

AN OVERVIEW OF FOOD SECURITY AND INSECURITY IN PAKISTAN



S.NO	CONTENT	PAGE
1	ABSTRACT	03
2	INTRODUCTION	04
	2.1. What is food security? 2.2. What is food insecurity?	04
3	FOOD SECURITY SITUATION OF PAKISTAN	05
4	CROPS PRODUCTION AND CONSUMPTION IN PAKISTAN	08
5	SUMMARIZED NATIONAL FOOD SECURITY POLICY	09
6	ROLE OF ZTBL TO ADDRESS THE ISSUE OF FOOD SECURITY	12

ABSTRACT

Food security is a significant global challenge, and Pakistan, like many other countries, faces a growing concern regarding meeting the food requirements of its population as the population continues to increase. Food security refers to the availability, access, utilization, and stability of food for a population, and it is crucial for the well-being and development of any nation. Climate change has a significant impact on food security of Pakistan. Erratic weather patterns, such as droughts, floods, and extreme temperatures, can lead to reduced crop yields and livestock productivity. Floods 2022, has destroyed millions of acres standing crops. Keeping in view the sensitivity of the food security issues and food security situation in Pakistan. A task assigned by ZTBL member Board/Secretary Business Development & Review Committee to submit a brief research report and submit at Committee and Board level. This research report aims to investigate the crucial role played by Zarai Taraqiati Bank Limited (ZTBL) in ensuring food security in Pakistan. The study was conducted in coordination with key stakeholders, including Pakistan Agriculture Research Center, Ministry of National Food Security and Research, Bureau of Statistics, and a review of articles published on food security in reputed research journals. The report provides an in-depth analysis of the current state of food security in Pakistan, highlights the significance of ZTBL's involvement, and proposes recommendations for further enhancing its contributions in this critical sector.

INTRODUCTION

1.1. What is Food Security?

Based on the 1996 World Food Summit, food security is defined as:

“When all people, at all times, have physical and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.”

According to the FAO, there are four main pillars of food security:

- **Physical availability of food:** Food availability relates to the supply of food through production, distribution, and exchange.
- **Economic and physical access to food:** Food security can not only be ensured by having physical availability of the food at all levels (household/ national/ international) but sufficient economic and physical access to food.
- **Food utilization:** Utilization refers to the metabolism of food by individuals i.e. the way the body makes the most of various nutrients in the food
- **Stability of the other three dimensions over time:** Stability in physical availability, economic and physical access of food and utilization over time ensures food security. Even if your food intake is adequate today, you are still considered to be food insecure if you have insufficient access to food on a periodic basis, risking your nutritional status.

1.2. What is Food Insecurity?

A person is food insecure when they lack regular access to enough safe and nutritious food for normal growth and development and an active and healthy life. This may be due to unavailability of food and/or lack of resources to obtain food.

