



GIEWS Special Alert

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The Islamic Republic of Pakistan

Heavy monsoon rains and subsequent flooding affected large numbers of people and caused widespread devastation to the agricultural sector

Highlights

- Heavy monsoon rains and subsequent flooding between mid-June and end-August 2022 disrupted the livelihoods of about 33 million people and destroyed agricultural land, crops, livestock assets, critical agricultural infrastructure and households' food reserves.
- The floods caused significant losses to the 2022 "Kharif" food and cash crops, including rice, maize, cotton, sugarcane, vegetables and orchards, with the bulk of the damage concentrated in Sindh Province.
- Prices of wheat, the country's main staple, and other basic food items have been generally rising since the end of 2021 and reached record or near-record levels in August 2022.
- Acute food insecurity is expected to worsen in parts of the country due to the negative impact of the floods and the very high prices of basic food items, energy and fuel.
- International food and agricultural assistance is urgently needed to avoid the deterioration of the local food security situation.

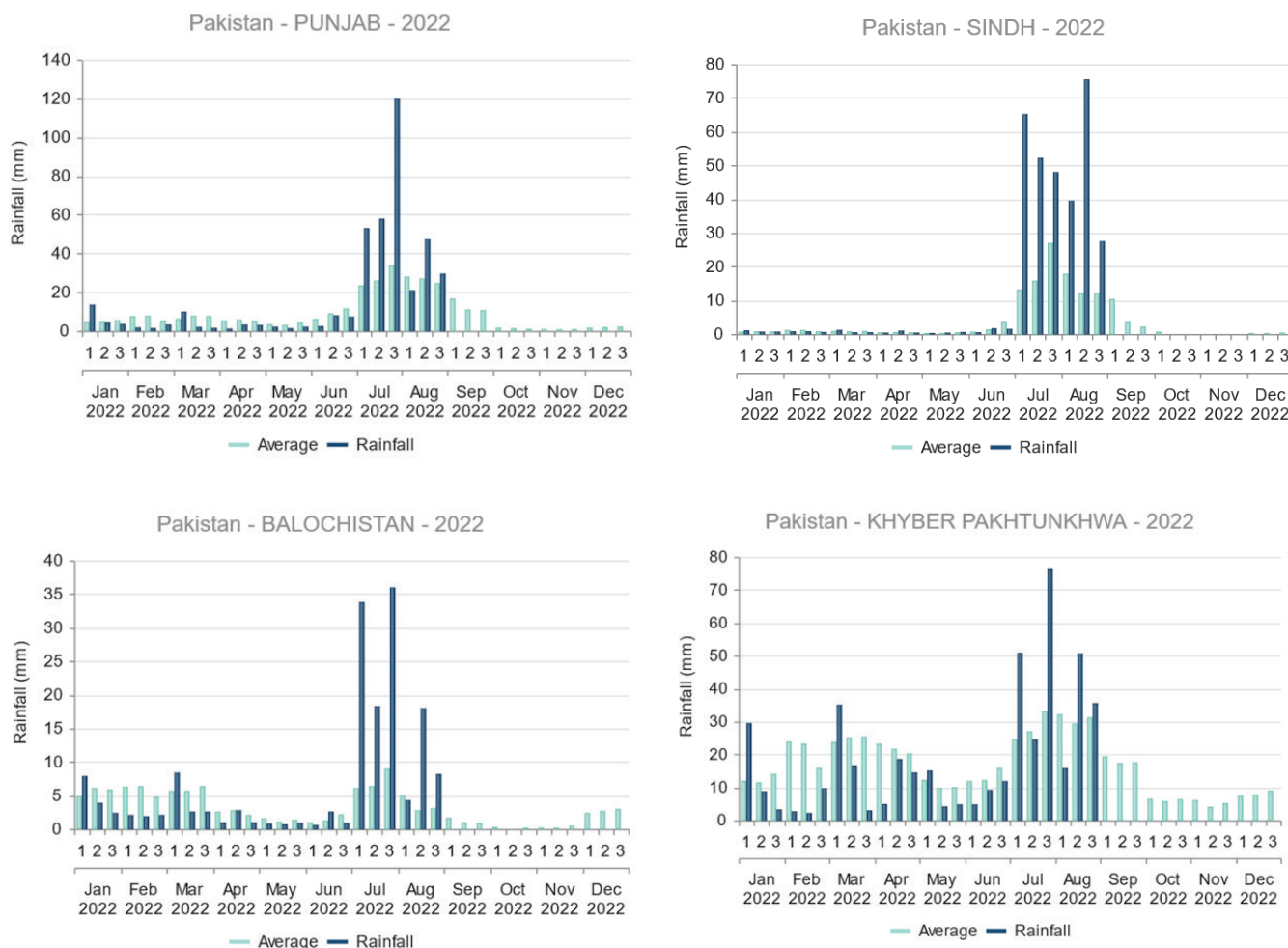
Heavy monsoon rains and severe floods between mid-June and end-August 2022 caused widespread devastation, especially in the southern parts of the country. Floods disrupted the livelihoods of about 33 million people, causing death and injuries, and damage to housing and road infrastructure, mainly in Sindh and Balochistan provinces. Floods wiped out agricultural land, crops, livestock assets, critical agricultural infrastructure and households' food reserves. Prices of most basic necessities, including food, energy and fuel, have been steadily rising starting in late 2021 and reached record or near-record highs in August 2022, worsening access to these items for large numbers of people. Additional floods may occur in the coming weeks as water level is high in the river Indus at Taunsa, Guddu, Sukkur and Kotri barrages, and may cause more inundation.

