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Received:
November 24,
2022

Revised:
January 18,
2023

Published:
June 10, 2023

Journal of Politics and International Studies

Vol. 9, No. 1, January–June 2023, pp.59–70

Food Security As And National Security: A Management Approach

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Abstract

National security refers to ensuring the safety of the citizens and the protection of the state. It is imperative to understand that national security cannot be achieved unless the basic need of food security is met. Prioritizing food security can make the world a safer place, even for sovereign nations. Unfortunately, most of the time this fundamental aspect of national security is overlooked. The government must prioritize food security because it has an impact on the safety and security of Pakistan. Inadequate access to food has resulted in protests, civil unrest, and even terrorist attacks. Poor economic growth can also destabilize social and political orders, posing a significant threat to national security. This research aims to analyze the critical role of food security in national security in Pakistan, using qualitative analysis and data from the Food and Agricultural Organization (FAO). The findings indicate that if population growth continues at the current rate, Pakistan will become food insecure in 2030. Thus, prioritizing food security could significantly contribute to enhancing the security condition in Pakistan.

Key Words: food security, National security, Pakistan, human security

Introduction

“Improved information and understanding of the various interplays between food security and human security will assist build more effective actions and contribute to longer-term results.” (FAO Director-General José Graziano da Silva (UN Peacebuilding Commission, January 2015).

In 1970s, the notion of food security was widespread because of the food crises around the world. In 1974, the World Food Conference (WFO) defined food security as the assurance of a stable food supply and prices for essential goods on a national and global scale, emphasizing the need for adequate access to basic foods for populations worldwide.

Food insecurity can exacerbate conflict by creating unequal access to food and even compelling individuals to support violence. In such circumstances, national security may be threatened, as the government struggles to maintain law and order. Therefore, the conventional concept of security must be expanded and deepened to address new threats to the safety and well-being of individuals within the state. This has led to the development of the concept of "Human Security," which seeks to capture the non-traditional threats to the survival and security of the states by prioritizing the health, survival, and overall welfare of individuals. The concept of food security comprises four key components, namely availability, accessibility, utilization, and stability. The South Asian region, which is home to more than 1.17 billion people, India accounts for the largest share of the population at over 17 percent, followed by Pakistan and Bangladesh with individual contributions of 2.5% and 2.4%, respectively. While Sri Lanka has managed a growth rate of 1.3 and Nepal 1.1, the overall population growth rate in most nations has slowed down significantly in recent years. Food security concerns and economic growth practices are mutually reinforcing, leading to a dependence on wheat-based food security in the region. (Timmer, 2004).

Pakistan, as a developing nation, is facing growing concerns over food security due to rising food costs in the 21st century (Khan, M. 2003). Pakistan faces a significant challenge in addressing malnutrition. Shockingly, more than one-third of pregnant women in the country suffer from malnourishment, and over 25% of newborns exhibit stunted development. Even more concerning, over 30% of deaths among newborns and toddlers in Pakistan were caused by malnutrition. (Planning Commission and UNICEF, 2004).

Micronutrient deficiency is also pervasive in Pakistan and is sometimes referred to as "Hidden Hunger" since it reflects poor maternal health and nutrition, a heavy burden of disease, and low soil iodine and zinc content. Malnutrition disproportionately affects women and children in Pakistan, putting them at risk for stunted development and mental decline. Despite adequate food availability, many people in Pakistan, especially women, and children, lack access to a balanced and nutritious diet.

i. Research Questions

- How does food security affect the National security of Pakistan?
- What are Pakistan's greatest obstacles when it comes to Food Security?
- What are the consequences of people's discontent with food supply availability, access, and utilization?
- What type of policies can enhance food security in Pakistan?

1. Theoretical Framework

i. Food security as a component of national security

National security is composed of several elements, including defence, economic, political, food, and cyber security. One of the components that have gained significant importance in recent times is food security. Pakistan has launched national food security policy in 2018.

ii. National Security Policy of Pakistan (NSP) 2022-2026

The National Security Policy (NSP) 2022-2026 is the first national security policy document of Pakistan. The NSP articulates a citizen-centric 'Comprehensive National Security' framework. It recognises that traditional and non-traditional threats and opportunities together impinge on overall national security.