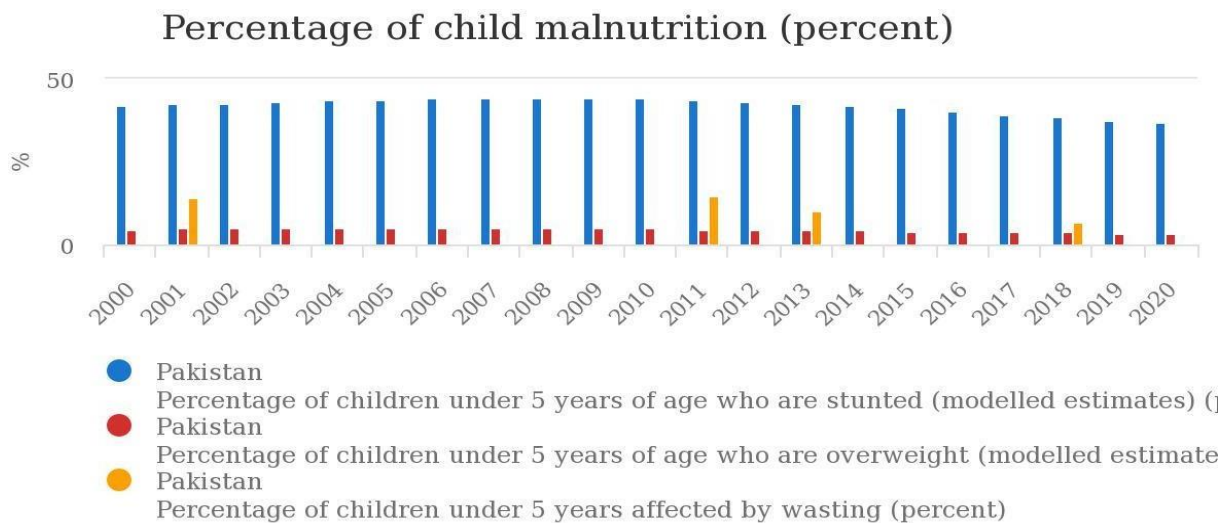
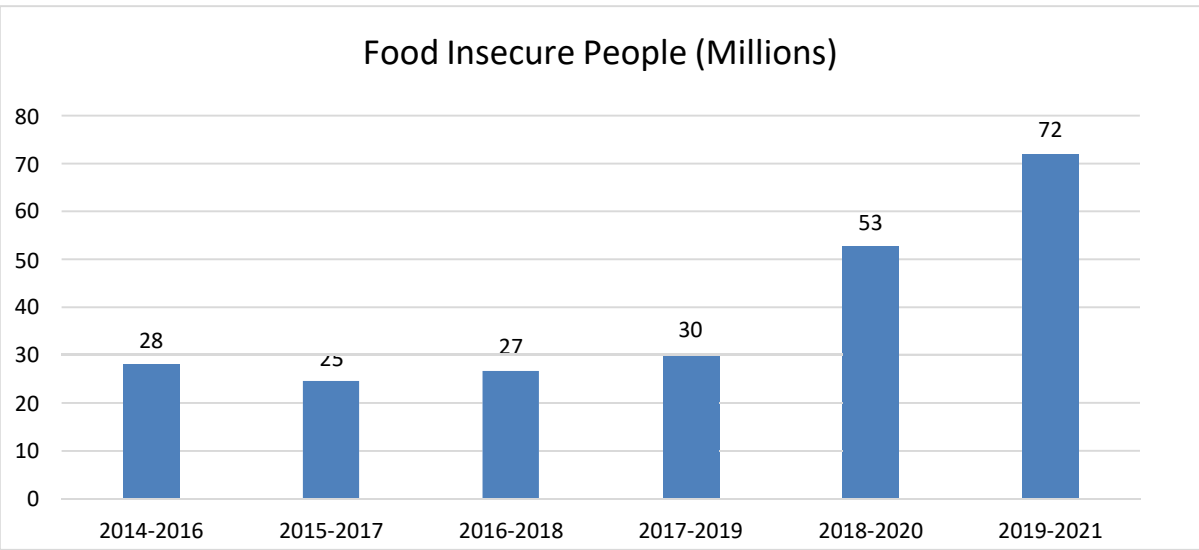
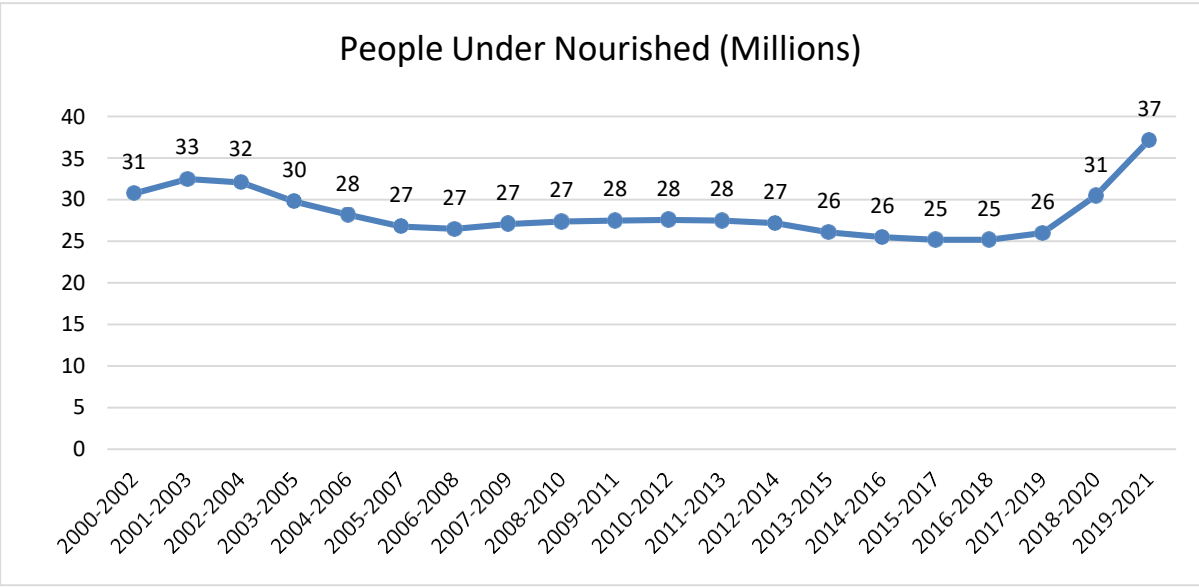
National Institute of Population Studies (NIPS) reported high level of severe stunting (45%), wasting (15%) and underweight (30%).

