



AN EVALUATION OF PAKISTAN'S FOOD SUPPLY AND SECURITY

Muhammad Osama Munir¹, Muhammad Ali Hussain², Tanees Yaseen³, Maria Bibi⁴, Kalsoom⁵, Ayesha⁶, Afsheen⁷, Aneesa Khursheed⁸, Haneen Fazal⁹, Sadia Shafqat¹⁰, Tehreem¹¹ ^{1,2,3,4,5,6,7,8,9,10,11} Department of Human Nutrition & Dietetics, Hamdard University Islamabad Campus, Pakistan

> Corresponding author:*Muahmmad Osama Munir Email: osamamunir502@gmail.com

A B S T R A C T

Governments prioritize global food insecurity. Food insecurity affects a billion people, with Asia and the Pacific Islands having the highest rates and Sub-Saharan Africa the lowest. Pakistan is one of the worst-hit countries due to a surge in chronically food insecure people. Pakistan's food crisis persists. Due to improved worldwide methods and statistics on population, food balance sheets, and consumption patterns, Pakistan's PoU for 2017-19 is 12.3%, up from 12.0% the year before. This is helping measure progress on SDG indicator 2.1.1. 26 million individuals cannot fulfill their basic calorie needs, and the number is rising.

KEYWORDS

Food Security, Pakistan, climate change, Pakistan economy

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INTRODUCTION

Pakistan rated ninth in the top 10 food-shortage countries. Food insecurity affects millions of low- and middle-income Pakistanis. Pakistan's biggest problems are population growth and poverty. Food insecurity goes beyond food access. Food is expensive due to cash shortages or unavailability. Poverty and regional wars hamper Pakistan's food security. Food insecurity does not affect all household members. Housewives and children are more likely to go hungry than males. Economically disadvantaged and underdeveloped places have a higher risk of long-term hunger. Our nation will struggle to end hunger.A global survey found 4.66 million people in Khyber Pakhtunkhwa, Baluchistan, and Sindh are food insecure. Pakistan is among the top 10 food crisis nations. Pakistan has about 1.03 million people in a food emergency. According to the report, food insecurity will increase in Baluchistan and Khyber Pakhtunkhwa and decrease in Sindh. 1.03 million Pakistanis are in a food emergency. The analysis includes nine Baluchistan, seven recently joined Khyber Pakhtunkhwa, and nine Sindh districts, representing 9% of Pakistan's 215.3 million people(Thomas, 2001).

Quantification:

As we've established, food security means everyone has rapid access to enough safe, healthy food. Scientists quantify food insecurity using economic and political factors. Food security assessments begin at the individual level. Indicators assess if a person has access to nutritional meals. We then assess families' food security. We eventually evaluate whether all countries and the world have enough food. Five methods measure food insecurity (from the personal to the global). The FAO oversees global hunger-reduction and food security efforts. Many indicators influence whether a population is secure from hunger. Most people count calories, measure food intake, evaluate household income, and measure body composition through anthropometry (Marina et al., 2019).

Estimating national per-person calorie consumption:

This method estimates a nation's per-person calorie intake. This method uses public data from most countries. It is updated regularly to track food insecurity trends. This method is cheaper than others. Focusing on easily accessible calories is a drawback. Calorie sources and composition are ignored. Humans need macro and micronutrients (carbs, proteins, and fats as well as minerals, vitamins etc.) If your diet is unbalanced, eating the proper quantity of calories won't help. Precompiled country data may make it harder to find regional calorie distribution differences. This approach is also unreliable due to a lack of homogeneity, which causes data errors. Finally, a single calorie threshold for everyone, regardless of age, gender, physical fitness, etc., yields less trustworthy measurements(Feinman & Fine, 2004).

Earnings and spending:

Food insecurity is studied through house surveys. Respondents report food and income. By taking into account calorie content, it presents a more detailed picture of food poverty (macro and micronutrients). This method assesses households for national anti-poverty and food security efforts and identifies vulnerable people. One issue is that the sample size is smaller than if researchers used calorie intake data alone. Each household shares its food insecurity story. Unfortunately, this process is more complicated and expensive. So, collecting and disseminating this information takes longer not annually but also individually. This strategy addresses food consumption for individuals and families. Test subjects must answer questions concerning their 24-hour eating patterns(Ahmad et al., 2021).

