## RESEARCH ARTICLE



# Food security challenges for Pakistan during COVID-19 pandemic: An overview of the response plan

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#### **Abstract**

The COVID-19 pandemic has imparted a significant impact on the global economic conditions. The food security status in the developing and under-developed countries is getting worse with the progression of the pandemic. According to the World Food Program (WFP), 271.8 million people were acutely food insecure due to the destructive impact of COVID-19 pandemic across the world. Similarly, around 20%-30% population of Pakistan, that is, 40-62 million people, has been suffering from acute food insecurity due to the pandemic, and other socio-economic and environmental/climatic issues. The highly vulnerable groups include daily wage class, refugees, and people living in droughtaffected areas, locust-affected areas and areas with winterized emergency. The COVID-19 response plan of Pakistan aimed at improving the food security situation and protecting the livelihood of the demographic groups highly vulnerable to the COVID-19 pandemic through defining the implementing the policy for ensuring the uninterrupted food production and supply chain, integrating the food production system into the COVID-19 relief packages, adopting innovative practices to enhance the functionality of food supply chain market, and treatment of acutely malnourished

and groups affected by food insecurity. Accordingly, this opinion-based article reports the food security challenges faced in Pakistan in the COVID-19 era and explicates the government policies for stabilizing the functionality of agrifood systems in Pakistan.

#### KEYWORDS

agri-food system, COVID-19, food security, malnutrition, response plan

# 1 | INTRODUCTION

The global situation of COVID-19 pandemic has put a momentous stress on the food and health systems all around the world. The pandemic created severe impediments to the economic activity resulting in drastic changes in the livelihoods of people and the situations of food security and nutrition. Increasing rates of globalization, and international travel and trade are primarily responsible for the outbreak of the virus across the world. Moreover, the situations of lockdowns and restricted movements within and across the countries have manifested a drastic effect on the local, national, and international markets, resulting in truncated global economic activity. The situation is even worse in the underdeveloped, and countries with low socioeconomic growth further exacerbating the already fragile agri-food systems and consequently, the livelihoods of the people. According to the Global Report on Food Crises 2020, around 135 million people are suffering from "crisis" level of acute food insecurity situation which needs immediate attention. It is further stated in the report that over 183 million people have been facing the "stressed" level of acute food insecurity, and are at a high threat of moving into the "crisis" phase (Food and Agriculture Organization of the United Nations [FAO], 2020a; Food Security Information Network [FSIN], 2020).

With the protraction of the COVID-19 crisis, it has become vital to correlate challenges and needs of food security with the continually deteriorating and aggravating impacts on the key drivers of vulnerability such as climate change, socio-economic downturns, and natural hazards (Mamun & Ullah, 2020; Waris et al., 2020). The global pandemic has disrupted the economy and the projected number of acutely food insecure people has increased significantly. According to the recently published report by the World Food Program (WFP) in November 2020, around 271.8 million people were acutely food insecure across the world due to the devastating impact of COVID-19 pandemic (WFP, 2020a). The details about the projected number of people suffering from acute food insecurity are given in Table 1.

The COVID-19 pandemic reached Pakistan at a time when people of this country had been grappling with various other crises such as prolonged drought, desert locust (*Schistocerca gregaria* Forsk.) infestation, severe winter season, spiraling economic losses, persistently widespread poverty, and consequent food security challenges. According to Pakistan's National Nutrition Survey (2018), the rate of global acute malnutrition among children under 5 years of age has already exceeded the emergency threshold established by the World Health Organization—that is, 18%—with the situation particularly alarming across the provinces of Sindh (23.3%), Khyber Pakhtunkhwa (23.2%), and Balochistan (18.9%; OCHA [Office for the Coordination of Humanitarian Affairs], 2020).

The current situation of food security in Pakistan is quite worrisome in the light of evolving nature of the global pandemic. The biggest challenge in the present time is to devise a suitable strategic plan



TABLE 1 Projected number of acutely food insecure people (millions) in various regions of the world

Regions	Asia and the Pacific	Central Asia, Middle East, North Africa	Central and West Africa	Southern Africa	East Africa	Latin America and the Caribbean	Total
Number (million)	51.4	54.5	57.4	50.1	40.1	18.4	271.8

Source: WFP global update on COVID-19: November 2020

for improving the economic, food and health systems in Pakistan for prevent/prepare for the similar outbreaks from intensifying into the full-blown social and economic crises. Therefore, the present work is aimed at highlighting the food security challenges faced by Pakistan and the other developing and resource-poor countries in the era of the COVID-19 pandemic. Additionally, the current opinion also provides an overview regarding the adopted and future COVID-19 response plan aimed at ensuring the food security and livelihood protection to the demographic groups highly vulnerable to the COVID-19 pandemic.

