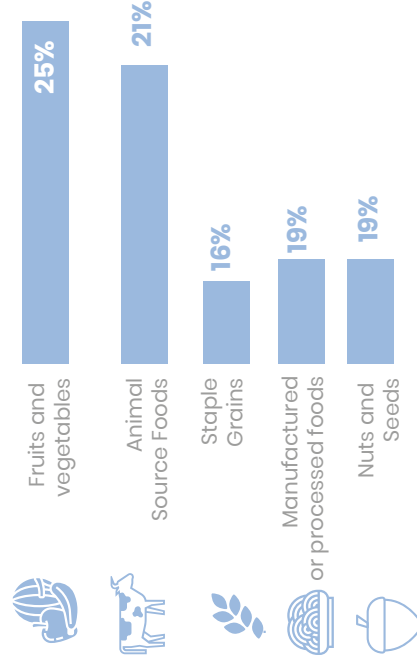
Change in food prices from January to December 2020 on four selected food items, PKR



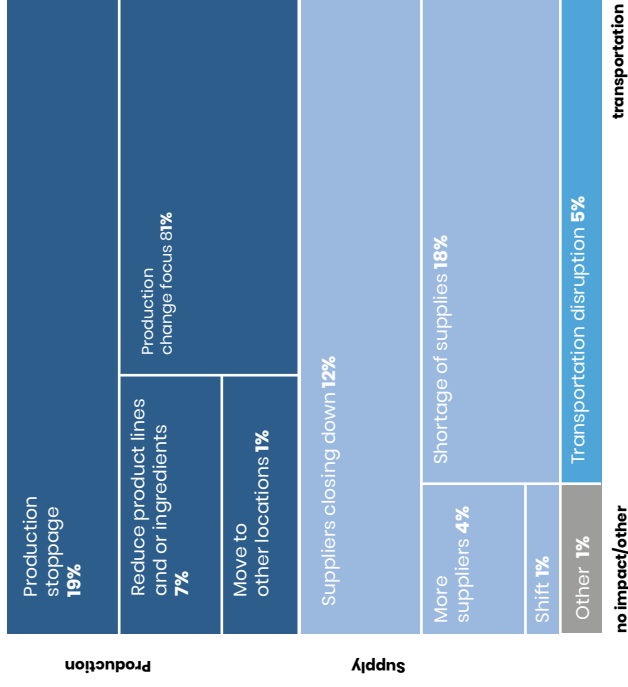
Extent of disruption of the COVID-19 pandemic on markets and supply chains



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%



Data Sources

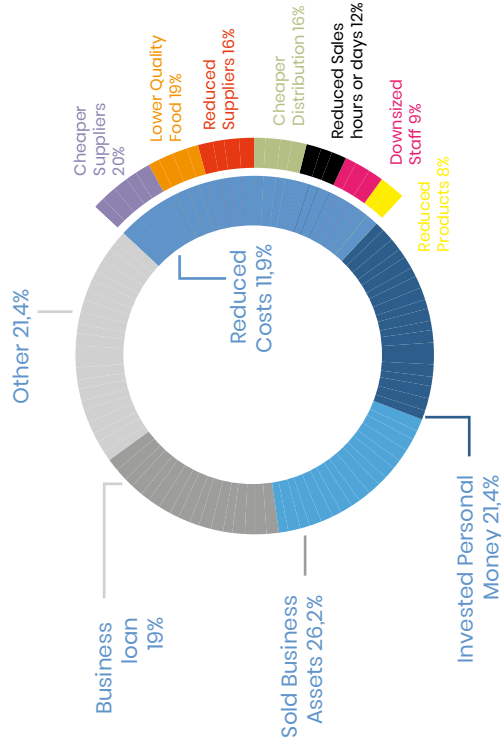
Foods consumed by breast-feeding children (6-23 months) Secondary analysis of the DHS 2017-18
Minimum acceptable diet Secondary analysis of the DHS 2017-18
Proportion of wasted and stunted children Secondary analysis of the DHS 2017-18; FAO Rapid assessment 2020. Stunting prevalence is classified as high and wasting prevalence as medium by WHO standards.

