



# THE SILENT CRISIS:

## How Climate change is Driving Food Inflation in Pakistan

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Fruit vendor Mohammad Salim, originally from Charsadda, is experiencing a 50% decline in sales in Karachi's posh area of Tariq Road. The fruits he buys from the market have become more expensive, leading fruit buyers to reduce their purchases. "People in the market (mandi) have jacked up prices, claiming that it's becoming expensive from the source. Additionally, they have limited quantities to sell, which results in minimal bargaining. When we sell high-priced fruits, common people negotiate extensively, leading many to either reduce or completely stop buying. Both margins and quantity have significantly decreased."

Waheed Ahmed, Patron-in-chief of All Pakistan Fruit & Vegetable Exporters, Importers & Merchants Association (PFVA), highlighted that Pakistan's most significant threat is climate change, wreaking havoc on agriculture. The country has witnessed a surge in extreme weather events, including floods, droughts, and heatwaves. These events damage crops, disrupt agricultural activities, and lead to yield losses. Given that Pakistan heavily relies on agriculture—contributing 21% of its GDP, employing 45% of its population, and contributing about 60% to exports—climate change poses a severe risk. According to him, "There's a clear food security threat to Pakistan if the impact of climate change on agriculture is not mitigated. Reports suggest that Pakistan's agricultural output may drop by 30% to 50% if the sector's issues, especially climate change, are not addressed. Sometimes onions are scarce, and sometimes tomatoes. Kinnow exports have declined by 50%. Prices of edibles have certainly risen significantly due to affected and unstable supply."

Ahmed, also an owner of Iftekhar Ahmed & CO., a major player in the fruits and vegetable business, including value-added fruit products like beverages (juices), pointing out that raw material issues for the beverage

industry are also looming large. "The volatile supply of raw material (such as fruits) is affecting the beverage industry, which has already suffered a sales decline of 45% in the last two years due to 38% government taxation. This decline is also affecting the earnings of growers."

Kazim Saeed, co-founder and strategy advisor of the Pakistan Agricultural Coalition (PAC), emphasised that farmers are more aware of climate change compared to urban dwellers. "Farmers are on the front lines; they require not just awareness but also tangible support, such as covering the premium for crop insurance, to tackle the challenges posed by climate change," he stated. Saeed noted that changing weather patterns have begun to confuse even experienced farmers, who are uncertain about the optimal timing for planting seeds amid erratic weather patterns. Unpredictable weather, such as unexpected temperature fluctuations and unseasonal rain, not only reduces yields but also increases the threat of pests. He highlighted a recent example of the white fly pest, which severely affected the cotton crop last September due to unusually high temperatures.

Waheed Ahmed stressed that modern technology and measures will have to be adopted to tackle the climate change threat. These measures include, but are not limited to, promoting climate-resilient agricultural practices such as drip irrigation, conservation agriculture, and agroforestry to help farmers adapt to changing climate conditions and improve productivity. Investment in research and technology, such as modified seeds for climate-resilient crop varieties, and policy support, such as providing incentives for climate-smart farming and supporting farmers in adopting resilient technologies, is crucial.

Azhar Lashari, Director of the Policy Research Institute for Equitable Development (PRIED),

observed that people in urban areas, such as Lahore and Karachi, have high carbon footprints, but the impact of climate change affects farmers, especially in Southern Punjab and interior Sindh, the most. "People in urban areas travel more, use fossil fuel-based electricity more, and work in industries. They tend to have significantly better incomes than the majority working in rural areas, especially in the agriculture sector. Their carbon footprints are high, their income is high, and they are comparatively least affected by climate change. This is natural injustice." He suggested implementing carbon taxing in Pakistan, with the revenue spent on communities most affected by climate change.

The impacts of climate change on agriculture in Pakistan have far-reaching consequences, including food inflation. Reduced agricultural productivity leads to lower supply levels, which, coupled with increasing demand, results in higher food prices. This inflationary pressure disproportionately affects low-income households, leading to food insecurity and malnutrition. Food inflation in rural areas reached 52.4% in May last year, contributing to the highest overall inflation level in the country's history at 38%, mainly due to supply shocks, with floods being a significant factor.

Pakistan's population is growing rapidly. According to the United Nations Population Fund (UNFPA), Pakistan's population is currently estimated at 240.5 million and is projected to reach 403 million by 2050—a significant 67% increase. Urban centers may not fully grasp the seriousness of the matter, but malnutrition is one of the biggest threats to the population. According to the School Age Children Health and Nutrition Survey (SCANS) 2020, over 90% of kids have inadequate amounts of iron in their diet. Children in Pakistan are malnourished, with iron deficiency being among the top deficiencies (49.1% as per the National Nutrition Survey 2018 for those under 5 years of age). The declining agricultural output will certainly exacerbate the challenges the country is facing on the food security front.

Pakistan is also grappling with a water crisis exacerbated by climate change. According to the Asian Development Bank, Pakistan's water availability per capita has decreased from around 5,000 cubic meters per year in the early 1950s to less than 1,000 cubic meters per year in recent years, significantly below the water scarcity threshold of 1,000 cubic meters per capita per year.

Climate change has contributed to soil degradation in Pakistan, particularly through erosion, salinisation, and desertification. The Food and Agriculture Organization (FAO) reports that around 6 million hectares of agricultural land in Pakistan are affected by salinity and waterlogging, reducing the land's productivity.

Climate change-induced challenges have increased Pakistan's dependency on food imports. According to the State Bank of Pakistan, Pakistan's food import bill has increased significantly in recent years, putting pressure on foreign exchange reserves and contributing to food inflation domestically.

Deputy Governor Saleem Ullah, speaking at the Delfa Cattle Show at Karachi Expo Center, emphasised that the share of agricultural products in Pakistan's imports is USD 10 billion: "If agriculture, livestock, and fisheries are developed, 8 to 9 billion dollars can be easily saved out of this, while keeping the prices at a reasonable level to reduce inflation." He added that the State Bank has a special focus on the development of agriculture. For this purpose, the State Bank is working on a new project that will be introduced in the next two to three months. Under this project, access to financial facilities will be facilitated for small farmers, as 75% of small farms currently access financial services through non-traditional methods, facing stringent conditions. He stated that the second priority in the new agriculture development plan will be to increase the productivity of small farmers. This will involve facilitating the supply of agricultural inputs in collaboration with various stakeholders, as small farmers will require additional quality inputs. "They (farmers) do not have the ability to pay the price, so their productivity is very less than the national ratio, while the productivity of progressive farmers is almost double the national ratio."

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