



## REVIEW ARTICLE

## A Food Insecurity Labyrinth: Unveiling the Causes and Responses to Pakistan's Food Crisis (2022 - Present)

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## ABSTRACT

Pakistan has been facing a complex food crisis, which greatly complicates the country's food security. This research paper will explore the causes standing behind this crisis, while also evaluating the extent to which Pakistan foresaw these challenges and the effectiveness of the preventive measures implemented prior to its escalation. Moreover, the study will examine the international context of the food crisis and will focus on the case of India's involvement in addressing the food crisis in Pakistan. By conducting a thorough critical analysis based on a detailed exploration of the crisis formation, this paper will outline the significance of global cooperation in combating food insecurity. It also seeks to analyse the collaboration and learn lessons from history on enhancing resilience against food insecurity and protecting Pakistan's population from hunger. Through a synthesis of the sub-topics, a better understanding of Pakistan's food crisis has been developed.

**Keywords:** Food Crisis; Pakistan; Food Insecurity; Root Causes; Preventive Measures; International Community; India's assistance

## INTRODUCTION

Food insecurity is a widespread problem that doesn't limit itself to one region, affecting many people worldwide. A variety of factors, including the economy, politics, society, and environment, contribute to it. In essence, it means that certain individuals and families may not always have access to enough wholesome, safe, and nutritious food to maintain an active lifestyle. This is not only about hunger. It affects people's general well-being, health, and educational attainment.

Pakistan faces a serious and urgent food crisis that's making it hard to provide enough food for its people. This problem comes from a mix of things like changes in the environment, money issues, and social factors. Environmental challenges, such as the adverse effects of climate change and water scarcity, continue to strain the

agricultural sector, impacting crop yields and overall food production. A portion of the population finds it harder to obtain affordable and nutritious food due to social and economic inequality. Being a country largely reliant on agriculture, farming dynamics bring another level of complexity that necessitates striking a balance between traditional methods and modern approaches. In addition to this, communities all around Pakistan are more vulnerable, and there's a greater chance that food insecurity may negatively impact people's general well-being.

## BACKGROUND

Pakistan's food crisis is complicated and can be attributed to a variety of variables rather than a single cause. This complex situation is defined by several factors, all of which contribute to the widespread problems of hunger



and malnutrition that impact a significant section of the population. Investigating the complex relationships between these contributing components is crucial to developing a thorough knowledge of this challenging scenario.

Pakistan's agricultural sector plays a pivotal role in the country's economy, providing a major section of the people with a vital source of income and making a significant contribution of about 23% to the country's Gross Domestic Product<sup>1</sup>. The sector is characterized by the cultivation of crops such as wheat, rice, sugarcane, cotton, and maize, which collectively form the backbone of the sector. Additionally, livestock farming, including dairy and poultry, adds a crucial dimension to agricultural activities. The sector is predominantly rain-fed, relying heavily on the monsoon season for water supply, although irrigation plays a vital role in enhancing productivity, particularly in areas with arid or semi-arid climates. The majority of Pakistan's agricultural sector comprises small and medium-sized farms, with a considerable number of rural households depending on farming as their only source of income.

For a sizeable section of the populace in Pakistan, agriculture is a major source of employment. Over 37% of the labour force finds livelihood in agriculture, directly or indirectly through processing and distribution<sup>1</sup>. In addition to providing for the needs of farmers and rural communities, this sector makes a substantial contribution to the nation's overall economic growth. However, the productivity and efficiency of the sector have been hampered by outdated farming methods, reliance on traditional methods, and a limited adoption of contemporary agricultural technologies.

Pakistan's agricultural sector is under pressure to boost production and adapt to a changing and diversified food consumption pattern due to the country's rapid urbanization and population rise. Despite significant government expenditures and assistance from development partners, the growth of agriculture decreased from an average of more than 4% year between 1970 and 2000 to less than 3% after that<sup>2</sup>. A shift to a more water-efficient, higher-value agriculture is hindered by poorly operating agricultural markets that require substantial government intervention and a pattern of public spending on agriculture characterized by ineffective and poorly targeted subsidies.