Pakistan's food security and politics

Food insecurity may cause unrest in Pakistan. Rising food prices and food insecurity are linked to social and political unrest in low-income, highly unequal societies during political transition or group dominance of power, in settings where state capacity and public service delivery are weak, and in settings where clienteles and government corruption are perceived. Rising food prices may spark government protests that become political. Food price increases can exacerbate social tensions in a society.In circumstances of horizontal inequality and heightened societal tensions, significant food price hikes may escalate violence between groups (inequalities in societies divided by collective identities). Rising food prices could hurt some more than others and create indignation over relative suffering. The rising cost of food may be a sign of social welfare and status degradation, especially for individuals whose main concern is relative poverty. In reaction to food scarcities and growing costs, people and communities may migrate inside or beyond borders to find jobs, fertile land, and food. Newcomers and longtime inhabitants may fight over jobs and other public services. If food is limited, people may join armed gangs or insurgencies to survive, especially if they fear the government or market will not.As compared to poverty, starvation, and young men's incapacity to support their family, the hazards of involvement seem tolerable. Food price spikes may "lightning rod" countries with more serious political and social issues. Inflation and social hardship often occur together. Hence, enormous price jumps have caused concerns in cultures that reflect instability, particularly those that quickly mobilize into political opposition or community violence. Food shortages and price riots in these countries may be a proxy for social and political dissatisfaction. Natural disasters, agricultural strife, and military and security-related stockpiling, smuggling, and internal migration cause this sensitivity to food insecurity. He blames Pakistan's food shortages on "weak management of the wheat economy and poor stewardship of the agriculture business as a whole" and natural calamities. His research shows that wealthy, politically-connected landowners and individuals receive preferential treatment, resulting in unequal access to public assets. A focus on the wheat market and preferential treatment of some places suggest rural neglect. This idea suggests that the country's food insecurity is due to its inability to diversify its agricultural base. The colonial Land Acquisition Act still applies, proving these claims. Pakistan's wheat surplus doesn't solve food insecurity. Pakistan's food insecurity is exacerbated by "no real official response to the oncoming tragedy of increased food costs in 2008."A 2009 strategy to accelerate agricultural growth and build a more efficient and equitable food supply chain from harvest to consumption helped the poor, increased food security, and created non-farm jobs. Malik blames "government disinterest to the agricultural" for the failures of enterprise. Pakistan's "entrenched institutions that regulate wheat sector" caused "sloppy and halfhearted" wheat market liberalization(Edward, 2018).

Food insufficiency and security risks

Food insecurity often leads to hunger. Notwithstanding food production successes, Pakistan has chronic food instability and malnutrition. According to the Planning Commission's "Vision 2023," half of Pakistanis, especially children, women, and the elderly, are malnourished. The 2021 World Hunger Index placed Pakistan 92nd out of 116 countries (GHI). The country's hunger is severe at 24.7. Around 3 million Pakistanis, especially in drought-stricken Baluchistan and Sindh, are food insecure, according to WFP 2020. These provinces have over half a million emergency residents. A growing population, climate change-induced harsh weather, and the COVID-19 pandemic are aggravating famine. Several factors can generate food insecurity and shortages in a nation. Some of the biggest variables affecting food security are listed below:Most food is produced in large, centrally situated facilities using energy-intensive farming technology, making it sensitive to fossil fuel depletion and biofuel use. Farm machinery, food preparation, transporting perishables, packaging

materials, and fertilisers and insecticides all require large amounts of fossil fuel. Nitrogen is one of the most fossil fuel-intensive fertilisers, releasing 3.7 pounds of CO2 per pound. Pakistan's energy and economy are struggling. Pakistan consumes 84 million metric tonnes of oil equivalent per year due to population and economic growth (MTOE). Fossil fuels dominate Pakistan's energy economy. Domestic fossil fuel reserves are declining and won't fulfil predicted energy needs. The government must find new energy sources to meet its needs. Biomass could help Pakistan overcome its energy crisis. Corn, palm oil, sugarcane, and other biofuels are seen as a more environmentally friendly and cost-effective alternative to fossil fuels that contribute to global warming. Several environmental groups are worry that biofuel demand could harm the environment more than fossil fuels (Von Braun et al., 2005).

