SINDH, PAKISTAN
LOCUST INFESTATION, REDUCED INCOME DUE TO COVID-19 RELATED RESTRICTIONS, FLOODING AND HIGH FOOD PRICES ARE DRIVING FOOD INSECURITY IN SINDH, PAKISTAN.

Overview
Sindh is one of the provinces in Pakistan with the highest prevalence of food insecurity, malnutrition and poverty. In 2020, the population faced multiple shocks including high food prices, locust outbreaks and heavy monsoon rains/flooding, all exacerbated by the impacts of the COVID-19 pandemic. Around 3.1 million people (26 percent of the rural population) are estimated to be facing high levels of acute food insecurity (IPC Phase 3 or above) in the current period of March to June 2021, corresponding to the end of the lean season and the beginning of the harvest season. These include around 2.26 million people (19 percent of the rural population) in IPC Phase 3 (Crisis) and 0.8 million people (7 percent of the rural population) in IPC Phase 4 (Emergency) across the nine districts analysed. At least 5 percent of the population analysed in all the districts is in Phase 4, and between 15 to 30 percent in IPC Phase 3 or 4. The analysis of the projection period (July-September 2021) corresponding to the post-harvest season indicates that the number of people in IPC Phase 3 or above is expected to reduce to 2.6 million (22 percent of the rural population). Urgent action is required to protect livelihoods and reduce food consumption gaps of people in Crisis and save lives and livelihoods of people in Emergency.

Key Drivers

High Food Prices
Nationally, food prices went up by 9.1 percent for rural consumers on a year-over-year basis in February 2021. Inflation, high food prices of commodities coupled with loss of employment and reduced income due to COVID-19 related restrictions reduced household purchasing power, particularly for low income groups e.g., small farmers, wage labors, households relying on petty trades, etc.

Locust Infestation
Most of the districts are heavily reliant on agriculture where locust infestation was experienced, that adversely affected food crop and fodder production.

Flooding
The majority of the households were also affected by heavy rains/flooding that affected agriculture crop production.
CURRENT SITUATION MAP AND POPULATION TABLE (MARCH - JUNE 2021)

Key for the Map
IPC Acute Food Insecurity Phase Classification
(mapped Phase represents highest severity affecting at least 20% of the population)

- 1 - Minimal
- 2 - Stressed
- 3 - Crisis
- 4 - Emergency
- 5 - Famine

Evidence Level
****** Medium

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Note: A population in Phase 3+ does not necessarily reflect the full population in need of urgent action. This is because some households may be in Phase 2 or even 1 but only because of receipt of assistance, and thus, they may be in need of continued action.
Vulnerability and Shocks

This IPC analysis is focused on nine rural districts of the Sindh province of Pakistan: Badin, Ghotki, Khairpur, Mirpur Khas, Sanghar, Shaheed Benazirabad, Sukkur, Tharparkar and Umerkot. Tharparkar, Sanghar, Umerkot, Badin, Khairpur and Ghotki districts border with India, have desert areas and are prone to moderate to severe drought, whereas Sukkur and Ghotki districts are prone to riverine flooding. Apart from Tharparkar and Umerkot, the other analysed districts are the major food and cash crop producers in Sindh. Overall, around 2.26 million people are in IPC Phase 3 (Crisis), and around 0.8 million people in IPC Phase 4 (Emergency). Furthermore, 4.2 million people are in IPC Phase 2 (Stressed). Of the nine districts analyzed, only Sukkur is classified in IPC Phase 2 (Stressed), the remaining districts are classified in IPC Phase 3 (Crisis). Ghotki, Shaheed Benazirabad, Tharparkar and Umerkot have 30 percent of their population in IPC Phase 3 (Crisis) or above, while Badin, Mirpur Khas and Sanghar have 25 percent of their population in IPC Phase 3 (Crisis) or above.

The main shocks affecting the area have been locust outbreak and flooding, which affected food availability, with COVID-19 restrictions and high food prices mainly affecting household purchasing power and access to food. The locust outbreak started from March/April 2019 in Balochistan and moved to Sindh later in 2019 and early 2020. As per data on locust control and surveillance, out of 277,407 acres treated/sprayed in Sindh, 219,299 acres (around 80 percent) were treated in the nine analysed districts. In addition, in August/September 2020, several districts of Sindh, including the analysed districts, received heavy monsoon rains which caused flooding, particularly in Sanghar, Umerkot, Mirpur Khas, Shaheed Benazirabad and Badin. The first case of COVID-19 in Pakistan was reported in February 2020 and the federal and provincial governments imposed strict lockdown in the country from the last week of March 2020, and several businesses were closed initially. However, considering the importance of keeping the food supply uninterrupted, food markets and businesses were allowed to operate while other businesses remained closed. With improvement in the COVID-19 situation, the government lifted the restrictions on other businesses as well from May 2020, which continued for the rest of the year. From the third week of March 2021, the government has again announced limited business hours and two off days during the week due to the third wave of COVID-19; however, food and agriculture-related businesses are largely exempted from these restrictions.

