

Global Shocks and Food Security: A Pakistan Perspective

In recent years, global shocks have appeared frequently, which include: COVID-19, Ukraine-Russia War, Gaza-Israel War, and the ongoing USA-Israel-Iran conflict. Food security in developing countries is a critical challenge because of limited resources, modern technologies, environmental factors, external pressure, debt level, political instability, structural incompetence. Pakistan as a developing country is also facing food insecurity despite being an agrarian country because of all the above-stated reasons. In this article, we will focus on the food security under global shocks like pandemics, floods, climate change, world economy's uncertainty, most importantly the current Middle East Conflict. After a comprehensive analysis, we will conclude with policy change recommendations to address these issues for better food security.

Introduction

Food Security is not only a national level issue; it is a major problem at international level and exists in mostly developing and under developed countries. It is most important for human survival in this world and linked with economic stability and national security for all countries. That's why there are many international organizations working to improve food security which includes FAO (Food and Agriculture Organization) under United Nations and IOFS (International Organization for Food Security) under OIC. Despite the strong efforts of these organizations, the global shocks like Covid-19 and the current Middle East Conflict are two major shocks for food security in world.

Framework of Food Security

The framework of food security consists of four factors:

- 1) Availability of Foods:** The most important factor is availability of food in the country for the entire population. The availability of food can be in the form of crops grown in the country, imported food items, and their storage for future usage.
- 2) Access of Foods:** It is the second factor of food security to ensure access to food for the people of the country. The word access here means that all people can buy food at reasonable or affordable prices without any hurdles anytime. The people must have sources of income like jobs or businesses which enable them to buy food at market prices.
- 3) Utilization of Foods:** Another important factor of food security is the utilization of foods in a proper manner. All humans need proper nutrition for better health, safe

and clean water, and good quality of foods.

- 4) Stability in the Foods' Market:** This factor makes food market stability for people who need it on a daily or regular basis without any hurdles like economic crisis, pandemics, natural disasters or wars in the region.



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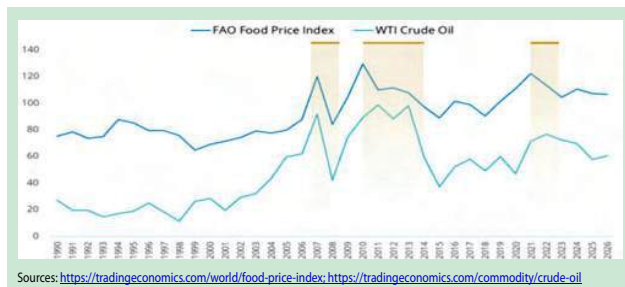
Global Shocks as Major Threat to Food Security

Global shocks such as pandemics, wars or conflicts are major threats for food security because they create unemployment, business closure, an upward trend in inflation, supply disturbances which ultimately increase the hunger in the region. COVID-19 started in 2019 and continued until 2021 and in this period the supply of food was badly disrupted and inflation was at peak in the whole world. Post pandemic, it was not easy to return to normal food supplies because due to economic crisis, purchasing power declined and prices increased sharply.

The Gaza-Israel war caused borders to close since October 2023 and food supply was blocked because major infrastructure was damaged; agriculture and irrigation system was destroyed. There was a controlled or blocked supply of food, medicines, fuel, and other necessities of life during war which resulted in a sharp increase in food prices and economic breakdown. There was shortage of clean water due to destruction of infrastructure. Ultimately, food insecurity was created and people were dying due to food shortages. Major portion of population now depends upon AID. The long-term consequences of this war include agricultural land destruction that will take time to recover, difficulty in food production due to soil damaged by explosions, malnutrition impact on major population of region.

The Ukraine – Russia war made a large impact on major portion of world because both countries are major exporter of wheat, maize, corn, barley, and sunflower oil.

It is reported that about 50% of sunflower oil production was from only Ukraine before this war. This war also disturbed the food supplies globally as well as inside both countries. As a result, food prices increased sharply, agricultural land was destroyed, labor shortages emerged, and crop production declined. The Russia is a major supplier of fertilizers and natural gas, which was disrupted and ultimately caused the food and energy crisis.



The Middle East war has disturbed all major factors of food security because it impacts availability, accessibility, utilization, and stability of foods in the whole world especially in Asia and Africa. This is an ongoing crisis and has caused a series of crises over the last 5-6 years which have badly impacted the world economy and food security. This war has also had an impact far beyond its region, affecting the whole world.

Iran has blocked the Strait of Hormuz, through which a significant portion of oil and gas is transited. Due to the blockage of the Strait of Hormuz, the supply of oil and gas to the world declined. The price of oil sharply increased to more than \$100 within a month which was around \$65 before this war. Oil prices exceeded \$100 in 2008, 2011, and 2022, which badly impacted food prices.

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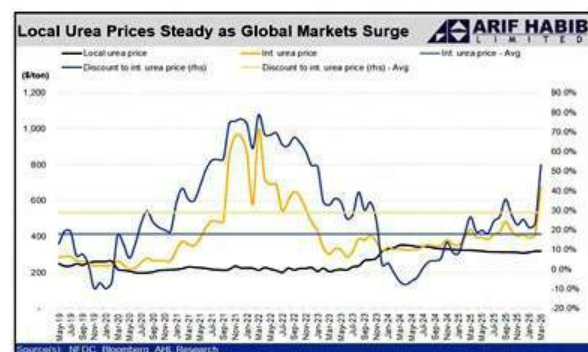
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Due to the increase in prices of oil and gas, the production cost of food increased sharply in the world. When this price hike transfers to consumer, low-income people cannot afford food at high prices. It can be divided into four categories; first, the people who are unable to buy food at

any price due to no income; second, the people who cannot afford food after the price increase due to this war; third, the people who do not have access to food in this situation; and fourth, the people who will be pushed in hunger line between this situation and post this situation.