Intensification of Population Growth:

Most nations have a 2%–3% annual population growth rate, which would boost food consumption and agricultural production by 3%–5%. Due to significant population increase, 60% of the country's residents are at risk of hunger, according to the WFP. Pakistan's 2017 census population was 207.7 million. The government must solve poverty and hunger in a growing nation. Rising global population, urban agriculture output, poor incomes, and variable food prices all contribute to food insecurity. Malnutrition costs Pakistan 3%–4% of GDP annually, according to the 2016 One UN Pakistan Annual Report. Climate change disrupts agricultural productivity, agriculture, and human and animal disease, threatening food security, safety, and health. Climate change can be good or bad depending on temperatures and precipitation(Chawarika, 2016).

The World Food-wise

"Food security" is "when all people have access, on a permanent basis, to sufficient, safe, nutritious food" for a healthy and active lifestyle, according to the WHO. Food security is the extent to which a population has affordable, nutritious food. Pakistan's agriculture sector is suffering from climate change-related drought and irrigation water shortages. Pakistani rice, vegetable, cereal, spice, and grain crops are highly weather-sensitive. As temperatures rise and precipitation patterns change, food insecurity increases due to decreased productivity, especially in agriculture. Food insecurity hinders social and economic development; hence it needs extensive scientific research. Climate change issues allow for multiple solutions. Due to the government's poor governance and lack of political commitment to address hunger, Pakistanis are at risk of starvation. Pakistan is one of Asia's most food-insecure nations, according to IFPRI's Global Hunger Index (GHI) (IFPRI). Food insecurity affects around 83 million Pakistanis. The government must handle this complicated issue. Pakistan's food crisis is multifaceted. The government has a lot of responsibility here. Zafar Altar of the Pakistan Agricultural Research Council cites the government's agricultural administration's overemphasis on wheat, insufficient fertilizer and irrigation systems, poor infrastructure in the west, and lack of new knowledge generation. Subsidy programmers hurt consumers while helping producers. Land inequality causes food insecurity. The NWFP and Punjab had quite diverse wheat supplies. Pakistan's military-driven policies have caused widespread food insecurity. The Federally Administered Tribal Areas, Baluchistan, and NWFP, where the Pakistani government is conducting military operations, are "very food insecure" and "food insecure." Many civilians have been displaced by military activity(Dizon & Herforth, 2018).

Pakistan's hunger's effects

Modern society's biggest issue is hunger. Asian, Pacific, and Sub-Saharan Africa have the greatest rates of malnutrition. Pakistan is one of the worst-affected countries by a sharp surge in chronically food insecure people. The 2021 World Hunger Index puts Pakistan 92nd out of 116 countries (GHI). Its hunger score is 24.7. Pakistan outperforms India (ranked 101), Bangladesh (65), and Sri Lanka (Ranked 66). But, Pakistan's economy is so bad that it can barely be saved, making this situation even more stunning and alarming. Pakistan is known for its agriculture, but most of its people go hungry every day. Due to poverty, natural calamities, and political and economic instability, some parts of Pakistan are undernourished. The UN World Food Program reports that 20% of Pakistanis are malnourished and 50% of children under five are stunted (WFP). Pakistan has the second-highest malnutrition incidence in the region, with 82% of children going hungry. Acute malnutrition affects 18% of under-5s, whereas 40% are stunted. Pakistan's food crisis is exacerbated by natural disasters and extreme weather due to its fragile climate. According to the UN Food Security Cluster, drought has plagued portions of Baluchistan and Sindh since 2013, endangering livelihoods and household food security (FSC). The FSC recorded 5 million drought victims in 26 districts in Baluchistan and Sindh provinces in 2019. According to the Office for the Coordination of Humanitarian Affairs (OCHA), significant rain and snow in early and middle January affected at least 1 million households in AJK, Gilgit-Baltistan, Baluchistan, and KPK provinces (OCHA). Locals cannot move to safer, better-supplied places. Due to locust invasions in Baluchistan, Sindh, and Southern Punjab, good food is scarce. Locusts destroyed farmers' crops, jeopardizing their life. This worsened household food insecurity and disrupted the nation's food security policy. According to the FAO, economic losses will surpass \$5.1 billion (FAO). Since 2018, rising food prices have made it harder for the poor to eat. The PBS reported 8.2% national inflation in May 2020, up from 5% in 2018. From 4.5 to 9.7 percent, rural inflation has doubled. Since they spend more on food, the poor have less spare income. So, they can spend less on food. The pandemic devastated the economy, raising unemployment and poverty. Wage laborers, peasants, women, and children are hardest hit(Munir, 2020).