Multiple shocks affecting livelihood/income of the surveyed households were reported in the Food Security and Livelihood Assessment (FSLA), mainly locust infestation, monsoon rains and COVID-19. The sickness or death of a member/breadwinner, lost employment or income and reduction in own production were other shocks reported by households. Overall, 27 percent of the surveyed households reported their household livelihood/income being severely affected by locusts, followed by 32 percent reporting being moderately affected, 10 percent being slightly affected and 32 percent not being affected. Regarding the impact of monsoon rains/flooding on household livelihood/income, 36 percent of the surveyed households reported it is severely affected, followed by 29 percent moderately affected, 21 percent slightly affected and 15 percent not affected. Around 25 percent of the surveyed households reported their household livelihood/income being severely affected by COVID-19, followed by 37 percent being moderately affected, 19 percent being slightly affected and 19 percent not being affected. Overall, 54 percent of the surveyed households reported a reduction in their income due to COVID-19/lockdown.

Availability

Overall, agriculture and livestock based activities have been reported as a primary source of livelihood by 68 percent of the households surveyed by the FSLA, whereas non-agriculture wage labor is the primary source of livelihood for 21 percent. Other sources (small business/self-employed, medium to large business, government employee, NGO/private employee, petty trade, pension allowance, charity/zakat/gifts, and home-based work like handicraft) are reported by 11 percent of surveyed households.

The Outcome Indicators

Food Consumption Score (FCS) - The majority of the surveyed households (42%) had ‘borderline’, 37 percent had ‘acceptable’, and 21% had ‘poor’ food consumption. The households with borderline food consumption are at risk of deteriorating to poor food consumption if access to food worsens due to any unexpected shocks.

Household Dietary Diversity Score (HDDS) - 84 percent of households consumed five or more food groups during the past 24 hour reference period, 13 percent consumed between three and four food groups, while only 3 percent consumed two or less food group.

Reduced Coping Strategy Index (rCSI) – 11 percent of the households had a score greater than 19, 45 percent had a score of 4-18, whereas 44 percent had a score of 0-3. Households with an rCSI score of 4-18, and 19+ indicate that food gaps exist in these areas and households are adopting short-term coping strategies to meet their food needs.

Households also resorted to livelihood coping strategies (LCS) to meet their food needs. Overall, 14 percent of households adopted ‘Emergency’ livelihood coping strategies, 15 percent adopted ‘Crisis’, 19 percent adopted ‘Stressed’, whereas 52 percent households did not adopt any coping strategies.

1 The FSLA was jointly conducted by FAO and WFP in 21 districts of Sindh, Balochistan and Punjab in collaboration with the Food Security and Agriculture Working Group (FSAWG) and the Provincial Disaster Management Authorities of Sindh, Balochistan and Punjab in October/November 2020.
Agriculture is one of the most important sources of livelihood for rural households in the analysed districts. Due to the limited availability of water and landholdings, most farmers are engaged in small-scale subsistence-level crop production. On average, the surveyed households in Sindh merely own 2.9 acres of agricultural land, which is small relative to the household size in the analysed districts and not enough to produce adequate food production for household consumption for longer duration. In terms of distribution of agricultural land ownership, almost half of the surveyed households do not own any agricultural land. The average land cultivation is 4.6 acres higher than the average land ownership, mainly because most of the cultivators are sharecroppers or tenants. Overall, 22 percent of households do not cultivate land, 24 percent cultivate up to two acres, 29 percent cultivate between two and five acres, and 25 percent cultivate more than five acres. Due to small landholdings and subsistence-level crop production, on average, the own production of 2020 Rabi and Kharif seasons’ cereals is merely sufficient for household consumption for four months and one month respectively, suggesting limited or no carry over stock from previous seasons for the majority of households, particularly for the households who cultivate five acres of land or less and also have a large family size. The farming households also reported that COVID-19 related measures such as lockdown/restrictions on movement, limited business hours which affected crop production due to limited availability of seeds, fertilizers, labor and agriculture machinery for harvesting/sowing of crops, high cost of seeds for crops, high transportation cost and high cost of fuel. The farming households also reported problems in selling their crop produce due to COVID-19 related measures such as constrained access to markets due to movement restrictions, demand for crop produce is lower than usual, usual traders are not coming to buy the production anymore, limited availability of transport for marketing of agriculture produce, cost of transportation is higher than usual, prices are too low, security and other reasons.