Substantial damage to 2022 "Kharif" summer cereal and cash crops at subnational level

The country is prone to floods during the monsoon season, which normally extends from June to September. In 2022, record amounts of monsoon rains between mid-June and end-August 2022, coupled with unusual melting of glaciers, caused the main river Indus and its tributaries to overflow, resulting in devastating floods over large parts of the country. The provinces of Sindh and Balochistan received cumulative rainfall levels of 690 mm and 320 mm, respectively, more than eight times above the Long-Term Average (LTA), while rainfall levels in the provinces of Punjab and Khyber Pakhtunkhwa were between 40 and 95 percent above the LTA (Figure 1).

Preliminary official estimates, as of 27 September 2022, indicate that about 2.6 million hectares of standing

Figure 1: Pakistan – Seasonal rainfall patterns in Punjab, Sindh, Balochistan and Khyber Pakhtunkhwa provinces, January–December 2022



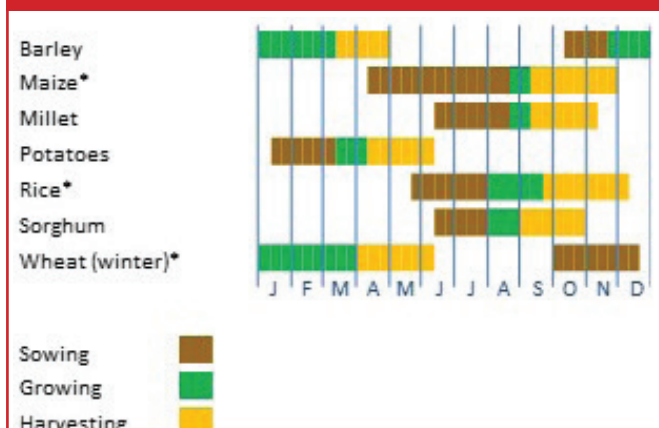
Source: WFP/VAM - https://dataviz.vam.wfp.org/seasonal_explorer/rainfall_vegetation/visualizations, 2022.

“Kharif” crops have been adversely affected, mainly in the province of Sindh (1.9 million hectares), Balochistan (365 000 hectares), Punjab (285 000 hectares) and Khyber Pakhtunkhwa (60 700 hectares).¹ However, these estimates are preliminary as in-country assessments are still ongoing to establish the full extent of the damage. An update of the situation will be provided as soon as the assessments are completed.

According to the latest official estimates, the area affected by floods represents about 35 percent of the total area planted to cereal, sugarcane and

cotton during the 2022 “Kharif” season. Severe losses are reported for cotton and rice crops that, together with sugarcane, are important crops and account for a large proportion of the country’s export earnings. Severe losses of vegetables and orchards have also been reported. In 2021, the country was the fourth largest world exporter of rice, with shipments estimated at 3.9 million tonnes. The cereal crops of the current “Kharif” season, planted in May/June and scheduled to be harvested from October, including rice, maize, millet and sorghum, account for approximately 45 percent of the annual

¹ A joint government and multi-agency Post-Disaster Needs Assessment (PDNA) is currently underway and is expected to provide detailed information on the impact of the recent shocks on the agricultural sector. In addition, FAO is conducting a geospatial analysis to assess the impact of recent floods on agricultural land.