Pakistan has experienced substantial population growth over the past few decades, making it one of the most populous countries in the world. From 1960 to 2022 the population of Pakistan increased from 44.99 million to 235.82 million people<sup>3</sup>. The rate of population growth has presented significant challenges in terms of resource management, provision of basic services, and overall sustainable development. Efforts to control population growth have included family planning initiatives, awareness campaigns, and reproductive health programs. However, the effects of a sizable and expanding population continue to put pressure on the resources that are available, particularly water, which

is essential for agriculture.

This country also faces a serious problem with water scarcity, which is closely related to the country's agricultural methods. Most of the water used in the nation is consumed by the agricultural sector, making it the top user of water overall. Inefficient irrigation methods, water wastage, and the depletion of groundwater resources contribute to the water scarcity. Over the past 70 years, Pakistan's per capita water availability has dropped by more than 80%<sup>4</sup>. The lack of access to clean water is affecting people's livelihoods, health, and educational prospects.

Pakistan is highly vulnerable to the impacts of climate change, which include altered weather patterns, increased temperatures, and extreme events such as floods and droughts. These changes have far-reaching effects on agriculture, impacting cattle, agricultural yields, and overall food production. Unpredictable rainfall patterns can cause water shortages that affect hydropower generation as well as irrigation.

These factors including land fragmentation, government policies and global market dynamics are at the root cause of Pakistan's food insecurity. Although these factors have consistently played a role in shaping the country's food crisis, the pivotal event that worsened food insecurity was the occurrence of flash floods in 2022.

## CAUSES OF THE FOOD CRISIS

The food crisis in Pakistan is a complex issue rooted in a multitude of interconnected factors. These causes encompass environmental challenges such as climate change and water scarcity, economic disparities, social inequalities, political instability, and governance issues. Additionally, reliance on outdated agricultural practices, land fragmentation, and dependence on imports for essential food items further exacerbate the crisis. These causes interact in intricate ways, creating a perfect storm that threatens the country's food security and amplifies vulnerabilities within the food system. Understanding these multifaceted causes is essential for developing effective strategies to address Pakistan's food crisis. Following are some of the causes of the crisis.

### *Land Fragmentation*

When several of the same landowner's plots are in various locations and can be viewed as a single unit, this is called land fragmentation. Globally, there is a great deal of agricultural land fragmentation due to social, political, institutional, and historical reasons like land reforms, inheritance laws, consolidation, housing projects, transaction costs, and individual land ownership valuation.

In Pakistan, land fragmentation is a prevalent issue and plays a pivotal role in hindering agricultural productivity. This phenomenon occurs because of the continued subdivision of agricultural land into smaller plots, typically due



to factors such as inheritance practices, population growth, and land tenure systems. In Pakistan, this process has significantly diminished the average size of farms, leading to a landscape dominated by small and subsistence-level agricultural holdings.

The consequences of land fragmentation are profound, especially in terms of agricultural productivity. Approximately 68 percent of total farms in Pakistan, covering around 80 percent of the cultivated area, fall into the category of small, subsistent, or below subsistent level farms<sup>5</sup>. These small-scale holdings face numerous challenges, one of which is the limitation in adopting modern and advanced agricultural technologies that could otherwise enhance crop production.

The restricted adoption of modern technology is a critical concern for smaller farms. Larger agricultural holdings often benefit from economies of scale, allowing them to invest in and effectively utilize advanced machinery, precision farming techniques, and other modern technologies that significantly boost crop yields. However, small, and fragmented plots lack the scale necessary to justify such investments, rendering the application of modern technology less efficient and feasible.

The per capita arable landholding in the country is notably low, standing at only 0.168 hectares. This limited landholding per person further exacerbates the challenges associated with adopting modern technologies, as smaller plots face constraints in optimizing their agricultural practices to achieve sustainable and productive outcomes.

### **Water Scarcity**

Pakistan is classified as severely water-insecure in the most recent UN study, "Global Water Security 2023 Assessment," indicating that the nation is experiencing a water emergency that needs to be addressed right away. The annual per capita water availability in Pakistan has decreased from 2,500 cubic meters in 1952 to 1090 cubic meters in the current decade<sup>6</sup>. This has resulted in water shortages in practically every economic sector. Pakistan's declining water availability is mostly caused by climate change, the country's fast population increase, poor resource management, ignorance, and interprovincial politics. The lack of access to clean water is negatively impacting people's health, education, and livelihoods.