The main cereal crops grown in the focused areas are: wheat (the major cereal crop grown in all areas in winter (Rabi season) except in Tharparkar), rice (mainly grown in Badin, Khairpur, Ghotki and Shaheed Benazirabad), millet (cultivated mainly in Tharparkar and some parts of Sanghar, Umerkot and Mirpur Khas) and maize (mainly grown in Sukkur, Khairpur, Badin, Sanghar and Umerkot). Gram, the major locally produced pulse, is mainly grown in Khairpur, Sukkur and Ghotki districts. Except for Tharparkar, all districts also produce different varieties of vegetables and fruits, whereas cotton and sugarcane are the major cash crops in these districts.

During the cropping season, the farming households experienced adverse impacts of locust outbreaks and heavy monsoon rains/flooding in 2020, and their crops (both food and cash, vegetables and orchards) were affected, particularly by the monsoon rains/flooding, mainly in Sanghar, Umerkot, Mirpur Khas, Badin and Shaheed Benazirabad. The FSLA highlighted that nearly all farming households had reductions in crop production due to multiple shocks compared to a normal year, affecting both staples (wheat, maize, rice and millet), fodder crops (rabi and kharif), cash crops (sugarcane and cotton) and others (cluster beans, vegetables and pulses). Overall, 95 percent of wheat growers, 97 percent of sugarcane owners, 85 percent of cotton owners, 100 percent of maize growers, 94 percent of rice growers, 68 percent of millet growers, 88 percent of sorghum growers, 64 percent of cluster bean growers, 98 percent of pulses growers, 86 percent of Rabi season fodder crop growers and 94 percent of Kharif season fodder crop growers reported a reduction in production compared to a normal year. Reduced fodder crops production also caused a reduction in availability of fodder for livestock, which is the second major livelihood source for the people in the affected areas. Agricultural support required by farming households to improve crop production in the next cropping season include good quality seeds, cash support to buy agriculture inputs, fertilizer, irrigation water, agricultural tools, improvement/repair of existing irrigation system, tube well, etc.

Official data from the Crop Reporting Services of the Sindh Agriculture Department shows that, wheat area (in hectares) has increased by merely 2 percent whereas wheat production (in tonnes) increased by just 3 percent in the analysed districts over the past five years. Out of the nine districts analysed, Ghotki, Khairpur, Sanghar and Shaheed Benazirabad have relatively more production of wheat compared to the other districts.

Livestock is one of the core assets for the rural households in the analysed areas and kept as a source of livelihood as well as for meeting household consumption needs of livestock products. Overall, 75 percent of households keep livestock (cattle, buffalos, goats, sheep, camels, donkeys and poultry), whereas between 80-90 percent of households raise livestock in Ghotki, Khairpur, Mirpur Khas, Sanghar, Shaheed Benazirabad and Tharparkar districts. Less than 10 percent of livestock holders reported deaths of different types of animals except deaths of goats reported by 28 percent of livestock holders. The main reasons for deaths of livestock were diseases, monsoon rains/flooding and limited availability of fodder. Around 5 percent of livestock holders sold their animals due to the COVID-19 pandemic, locust outbreaks and monsoon rains/flooding. The three major reasons for sale of livestock reported by livestock holders who sold livestock are: sold for earning livelihood, distress sale to meet food and other needs and distress sale because of poor health of animal. Livestock holders also reported problems in selling/marketing livestock products due to the COVID-19 crisis because of increased transportation costs, road closure/lockdown and reduced demand for livestock products. The major livestock needs as identified by livestock holders are cash to buy livestock inputs, vaccines/medicines, straw/green fodder, veterinary services and drinking water for livestock.
Access