Table 1: Pakistan – Crop calendar

Note: *Major food crop.

Source: FAO/GIEWS, 2022.

Table 2: Pakistan – Cereal production

| | 2017-2021 average | 2021 | 2022 forecast | change 2022/2021 |
|--------------|----------------------|---------------|------------------|---------------------|
| | 000 tonnes | | | percent |
| Wheat | 25 730 | 27 293 | 26 129 | -4.3 |
| Rice (paddy) | 11 937 | 13 978 | 13 180 | -5.7 |
| Maize | 7 810 | 9 500 | 8 900 | -6.3 |
| Others | 518 | 523 | 525 | 0.4 |
| Total | 45 994 | 51 294 | 48 734 | -5.0 |

Notes: The 2022 production forecast incorporates only preliminary estimates on flood damage and is, therefore, subject to revision. Percentage change calculated from unrounded data.

Source: FAO/GIEWS Country Cereal Balance Sheet, 2022.

national cereal production (Table 1). Following extensive losses due to floods, the production forecasts for the crops on the ground will be revised downward from the current forecasts of 13.2 million tonnes for rice and a combined 9.4 million tonnes for maize, sorghum and millet. At these levels, the cereal output was already estimated to decrease year-on-year (Table 2). Floods did not affect the 2021/22 main “Rabi” wheat crop, which accounts for about 55 percent of the total annual cereal output, as its harvest was already concluded by mid-June. Despite record plantings, official estimates indicate a slightly above-average output of wheat at 26.1 million tonnes as yields were affected by heatwaves between March and April and shortages of urea fertilizers and irrigation water supplies.

Floods resulted in the loss or damage of agricultural inputs, including seed stocks, fertilizers and machinery at household level, with an anticipated negative impact on the next 2022/23 “Rabi” wheat crop to be planted between October and December.

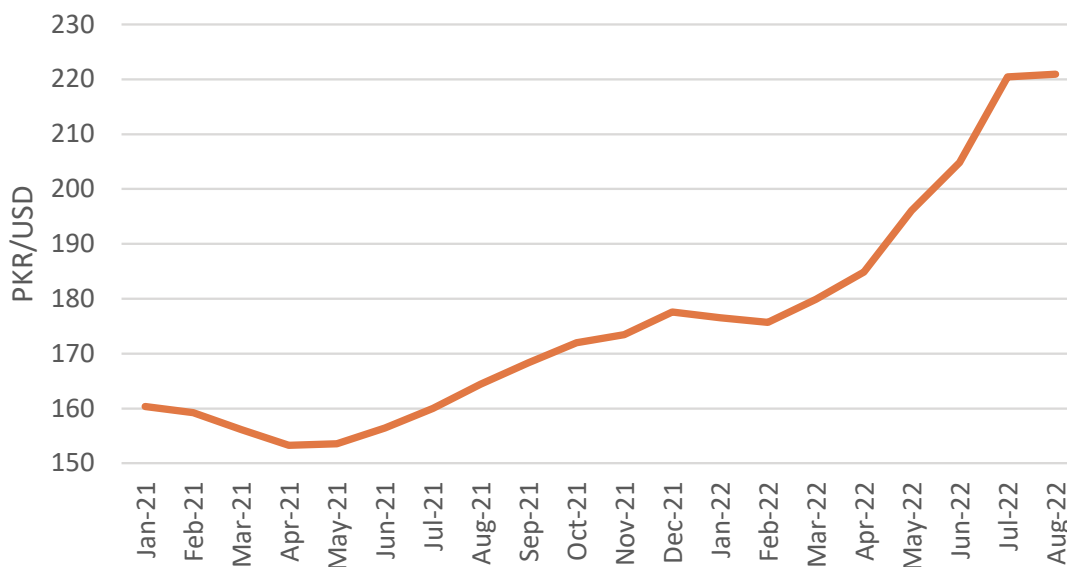
Severe damages to irrigation infrastructure, crucial for the wheat crop that is 90 percent irrigated, is expected to negatively affect future planting intentions. Since the planting window for the “Rabi” wheat crop is imminent, it is essential to provide urgent support to farmers to safeguard production.