KEY INDICATORS OF FOOD INSECURITY	
Undernourishment	Undernourishment means that a person is not able to acquire enough food to meet the daily minimum dietary energy requirements, over a period of one year.
Malnutrition	Acute Malnutrition (<i>Wasting</i>) This type of malnutrition is a result of deficiencies in any or all the necessary nutrients (<i>micronutrients</i> and <i>macronutrients</i>). <i>Wasting</i> or <i>thinness</i> occurs due to sudden and rapid loss of weight or failure to gain weight.

	severe stunting (45%)
	<p>Underweight Wasting + stunting</p> <p>Underweight is defined as low weight-for-age. A child who is underweight may be stunted, wasted or both.</p>
Micronutrient deficiency	<p>Micronutrient deficiency is the important pillar of food insecurity. Micronutrients are vitamins and minerals needed by the body in very small amounts. However, their impacts on a body's health are critical, and deficiency in any of them can cause severe and even life-threatening conditions.</p>
	<p>Chronic Malnutrition (Stunting)</p> <p>This type of malnutrition occurs as a result of long-term nutrient deficiencies and/or repeated infections with inadequate catch-up growth. National Institute of Population Studies (NIPS) reported high level of</p>

FOOD SECURITY SITUATION OF PAKISTAN

- According to the Food and Agriculture Organization (FAO), an estimated 43% of the population in Pakistan is food insecure, meaning they do not have access to sufficient and nutritious food to meet their dietary needs. Additionally, Pakistan ranks 106th out of 116 countries in the Global Hunger Index (GHI) 2021, which measures hunger and under nutrition worldwide.
- 36.9 percent of the Pakistani population faces food insecurity. (WFP, 2022)
- According to the Food Security Assessment Survey (FSA), 2016, 18% of the population in Pakistan is undernourished.
- In Pakistan GOP conducted a survey, an estimated 40.2 per cent of Pakistani children under the age of five years are stunted.
- Pakistan has a global acute malnutrition (GAM) rate of 17.7 per cent, exceeding the emergency threshold (< 10 percent).
 - 52 per cent are deficient in vitamin A.
 - 63 per cent are deficient in vitamin D.
 - 28.6 per cent suffer from iron deficiency.
 - 18.6 per cent are zinc deficient.
- Country's GDP is 18.5 percent made up of contributions from livestock (60.5 percent), crops (35 percent), fisheries (2.1 percent) and forestry (2.1 percent).



Source: FAOSTAT (Apr 10, 2023)

Comparative Position of Top Producing Countries of Major Crops

WHEAT	
Country	Yield Kg/Hec
France	6,680
China	5,742
India	3,431
USA	3,342
Russia	2,976
*Pakistan produces 2868 Kg/hect	

MAIZE	
Country	Yield Kg/Hec
USA	10,795
Argentina	8,677
China	6,318
Brazil	5,695
India	3,431
*Pakistan produces 2850 Kg/Hect	

RICE	
Country	Yield Kg/Hec
China	7,040
Viet Nam	5,920
Indonesia	5,128
Bangladesh	4,809
India	3,962
*Pakistan produces 2563 Kg/Hect	
COTTON	
Country	Yield Kg/Hec
China	9,077
Turkey	4,937
Brazil	4,329
Uzbekistan	2,897
USA	2,765
India	1,378
*Pakistan produces 753 Kg/Hect	

SUGARCANE	
Country	Yield Kg/Hec
Australia	82,645
China	79,426
India	77,347
Brazil	75,604
Mexico	69,424
*Pakistan produces 67,000 Kg/Hect	