The non-traditional threats include a vital element of food security. The availability of food and access to it is critical to the well-being and stability of the country.

iii. The National Food Security Policy of Pakistan (NFSP)

The National Food Security Policy (NFSP) aims to achieve sustainable agricultural growth, improve food supply, accessibility, usage, and stability in Pakistan. It is a cross-sectorial policy connecting agriculture, food security, climate change, and market services. The NFSP has four main measures to eliminate hunger, food insecurity, and malnutrition: Agricultural diversification, Poverty reduction programs, Innovation in food production, and reducing food waste. The policy promotes cropping patterns, climate-smart agricultural practices, and high-value fish farming and commercial poultry production, while also providing off-farm employment opportunities.

iv. Sustainable Development Goals (SDGs) and Food Security

The transition from MDGs to SDGs presents a challenge for Member States to maintain the significant progress made in reducing poverty and hunger. While 72 out of 129 nations have achieved the hunger MDG 11 objective, but around 800 million people still suffer from hunger.

Agriculture remains the primary source of income for 86% of the world's rural population and is critical to reducing poverty and hunger. Social protection systems are essential in enabling progress toward eradicating hunger and reducing poverty by increasing financial stability and access to improved nutrition, healthcare, and education. Prolonged crises resulting from natural or human-caused catastrophes and political instability have heightened vulnerability and food insecurity.



Source: sustainable development goals

v. Establishing a link between Human Security and Food Security

Human security refers to the safety of individuals and groups from cross-cutting dangers to their lives, dignity and lack of access to food. Food insecurity is one of the many vulnerabilities that are interconnected with other insecurities, including political, economic, health, environmental, personal, and communal anxieties.

The connection between human security and food security is based on the complete realization of the basic human right to sufficient sustenance, where no one is left behind. This right is achieved when everyone has constant physical and economic access to adequate food or the means to obtain it, regardless of their gender, age, or social status.

To address the numerous risks and vulnerabilities that threaten the resilience of communities and societies, a people-centred, comprehensive, context-specific, and prevention-focused strategy is required, as human security demands.

Food insecurity is one of the many vulnerabilities that are interconnected with other insecurities, including political, economic, health, environmental, personal, and communal anxieties.

Table 1. *Link between Human Security and Food Security*

Human Security for Food Security Resilience	
Human-Security Principals	Human-Security links to Food Security
People-centred	<ul style="list-style-type: none"> ▪ Focus on most vulnerable food-insecure part of community. ▪ Use participatory approaches to consider input from impacted parties. ▪ Consider local hazards, capabilities, and resources to identify framework and response gaps. ▪ Work with agricultural concepts, norms, and institutions.
Comprehensives	<ul style="list-style-type: none"> ▪ Take a holistic approach to food insecurity and vulnerability. ▪ Food security needs health, environmental, political, and socio-economic factors. ▪ Involve pertinent topics, sectors, and disciplines. ▪ Involve local, district, national, regional, and worldwide players such as national governments, international institutions, funders, civil society, the business sector, small producers, trade unions, labour, and women's groups. ▪ Handle cross-cutting concerns by considering national and international changes that influence implementation (public sector reform and decentralization, peace and security, trade and macroeconomic policy reforms, etc.). ▪ Protect the most food insecure people and create community resilience via a "protection and empowerment" paradigm.
Context-specific	<ul style="list-style-type: none"> ▪ Solve systemic causes of food insecurity. ▪ Implement context-specific methods locally. ▪ Analyse intrastate and interstate food insecurity by contextualizing insecurity (district, national, regional, global). ▪ Analyse targeted topics and demographics locally and outside.
Prevention-oriented	<ul style="list-style-type: none"> ▪ Reduce risks and build resilience. ▪ Community-driven early warning systems. ▪ To secure ownership and sustainability and minimize land conflict, increase local capacity, use local resources, and enhance intra- and intercommunity interaction. ▪ Use local knowledge to avoid this. ▪ Map trends over time to adjust interventions. ▪ Identify marginalized people and locations.