According to UN estimates, 40% of Pakistan's annual excess deaths might be either directly or indirectly linked to the country's inadequate access to clean water. In Karachi, the seventh most populous city in the world, less than 40% of households have access to piped water. In rural Sindh and Balochistan, drought conditions are common, which is one of the driving forces for the rise in rural-urban migration<sup>7</sup>.

Water scarcity can be a serious issue considering agriculture and irrigation soak up 97% of the water available. Pakistan exports a lot of crops, which is a big part of its

economy. Water scarcity has a significant impact on it and has the potential to jeopardize national economic security. The water issue has caused crop productivity to drop, which has affected the output of wheat, cotton, and sugar. As a result, by 2025, there will likely be a shortfall of about 70 million tons of food. To address Pakistan's growing water scarcity issue, immediate action is needed to control climate-related water insecurity and strengthen the resilience of potable water delivery systems<sup>8</sup>.

### **Climate Change**

Climate change has been a significant factor in Pakistan's food crisis, impacting food production and exacerbating food insecurity. The country has experienced extreme weather events such as heat waves, droughts, and floods, which have become more frequent due to climate change. Pakistan is among the top ten countries most vulnerable to extreme climatic events, despite being one of the carbon emitters with the lowest emissions worldwide.

The country's main water supply, the Indus basin, is fed by the Himalayan glaciers, which have lost more mass since 2000 than they did over the course of the 20th century. Climate change might cost Pakistan more than 9 percent of its GDP annually, according to United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)<sup>9</sup>. Pakistan's food security is seriously at stake due to the Intergovernmental Panel on Climate Change's warning that these extreme weather events will become more frequent in the future. Due to increased cultivation costs and climate change, the Asian Development Bank predicts significant decreases in important food and cash crops in the upcoming years.

There are several ways in which Pakistan's food security is impacted by climate change. A direct result of extreme weather events on agricultural production has been a shortage of food and an increase in price. The political and economic instability brought about by climate change has exacerbated the food problem even further. Due to its reliance on imported food, particularly necessities like edible oils, the nation is more susceptible to the effects of climate change on the world's food supply networks. In addition, the food system is now less able to withstand the consequences of climate change due to the over-reliance on a small number of important crops.

A comprehensive strategy that incorporates investments in climate-resilient infrastructure, diverse food production, and sustainable agriculture is needed to address the impact of climate change on food security.

### **Political Instability**

Political instability in Pakistan significantly worsens the challenges associated with food insecurity, intensifying existing vulnerabilities and obstructing efforts to implement



effective solutions. Political turmoil leads to a reallocation of resources away from critical sectors like agriculture and infrastructure, as governments prioritize short-term political objectives over long-term development goals. This misallocation of resources, coupled with corruption and inefficiency within government institutions, undermines the effectiveness of initiatives aimed at agricultural development and food security.

Moreover, frequent changes in government leadership result in policy inconsistency and a lack of continuity in decision-making processes. This uncertainty not only undermines investor confidence but also hampers long-term planning in the agricultural sector. Politicians facing uncertain political futures often resort to short-term, populist measures to maintain popular support, neglecting sustainable agricultural development and failing to address underlying structural issues.

Internal conflicts further exacerbate food insecurity by disrupting agricultural activities, damaging infrastructure, and displacing rural communities. Farmers are forced to abandon their fields, leading to decreased food production and distribution challenges in conflict-affected regions. These conflicts also intensify food insecurity by creating displacement, disrupting markets, and impeding humanitarian access, particularly for displaced populations.

Furthermore, political instability tarnishes Pakistan's international image and erodes confidence among foreign investors and aid donors. This makes it difficult to attract much-needed foreign investment and access international assistance crucial for addressing food security challenges. Additionally, strained diplomatic relations resulting from political instability hinder collaboration on regional food security initiatives and limit access to cross-border trade and assistance.

Ultimately, political instability erodes trust in government institutions and undermines the effectiveness of policy implementation. This erosion of trust diminishes public confidence in the government's ability to address food insecurity and undermines efforts to mobilize public support for solutions. Addressing political instability is essential to effectively combating the food crisis and fostering sustainable development in Pakistan. Stable governance, transparent institutions, and inclusive policies are crucial for building resilience and ensuring food security for all citizens.