Pakistan is also facing high inflation, including high food prices. The current wave of inflation in the country has had adverse effects on the purchasing power of populations and their access to food, particularly poor and middle income groups. The Consumer Price Index (CPI) inflation data released by the Pakistan Bureau of Statistics (PBS) by the National Statistical Organization in March 2021, shows that CPI inflation (General) in Pakistan increased by 8.7 percent on a year-over-year basis in February 2021. Food prices went up by 10.3 percent for urban consumers and 9.1 percent for rural consumers. In particular, prices of essential food items, such as wheat flour, rice, pulses, cooking oil and vegetables, have spiked since January 2020. In the three major markets surrounding the analysed districts, on average, price of wheat rose by 15 percent since January 2020, rice by 22 percent, sugar by 23 percent, cooking oil by 26 percent, cooking ghee by 30 percent, masoor pulse by 11 percent, moong by 1 percent, mash by 15 percent, gram by 5 percent, beef/mutton, milk and eggs each rose by 12 percent, whereas prices of chicken increased by 37 percent.

The inadequate production of cereals at household level raises dependency on markets for their food needs. In fact, although food is mostly available in the markets, the purchasing power of households is considerably low due to high level of poverty in these areas, and the distance to food markets is relatively far with nearly one-third of households travelling more than 10 kilometers to reach the market. Around half of the households (48 percent) reported that they face problems reaching the market such as long distances, access roads damaged, high cost of transportation, transport is often not available and security issues, etc. Nearly one third of households (29 percent) reported that they do not have enough means/resources to buy food from the market. Generally, households have also contracted new debts to meet basic household needs during the past six months preceding the survey. Overall, around half (43 percent) of households accumulated new debts, mainly to cover food needs, purchase of livestock/agricultural inputs and health needs. Considering the already limited household income in the area, people are likely to remain in a debt cycle for some time, as their monthly income is not enough to cover debt or payments.

Utilization

Access to improved sources of water is universal (96 percent) in the analysed areas, however, quality of water was not assessed in FSLA. Around one-fourth of households reported men and women usually use flush toilets; in 32 percent of households, men use dry pit latrine whereas in 38 percent women use it; whereas 43 percent and 53 percent of households reported open field defecation by men and women respectively. In case of housing status of households, 51 percent live in non-cemented (Kaccha) houses, followed by 19 percent living in semi-cemented homes (Semi Pakka), 21 percent in cemented (Pakka) houses and 8 percent living in chhorna/wooden houses. The average number of rooms in the house is 2, while, overall, 59 percent of households have access to electricity.

The limiting factors for the key dimensions of food security (Availability, Access and Utilization) vary across the districts. Overall food availability is considered the major limiting factor for Badin, Ghotki, Mirpurkhas, Sanghar, Tharparkar and Umerkot districts. Access is considered the major limiting factor for Ghotki, Mirpurkhas and Tharparkar districts. The major limiting factors in term of accessibility are attributed to a number of factors such as: low income, very limited sufficiency of cereal crops, high cost of transportation, long distance to markets, reduction in income and rising food prices. Similarly, utilization is considered a ‘major’ limiting factor for Mirpurkhas, Tharparkar and Umerkot districts. For the rest of the six areas, utilization was considered a minor limiting factor. The major limiting factors are defined as less availability of clean drinking water, medical debt, and limited access to improved sanitation.

Humanitarian Food Assistance

In some districts, the Federal and Provincial Governments, the United Nations, along with international and local non-governmental organizations (NGOs), have provided support to help improve the livelihoods and food security situation of vulnerable households. During 2020, the PDMA of Sindh provided 192,483 ration bags after the monsoon rains/flooding with the support of the NDMA, private donors, UAE, the United Nations and various humanitarian partners in Badin, Shaheed Benazirabad, Sanghar, Mirpurkhas, Tharparkar, and Umerkot districts. In Sanghar, Concern Worldwide and SIF provided cash assistance to 2,400 households, SIF and WFP provided cash assistance to 7,175 households, Malteser international provided ration bags to 3,600 households and cash assistance to 300 households in response of COVID-19 and ACTED provided conditional cash assistance to 725 families and livestock feed (fodder) to 525 families. In Tharparkar district, SIF provided food assistance to 2,170 households and cash assistance to 2,350 households. ACF provided unconditional cash grants to 768 households and cash grants for livestock inputs to 600 households in Badin and Umerkot. In Umerkot, ACTED provided conditional cash grants to 7,558 households, livestock feed (fodder) to 1,192 households, kitchen gardening inputs to 448 households, and vaccination and deworming services to 300 households. In Mirpur Khas, ARTS Foundation provided ration bags to 264 families in response of COVID-19 FAO provided livelihood related support in the form of crops and livestock inputs, cash/voucher assistance to 79,117 households in five out of nine focused districts as follows: Khairpur (695), Sanghar (2,899), Mirpur Khas (346), Tharparkar (3,007) and Umerkot (72,170 households of which 69,590 were provided with livestock related support) in 2020.