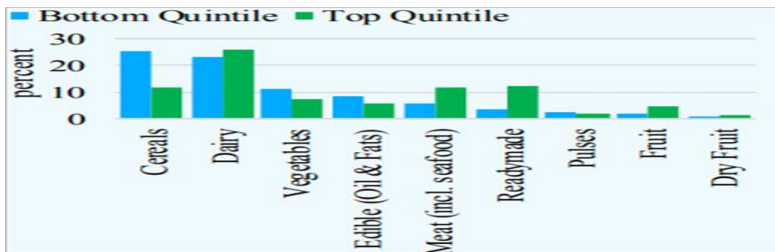
2. Analysis And Discussion

i. The current state of food security in Pakistan

a. Food stability condition in Pakistan

FAO reveals that Pakistan lags behind other lower-middle-income countries in all four indicators of food security (as presented in Table 2 in appendix 2). It is found that Pakistan is still facing significant challenges in addressing malnutrition, particularly deficiencies in essential micronutrients like iron, calcium, and vitamin A, as well as inadequate access to safe drinking water.

The factors contributing to food insecurity in Pakistan, include low economic access and interruptions in the food chain. According to the Pakistan Bureau of Statistics (PBS), the overall poverty rate of Pakistan was 24.3% in 2019-20. The consumption of nutrient-dense foods such as meat, poultry, fish, milk, vegetables, and fruits is low in Pakistan, with levels six to ten times lower than in industrialized countries. This highlights the need for greater investment in nutrition-sensitive programs and policies that prioritize access to safe drinking water and nutrient-dense foods in Pakistan. The 60% of households in Pakistan spend 45% of their earnings on food, compromising their nutritional stability. Social programs and transfers have been employed to stabilize and increase the poor's wages, but governance issues and poor service delivery have cast doubt on their effectiveness. (Figure 5 shows average consumption expense)

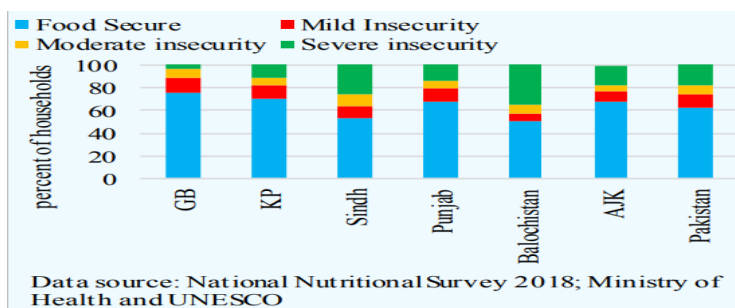


Agriculture and production policies of the government

Pakistan's agriculture sector faces a lack of expansion in cultivated land and threats posed by erosion, deforestation, and waterlogging. The annual cost of soil fertility loss is projected to be significant, and urbanization has led to a decline in available arable land. The only way to increase crop yields is to implement alternative farming methods such as hydroponics, aeroponics, and vertical farming, which would require significant investment in infrastructure, research, and development.

b. Analysis of food availability Conditions in Pakistan

Pakistan is producing sufficient amounts of staple crops such as wheat, rice, sugarcane, and milk, but a significant proportion of its population still struggles to access adequate food. This is reflected in the National Nutritional Survey's alarming results, which classified 36.9% of Pakistani households as "food insecure," with 18.3% suffering from "severe" food insecurity (Hammad et. al, 2021). Addressing these disparities through targeted interventions and policies will be crucial in achieving food security for all in Pakistan. (Figure 2).



c. Analysis of food accessibility condition in Pakistan

In Pakistan the food accessibility is affected by various factors, including poverty, income inequality, inadequate infrastructure, and inefficient food distribution systems.

The COVID-19 pandemic has also further exacerbated the situation, with lockdowns and economic disruptions leading to increased food insecurity. The government has implemented various programs to address food accessibility, such as the Benazir Income Support Programme, which provides cash transfers to vulnerable households. However, much more needs to be done to ensure that all Pakistanis have access to sufficient and nutritious food.