According to International Monetary Fund (IMF) 2022, if 10% oil prices increase, food supply prices will go up by 2%. So, we can estimate how difficult a situation can occur in near future for the people of Pakistan as well as whole world. Oil prices impact food prices because oil is an input for agriculture production such as diesel for tractor, tube well, and transportation.

Pakistan imports major fertilizer raw materials from the Middle East, especially DAP from Saudi Arabia, Morocco & Qatar. If there is shortage of fertilizer for upcoming crops, production will significantly reduce and result in a shortage of foods in the country. The shortage of oil, gas, and fertilizers will create inflationary pressure on food prices. Ultimately, a humanitarian crisis in Pakistan as well as in the world is imminent due to food shortage or high-priced foods. Low-income population in Pakistan may affect significantly because Pakistan already facing economic challenges due to majorly high business costs, energy crisis and recent exit of multinational companies from Pakistan due to higher taxes. World Food Program warns that if war continues, an additional 45 million people will fall under major food insecurity, in which Asian countries are at top (Source: World Food Program, 24th March 2026).



The most important factor of food security is affordability because even if food is available in the market in sufficient quantity but most of the population cannot afford it at high prices. Inflation backed by high energy costs can lead to a reduction in real income of major population who spend most of their earnings on food. Mainly, labor, farmer, homeless people are major victims of this global shock. It will ultimately increase social stress, malnutrition, and health issues.

Supply chains will be disturbed due to this war, because Pakistan imports its oil, LPG, LNG, and fertilizers from Gulf countries, which is creating delays in shipment. Because of this delay, there will be shortage of these goods in market and panic buying is expected to start in near future. It will create a more problematic situation for food supply and

Regional Office	Number of countries	Absolute change (million)	Relative change (percent)
Asia and the Pacific	10	9.1	24
East and Southern Africa	16	17.7	17
Latin America and the Caribbean	3	2.2	16
Middle East, North Afr., East. Eur.	12	5.2	14
Western and Central Africa	12	10.4	21
Total	53	44.7	18

price hike in market. In this situation, government of Pakistan will face a disturbance in import bills due to higher oil, gas and fertilizer prices and unable to provide subsidy to low-income people.

In this situation, Government of Pakistan should take actions to maintain supply of foods at affordable prices. It should be based on multi-layered strategies and long-term resilience for food security as a national security. Recently, government has initiated measures to counter this situation; such as subsidized fuel for farmers and transporters. But it is not sufficient to control the food security. Pakistan also exports food items like potatoes, onion, fruits to gulf countries where this war is continued. Due to war, logistics are blocked or delayed as the Strait of Hormuz is blocked by Iran, its exports are stopped which ultimately affect the farmer because food items are perishable and cannot wait long to be exported. In this situation, the government should take action to support farmers with ready crops through dialogue with Iran and Gulf countries to secure safe passage for Pakistani vessels. If the crops waiting to be exported are destroyed, it can lead to another crisis for food security. The farmers of Pakistan may face heavy financial losses and their associated laborers may also face financial problems.

Another important need for food security is to use modern technologies to preserve food items like dried vegetables and fruits. Government of Pakistan should take actions to improve the usage of these technologies with the support of universities by training farmers and introducing equipment used in the drying process. It is also necessary to make available high-quality seeds and modern technologies for higher yield to strengthen the food security. Fertilizer plants' capacity should be improved to reduce the burden of imports and sufficient availability of fertilizers locally during such global shocks. By adopting such measures, the food items will get longer life and can get better price as well.

In this world, global shocks are a significant challenge for all countries. Food security is continuously disturbed by climate change, pandemics, global conflicts, economic crisis, and energy crisis. The current ongoing crisis in the Middle East

has badly affected all factors of food security. By facing interconnected crises in the world, it is necessary to build long-term strategies, structural reforms and modern technology adoption for agriculture resilience. The agriculture resilience is required for food security, environment stability, farmers' livelihood, and long-term resilience against global shocks.

Government of Pakistan must take relief actions such as targeted subsidies for low-income people in the form of subsidized wheat flour, edible oil, and maize through a strong distribution system, and direct financial support to low-income people. It is also necessary that the food supply should not be disturbed and prices should be controlled to prevent panic buying and market speculations. In long-term, Pakistan should shift its energy dependence from oil to solar or wind power. Energy sufficiency will stabilize food production costs and help counter global shocks.

Further, it is necessary to establish partnerships with multinational companies to set up DAP fertilizer technology in Pakistan. Similarly, institutional reforms are required for resilient food security; Pakistan can establish and implement a comprehensive food security system and framework with the help of FAO and IOFS. Therefore, short-term and long-term strategies and a policy framework are necessary to overcome global shocks for food security. As recommended by the FAO Chief Economist: alternate trade corridors, emergency financial support, farmers' access to credit, diversify sources of import fertilizers, improved fertilizers reserves, input efficient agriculture system, adoption of green ammonia, and convert food system to strategic infrastructure.

About the Author: The writer is a Fellow member of ICMA, an entrepreneur, and runs a management accountancy firm. He has over 15 years of diversified experience in tax consultancy, corporate services, and real estate investment advisory within Pakistan. He also has experience in providing freelancing services in financial reporting and other bookkeeping services to overseas clients.