CROPS PRODUCTION AND CONSUMPTION IN PAKISTAN

- **Wheat:** Pakistan is the 8th largest wheat producer in the world, with an annual production of around 25 million tons. The country's wheat consumption is estimated to be around 26-28 million tons annually.
- **Rice:** Pakistan is the 12th largest rice producer in the world, with an annual production of around 7 million tons. The country's rice consumption is estimated to be around 3.5 million tons annually, with the rest being exported.
- **Sugarcane:** Pakistan is the 7th largest sugarcane producer in the world, with an annual production of around 70 million tons. The country's sugarcane consumption is estimated to be around 4-5 million tons annually, with the rest being used for sugar production.
- **Cotton:** Pakistan is the 4th largest cotton producer in the world, with an annual production of around 10 million bales. The country's cotton consumption is estimated to be around 15 million bales annually, with the rest being exported.
- **Maize:** Pakistan's annual maize production is around 6 million tons. The country's maize consumption is estimated to be around 5.5 million tons annually, with the rest being used for animal feed and other industrial purposes.
- **Oilseed crops:** are an important part of Pakistan's agricultural economy. Here is some information on oilseed crop production and requirements in Pakistan:
- **Canola:** Pakistan's annual canola production is around 0.8 million tons. The country's canola consumption is estimated to be around 1.2 million tons annually.
- **Sunflower:** Pakistan's annual sunflower production is around 0.3 million tons. The country's sunflower consumption is estimated to be around 0.6 million tons annually.
- **Soybean:** Pakistan's annual soybean production is very low, around 10 thousand tons. The country's soybean consumption is estimated to be around 1.5 million tons annually, with the rest being imported.
- **Sesame:** Pakistan's annual sesame production is around 0.1 million tons. The country's sesame consumption is estimated to be around 0.2 million tons annually.
- **Other oilseeds:** Other oilseeds grown in Pakistan include rapeseed, mustard, and linseed, with annual production of around 0.5 million tons. The country's consumption of these oilseeds is estimated to be around 0.8 million tons annually.
- It is important to note that Pakistan heavily relies on oilseed imports to meet its domestic demand for edible oils. The country's annual edible oil consumption is

estimated to be around 4-4.5 million tons, while domestic production is only around 0.5 million tons. Therefore, Pakistan is a net importer of edible oils to meet its domestic demand.

SUMMARISED NATIONAL FOOD SECURITY POLICY

The National Food Security Policy of Pakistan was approved by the government in 2018. Overall, the policy is a comprehensive strategy to ensure food security and reduce malnutrition in the country. The main features of the policy include:

- ✓ **Ensuring food availability:** The policy aims to ensure that sufficient quantities of food are available in the country at affordable prices.
- ✓ **Promoting agricultural development:** The policy focuses on promoting agricultural development by improving land use, increasing agricultural productivity, and promoting research and development in the sector.
- ✓ **Enhancing food access:** The policy aims to enhance access to food by improving food distribution systems and increasing purchasing power of vulnerable groups.
- ✓ **Reducing malnutrition:** The policy aims to reduce malnutrition by increasing access to nutritious food, promoting breastfeeding and improving access to health care.
- ✓ **Encouraging food safety:** The policy focuses on improving food safety by strengthening food standards and regulations, improving food testing facilities, and promoting food hygiene practices.
- ✓ **Strengthening institutional coordination:** The policy aims to strengthen institutional coordination among government agencies and stakeholders to ensure effective implementation of the policy.

Major Aspects covered in National Food Security Policy of Pakistan:

Some of the key aspects covered in National Food Security Policy of Pakistan related to food security are:

- **Agriculture development:** The policy aims to promote agriculture development in the country by improving land use, increasing agricultural productivity, and promoting research and development in the sector.
- **Food availability:** The policy aims to ensure that sufficient quantities of food are available in the country at affordable prices, by increasing food production, improving storage and distribution systems, and reducing food waste and losses.
- **Food access:** The policy aims to enhance access to food by improving food distribution systems and increasing purchasing power of vulnerable groups, such as low-income households, women, and children.
- **Nutritional security:** The policy aims to reduce malnutrition and ensure nutritional security by increasing access to nutritious food, promoting breastfeeding, and improving

access to health care.

- **Food safety:** The policy focuses on improving food safety by strengthening food standards and regulations, improving food testing facilities, and promoting food hygiene practices.
- **Institutional coordination:** The policy aims to strengthen institutional coordination among government agencies and stakeholders to ensure effective implementation of the policy.
- **Climate change and environment:** The policy recognizes the impact of climate change on food security and aims to promote climate-smart agriculture and sustainable management of natural resources.