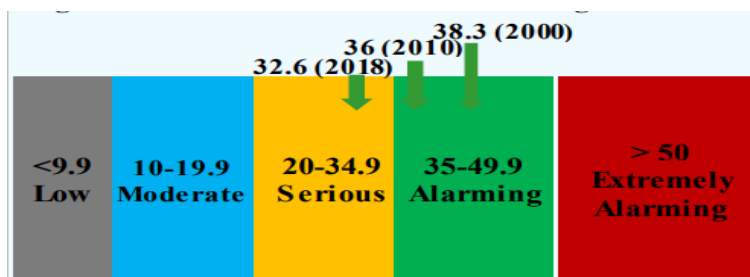
- **Import and Export policies of the government**

The food group, which accounts for over 17% of the country's export revenues, showed a slight recovery during the financial year that ended in March 2021. It posted a growth of 0.7% over the previous year. Rice was the most common export product of the group, which declined by 6.15% in volume and 26.75% in value. The value of fruits and vegetables increased by 11.19% and 3.39%, respectively and contributed in the export revenue of the country. On the other hand, the export incomes of the fish and fish preparation subgroup went up by 1.96%.

The country's export of nuts, seeds, and oil seeds went up by 212.59% during the financial year 2021 and reached a value of \$94.1 million. During the same period, the export of spices increased by 5.32%. However, the export of spices went down by 9.1% during the previous year. Meat and meat preparations posted a growth of 14.21% and 9.03%, respectively, which indicates that the country's livestock industry is starting to recover.

d. Analysis of food utilization condition in Pakistan

Alarmingly, more than 50% of children under the age of five in Pakistan are stunted, indicating low height for age. According to the World Hunger Index, which considers these factors, Pakistan is facing a "severe" level of hunger and ranks 106th out of 119 countries evaluated (as shown in Figure 3). However, Pakistan is one of the seven countries that together account for one-third of the world's malnourished population, along with Bangladesh, Congo, Ethiopia, India, and Indonesia.



Source: World Bank hunger report 2019

It is important to consider the economic consequences of a malnourished population.

4. Policy Recommendations

Pakistan must prioritize population control and legislation to combat the expected deterioration of its food security situation. The national food security policy outlines 20 objectives to achieve food security, but policymakers face significant challenges in implementing necessary changes to ensure food security for the growing population.

a. Improved food safety laws and an improved trading environment are two other goals.

The release of the draft food security strategy in Pakistan is an ambitious goal, but full implementation is crucial to combat the rising food bill due to expanding domestic demand and the limited availability of locally produced goods. The plan lacks consideration for how a growing population will affect long-term food supplies. To achieve food security, it is essential to improve rural infrastructure, control market systems, and increase investments in agricultural research and development. Collaborating on confidence-building measures with India could also benefit regional commerce.

Recommendation for future action

a. Recommendations to improve food availability

The Pakistani government should prioritize improving rural infrastructure by investing in the reconstruction and development of irrigation systems, regulating food markets to prevent artificially created scarcities, establishing well-organized market systems to control prices at local and national levels, and constructing mass storage. Additionally, increasing investments in agricultural research and development and addressing failures in the operationalization of the food embargo, and promoting regional trade should be prioritized to achieve food security.

i. Reducing food waste and loss

The government should focus on reducing food waste, adopting efficient meal preparation techniques, and proper storage and packaging. By adopting such policies the government can save USD 750 billion annually

ii. Enhancing infrastructure

The government should focus on developing the optimized infrastructure for reducing food loss and increasing food security. This involves analysing the entire food chain, from sowing and harvesting to disease prevention, storage, and transport.

iii. Diversification

The government should encourage farmers to adopt crop diversity practices through incentives such as subsidies, technical assistance, and education programs.

b. Recommendation to improve food accessibility

There is a need to implement a comprehensive food security program that focuses on economic access to food through initiatives such as promoting sustainable agriculture, supporting local food production, improving infrastructure for food storage and transportation.

i. Encouraging fair trade

Encourage partnerships with local communities and civil society organizations to ensure effective implementation and responsiveness to local needs.

ii. Minimizing yield gap

The government should prioritize the adoption of sustainable agriculture practices such as crop rotation, innovative techniques, and better utilization of fertilizers, water, and high-quality seeds to increase agricultural productivity and yield and ensure food security for all.

iii. Improves export balance

The government should focus on providing subsidies for healthy food and increase investment in local food production to reduce reliance on imports

c. Recommendation to improve food stability

d. The government should focus on addressing the underline issues such as conflicts, unemployment, and inequality to ensure a consistent supply of nutritious food and maintain food security, particularly for vulnerable populations who may be unable to work in agriculture sector.