### **COVID-19 Pandemic**

The COVID-19 pandemic has significantly impacted Pakistan's food security and agricultural system, exacerbating existing challenges and vulnerabilities. The containment measures implemented to curb the spread of the virus, such as lockdowns and social distancing, have disrupted the country's agricultural system, leading to a potential collapse of the food system. These measures have made it challenging for farmers to transport goods, access markets, and sell their

products, resulting in wasted stocks and falling prices. The pandemic has also highlighted the difficulties in fighting the virus in Pakistan, where sanitation issues, lack of knowledge on symptom treatment, and adoption of preventive measures like hand washing and social distancing are prevalent.

Furthermore, the pandemic has had a profound effect on Pakistan's food security status. Prior to the pandemic, 37% of the population was already food insecure in 2018<sup>10</sup>. The COVID-19 crisis has worsened this situation, with the World Food Program estimating that 271.8 million people globally were acutely food insecure due to the pandemic's impact. In Pakistan, the pandemic has not only led to a decline in the standard of living for many citizens but has also limited their access to essential services like healthcare and education. Additionally, external shocks such as floods, droughts, and displacement have further strained households' ability to access an adequate food supply.

The COVID-19 pandemic has intensified food insecurity in Pakistan, highlighting the urgent need for strategic interventions to address the challenges faced by the agricultural sector and ensure the availability of food for all citizens. Efforts to combat the pandemic must be coupled with measures to safeguard food security, support vulnerable populations, and strengthen the resilience of the food system to prevent a full-blown crisis.

### **Floods (2022)**

The 2022 floods in Pakistan had a significant impact on the country's food security, causing a food crisis in several ways. The floods destroyed rice harvests and seeds for wheat, which were already affected by a prolonged drought before the floods. Heavy rains in 2022 further wiped out the wheat crop, exacerbating the food shortage and increasing prices. The floods destroyed crops over an extensive area, reducing the availability of food and increasing the cost of food items.

The destruction of more than 129 bridges hindered the distribution of fruit and vegetables, causing further disruptions to the food system<sup>11</sup>. This made it difficult for farmers to transport their produce to markets, leading to a decline in the supply of fresh fruits and vegetables and increasing their prices. The disruption in the distribution of food items further worsened the food crisis in the country.

It destroyed millions of acres of agricultural land and crops, causing immense damage to the basic source of income for most of Pakistan's population. This has led to a scarcity of basic food items, with their prices skyrocketing, triggering widespread food insecurity, hunger, and malnutrition in the country. The destruction of agricultural land and crops has reduced the availability of food and increased the cost of food items, making it difficult for people to afford them.

The floods also ravaged more than 3,728 miles of roads and bridges, giving a huge blow to the transportation system, and making the conveyance of extant food impossible. This



further disrupted the food supply chain, making it difficult for people to access food, particularly in flood-hit areas. The disruption in the transportation system further exacerbated the food crisis, making it difficult for people to access food items<sup>12</sup>.

The floods destroyed 65 percent of the country's main food crops, including a staggering 70 percent of its rice<sup>12</sup>. The shortage of agricultural crops, particularly wheat, which is a staple food for a large population in the country, has resulted in importing food, increasing costs, and reducing the purchasing power of people, especially in flood-hit areas. The destruction of food crops has reduced the availability of food and increased the cost of food items, making it difficult for people to afford them.

### **DID PAKISTAN FORESEE THE CRISIS?**

The multifariousness of the food crisis in its entirety is making it difficult to know whether Pakistan had seen it coming. Yet, one cannot also say with certainty if these warnings were fully recognized and acted upon at a systemic level. The interplay of multiple factors triggering land fragmentation, climate change, economic disparities, and political instability are reasons behind Pakistan's food crisis. There are interconnections between these factors that usually often intensify each other thereby leading to difficulties when projecting their cumulative effect on food security.

Moreover, both internal and external factors such as national policies international market trends and geopolitical considerations have an impact on the dynamics of the food crisis. Forecasting efforts are made more difficult by the dynamic nature of these problems making it impossible to predict Pakistan's future in terms of food security.

However, such a comprehensive understanding of the holistic crisis and its probable outcomes might have been lacking despite some indications of impending difficulties on specific fronts such as lower agricultural productivity or water scarcity. Additionally, the fragmented nature of governance and policy implementation in Pakistan could have further hindered the ability to foresee and address the crisis comprehensively.