Gender and food safety

Food security only exists when all individuals in a given area, regardless of where they reside or how much money they have, have quick access to an abundance of affordable, high-quality food that meets their nutritional needs and fulfills their gastronomic interests. This principle applies to household food security. In this case, measures to increase national food security and home food safety are surprisingly similar. The gender of leaders can affect a nation's or family's food security. Women and men contribute differently but equally to family and community nutrition. In many houses, women make sure everyone eats well, has fresh, healthful food, and prepares it appropriately. Women spend more of their salary on food than men. Despite being the backbone of household food security, patriarchal society makes women suffer from food insecurity.Women produce 60-80% of Pakistan's food, feeding half the population. Despite abundant evidence, women are still regarded as helpers and "homeowners" expected to work long hours for little remuneration. Men inherit most land in this country. Women may be denied property, water, and animals.Even when women have access to property, a lack of ownership inhibits them from spending time and money in sustainable farming practises, resulting in lower output, family income, and food. Women and girls in rural Sindh and Baluchistan have trouble getting a good education. Education improves diet quality, agricultural output, and poverty. Today's women confront more obstacles to credit and financial autonomy than men. They cannot invest in agricultural machinery, seeds, fertiliser, or labour because they cannot get loans.Nutrition is a problem for many Pakistani low-income women. Local food distribution sometimes reflects socioeconomic class. Women have less food than males due to economic

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dependence, the idea that they need less food, and food taboos during pregnancy. Women, children, and the elderly are more likely to be hungry during food shortages since they have less control over resources than men. Gender influences food production, distribution, and consumption throughout cultures and time. Food insecurity magnifies male food power.We can solve these issues by empowering women at work and on the land, paying them properly, and safeguarding them from damaging cultural norms(Grace et al., 2016).

CONCLUSION:

Due to low-income rural families' lack of year-round healthy food, food insecurity is worse in rural Pakistan than in cities. In 2020, FIES-based statistics showed that moderate or severe food insecurity rose to 61.9% in flood- and desert-locust-affected areas of Pakistan, mostly in Balochistan and Sindh. Lawmakers have been chastised for their slow response to the country's food shortage. The recent food price crisis has reduced the purchasing power of people already living on less than \$2 per day. In 2021–2031, 38% of Pakistan's population would be food insecure, according to the US Department of Agriculture's International Food Security Assessment. Sindh and Balochistan suffer the nation's worst hunger. Integrating health, food, social protection, and water and sanitation into evidence-based nutrition programs is necessary for several reasons. Climate change and fossil fuel shortages cause food insecurity. Inadequate political governance, ethical bias, and feudalism also affect food production, stability, and availability. The Ministry of National Food Security and Research, a Cabinet-level ministerial department, develops, enforces, and implements Pakistani agricultural, rice, livestock, fisheries, and farming policies. It aims to establish a cutting-edge food production and distribution system that maximizes food security and nutrition in terms of accessibility, efficiency, utility, and sustainability. Pakistan's economic and financial policies have increased wealth inequality and poverty. To avert food shortages, governments must enhance the fruit and vegetable value chain and guarantee storage capacity. The government can reduce food security losses from natural catastrophes through crop diversification, water management, and "climate-smart" farming. Food security requires crop subsidies and agricultural value addition.

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