# 2 | METHODOLOGY

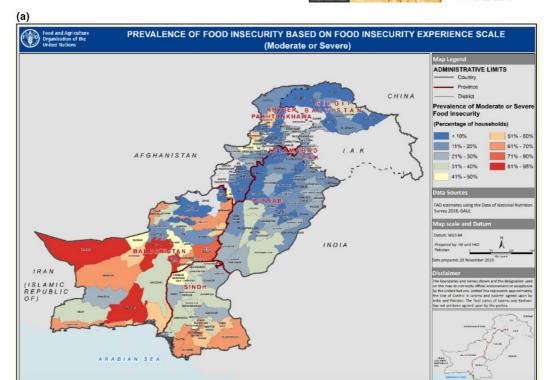
The present work is an opinion-based article which is compiled keeping in view the facts published in the reports prepared by several organizations such as WFP, OCHA, FSIN, Pakistan Humanitarian Response Plan for COVID-19 Pandemic 2020, and FAO.

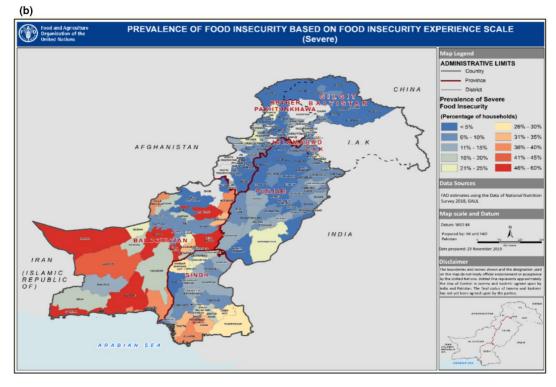
# 3 | RESULTS AND DISCUSSION

This report describes the food security challenges which are being faced by Pakistan, particularly in the intensely affected areas of Pakistan and associated socio-economic impacts. Additionally, the report elaborates the government policies for stabilizing the functionality of agri-food systems in Pakistan. Moreover, the description regarding the potential impacts of these measures on the food security situation and livelihoods of the vulnerable groups and probable options for the agri-food system policies to improve the food security situation in Pakistan. The details have been provided in the subsequent sections.

# 3.1 | COVID-19 pandemic and food security challenges in Pakistan

The situation of COVID-19 pandemic is getting worst in Pakistan like the other countries and the pandemic attacked the country at the time when Pakistan is going through slow economic growth and high inflation. It is estimated that around 53 million people in Pakistan live below the poverty line. Likewise, 20%–30% population in Pakistan is already suffering from food insecurity and the economic experts believe that the number of food insecure people will rise in Pakistan in 2021 due to the evolving nature of the current pandemic. It has also been reported by the Pakistan Bureau of Statistics that the Consumer Price Index has been increased in Pakistan by 8.2% between May 2019 and May 2020. Moreover, food inflation has also been increased by 13.73% in the rural areas and 10.94% in the urban areas during this pandemic era (FAO, 2020a, 2020b; Noreen et al., 2020). The





**FIGURE 1** (a) Map of moderately or severe food insecure households in Pakistan (Source: FAO, 2020a, 2020b). (b) Map of Map of severe food insecure households in Pakistan (Source: FAO, 2020b)

food insecurity maps provided by FAO, describing the food insecurity situation in Pakistan, are provided in Figure 1a,b. Therefore, it is direly needed to carefully monitor the next production season in Pakistan as high risk of production losses has been predicted.

Recently, the World Food Programme (WFP), and FAO collaborated for a food security and nutrition analysis aimed at stocktaking of the impact of the COVID-19 pandemic on the livelihood, food security, agricultural supply chain, prices of food commodities, market conditions, and management strategies along with suitable measures for mitigating the effects of this pandemic on the food insecure groups. The findings of the analysis revealed that close to 36.43 million people are highly vulnerable to food insecurity owing to both natural and manmade hazards, including the ongoing pandemic. Also, around 49 million people (25%) are moderately food insecure, while 21 million (10%) households are severely food insecure in Pakistan (OCHA, 2020; WFP, 2020b). The demographic groups most susceptible to the COVID-19 pandemic are the daily wage class (accounting for 22% of all the wage earners), refugees, internally displaced persons, senior citizens, and persons with preexisting medical conditions, as well as low-income urban households, market-dependent rural communities, and child-headed households.

Food and Agriculture Organization of the United Nations and WFP further stated that an additional 2.5 million people are at a high risk of becoming food insecure due to the current pandemic situation, consequent lockdowns, and the scenario is projected to become even worse if the pandemic continues to proceed unabated. Based on these concerted estimates, WFP and FAO have recommended immediate response planning for the populations with acute livelihood needs such as the provision of lifesaving food, and food, and non-food production assistance in a highly targeted manner, thereby, to prevent a full-scale humanitarian emergency. These extremely susceptible populations mostly belong to the afore-mentioned geographical regions severely impacted by the COVID-19 shock. An overview of the food insecurity situation in Pakistan under the influence of the COVID-19 pandemic has been illustrated in Figure 2.