Pakistan was not able to adequately prepare for the current food crisis based on the information provided in the sources. There have been warning signs and concerns over the years but because of the complexity of the situation and the way various factors are interacting it has been difficult to determine the exact level of anticipation.

Pakistan's situation regarding food security has been profoundly affected by the COVID-19 pandemic with its unanticipated disruptions and extensive economic consequences. Due to pandemic-related closures that were put into place in 2020 about half of the nation's population has been forced to either cut back on their food consumption or transition to lower-quality food items as a coping mechanism.

The vulnerabilities present in Pakistan's food system have been exposed by this unanticipated shock exposing gaps and weaknesses that were not fully anticipated. Growing awareness of the critical need to fortify and modify Pakistan's food systems in order to better withstand shocks and crises in the future is being brought about by the pandemic's challenges.

The magnitude of the crisis and the requirement for foreign assistance to solve the issues are demonstrated by the financial aid and support from other countries to assist Pakistan in rebuilding its food system and recovering from flood damage. Ultimately, the complexity and gravity of the current crisis indicate that Pakistan has not fully anticipated the scope of its current challenges despite certain indications and worries regarding the country's food security. Pakistan's present food crisis is utterly unpredictable as seen by unexpected shocks, ongoing political and economic unrest, and the necessity of significant systemic changes.

### **ACTIONS TAKEN TO PREVENT THE CRISIS**

Pakistan had taken measures to improve its environmental programs for food security and economic policies including population growth control, prior to the current crisis. That being said, food insecurity was greatly elevated by the COVID-19 pandemic and the lockdowns that followed with an estimated 50% of the population either cutting back on their diets or switching to lower-quality food during the lockdowns<sup>13</sup>.

To support the agriculture sector during the pandemic, the government set aside PKR 1.2 trillion for subsidies and reduced interest rates and repayments on agricultural loans. These programs helped cushion the impact on the food and agriculture sector but did not reach all farmers, especially smallholders. They were also unlikely to jumpstart longer-term productivity growth as they did not address the underlying constraints in fragmented supply chains and inefficient markets<sup>13</sup>.

Launched in 2018 the National Food Security Policy is one of the main efforts to address food security in Pakistan. This policy promotes agricultural resilience and productivity with the goal of increasing food sustainability, accessibility, and availability. In order to fulfill the population's increasing need for food it provides strategies for raising crop yields, enhancing water management techniques, and modernizing the agricultural sector.

The government offers subsidies for fertilizers, seeds, and farm equipment among other necessary inputs. Through these subsidies, farmers will be able to invest in inputs that can increase crop yields and productivity at a lower cost of production. The subsidies are intended to assist farmers and enhance food security by reducing the financial barriers to accessing these inputs.

In Pakistan initiatives such as the Benazir Income Support Programme (BISP) are vital in tackling the issue



of food insecurity among marginalized communities. BISP helps low-income families, widows, orphans, and people with disabilities meet their basic needs such as having access to food by providing financial support. These social safety nets provide cash transfers and other forms of assistance with the goal of reducing poverty and enhancing food security for underprivileged populations.

For agricultural water management to be improved irrigation infrastructure investments such as dams and canals are crucial. Pakistan's arid and semi-arid climate makes irrigation essential to the country's agriculture. Therefore, improving irrigation infrastructure is essential to guaranteeing crops a steady supply of water and reducing the negative effects of water scarcity on agricultural output. The government wants to boost overall food security raise crop yields and improve water efficiency through infrastructure development.

Although these government initiatives are significant steps in the right direction towards addressing Pakistan's food security issues it is still up for debate how effective they will be in averting the current crisis.

### **REASONS FOR THE FAILURE OF THESE PREVENTIVE MEASURES**

The government's inability to implement policies and programs effectively is one of the main obstacles to addressing food security. The effective implementation of programs intended to increase agricultural productivity and food access is frequently hampered by corruption, inefficiency, and bureaucratic obstacles. For instance, subsidies meant to help farmers might not even reach the intended recipients or could be diverted by middlemen. Projects aimed at improving irrigation or storage capacity might also encounter setbacks or substandard management.