Policy Imperatives

The improvement in crop-livestock productivity and diversity increases farm incomes, reduces consumer prices and enhances diverse food supplies. Agriculture also stimulates rural development which is realized in the form of an increased supply of raw materials for the processing industries, workforce employment, and productive infrastructure development at the community level. The following sections focus on achieving four pillars of food security including; availability, accessibility, utilization and stability while highlighting key issues and suggesting policy interventions:



Implementation Arrangements

The successful implementation of the policy will be based on the stringent actions like:

- a) Cost-benefit analysis of policy measures to priorities them into those of most value in the short, medium and long term, and to recognize trade-offs.
- b) Commitment to the high impact, flagship programs that need public funding and government leadership, and specific time-frames to produce desired results
- c) Structuring and resourcing of government institutions according to activities prioritized under the policy, with appropriate coordinating mechanisms.
- d) Government spending to leverage private sector investments for accelerating the attainment of food security goals.
- e) Providing sufficient financial incentives through taxation and subsidy regimes with minimal distortionary effects.
- f) Using communication, education and awareness methods customized to the language and literacy status of intended audiences.
- g) Media and public submissions to achieve cross-section food security.

Implementation of the policy will require the involvement of various ministries, commissions, departments, institutions at the federal and provincial levels along with contribution from UN agencies and other international organizations. However, the main operational responsibility for most of the actions will be with the provincial governments. In addition, the new policy directions will require drawing in government institutions, including agriculture research and extension organizations, food departments, dairy and livestock institutions, on-farm water management & irrigation establishments, forest and fisheries departments, health & education, social welfare and women's development at the sub-provincial level – particularly at the district and union council levels. It will require working with the private sector, Rural Support Programs (RSPs), NGOs/Civil Society Organizations (CSOs), academia, farmers' organizations, value chain actors, processing industry, local bodies, and consumers.

In order to implement this policy, complementary policies, plans, and programs will need to be prepared by each of the provinces and regions and, where needed, the MNFSR shall provide support.

Role of the Ministry of Food Security & Research (MNFS&R)

The Ministry of Food Security & Research (MNFS&R) would play an overarching role, including monitoring, reporting, and addressing high-level policy issues. The MNFSR will have oversight of policy implementation through an Implementation Committee. The Committee will be chaired by the Federal Secretary of the MNFSR and include the secretaries of relevant ministries, commissions, and programmes at the federal and provincial levels and representatives from academia, the private sector, and civil society organizations. Although the provinces are to take the lead in agriculture matters, the MNFSR will continue to play an overall coordination and support role in many aspects related to agriculture and food security.

Role of Federal and Provincial Governments

The provincial governments are supposed to substantially increase resources to implement activities under their Annual Development Plans. In order to guide their activities and investments in agriculture, some provinces have started work on the preparation of provincial policies, strategies, and investment plans. However, the provinces need an overall vision and direction for agricultural development to ensure that synergies are maximized and overlaps minimized. Moreover, certain activities, such as national priority setting, trade policies, national and trans-boundary pest and disease surveillance, the certification of agriculture products at international standards, and strategic and basic research on topics of national importance, remain areas that the federal Government needs to take the lead in consultation with the provinces.

ROLE OF ZTBL TO ADDRESS THE ISSUE OF FOOD SECURITY

Pakistan has made significant progress in food production over the last several decades. However, food security is still a key challenge due to high population growth, rapid urbanization, low purchasing power, high price fluctuations, erratic food production, and inefficient food distribution systems. Foreseeing the broader perspective of food security in the country, ZTBL management is keen to play vital role in mitigating the food security issues.

ZTBL, being a specialized agriculture development financial institution, is already catering the financial needs of small/marginalized farmers to increase their farm productivity, reduce production costs and increase their income by adopting non-farm practices as well. This segment of society is more vulnerable to food insecurity due to lesser income. Multiple new initiatives have recently been introduced under supervision of ZTBL Board of Directors for promoting farm mechanization, production of alternate crops (soybean, mustard, sesbania etc.), enhancement in farmer's income by adopting nonfarm practices (Bee Keeping, Biofloc Fish farming, Australorp and desi chicken farming etc.), Women empowerment in Garment Sector, kitchen gardening etc.