Conclusion

National security encompasses protecting society and maintaining the legitimacy of the state. However, a nation cannot be considered safe if its food security is insecure. Prioritizing food security is essential for a secure society.

In the context of Pakistan, this crucial aspect of national security is often overlooked. If the government prioritizes ensuring food security, it can significantly contribute to overall security. Food insecurity and poverty are not intertwined issues with various political, social, and economic factors that can lead to grievances, instability, protests, riots, civil conflict, and even terrorist attacks in society. Food insecurity, negative economic development can also disrupt the social and political structures of the country and pose a risk to national security.

References

- [1] Wasim, Babur, Takashi Yamano, and Noriko Sato. "Impact of Covid-19 on Farm Households in Punjab and Sindh, Pakistan: Analysis from Cross-Sectional Surveys." (2021).
- [2] United Nations Statistics Division. "Sustainable Development Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture." In *The Sustainable Development Goals Report 2016*. New York: United Nations, 2016. Accessed 2016. <https://unstats.un.org/sdgs/report/2016/goal-02/>.
- [3] United Nations Statistics Division. "Sustainable Development Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture," in *The Sustainable Development Goals Report 2016*, (New York: United Nations, 2016), accessed [2018], <https://unstats.un.org/sdgs/report/2016/goal-02/>.
- [4] UNICEF. "Annual Report 2004." New York: UNICEF, 2004. Accessed [2004]. <https://www.unicef.org/media/93056/file/UNICEF-annual-report-2004.pdf>.
- [5] UNICEF, "Annual Report 2004" (New York: UNICEF, 2004), accessed [insert date], <https://www.unicef.org/media/93056/file/UNICEF-annual-report-2004.pdf>. Technology (2023): 0-0.
- [6] Sultana, Anila, and Adiq Kiani. "Determinants of food security at household level in Pakistan." *African journal of business Management* 5, no. 34 (2011): 12972-
- [7] strategies for enhancing food security against the phenomenon of food geopolitization." *Environment, Development and Sustainability* (2023): 1-18.
- [8] Steven A. Block et al., "Macro shocks and micro outcomes: child nutrition during Indonesia's crisis," *Economics & Human Biology* 2, no. 1 (2004): 21-44.
- [9] State Bank of Pakistan. "Chapter 2: Macroeconomic Review." *Annual Report 2016-2017*. Accessed April 2, 2023. <https://www.sbp.org.pk/reports/annual/arFY17/Chapter-02.pdf>.
- [10] State Bank of Pakistan. "Chapter 2: Macroeconomic Review." *Annual Report 2016-2017*. Accessed April 2, 2023. <https://www.sbp.org.pk/reports/annual/arFY17/Chapter-02.pdf>.
- [11] Shaw, D. John. "World food summit, 1996." In *World Food Security: A History since 1945*, pp. 347-360. London: Palgrave Macmillan UK, 2007.
- [12] *Safety Science and Resilience* 4, no. 1 (2023): 61-74. Accessed March 28, 2023. <https://doi.org/10.1016/j.jnlssr.2022.09.004>.
- [13] Rasmus Heltberg and Niels Lund, "Shocks, coping, and outcomes for Pakistan's poor: health risks predominate," *The Journal of Development Studies* 45, no. 6 (2009): 889-910.
- [14] Qureshi, Asad Sarwar. "Improving food security and livelihood resilience through groundwater management in Pakistan." *Glob. Adv. Res. J. Agric. Sci* 4 (2015):
- [15] Peng, W. (2023). *Ensuring National Food Security*. In: Chen, X., Wei, H., Song, Y. (eds) *Rural Revitalization in China*. Springer, Singapore.