An additional obstacle arises from the government's inclination to give precedence to immediate benefits in its policy-making rather than enduring sustainability. While populist policies like fertilizer subsidies may provide farmers and consumers with short-term respite, they frequently fall short in addressing longer-term problems with sustainability and resource management. Overuse of fertilizers for example combined with improper soil management techniques can erode soil quality and pollute the environment thereby reducing agricultural lands' long-term economic value.

The government's ability to invest in vital areas required to improve food security is severely limited by resource constraints. Financial constraints limit support for vital areas such as climate-smart technology, adoption of agricultural research, and storage infrastructure development. In the absence of sufficient investment in these areas, it becomes difficult to improve agricultural productivity, adjust to shifting climatic conditions, and guarantee food availability and affordability for the populace.

In the agricultural sector, uncertainty and instability are exacerbated by the frequent shifts in government priorities and policy. Farmers frequently struggle with long-term planning and decision-making because of erratic changes in laws and regulations. Inconsistent policies make it difficult for businesses to invest in agriculture and innovate which makes it more difficult to solve persistent problems with food security sustainability and productivity.

Critics claim that the government's focus on temporary fixes like relief programs and subsidies has made the agricultural industry more vulnerable and exacerbated the food crisis. The government might be aggravating underlying problems that support food insecurity by ignoring investments in long-term resilience-building initiatives and sustainable agricultural practices.

However, some analysts point out that Pakistan faces a plethora of interconnected challenges that are overwhelming even though they acknowledge the government's efforts to address food security issues. It is challenging to fully attribute the food crisis to government actions or inactions because of factors like population growth climate change and global market dynamics that present substantial barriers to achieving food security.

### **INTERNATIONAL COMMUNITY'S AWARENESS AND INVOLVEMENT**

Pakistan was apprised of the possible food crisis and its ramifications by the international community. The Food and Agriculture Organization (FAO) and the World Food Programme (WFP) jointly released a report in June 2023, that estimated that 8.5 million people in Pakistan would experience severe food insecurity between September and December of that year. The report focused on the deteriorating factors that were predicted to make the situation even more dangerous in the upcoming months<sup>14</sup>.

Furthermore, the International Rescue Committee (IRC) issued a warning that the floods which destroyed over 10 million acres of agricultural land that supported millions of people could force up to 911 million people into poverty and make them entirely dependent on humanitarian aid. The IRC also underlined the necessity of giving crisis-affected nation's top priority on the global climate agenda along with real commitments, deeper collaborations with regional civil society organizations and investments in cutting-edge initiatives like proactive action that can stop the climate crisis from turning into a climate disaster<sup>15</sup>.

The international community has been worried about the dire repercussions that would occur if it neglected to take appropriate action to alleviate Pakistan's food crisis. For instance, the international community was forewarned in a report by the International Institute for Strategic Studies (IISS) of the grave consequences that would ensue if it neglected to fulfill its responsibility to provide Pakistan with all the aid that it needs.



Pakistan has received support from the international community to tackle its issues related to food security. For example, the World Food Programme (WFP) has been supplying food aid to communities in Pakistan that are at risk, especially during emergencies like floods and conflicts. Alongside strengthening Pakistan's food security frameworks and enhancing its ability to handle food crises the WFP has been collaborating with the government of that nation.

Reviving highly pressured food systems, controlling rapid population growth, lowering needs, preventing crises and improving inadequate economic policies and environmental programs for food security are among the suggestions made by the international community to stop the crisis. These suggestions seek to increase agricultural productivity strengthen agricultural systems and enhance food security and nutrition. The IMF continues to offer financial support capacity building and policy advice through the Upper Credit Tranche Arrangements and the Food Shock Window all while collaborating closely with other international organizations<sup>16</sup>.

Along with addressing the need for coordinated efforts to build resilience in the face of the global food crisis the recommendations also highlight the necessity of helping the most affected nations maintain open trade, strengthen social safety nets, and develop more resilient agricultural systems. Through the Upper Credit Tranche Arrangements and the Food Shock Window, the IMF continues to offer financial support capacity building and policy advice.

The recommendations place a strong emphasis on funding Research and Development, advancing the science and application of less-fossil-fuel-dependent fertilizers, incorporating innovation and technology into the agriculture sector, and investing in research and development areas. These initiatives seek to close the gap between supply and demand which fuels food insecurity and give farmers more sustainable options. Along with stressing the significance of climate-smart agriculture and resilience-building measures, the recommendations also underscore the significance of addressing the effects of climate change on food security and agriculture.