Regarding the livestock sector, preliminary official estimates show that 1.1 million animals,

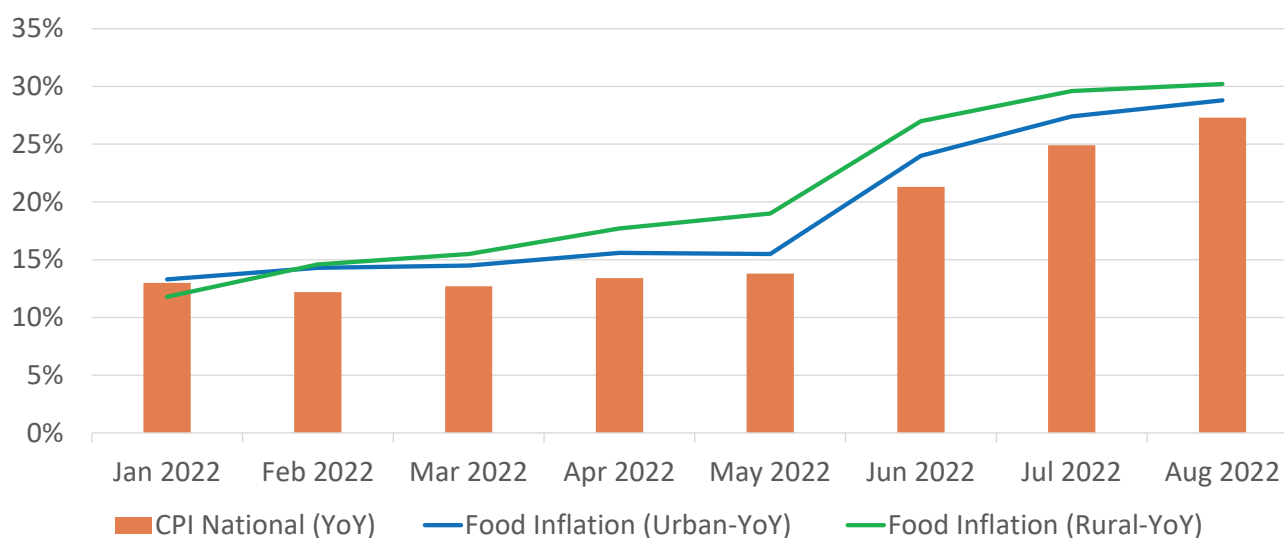
including cattle, goats, donkeys and sheep, died due to drowning or starvation as grazing land was covered by water and feed stocks were lost. Most of the animal deaths are reported in Balochistan Province (estimated around 500 000 animals) followed by Sindh (393 000 animals), Punjab (205 000 animals) and Khyber Pakhtunkhwa (21 328 animals). Widespread damage to livestock shelters has been reported. According to the preliminary findings of the ongoing multi-sectoral Rapid Needs Assessment (RNA) in ten districts of Balochistan, nearly 50 percent of the flood-affected households rely on livestock keeping for their livelihoods. Of these, 36 percent reported losing at least one livestock asset, 46 percent reported damage to livestock shelters and 29 percent lost their animal feedstock. About 60 percent of livestock holders in the affected districts of Balochistan have already reported outbreaks of water-borne animal diseases.

Prices of most basic food products at record or near-record levels in August

Since early 2021, the country has been facing a serious macroeconomic crisis driven by high inflationary pressure, a significant decline in foreign exchange reserves, due to high import bills and scheduled debt repayments, and a strong depreciation of the national currency. The Pakistan rupee (PKR) depreciated steadily since June 2021 and, in August 2022, its value reached a record low at PKR 221 against USD 1, depreciating by 35 percent

Figure 2: Pakistan – Exchange rate, January 2021–August 2022

Source: International Monetary Fund (IMF), 2022.

Figure 3: Pakistan – General food inflation rate, January–August 2022

Source: International Monetary Fund (IMF), 2022.