- [16] Pakistan, Office of the National Security Advisor. "National Security Policy," (Islamabad: Government of Pakistan, 2021), accessed [2020], <https://onsa.gov.pk/assets/documents/polisy.pdf>.
- [17] Pakistan, Office of the National Security Advisor. "National Security Policy," (Islamabad: Government of Pakistan, 2021), accessed [2020], <https://onsa.gov.pk/assets/documents/polisy.pdf>.
- [18] Naylor, Angus, Tiff-Annie Kenny, Sherilee Harper, Dorothy Beale, Zahra Premji, Chris Furgal, James Ford, and Matthew Little. "Inuit-defined
- [19] Munir Ahmad and Umar Farooq, "The state of food security in Pakistan: Future challenges and coping strategies," *The Pakistan Development Review* (2010): 903-923.
- [20] multi-sectoral interventions: A review of cross-disciplinary perspectives." *Geoforum* 108 (2020): 23-27.
- [21] Mashizha, Tinashe Mitchell, and Happy Mathew Tirivangasi. "Climate Change, Food Security and Poverty."
- [22] Jianyao, Yudie, Zhang, Qi, Ge, Liang, and Jianguo Chen. "Technical methods of national security supervision: Grain storage security as an example." *Journal of*
- [23] *Islamic Finance Perspective*, pp. 57-86. Cham: Springer Nature Switzerland, 2023.
- [24] Hussain, Abid, and Jayant Kumar Routray. "Status and factors of food security in Pakistan." *International Journal of Development Issues* 11, no. 2 (2012): 164-
<https://www.unmultimedia.org/avlibrary/asset/2647/2647733/>
- [25] Hosseini, Seyed Mohammad, Mohammad Bagher Qhalibaf, Seyed Mojtaba Moussavi Neghabi, and Seyed Ali Hosseini. "Developing a model of
- [26] Heltberg, Rasmus, and Niels Lund. "Shocks, coping, and outcomes for Pakistan's poor: health risks predominate." *The Journal of Development Studies* 45, no. 6 (2009): 889-910.
- [27] Hashmi, Hammad Ahmed, Azaiez Ouled Belgacem, Mohamed Behnassi, Khalid Javed, and Mirza Barjees Baig. "Impacts of Climate Change on Livestock and Related Food Security Implications—Overview of the Situation in Pakistan and Policy Recommendations." *Emerging Challenges to Food Production and Security in Asia, Middle East, and Africa: Climate Risks and Resource Scarcity* (2021): 197-239.
- [28] Handl, Günther. "Declaration of the United Nations conference on the human environment (Stockholm Declaration), 1972 and the Rio Declaration on Environment and Development, 1992." *United Nations Audiovisual Library of International Law* 11, no. 6 (2012).
- [29] Hammad Ahmed Hashmi, Azaiez Ouled Belgacem, Mohamed Behnassi, Khalid Javed, and Mirza Barjees Baig, "Impacts of Climate Change on Livestock and Related Food Security Implications—Overview of the Situation
- [30] Gundogdu, Ahmet Suayb. "Food Security and Poverty: Assuring Supply-Side Stability." In *Food Security, Affordable Housing, and Poverty: An*
- [31] Global Goals. "Zero Hunger." Accessed April 2, 2023.
<https://www.globalgoals.org/goals/2-zero-hunger/?gclid=CjwKCAjwrJ->