Pakistan emits relatively little carbon dioxide, yet it is among the ten nations most impacted by climate change. Climate change has caused extreme weather events such as heatwaves droughts and floods to occur more frequently in the last several years. According to a study by the Asian Development Bank, the impacts of climate change and high cultivation costs will cause a significant decline in food and cash crops.

Ultimately, Pakistan has received warnings from the international community regarding the possible food crisis and its ramifications. Reducing needs, averting crises and revitalizing severely pressured food systems are the main goals of the international community's recommendations

which also center on strengthening environmental and economic policies for food security.

## INDIA'S POTENTIAL ROLE IN ASSISTANCE

There is no concrete evidence of India providing assistance to Pakistan in its current food crisis. However, there are a few mentions of Indian leaders suggesting that India can offer wheat to Pakistan, to help it tackle the food crisis.

For instance, RSS Joint General Secretary Krishna Gopal made a statement suggesting that India can offer wheat to Pakistan to help it tackle the food crisis<sup>17</sup>. Similarly, leaders of the Socialist Party in India have suggested that India can help Pakistan by exporting wheat and other food grains via the Punjab border, emphasizing the importance of trade and peace efforts between both countries<sup>18</sup>.

However, the broader context of India-Pakistan relations cannot be ignored. Decades of political tensions, border disputes, and security concerns have often overshadowed efforts at cooperation and reconciliation between the two countries. The strained bilateral relations, particularly in the aftermath of security incidents and diplomatic standoffs, create significant obstacles to meaningful engagement and assistance initiatives.

It is essential to highlight India's position on providing aid to Pakistan during its economic crisis, as articulated by India's External Affairs Minister S Jaishankar. He has made it clear that India is unlikely to come to Pakistan's aid as it grapples with an economic crisis and a food crisis. Jaishankar emphasized that India does not see its western neighbour, Pakistan, through the same lens as Sri Lanka, where India had previously provided assistance during an economic crisis. He highlighted that the fundamental issue impacting India-Pakistan relations is terrorism, and he stressed that no country could come out of a difficult situation if its basic industry is terrorism. Jaishankar mentioned that while India has helped neighbours like Sri Lanka in the past, the situation with Pakistan is different due to the long-term issues and historical distortions in its economy. He also reaffirmed that India's approach to its neighbouring countries has changed under Prime Minister Narendra Modi's leadership, focusing on regional and global cooperation but not extending aid to Pakistan during its economic and food crisis<sup>19</sup>.

Furthermore, the lack of concrete evidence of assistance from India to Pakistan during its food crisis underscores the challenges and limitations in translating gestures and proposals into tangible actions. The intricacies of domestic politics, public opinion, and diplomatic considerations further shape India's approach to engaging with Pakistan on humanitarian issues.

Ultimately, while there are indications of willingness among some Indian leaders to explore options for assisting Pakistan during its food crisis, the broader context of India-Pakistan relations and the complexities involved in bilateral interactions pose significant challenges to meaningful coop-



eration. Any efforts to extend assistance must navigate these complexities while prioritizing humanitarian considerations and the long-term interests of both countries and the wider region.

## **ROLE OF INTERNATIONAL COOPERATION IN MITIGATING FOOD CRISIS**

International cooperation plays a crucial role in mitigating Pakistan's food crisis by providing support, resources, and expertise to address the underlying causes and challenges associated with food insecurity.

In times of crisis, food aid distribution is largely coordinated by international organizations such as the World Food Programme (WFP). They guarantee that food assistance reaches those in need as soon as possible by collaborating closely with the affected countries. In order to reduce hunger and malnutrition, coordination efforts make sure that resources are used effectively and avoid duplication of help.

Some nations may restrict food exports during food crises in order to protect domestic supplies. Food can be moved from surplus regions to deficit areas thanks to international cooperation which keeps trade channels open. International cooperation ensures free movement of food across borders so stabilizing prices and averting shortages in vulnerable areas. It does this by mediating trade agreements and negotiations.