# 3.2 | Response plan of Pakistan for COVID-19 pandemic

In 2019–20, the Food Security and Agriculture Working Group (FSAWG) targeted recovery assistance to various population groups affected by several emergencies across various parts of Pakistan,

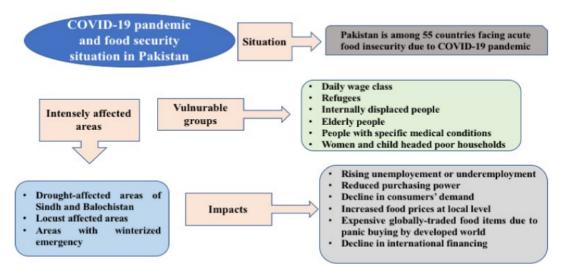


FIGURE 2 COVID-19 pandemic and food security situation in Pakistan

Key performance indicators (KPIs)	<ul> <li>Weekly monitoring of food pricing reports</li> <li>Number and type of regulatory measures</li> <li>Monitoring the implementation and enforcement mechanisms</li> </ul>	<ul> <li>Monitoring the COVID-19 relief packages</li> <li>Identifying the percentage of vulnerable farmers</li> <li>Monitoring the percentage of vulnerable groups received the assistance</li> </ul>	<ul> <li>Number of new tools and technologies adopted to ensure the functionality of food supply chain market</li> <li>Development of safe and effective food delivery process/system</li> </ul>	<ul> <li>Number of cases admitted in the program</li> <li>Number of cases with associated medical complication</li> <li>Number of cases recovered</li> </ul>	<ul> <li>Number of mothers received with the message of promoting the breastfeeding</li> <li>Number of children and women provided with food supplementation</li> </ul>
Proposed activities	<ul> <li>Balanced resource allocation</li> <li>Regular and systematic monitoring of food and nutritional security</li> <li>Market regulation</li> <li>Strengthening the management of food production, marketing and supply chain systems</li> <li>Strengthening and centralizing the data collection and government's analytical capacity to ensure informed decision-making</li> <li>Ensuring the smooth transportation of food supplies</li> <li>Launching the awareness campaigns</li> </ul>	<ul> <li>Integrate acute malnutrition management into distribution of food, cash, and vouchers</li> <li>Strategies to improve the composition of ration packages to meet the dietary guidelines</li> <li>Subsidizing the seed and fertilizer</li> <li>Consider interest-free loans and grants to highly vulnerable groups</li> </ul>	<ul> <li>Adopting the integrated food ordering and delivery systems</li> <li>Enhancing the collaboration with existing private sector to develop efficient and safe delivery processes</li> </ul>	<ul> <li>Identification of acutely malnourished children and women (no. of cases)</li> <li>Ensuring the continual treatment</li> </ul>	<ul> <li>Promote adequate breastfeeding, age-specific complementary feeding and nutritional supplementation</li> <li>Supplementation programs for pregnant and lactating women</li> </ul>
Recommendations	Defining the implementing the policy and regulations to ensure the uninterrupted food production and food supply chain	Integrating the food production, supply chains and security (food and nutrition) into the COVID-19 relief packages	Use of innovative technology and practices to improve the functioning of food supply chain market	Treatment of acutely malnourished children, and pregnant/lactating women	Preventing the wasting and malnutrition

in particular, Balochistan, KPK, Gilgit Baltistan, and Pakistan-administered Kashmir. For instance, FSAWG disbursed around USD 16.4 million as part of a Drought Response Plan for Balochistan and Sindh for the provision of emergency food security and livelihood assistance to about 2.1 million people. Similarly, another USD 2.194 million were mobilized under the Winter Emergency Response 2020 for Kashmir and Balochistan to fulfill the immediate needs of around 0.5 million people. Additionally, the Government of Pakistan has put in place a National Preparedness and Response Plan, allocating about USD 44 million for prevention/control of desert locust infestation. In addition to these strategies, the government has also launched the *Ehsaas Emergency Cash* program for supporting the people during the COVID-19 pandemic by distributing PKR 12,000/household to over 12 million families (Akhtar, 2020).