The assistance was included in the current analysis as captured by the outcome indicators, however, due to missing information regarding the Kcal coverage, it was not possible to include it in the mapping protocols.
### PROJECTED SITUATION MAP AND POPULATION TABLE (JULY - SEPTEMBER 2021)

#### Key for the Map
IPC Acute Food Insecurity Phase Classification
(mapped Phase represents highest severity affecting at least 20% of the population)

- **1 - Minimal**
- **2 - Stressed**
- **3 - Crisis**
- **4 - Emergency**
- **5 - Famine**

#### Evidence Level

- *********: Excellent evidence
- ********: Good evidence
- ******: Medium evidence
- *****: Limited evidence
- ****: Scarce evidence
- **None**: Areas not analysed

#### Map Symbols

- **District**
- **Total population analysed**
- **Phase 1**
  - #people
  - %
- **Phase 2**
  - #people
  - %
- **Phase 3**
  - #people
  - %
- **Phase 4**
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  - %
- **Phase 5**
  - #people
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- **Area Phase**
  - #people
  - %
- **Phase 3+**
  - #people
  - %

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**Note:** A population in Phase 3+ does not necessarily reflect the full population in need of urgent action. This is because some households may be in Phase 2 or even 1 but only because of receipt of assistance, and thus, they may be in need of continued action.
During the projection analysis period (July to September 2021), corresponding to the post-harvest season, the total population facing high levels of acute food insecurity (IPC Phase 3 or above) is expected to decrease to 2.6 million (22 percent of the analysed population) from 3.1 million. This shows a 17 percent decrease of people facing high levels of acute food insecurity from the current to the projection period. Out of nine districts, two districts (Sanghar and Sukkur) are classified in IPC Phase 2 (Stressed), whereas the remaining seven districts will remain in the same phase (Crisis). The decrease in magnitude and severity is expected, particularly in IPC Phase 3, because of the recent harvest, stability in food prices and comparatively decreased impact of COVID-19 during the time of analysis.

The projection period coincides with the monsoon season in the analysed districts. Harvesting of Rabi (winter) crops will be completed during April and farming households are expected to have food stocks from own production during the projection period. Labor opportunities will increase during the harvest and post-harvest period contributing to food and income for the people associated with the wage sector.

Considering the rising number of COVID-19 cases and the possibility of lockdown by the government, COVID-19 may also have a slight adverse impact on the livelihood/income of the rural households over a shorter period of time. However, it is less likely that a complete lockdown will be imposed for a long time which can highly disrupt the food supply chain.

Food prices of commodities are expected to slightly decrease or remain the same, inflation is likely to continue which is expected to result in low purchasing power of households particularly for low income groups e.g., small farmers, wage laborers, households relying on petty trade, etc., ending up with food consumption gaps.

Religious festivals and events, such as Eid ul Adha and Moharram, will be celebrated and observed during the projection period. Livestock sales are expected to rise around Eid-ul-Azha, which takes place in July 2021.

Due to climate change, rainfall unpredictability has become higher. According to the climatological normal (1981–2010), Sindh province remains dry during October to May, whereas the rainy season prevails from July to September. According to Drought Advisory-I issued in February 2021 by the Pakistan Meteorological Department (PMD), “Pakistan overall received below normal (-31.0 percent) rainfall during (Oct-2020 to Jan-2021). The main thrust was in Balochistan (-73.2 percent) and Sindh (-70.2 percent) while, it remained above normal during November throughout the country’’. As per the drought outlook for 2021 by PMD issued in February 2021, mild drought conditions were prevailing in South Eastern parts of Sindh which include five out of nine analysed districts (Badin, Mirpur Khas, Tharparkar, Umerkot and Sanghar). However, as per the latest Drought Alert issued in April 2021 by the PMD, moderate drought conditions (instead of mild) are prevailing in the five analysed districts (Badin, Mirpur Khas, Tharparkar, Umerkot and Sanghar).