To increase agricultural productivity in vulnerable areas, wealthy nations and international organizations donate money and technical expertise. This assistance entails encouraging crop diversity using sustainable farming methods and making sure that resources like irrigation systems and fertilizers are available. International cooperation helps communities and farmers become more capable of producing more food sustainably by investing in agricultural development which eventually reduces dependency on food aid.

Improving the efficiency of food distribution in developing nations and reducing food spoilage are dependent on the upgrading of infrastructure which includes transportation networks storage facilities and irrigation systems. Infrastructure projects that increase the resilience of food systems and guarantee the timely delivery of food to those in need require international funding and collaboration.

Food security is seriously threatened by climate change which also makes weather-related disasters worse and disrupts agricultural productivity. Research and development of crops that are resilient to climate change early warning systems for extreme weather and climate-smart agricultural practices are all facilitated by international cooperation. The global community can contribute to enhancing the resilience of food systems and reducing the effects of climate change on food security by funding climate adaptation initiatives.

Financial resources are supplied by donor nations and international development banks to assist food security programs in weaker nations. Countries can invest in their agriculture industries upgrade their infrastructure and put long-term resilience-building strategies into action thanks to this financial support. Countries can take proactive measures to achieve food security and lessen their vulnerability to future crises by cooperating internationally and mobilizing financial resources.

## **KEY LESSONS LEARNED**

Pakistan's food crisis highlights the critical importance of domestic self-sufficiency in staple food production. Relying heavily on food imports can leave the country vulnerable to external shocks, such as price fluctuations in global markets or disruptions in trade routes. Therefore, investing in domestic agriculture to enhance production capacity and reduce reliance on imports is crucial for ensuring food security and stability.

Agricultural research plays a pivotal role in developing high-yielding crop varieties, improving farming techniques, and addressing challenges such as pests, diseases, and climate change. Ensuring a steady supply of key agricultural inputs, such as seeds, fertilizers, and irrigation, is essential for boosting productivity and resilience within the agricultural sector.

Providing incentives to farmers to cultivate key food crops can help address food shortages and stabilize prices in the domestic market. This may involve offering subsidies, price supports, or other forms of assistance to encourage farmers to grow priority crops that are essential for food security. Additionally, creating robust systems of social protection can safeguard vulnerable farming households from income shocks and food insecurity.

Public investment in agriculture and food systems is critical for supporting smallholder farmers, improving infrastructure, and enhancing market access. Investing in irrigation systems, rural roads, storage facilities, and market linkages can help reduce post-harvest losses, improve food distribution, and increase the income of farmers. Moreover, investment in agricultural extension services and capacity-building initiatives can enhance farmers' knowledge and skills, enabling them to adopt best practices and adapt to changing conditions.

Pakistan's food crisis underscores the importance of addressing the underlying structural causes of poor governance, skewed resource allocations, and severe inequality. This includes addressing issues such as unequal distribution of land ownership, inadequate access to credit and markets for smallholder farmers, and insufficient social protection programs for vulnerable populations. Addressing these structural challenges requires comprehensive policy reforms, institutional strengthening, and concerted efforts to promote inclusive and equitable development.



## CONCLUSION

The intricate web of challenges surrounding Pakistan's food crisis demands a paradigm shift in policy-making and governance to effectively combat food insecurity. The COVID-19 pandemic has laid bare the vulnerabilities in the country's food system, necessitating immediate and sustained action to fortify resilience and ensure access to nutritious food for all citizens. By addressing structural issues such as unequal distribution of resources, inadequate support for smallholder farmers, and governance deficiencies, Pakistan can pave the way for a more secure and sustainable food future.

Furthermore, the crisis highlights the interconnected nature of food security with broader socio-economic issues, emphasizing the need for holistic solutions that address underlying inequalities and promote inclusive development. Investing in agricultural research, infrastructure, and social protection programs is crucial to enhancing productivity, reducing vulnerabilities, and safeguarding the most marginalized populations. Collaborative efforts at the national and international levels are essential to build a food system that is not only resilient to shocks but also equitable and sustainable in the long term.

In conclusion, Pakistan stands at a critical juncture where decisive action and transformative reforms are imperative to overcome the challenges of food insecurity. By embracing innovation, fostering partnerships, and prioritizing the well-being of its people, Pakistan can chart a path towards a future where food security is a reality for all. The time for complacency is over; the time for bold and comprehensive change is now.

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