The COVID-19 response plan has been aimed at providing food security and livelihood protection to the demographic groups highly vulnerable to the COVID-19 pandemic. The FSAWG designed the response plan by focusing on the prevalent needs of the pandemic- and disaster-affected communities, and the inability to meet and protect their livelihood and food-associated needs. Another focal point of the designed response plan was augmenting the efforts of the Government of Pakistan for meeting the food consumption needs and other necessities of the pandemic-affected community groups. The plan is primarily based on the assistance of vulnerable groups through a combination of cash/food/food production, as well as agriculture-based livelihood protection assistance, that will aid in enabling the people to not only improve and protect their livelihoods but revitalize and recommence their productive activities as well. The key objectives of the response plan include ensuring food security, provision of effective cash/food/other facility transfer platforms, technical assistance in agriculture, livestock, and animal health maintenance, quick dispatching of response facilities, and avoiding the humanitarian emergency among vulnerable groups. A generalized description of response plan of Pakistan to improve the food security situation by maintaining the food systems and provision of nutrition services has been provided in Table 2 (Wazir, 2020).

## 4 | CONCLUSION

This report elaborates the food security challenges faced by Pakistan along with the concomitant socioeconomic impacts. Moreover, the policies of the government to stabilize the functionality of agrifood systems in Pakistan have also been discussed in this treatise. Despite momentous efforts, several
livelihoods- and food security-related needs remain unfulfilled due to limited resources. Hence, it is
highly imperative that the risks associated with the failure to deliver an equitable response to all the
vulnerable groups be identified. This has the potential to markedly improve the livelihood sustenance,
ensuring food security, and self-reliance. Government should ensure the provision of proper transportation and storage systems to mitigate the food losses, promote the export of value-added fruit and
vegetable products which can be a good source of foreign exchange, subsidize farmers by providing
essential inputs like seeds, pesticides and fertilizers in order to prevent economic losses, so that the existing food supply chain management can be strengthened and the future food crises can be prevented.

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#### REFERENCES

Akhtar, N. (2020). COVID-19 in Pakistan: Current scenario and future perspective. *Journal of Clinical and Experimental Investigations*, 11(4), em00753. https://doi.org/10.29333/jcei/8354

- Food and Agriculture Organization of the United Nations (FAO). (2020a). National agrifood systems and COVID-19 in Pakistan: Effects, policy responses, and long-term implications. http://www.fao.org/3/cb1343en/CB1343EN.pdf. Accessed on 01 Oct 2020.
- Food and Agriculture Organization of the United Nations (FAO). (2020b). COVID-19 emergency in Pakistan: Evolution of prices of major food items since COVID-19 outbreak (February 28–June 11, 2020). http://Pakistan | Humanitari an response (May–December 2020) (fao.org). Accessed on 09 Oct 2020.
- Food Security Information Network (FSIN). (2020). Global report on food crises 2020. Available at http://www.fao.org/emergencies/resources/documents/resources-detail/en/c/1272014/. Accessed on 04 Oct 2020.
- Mamun, M. A., & Ullah, I. (2020). COVID-19 suicides in Pakistan, dying off not COVID-19 fear but poverty? The forthcoming economic challenges for a developing country. *Brain, Behavior, and Immunity*, 87, 163–166. https:// doi.org/10.1016/j.bbi.2020.05.028
- Noreen, N., Dil, S., Niazi, S. U. K., Naveed, I., Khan, N. U., Khan, F. K., Tabbasum, S., & Kumar, D. (2020). COVID 19 pandemic & Pakistan; limitations and gaps. *Global Biosecurity*, 1(4). https://doi.org/10.31646/gbio.63
- OCHA (Office for the Coordination of Humanitarian Affairs). (2020). Pakistan humanitarian response plan for COVID-19 pandemic 2020. Available at http://Pakistan Humanitarian Response Plan For COVID-19 Pandemic 2020 | HumanitarianResponse. Accessed on 10 Oct 2020.
- Pakistan National Nutrition Survey. (2018–2019). Aga Khan University, Ministry of National Health Services, Regulations & Coordination (Pakistan), Pakistan Medical Research Council, UK Aid Direct, United Nations Children's Fund (UNICEF).
- Waris, A., Atta, U. K., Ali, M., Asmat, A., & Baset, A. (2020). COVID-19 outbreak: Current scenario of Pakistan. New Microbes and New Infections, 35, 100681. https://doi.org/10.1016/j.nmni.2020.100681
- Wazir, M. A. (2020). Immediate socio-economic response to COVID-19 in Pakistan. United Nations Population Fund (Pakistan). Technical Report, May 2020. https://doi.org/10.13140/RG.2.2.22523.13602
- World Food Program (WFP). (2020a). WFP global update on COVID-19. November 2020. Growing needs, response to date and what's to come in 2021.
- World Food Programme (WFP). (2020b). Comprehensive Food Security and Livelihood Assessment (CFSLA) 2020. Available at https://reliefweb.int/sites/reliefweb.int/files/resources/WFP-0000118584.pdf. Accessed on 01 Oct 2020.

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