According to the seasonal Agro-Climate Outlook for April-September issued in April 2021 by the PMD, “Upper Sindh is expected to have almost dry weather during the entire period. However, a few spells of light rains are expected during 1st and 3rd decade of May. Consistent hot and dry conditions would increase the water requirement for the standing crops in the region. Whereas, Lower Sindh may receive few spells of light to moderate rainfall (with few heavy downpours) during mid of April, and 1st and 3rd decade of May, while consecutive spells of light to moderate rainfall are also expected from mid of June till the end of specified period (September). Due to prolong dry conditions the standing crops will be affected more in the region'. Among the analysed districts, Sukkur, Ghotki and Khairpur are in Upper Sindh, whereas Badin, Mirpur Khas, Sanghar, Umerkot and Tharparkar are in Lower Sindh.

Considering the above forecasts from the PMD, there is the possibility of several spells of rainfall which would be beneficial for cultivation and production of cereal and fodder crops and for the livelihoods of the subsistence-level agro-pastoralists communities in the analysed districts, particularly in Badin, Mirpur Khas, Sanghar, Umerkot and Tharparkar. On the other hand, if drought conditions further aggravate, it would put stress on households reliant on agriculture and livestock-based livelihoods, because of reduced production of crops and fodder and water availability. Livestock diseases also typically occur during June-August, which could also have adverse impacts on the health, production and sale of livestock.
Considering the above-mentioned factors, it is anticipated that compared to the current period, more opportunities for agriculture and non-agriculture-based livelihoods and market-related activities will arise during the projection period. However, rising inflation and risks are likely to offset the positive effect as rising prices are expected to reduce the purchasing power and income of already vulnerable households. Furthermore, own production of wheat, other cereals and pulses are not expected to meet adequate household consumption. Therefore, a slight improvement is expected as shown in the numbers and classification above, but the majority of the households will likely remain dependent on markets to access food during the projected period and may continue to face the same situation. Overall, except in Sanghar, there would not be a major change in phase classification of the areas during the projection period (July-September 2021) as compared to the current period.

COMPARISON WITH PREVIOUS ACUTE FOOD INSECURITY ANALYSES

Several districts in Sindh experienced drought during 2018. In this context, the Natural Disasters Consortium (NDC)\(^2\) conducted the Sindh Drought Needs Assessment (SDNA) in eight drought-affected districts of Sindh in October 2018. Using the NDC assessment data and other secondary information, the IPC Acute Food Insecurity Analysis focusing on the drought-affected population in seven out of the eight notified districts in Sindh (Tharparkar, Umerkot, Sanghar, Jamshoro, Badin, Dadu and Qambar Shahdadkot) was conducted in April 2019. Out of the seven districts analysed, four districts (Badin, Sanghar, Tharparkar and Umerkot) are also analysed in this IPC analysis.

The comparison of the 2021 analysis with the 2019 analysis shows that because the focus of the 2019 analysis was only on the drought-affected population, a significantly higher proportion of population was in IPC Phase 3 or above in both the current and projected periods. The two graphs show that food insecurity is still high in the analyzed rural districts of Sindh, however, the situation improved substantially compared to the 2019 analysis for both Phases 3 and 4. Except for Badin, the other three districts, namely Sanghar, Tharparkar and Umerkot, were classified in IPC Phase 4 (Emergency) during both current and projection periods in 2019, whereas Badin was classified in IPC Phase 3 for both current and projection periods. During the 2021 analysis, all four districts are classified in IPC Phase 3 in the current period, whereas Sanghar is classified in Phase 2 in the projection period.

The major livelihoods of the rural parts of these districts are heavily based on agriculture and livestock, with many of this population relying on small-scale farming. Their livelihoods were severely affected by the 2018/19 drought, resulting in low food/cereal and livestock production, subsequently making a large number of people food insecure. Agro-climate conditions and livelihoods improved over time, which brings improvement to the food security situation, though this improvement has been partially offset by COVID-19, heavy monsoon rains/flooding and rising food prices in 2020.