Food Insecurity Experience Scale National Nutrition Survey 2018; FAO Rapid assessment 2020.
Monthly food prices WFP VAM
Sections' food supply chains, Food environment, COVID-19 impact and response Dikoda 2021

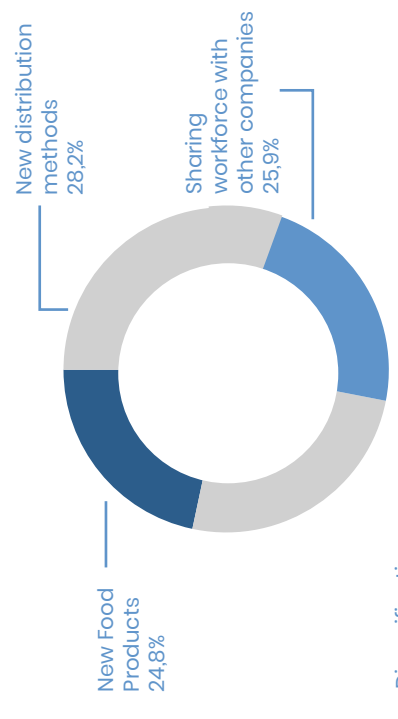
Responses and coping mechanisms

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

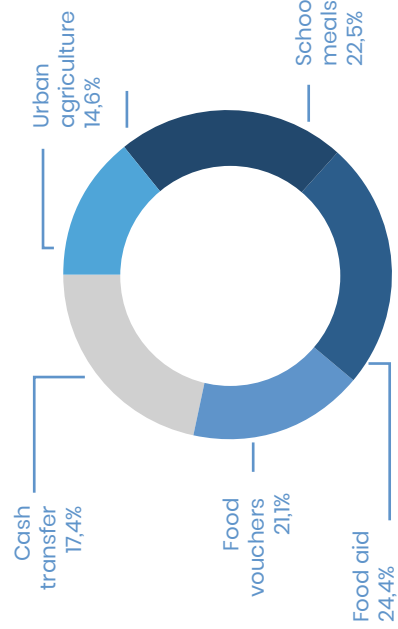
Private sector's methods to cope with lower income with breakdown of reduced costs



Other methods of adaptation by companies during COVID-19



Response by Development Partners to food insecurity

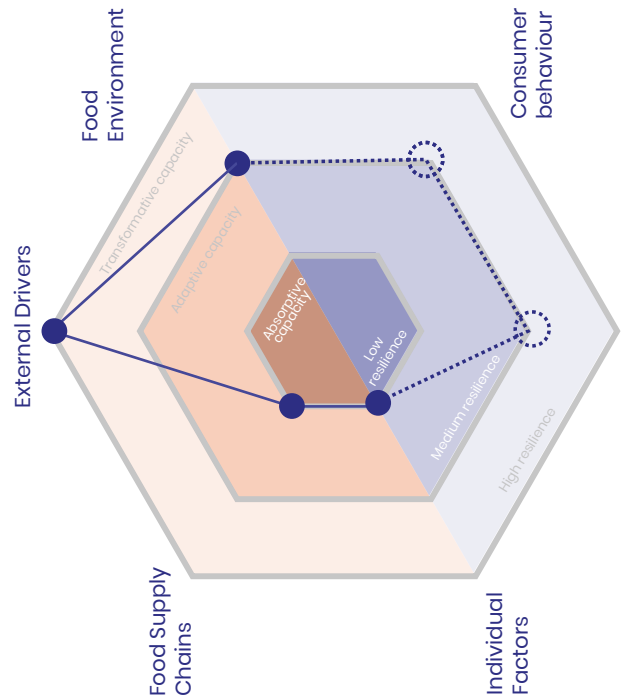


Methods and data sources

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. Key spatial indicators apart from slum population are from 2015 because data was consistently available across cities.

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.



Population density, persons per km²	Calculated from DHS data, Florczyk, A et al. (2018), GHS Urban Centre Database 2015, multitemporal and multidimensional attributes, R2018A, European Commission, Joint Research Centre (JRC) PIR, https://data.jrc.ec.europa.eu/dataset/53473144-b88c-44bc-b4c3-4583aedf1547e
Slum population	UNICEF, 2020, Profiling of Slums and Underserved Areas of Peshawar City of Khyber Pakhtunkhwa Province of Pakistan.
Cultivated land in 50km radius, km²	Calculated using GIS spatial analysis techniques by Dikoda using Copernicus Global Land Service data (2018) Buchhorn, M. et al. Copernicus Global Land Service: Land Cover 100m: collection_3_opcor_2018_Globes 2020, Accessed Feb 2020
Cultivated land in 50km radius per capita, km²	Copernicus as above
Number of markets/supermarkets per 100,000 persons	Calculated using GIS and OpenStreetMap data for each city