- [hBhB7EiwAuyBVXfoJ-Yule_7-P0qYxOK9No0mcmvf7aXWzsYTh9TvLtK15MP58LiU3RoCP9MQAvD_BwE](https://www.globalgoals.org/goals/2-zero-hunger/?gclid=CjwKCAjwrJ-hBhB7EiwAuyBVXfoJ-Yule_7-P0qYxOK9No0mcmvf7aXWzsYTh9TvLtK15MP58LiU3RoCP9MQAvD_BwE).
- [32] Global Goals, "Zero Hunger," accessed April 2, 2023, https://www.globalgoals.org/goals/2-zero-hunger/?gclid=CjwKCAjwrJ-hBhB7EiwAuyBVXfoJ-Yule_7-P0qYxOK9No0mcmvf7aXWzsYTh9TvLtK15MP58LiU3RoCP9MQAvD_BwE.
- [33] Ghalibaf, M. B., M. Gholami, and S. A. Ahmadi. "Climate Change, Food System, and Food Security in Iran." *Journal of Agricultural Science and*
- [34] Fullbrook, David. "Food as security." *Food Security* 2, no. 1 (2010): 5-20.
- [35] Farrukh, Muhammad Umer, Muhammad Khalid Bashir, and Fay Rola-Rubzen. "Exploring the sustainable food security approach in relation to agricultural and
- [36] Farrukh, Muhammad Umar, Muhammad Khalid Bashir, Sarfraz Hassan, Sultan Ali Adil, and Marit E. Kragt. "Mapping the food security studies in India, Pakistan
- [37] Fao.org, "FAO.org," accessed March 21, 2023, <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC184963/#:~:text=It%20focuses%20on%20enhancing%20food,of%20a%20food%20secure%20Pakistan.>
- [38] Ejaz Ali Khan, Rana, Toseef Azid, and Mohammad Usama Toseef. "Determinants of food security in rural areas of Pakistan." *International Journal of Social*
- [39] *Economics* 39, no. 12 (2012): 951-964.
- [40] determinants of food security in academic research focusing on Inuit Nunangat and Alaska: A scoping review protocol." *Nutrition and Health* (2023):
- [41] da Silva, José Graziano. "Transforming food systems for better health." *The Lancet* 393, no. 10173 (2019): e30-e31.
- [42] D. John Shaw, "World food summit, 1996," in *World Food Security: A History since 1945* (London: Palgrave Macmillan UK, 2007), 347-360
- [43] Bushehr Province." *Village and Development* 25, no. 4 (2023).
- [44] Block, Steven A., Lynnnda Kiess, Patrick Webb, Soewarta Kosen, Regina Moench-Pfanner, Martin W. Bloem, and C. Peter Timmer. "Macro shocks and micro outcomes: child nutrition during Indonesia's crisis." *Economics & Human Biology* 2, no. 1 (2004): 21-44.
- [45] Babur Wasim, Takashi Yamano, and Noriko Sato, "Impact of Covid-19 on Farm Households in Punjab and Sindh, Pakistan: Analysis from Cross-Sectional Surveys," (2021), accessed [insert date], <https://ageconsearch.umn.edu/record/308995>.
- [46] Asian Development Bank. "National Food Security Policy 2018: Pakistan," Last modified 2018, accessed [2018], <https://pr.adb.org/resource/national-food-security-policy-2018-pakistan>.

- [47] Asian Development Bank. "National Food Security Policy 2018: Pakistan," Last modified 2018, accessed [2018], <https://lpr.adb.org/resource/national-food-security-policy-2018-pakistan>.
- [48] Ahmad, Munir, and Umar Farooq. "The state of food security in Pakistan: Future challenges and coping strategies." *The Pakistan Development Review* (2010): 903-923.
- [49] Abdeslahi, Abas, Farshad Razmavar, Moslem Savari, and Parviz Bayat. "Analyzing the Food Security Challenges among Rural Households in 687-710.
- [50] "Fao.org." FAO.org: Accessed March 21, 2023. <https://www.fao.org/faolex/results/details/en/c/LEX/FAOC184963/#:~:text=It%20focuses%20on%20enhancing%20food,of%20a%20food%20secure%20Pakistan>.
- [52] "United Nations World Food Programme (WFP)," UN Sustainable Development Goals, accessed April 2, 2023, <https://sdgs.un.org/un-system-sdg-implementation/united-nations-world-food-programme-wfp-24514>.
- [53] "United Nations World Food Programme (WFP)," UN Sustainable Development Goals, accessed April 2, 2023, <https://sdgs.un.org/un-system-sdg-implementation/united-nations-world-food-programme-wfp-24514>.