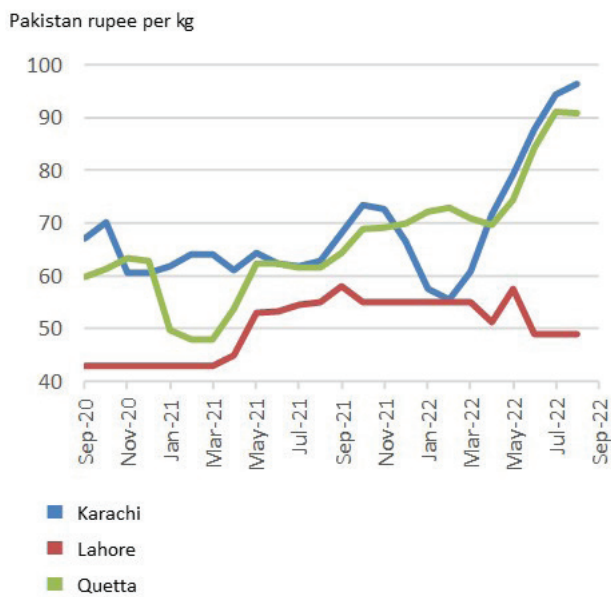
year-on-year, in response to political and economic uncertainties (Figure 2). The sharp depreciation of the national currency caused a significant rise in the domestic prices of imported food items, fuel and energy. Overall, the year-on-year inflation rate increased to 27.3 percent in August 2022, compared to 8.4 percent in August 2021. The food price inflation stood at by 30.2 percent in rural areas and 28.8 percent in urban areas year-on-year (Figure 3).

Prices of wheat flour (Figure 4) have been generally increasing since the end of 2021, reflecting lower-than-previously anticipated 2021/22 production and low levels of domestic stocks, following below-average outputs in 2018 and 2020, and high export flows. High agricultural input costs and inflationary pressure also supported prices. Overall, prices of wheat flour in August 2022 were at record or near-record highs, averaging about 30 percent higher

year-on-year. In July, in an effort to curb further price increases, the government announced a plan to import about 3 million tonnes of wheat. Similarly, domestic prices of rice (Figure 5) were at record levels in August 2022 after increasing since late 2021, amid general inflationary pressure and strong demand for exports. Prices of vegetables, such as potatoes, onions, tomatoes and livestock products, such as

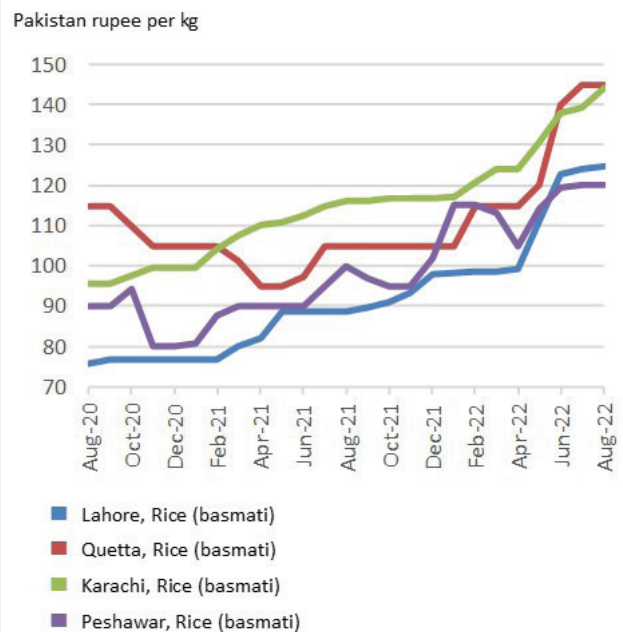
milk and eggs, registered substantial increases, particularly in the markets around the flood-affected areas (Figure 6). The depreciation of the national currency caused a strong rise in the domestic prices of imported items, such as petroleum and energy products. Given the extensive damage by the floods to road infrastructure, physical access to food in some areas has become very difficult.

Figure 4: Pakistan – Retail wheat flour prices in selected markets



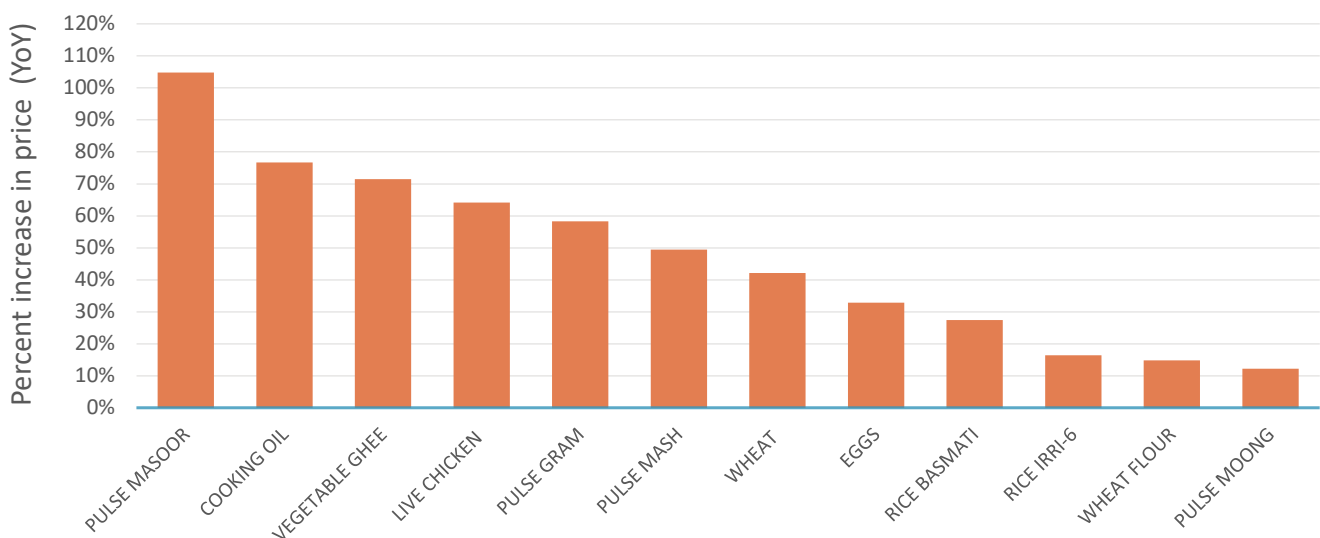
Source: FAO/GIEWS Food Price Monitoring and Analysis Tool, 2022.

Figure 5: Pakistan – Retail rice prices in selected markets

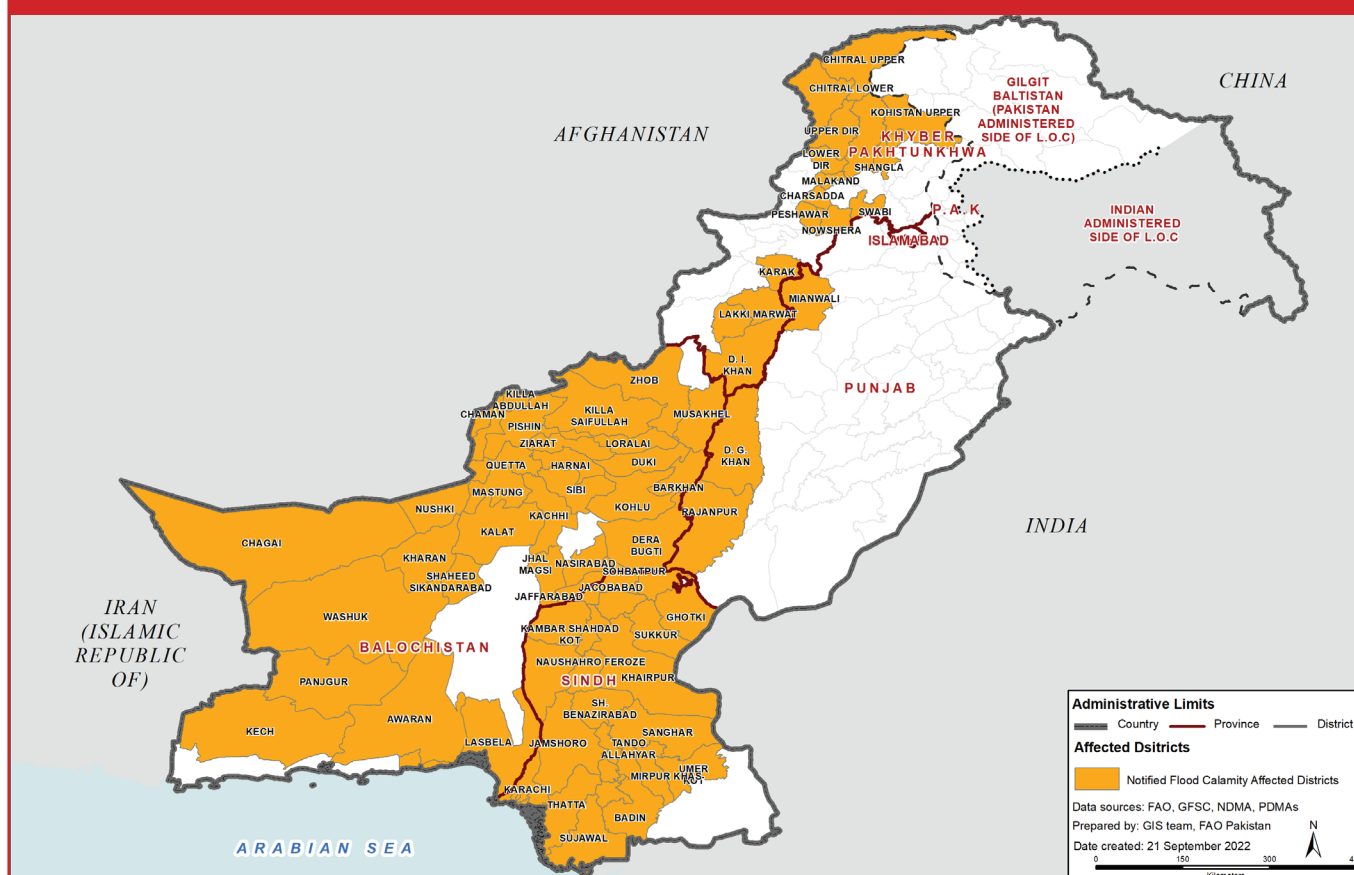


Source: FAO/GIEWS Food Price Monitoring and Analysis Tool, 2022.

Figure 6: Pakistan - Price change of selected food items, August 2021–August 2022



Source: Pakistan Bureau of Statistics, 2022.

Map 1: Pakistan - Notified flood/calamity affected districts

Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. Dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

Source: Pakistan National Disaster Management Authority, compiled by FAO Pakistan, 2022.

Food insecurity expected to increase significantly in parts of the country

According to the latest official estimates, floods had an adverse impact on 116 out of the country's 160 districts, affecting about 33 million people (nearly 15 percent of the total population), particularly in southern provinces of Sindh and Balochistan. On 24 of August 2022, the government announced a state of emergency and 81 districts were declared as calamity hit (Map 1). Floods caused severe damage to housing and infrastructure, including roads, bridges and shops. According to preliminary estimates of the latest Integrated Food Security Phase Classification (IPC) analysis, carried out prior to the floods in the first week of

July, about 5.96 million people, 30 percent of the rural population, were estimated to be facing high levels of acute food insecurity, IPC Phase 3 (Crisis) and above, between July and November 2022 in 28 vulnerable districts analysed in Balochistan, Sindh and Khyber Pakhtunkhwa provinces. Acute food insecurity is expected to increase considerably as livelihoods of a large number of people have been disrupted and vulnerable households are forced to deplete their productive assets in order to secure their basic needs.² In addition, early information indicates severe losses of food stocks at household and warehouse levels, including wheat and wheat flour, which provides about 35 percent of the average per capita energy requirements.

² Considering the devastation of the monsoon rains and flooding, the IPC analysis will be updated and new numbers will be available at the end of September 2022.

Access to food has been worsening as soaring inflation reduced households' purchasing power, with additional support to prices exerted by market supply disruptions due to blocked roads and damage to infrastructures.

Provision of government and humanitarian agencies assistance to affected population

The Government of Pakistan is leading the humanitarian response in the country through the National and Provincial Disaster Management authorities and assisting flood-affected households. Given the magnitude of the recent floods, larger than the previous event in 2010, the government needs urgent support. FAO, other United Nations agencies and Non-governmental organizations (NGOs) have scaled up their activities to support the affected people, particularly with medical support and medicines. However, in many areas, relief efforts are hampered by stagnant waters, additional heavy rains in some areas and destroyed infrastructure, including roads and bridges.

FAO to provide assistance for agricultural production and rehabilitation

FAO immediately appealed for USD 17.9 million to restore the livelihoods of the flood-affected smallholder farmers and livestock keepers to enable them to feed themselves and their communities in a frontline humanitarian response. The [FAO Pakistan - Urgent call for assistance](#) (September 2022–February 2023) included the following targeted activities:

- Vaccinate 683 400 large and small ruminants against major animal diseases, including foot-and-mouth disease, *peste des petits ruminants* and lumpy skin disease.
- Provide 113 900 households (about 763 000 people) with 22 780 tonnes of animal feed.
- Provide 76 900 households (about 515 000 people) with 3 845 tonnes of wheat seed, 3 845 tonnes of urea and 3 845 tonnes of Diammonium phosphate along with kitchen gardening packages and training on good agricultural practices.

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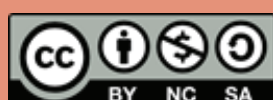
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