\(^2\) NDC comprised of IOM, FAO, UNICEF, HANDS and ACTED. WFP, OCHA and WHO also provided technical support to complete the assessments.
RECOMMENDATIONS FOR ACTION

Response Priorities
This analysis shows a worsened food insecurity situation in the analysed districts due to exposure to multiple shocks experienced during 2020. In response to the Crisis and Emergency acute food insecurity situation in the analysed districts, the following immediate response actions are suggested in order to help save lives and livelihoods:

- Improve access to food through appropriate modalities such as cash and voucher assistance aimed at reducing the food consumption gaps for the populations classified in Emergency (IPC Phase 4) and Crisis (IPC Phase 3).
- Timely provision of quality seeds for high-yielding crops and vegetables, and toolkits, especially to subsistence level farmers. In drought-prone areas, drought-resilient crop varieties need to be introduced to ensure sufficient production.
- Scale-up livestock protection and management interventions such as vaccination campaigns to prevent diseases and access to multi-nutritional feed and pastures to help in preventing distress sale. Livestock programmes should target the vulnerable households and women farmers.
- Construction and rehabilitation of water infrastructure for agriculture and livestock such as tube-wells, water channels and reservoirs for better conservation and management. A resilient water infrastructure can help in reducing the impact of recurring floods and droughts.
- Support livelihood diversification activities for local communities to increase income generation and employment opportunities (including training on ‘online business opportunities and management’).

Situation Monitoring and Update

- The food security situation in the analysed areas needs to be monitored regularly due to the high levels of acute food insecurity and malnutrition, in addition to the high incidences of poverty and vulnerability to multiple shocks.
- Regular monitoring of food security and livelihoods could be done through seasonal household assessments such as the Food Security and Livelihood Assessment.
- As drought conditions are aggravating in most of the analysed and surrounding districts, an FSLA in the context of drought in the second/third quarter, and an IPC analysis, should be carried out to monitor the food security and livelihood situation in these areas and other vulnerable districts of Sindh.
- If macroeconomic trends and the COVID-19 situation persist in Pakistan with rising inflation, there could be more adverse effects on the food security situation in the coming months. Projections may also be revised to reflect those changes.
- It is recommended to conduct regular or seasonal IPC Acute Food Insecurity analyses to inform policy makers on the food security situation in these vulnerable areas of Sindh. IPC Acute Food Insecurity analyses and data collection should be harmonized and planned in a way that the findings can feed into the HNO/HRP.

Risk Factors to Monitor

- Uncertainty around climatic conditions linked to the La Nina phenomena needs to be monitored, due to its impact on agricultural production and livelihoods, which could also lead to the outbreak of livestock diseases. Lack or limited rainfall in the desert areas would push down the water table and cause a reduction in the growth of fodder, leading to starvation for animals. Dry conditions will also cause water stress in the cultivated lands/areas due to the limited supply of irrigation water for Kharif crops. If the moderate drought condition turns to severe in the coming months, then the situation may deteriorate significantly and an update may be required.
- Prices of essential food items need to be monitored - prices of food items have registered a substantial rise during 2020, which also contributed to overall inflation, and needs to be strictly monitored.
- The COVID-19 situation has recently worsened in the entire country and if the situation further worsens, the government may opt for lockdown in the coming months, which would affect the households associated with or dependent on unsustainable livelihood sources i.e. casual labour and other off-farm sources.
- Crop pests, diseases, and livestock diseases need to be monitored, as these can potentially affect crops and livestock in already affected districts, resulting in reduced production and increased distress sale of livestock.
PROCESS AND METHODOLOGY

The IPC Acute Food Insecurity analysis was conducted for two time periods: the current period (March-June 2021) analysis was mainly based on Food Security and Livelihood Assessment (FSLA) data conducted in October/November 2020 along with other secondary information sources. The projected period (July-September 2021) analysis was based on the FSLA, other secondary information sources and forward-looking assumptions on rainfall, drought, food prices, crop harvests, the COVID-19 situation and livelihood opportunities. The analysis covered the nine districts of Sindh, namely: Badin, Ghotki, Khairpur, Mirpur Khas, Sanghar, Shaheed Benazirabad, Sukkur, Tharparkar and Umerkot.

A joint training and analysis (hybrid) workshop was held from 8-12 March 2021 in Islamabad, Pakistan. The workshop was attended by officials/staff of Federal and Provincial government departments, UN organizations, and international and local NGOs. This analysis has been conducted in close collaboration with IPC stakeholders at national and provincial levels, including the Pakistan Agriculture Research Council, the Ministry of Planning, Development and Special Initiative (MPD&SI), the National Disaster Management Authority (NDMA), the Bureau of Statistics of Sindh and Khyber Pakhtunkhwa, the Provincial Disaster Management Authorities (PDMA) of Sindh, Balochistan and Khyber Pakhtunkhwa, Agriculture and Livestock Departments of Sindh and Balochistan, Food Department of Balochistan, UN Organizations (FAO, WFP, UNICEF), and International and National NGOs (including: WHH, Concern Worldwide, ACTED, Care International, Action Against Hunger, Secours Islamique France, Islamic Relief, HANDS, TRDP, Youth Organization and BRSP). The active participation and support of officials/staff from the above ministries/departments/organizations is highly acknowledged.

The data used in the analysis was organized according to the IPC analytical framework and includes food security contributing factors and outcome indicators. The data was collected from multiple sources listed below and analysis was conducted in ISS.

Sources

- The Food Security and Livelihood Assessment (FSLA) carried out in 21 districts of Sindh, Balochistan and Punjab in October/November 2020. The FSLA provided information on a wide range of indicators: both outcome and contributing factors. The outcome indicators included in the analysis are the Food Consumption Score (FCS), the Household Dietary Diversity Score (HDDS), the Reduced Coping Strategy index (rCSI) and Livelihood Coping Strategies;
- Crop production data from the CRS, Agriculture Department, Sindh;
- Food prices data from PBS;
- Food and cash assistance, agriculture support, livelihood support/other distribution from PDMA, INGOs;
- Precipitation/rainfall and Seasonal Agro-Climate Outlook from the PMD;
- Poverty incidence from UNDP/Ministry of Planning, Development and Special Initiatives.

The Evidence Level of this analysis is Medium **.

Limitations of the Analysis and Recommendation for Future Analyses

- A limited number of evidence informing the projection was available, with weather forecast still quite probabilistic.
- Humanitarian Food Assistance (HFA) data was not provided in a format allowing the extrapolation of Kilo-calories coverage.
- The Livelihood Coping Strategies modules presented an additional stress coping strategy. For this reason the reliability of these indicators have been downgraded during the analysis.
- The FSLA and the IPC analysis have covered only rural areas of nine districts. As such, the results should not be extrapolated or generalized as representative of the whole population in the area, but only of rural households.

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2 The FSLA was jointly conducted by FAO and WFP in 21 districts of Sindh, Balochistan and Punjab in collaboration with Food Security and Agriculture Working Group (FSAWG) and Provincial Disaster Management Authorities of Sindh, Balochistan and Punjab in October/November 2020.
Acknowledgements

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What is the IPC and IPC Acute Food Insecurity?

The IPC is a set of tools and procedures to classify the severity and characteristics of acute food and nutrition crises as well as chronic food insecurity based on international standards. The IPC consists of four mutually reinforcing functions, each with a set of specific protocols (tools and procedures). The core IPC parameters include consensus building, convergence of evidence, accountability, transparency and comparability. The IPC analysis aims at informing emergency response as well as medium and long-term food security policy and programming.

For the IPC, Acute Food Insecurity is defined as any manifestation of food insecurity found in a specified area at a specific point in time of a severity that threatens lives or livelihoods, or both, regardless of the causes, context or duration. It is highly susceptible to change and can occur and manifest in a population within a short amount of time, as a result of sudden changes or shocks that negatively impact on the determinants of food insecurity.

Contact for further Information

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Classification of food insecurity and malnutrition was conducted using the IPC protocols, which are developed and implemented worldwide by the IPC Global Partnership - Action Against Hunger, CARE, CISSS, EC-JRC, FAO, FEWSNET, Global Food Security Cluster, Global Nutrition Cluster, IGAD, Oxfam, PROGRESAN-SICA, SADC, Save the Children, UNICEF and WFP.

Acute Food Insecurity Phase name and description

<table>
<thead>
<tr>
<th>Phase 1 None/Minimal</th>
<th>Phase 2 Stressed</th>
<th>Phase 3 Crisis</th>
<th>Phase 4 Emergency</th>
<th>Phase 5 Catastrophe/Famine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households are able to meet essential food and non-food needs without engaging in atypical and unsustainable strategies to access food and income.</td>
<td>Households have minimally adequate food consumption but are unable to afford all essential non-food expenditures without engaging in stress-coping strategies.</td>
<td>Households either: - have food consumption gaps that are reflected by high or above-usual acute malnutrition; or - are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis-coping strategies.</td>
<td>Households either: - have large food consumption gaps that are reflected in very high acute malnutrition and excess mortality; or - are able to mitigate large food consumption gaps but only by employing emergency livelihood strategies and asset liquidation.</td>
<td>Households have an extreme lack of food and/or other basic needs even after full employment of coping strategies. Starvation, death, destitution and extremely critical acute malnutrition levels are evident. For famine classification, area needs to have extreme critical levels of acute malnutrition and mortality.)</td>
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IPC Analysis Partners: