#### Journal of Public Policy Practitioners (JPPP) Volume 3 Issue 2, Fall 2024 ISSN<sub>(P):</sub> 2959-2194, ISSN<sub>(E)</sub>: 2959-2208 Homepage: https://journals.umt.edu.pk/index.php/jppp



Interest:

Article QR



| Title:          | Food security challenges in a post-productivist agricultural development model in Pakistan  |  |
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| DOI:            | https://doi.org/10.32350/jppp.32.04   |  |
| History:        | Received: October 16, 2024, Revised: December 12, 2024, Accepted: December 16, 2024, Published: December 30, 2024   |  |
| Citation:       | Safdar, S. (2024). Food security challenges in a post-productivist agricultural<br>development model in Pakistan. <i>Journal of Public Policy Practitioners</i> ,<br>3(2), 82–111. <u>https://doi.org/10.32350/jppp.32.04</u> |  |
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| Conflict of     | Author(s) declared no conflict of interest  |  |



A publication of School of Governance and Society University of Management and Technology, Lahore, Pakistan

#### Food Security Challenges in a Post-Productivist Agricultural Development Model in Pakistan

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#### Abstract

The further liberalization of wheat in Pakistan is being advocated on the premise that the previous model-centred around the minimum support price procurement by the government, is inefficient. The efficiency in wheat market will better address the welfare needs of ordinary consumers, with additional support from Benazir Income Support program and utility stores. Pakistan is about to enter in a new phase of manufactured food inflation. This phenomenon could be better understood by examining the last five years of the wheat policy as an example of capitalist operation. This study examines the policies and practices of wheat market in Pakistan over the last five years and their implications on food security and social market economy of wheat. Instead of responding to the excesses of neoliberalism by strengthening social market economy of wheat, we are set to expose a majority of the household to the full force of market, endangering food security at a large scale. This capitalist operation however, could not be effectively confronted by bringing back the old inefficient system. The findings of the study conceptualise the relationship between rising food insecurity in Pakistan and the ongoing deepening of market-oriented reforms in the wheat market. The research community in Pakistan needs to imagine new ways to realize the objectives of a social economy, as farmers risk losing the value they create to speculators and other investors in the supply chain. In an environment of post-productionism and hypercapitalism, the value produced by a weak economic actor is likely to fall prey to the moneyed and more powerful entities unless they operate within a well-functioning social market economy.

*Keywords:* agricultural development, food insecurity, post productivism, wheat market



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## Introduction

Be it East or West, the 21<sup>st</sup> century or the 1<sup>st</sup> century, food inflation that impacts ordinary lives, is resented and resisted. That precisely is also the reason that the staple food is always very high on the agenda of the profiteers and criminal economic actors.

The awareness of the tendency by certain individuals or social groups to use food as a tool to politically and socially exploit and/or to make wealth, has been the primary driver behind the development of the frameworks which put production and exchange of wealth on a firm basis, so that these activities take place in such a way that justice and fairness is ensured for all parties concerned. Such framework in general would expect the state and the rich to ease people's live and consider it morally and legally wrong if an economic actor profiteers on food by resorting to the practices such as fraud, deception, coercion, exploitation of the needy, withholding supplies of essential goods and services with a view to raising prices, raising prices by manipulating false bids, disseminate wrong information deliberately and introduce uncertainty in the commodity markets with speculation. When left unchecked, the criminal economic actors start occupying the factors of production like land and energy, with the help of wealth accumulated due to poor performance of the state and local officials. The examples of sugar and IPPs appear to have encouraged our corporate sector to persuade the IMF to transform Wheat from a social good as defined in our Constitution to an ordinary commodity. This sits well too with the new 'global food security narrative' after the Ukraine war.

In Pakistan, the virtual abandonment of the public provision of health, education, criminal justice and minimum employment security by the successive governments has not been met with any significant public resistance, despite Constitutional commitments and compelling evidence. Catastrophic expenditures on health and criminal justice have the potential to dramatically undermine the social fabric of the society in general and of subsistence of wheat growers in particular. Though there is no doubt that the previous system of wheat and flour market regulation and management had many problems, yet, liberalizing and globalizing the production and exchange of wheat and atta however may create serious social and political challenges. Pakistan is already an outlier in South Asia in terms of food inflation, health, education and social security. The general sense in the

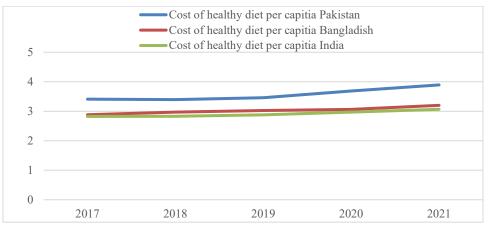


Global South food security literature is that the productivism and financialization of Wheat value chains is a fraught route.

It is not only the financialization of the food value chains that is reshaping the rural life. The Pakistan-style post-productivism in rural areas is servitizing the rural economy, significantly impacting consumption and employment patterns. Rediscovery of the 'local' coupled with ecological modernization as is happening for example in China is not much happening in Pakistan as the new economic actors appear to be concerned only with profits. The future planning and management of Wheat and Flour in Pakistan needs to be situated in the unfolding Real Green Revolution at many places in the world. The conversations on the subject in Pakistan need to grow fast so that the likelihood of wrong decisions is reduced. This study seeks to contribute to these conversations with a hope that they would lead to a meaningful ecological modernization in Pakistan.

# Figure 1





The preparation to withdraw the government from the social economy of wheat is happening at a time, when our food security indicators are low, deeply impacting the economic, social and cultural lives. Hammered by the double jeopardy of demand push inflation [by the affluent households] coupled with mismanaged cost push [petrol etc.] the poor households are coping through child labour, crime, low quality jobs particularly for youth and women, starting micro-enterprises, household indebtedness, increase in begging and dependence on charity. Still, it is not adequate as the food

security is becoming a serious challenge due to affordability. Analyzing the change in cost of healthy diet in India, Pakistan and Bangladesh show that the cost of healthy diet in Pakistan is the highest in the region (Figure 1). Wheat being the common staple food in Pakistan and India, underscores the severity of Pakistan's food security challenges.

The central inquiry of this research revolves around exploring, analyzing, and commenting on the following key question, which underpins the objective of this paper:

Does the production and exchange of wheat and wheat products in Pakistan belong to the realm of social economy, given its centrality to food security? Or does it belong to the social market economy of Pakistan, in need of well designed, clear and effective regulation of the multiple worlds of wheat, intending to better balance the farmers, consumers and economic interests of the market?"

The paper examines the wheat policies and practices in Pakistan over the last five years and its implications on food security and social market economy of wheat. In the next section methods are discussed, followed by discussion on the continuities and disruptions in the wheat-based food system in Pakistan. The third section explores the circular relationship between food insecurity in Pakistan and the ongoing deepening of marketoriented reform in the wheat market in Pakistan. After highlighting the possible hazards of the motivated push for the market-oriented reforms, particularly in the form of financialization, in the fourth and last section, the need for future research to reconceptualize the social world of wheat in Pakistan.

# Method

This study adopts an exploratory approach to critically analyse the policies and practices of the wheat market in Pakistan. For this purpose, the study builds upon evidence on the food security statics of Pakistan at national and regional levels. The household consumption expenditure on food and wheat is also analysed across the wealth quintiles. Secondary data was collected from FAOSTATS, FSIN, WHO and HIES (PBS). Employing qualitative research techniques, the study builds a conceptual relationship among the key variables studied i.e. market-oriented policies and practices in wheat market and food insecurity. An extensive literature review on the political economy of agriculture development and post-productivism informs the



findings of the study. The research identifies critical gaps in existing and contemporary research on social economy of wheat. There is need for critical evidence on the actual value captured by the farmer in the wheat value chain which is distorted by numerous stakeholders along the chain.

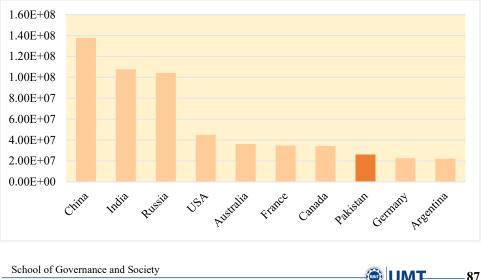
## Disintegration of a Relatively Stable and Secure Food System in Pakistan

#### Functioning of the Wheat Economy in Pakistan

Wheat is a crucial crop in Pakistan and is cultivated on almost one-third of the total cultivated area which includes irrigated and non-irrigated land. As a staple food, wheat is central to food security and accounts for almost 40% of the total value addition in key crops of Pakistan. In global production of wheat, Pakistan stands at number 8th, while being on number 6th in Consumption (Figure 2). The Punjab province has a major share in wheat cultivation in Pakistan, contributing around 70% of the total production. Since food consumption patterns have significantly changed due to urbanization, rising income, lifestyle changes, and population growth; the food demand is greater and more diverse which requires greater food production. However, in Pakistan, the production and supply of key crops such as wheat have not increased to offset the impact of increased demand.

#### Figure 2

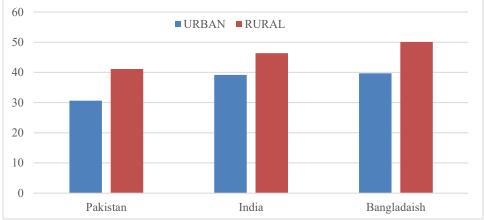




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Adjusting food production to increasing food demand is driving changes in food marketing and supply chain which include post-harvest system, logistics, processing, wholesale, and distribution and their connection with rural input markets agricultural technology, and the farm size (FAO, <u>2023</u>). There is no clearly defined, reliable path for the transformation in the agriculture sector in developing countries, including Pakistan, which helps farmer capture more value from their produce while ensuring that wheat, flour and roti remain affordable for the consumers.

# Figure 3



Percentage of Expenditure on Food

The social world of wheat in Pakistan is no more conventional local/rural food system as it was a few decades ago. Better connectivity within rural markets as well as rural-to-urban linkages have resulted in more diverse employment offered by the food value chain. FAO recommends a greater dependence on the new incomes in rural Pakistan to improve the affordability of increasing flour and roti prices (FAO, 2023).

Unfortunately, the wheat economy in Pakistan is plagued with governance and institutional inefficiencies in value at different levels (Khan, 2014). Addressing these inefficiencies requires a thorough understanding of the informal wheat market institutions (formal and informal), the key actors involved and their activities, and the way these actors interact with each other. The land holdings structure in Pakistan is

*Note.* Source: Pakistan, HIES 2018-2019, Pakistan Bureau of Statistics; Bangladesh, HEIS 2023-2024, Bangladesh Bureau of Statics.

such that the majority of farmers own and/or operate on small farms with less than twelve acres of arable land, including leasing.

## Key Actors involved in the Wheat Value Chain and Supply Chain

Value chain analysis of a product is simply a process which involves breaking a chain into its essential components for an in-depth understanding of its structure and functioning (FAO, 2009). The main difference between a value chain and a supply chain is that the supply chain deals with building the product and getting it to the consumer, while the value chain looks for ways to enhance the products value as it moves along that sup ply chain. As the FAO report on the state of food security and nutrition noted developing countries usually have long domestic food supply chains, involving a chain of labour-intensive enterprises (FAO, 2023), supply chains in Pakistani agriculture are also typically long, which may be resulting in greater cost and inefficiencies.

As for the wheat value chain in Pakistan, it is vital to map the key activities to explore the process and gain a clear understanding of the sequence and type of activities, the main actors involved, and their relationships. These are the important nodes of production, value addition and exchange. The identification of the economic actors at each step of value addition and exchange also help uncover the distribution of gains as well as the web of social connections which are linked with economic transactions (Gereffi & Fernandez-Stark, <u>2011</u>).

The key actors in the wheat value chain in Pakistan include wheat crop producers, public and private wheat buyers, traders, government wheat traders, flour mill owners and other producers of various products of wheat flour like roti, biscuits, noodles, cakes etc. These actors interact with each other to undertake different activities about the wheat and wheat products trade and their scope of role in the wheat value chain is often blurred. A case in point is the government which is involved in several functions such as wheat trade and storage, input supplier, and regulator of wheat flour supply and pricing. This makes the government a critical player in the wheat value chain which facilitates the supply side with the demand side while leveraging its political and institutional powers.

As such the wheat supply chain in Pakistan could be divided into four important nodes: 1) basic activities such as input supplies, cultivation, harvesting, and disposal which are carried out by the farmers; 2) the



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interface between farmers and private traders; 3) private wheat traders' interaction with government procurement agents; and 4) government functionaries link with flour mill owners.

Private traders also play their role as commission agents, wholesalers and stockists, and private seed companies in addition to village brokers and Arhatis. Farmers usually interact with Beoparis and Arhatis (Khan, <u>2014</u>). Similarly, wheat farmers often act as commission agents and stockists in addition to the propagation of wheat seed companies. Furthermore, small and medium farmers (which farmers? Small, medium or big) buy wheat from individual farmers and supply it to the traders and procurement agents of the government. On the other hand, wholesalers and stockists gather wheat from private wheat traders (Beoparis & Arhatis) and supply it to government food departments, and flour and feed mill owners, and sometimes also hold stock in case of deficit (Khan, <u>2014</u>).

Similarly, there is a system of seed production and distribution which involves private seed companies. The seed industry trade is comprised of plant breeding research, seed production and multiplication, processing and storage, and seed marketing and distribution. New seeds are usually propagated by progressive farmers registered with private seed companies to use the pre-basic, basic, and certified seeds, introduced by governmentowned agriculture research institutions.

Wheat and wheat products in South Asia move in a very complex exchange space these days making it very hard to exactly determine the 'value capture' by different actors and distinguish value capture for the capturing of rents. In Pakistan, as we head towards further liberalization by reducing the role of government, we need more sophisticated studies on the evolving patterns of value creation and capture.

# **Pakistan's Wheat Pricing Policy**

Food pricing policies are implemented to safeguard the interests of both the consumers and producers share value. These policies are designed in the light of economic, social, and political conditions of an economy. The wheat price policy of Pakistan is designed while considering the supply as well as the demand sides. On the supply side, the goal is to encourage wheat productivity and output, while ensuring that farmers get the due reward for their investments and efforts. However, from the demand side, wheat price



is managed to improve food security so that wheat flour is available at affordable prices and there is price stability for wheat flour in the market.

The mechanism of wheat prices in Pakistan is such that the prices are lower at the time of wheat harvest, however, the prices increase in the offseason which forces farmers to sell off their produce due to lack of storage, uncertain weather, and liquidity constraints (Khan, <u>2014</u>). Nevertheless, the wheat prices policy is highly critical as farmers need protection from the abrupt decrease in prices at the time of harvest. This enables farmers to recover their investment and get the expected returns which are necessary to promote investment in wheat cultivation.

On the contrary, the World Bank claims that support prices and agricultural subsidies cause agricultural policy distortions and prices should be determined by the market to improve production incentives, especially for wheat farmers. However, this holds true only when there is perfect competition with no power and information asymmetries and monopolistic tendencies which exploit farmers. Similarly, the assertion that keeping the procurement price of wheat below the world price is problematic may be true, but this will increase the food prices which has implications for the food security of low-income populations. Furthermore, this can also result in further rent-seeking behaviour of the middlemen, resulting in limited benefit for the farmer. Wheat in any case could not be treated at par with other goods due to its peculiar social relevance.

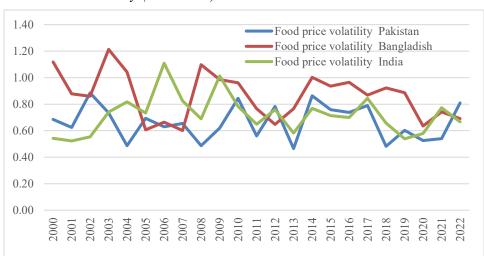
In this respect, the structuralists (Streeten, <u>1993</u>; Timmer, <u>1988</u>) argument is more appropriate in the Pakistani context as they reject the idea of world prices, emphasizing that food price policies have multiple objectives which may have contradictions. However, it is the policymakers job to reconcile the conflicting objectives and balance them by weighing the trade-offs and choosing more desirable alternatives (Streeten, <u>1987</u>). Moreover, world prices are also influenced and destabilized by the policies of developed countries, which subsidize their farmers.

Pakistans wheat price policy is not unique as many developing countries have been doing this and continue doing so. However, Pakistan is under a renewed pressure from the donors ostensibly due to its budget deficit and balance of payment challenges. This was the same in 2013 as is now in the staff level agreement signed in July 2024. The proposed reforms were justified because of the higher cost of subsidies on inputs despite



wheat yield being stagnant, increasing the cost of wheat import. Generally, the retail price of wheat changes with the wholesale price, while the government releases stock at a constant price throughout the year, allowing greater profit margins for flour millers in times of low wheat supply due to subsidy. This in addition to the flour mill owner cartels leverages the power of mills to manipulate and influence demand and supply in the retail market due to discrepancies between government retail prices and market retail prices (Khan, <u>2014</u>).

Nevertheless, the impacts of wheat production and price volatility affect the poorer segments of the economy who, unfortunately, are the majority in Pakistan.



#### **Figure 3** Food Price Volatility (FAO Stats)

In Pakistan, food price volatility fluctuated with notable peaks around 2006, 2014, and 2019, maintaining a relatively stable but moderate level of volatility over the years. Bangladesh experienced fluctuating food price volatility as well, but it showed a relatively stable trend compared to Pakistan and India (Figure 4). In India, food price volatility exhibited higher peaks, particularly around 2003 and 2007, indicating higher fluctuations compared to Pakistan and Bangladesh (Figure 4). Countries with higher volatility, like Pakistan and India, experience more pronounced food security effects than Bangladesh. Therefore, stable food price management is crucial for mitigating the impact on food security.



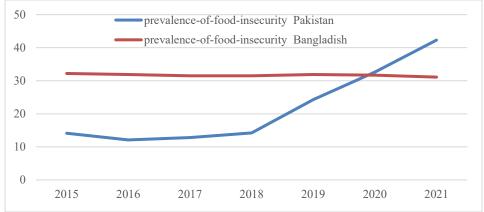
#### Wheat Economy of Pakistan and Food Security

As per the Constitution of Pakistan, the government is responsible for ensuring food security as a citizens' right (Article 38 (d) This is in addition to the ratification of the International Covenant on Economic Social and Cultural Rights, the Convention on the Rights of the Child, and the Convention on the Elimination of all Forms of Discrimination against Women.

According to the FAO, more than half of the Pakistani population suffers from moderate to severe food insecurity (FAO, 2023). This underscores the status of food insecurity in the country as well as the dire need to address this issue to avoid a worse food crisis. In Pakistan, the prevalence of food insecurity increased dramatically from 15% in 2015 to 40% in 2021 (See Fig 5).

# Figure 4

Prevalence of Food Insecurity (FAOSTAT

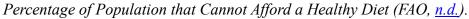


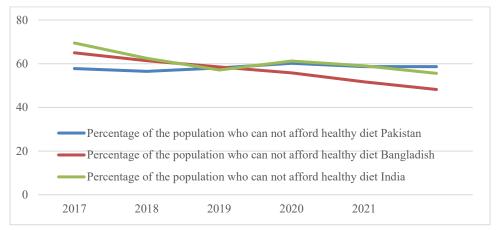
This significant rise correlates with the increasing cost of a healthy diet per capita and the high percentage expenditure on food in the CPI. The sharp increase from 25% in 2020 to 40% in 2021 indicates a severe impact of food inflation, particularly in wheat and roti prices, exacerbating existing food security challenges. The correlation between increased food insecurity and rising food costs underscores the vulnerability of low-income groups to food price inflation. In contrast, Bangladesh experienced a gradual decrease in food insecurity, from 34% in 2015 to 31% in 2021.

The wheat economy in Pakistan is such that the wheat value chain is intertwined with the food security situation in terms of access and

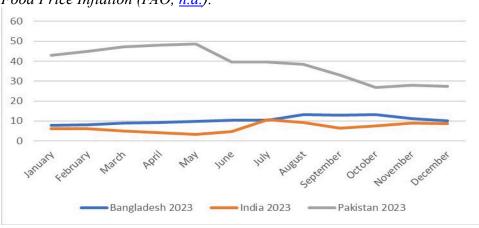
affordability. Wheat prices have been volatile in the recent past, affecting food security, especially in developing countries like Pakistan. In Pakistan, the proportion of population which cannot afford a healthy diet has remained relatively constant, ranging between 56% and 60%, with a high of 60.2% in 2020 (FAO, n.d.). Bangladesh experienced a significant drop from 65% in 2017 to 48.2% in 2021, showing increased affordability. India also saw progress, with the percentage dropping from 69.5% in 2017 to 55.6% in 2021 (Figure 5)

# Figure 5





#### **Figure 6** *Food Price Inflation (FAO, n.d.).*

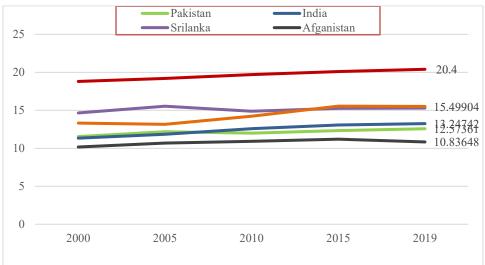




Food inflation pushes millions of people into hunger, and unstable wheat prices in Pakistan have serious implications as a large fraction of the population is comprised of low-income households that have low affordability, resulting in malnourishment and hunger. Despite a decrease in food price inflation in the year 2023, the Food Price inflation in Pakistan has remained the highest in the region (Figure 7).

This situation leads to a downward spiral of problems such as diseases, the inability of low-income people to work, and hence further poverty and precarious health conditions. This has a high opportunity cost and requires the government's greater investment and attention. The latest census [2023] reveals a startlingly bleak picture, only 3.5 % of Pakistanis are alive at 65 years. The healthy life expectancy at the age of 60 in Pakistan is lowest in the region (Figure 8).

# **Figure 7** *Healthy Life Expectancy at the age of 60 years (WHO)*



Sen (1981) contested the view that famines are caused by the shortage of food supply. Sen argued that social and economic factors hinder the access to economic opportunities of certain groups which in turn causes hunger and starvation. Sen used the expression '*exchange entitlement*' to explain his take on food security and hunger. According to Sen,

In a market economy a person can exchange what he owns for another collection of commodities. He can do this exchange either

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through trading, or through production, or through a combination of the two. The set of all the alternative bundles of commodities that he can acquire in exchange for what he owns may be called the exchange entitlement of what he owns . (Sen, <u>1981</u>, p. 3)

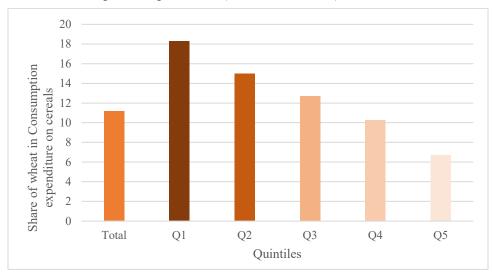
Furthermore, Sen asserts that

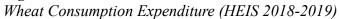
A persons ability to avoid starvation will depend both on his ownership and on the exchange entitlement mapping that he faces. A general decline in food supply may indeed cause him to be exposed to hunger through a rise in food prices with an unfavourable impact on his exchange entitlement. Even when his starvation is caused by food shortage in this way, his immediate reason for starvation will be the decline in his exchange entitlement. (Sen, <u>1981</u>, p. 3)

This means that food insecurity is caused by rising food prices, leading to the failure of exchange entitlement for poor households, and Sen refers to this as the 'decline in exchange entitlement' or 'worsening of exchange entitlement'. The central idea is that the worsening of exchange entitlement is not due to the decline in the food supply per se, but because of increased consumption of rich, higher food prices, and lower wages. Entitlement in Pakistan is affected by government involvement in the wheat economy as the wheat is procured from farmers using a price support mechanism to supply it to flour mills. The objective is to incentivise wheat production and ensure an affordable price of wheat and wheat flour while catering for the interests of farmers as well as consumers. However, the government paid less attention to wheat procurement and supply in the recent past, failing to translate the surplus wheat production into food security. This increased price of wheat flour has caused food insecurity as low-income groups, including subsistence farmers, find it very difficult to feed their families (Figure 9).

Households in the lowest income quintile (Q1) allocate the highest share of their cereal expenditure to wheat, approximately 18%, highlighting its crucial role in their diet. Price increases in wheat and wheat products disproportionately affect these households, exacerbating food insecurity. In contrast, households in the second quintile (Q2) spend about 15% and those in the third quintile (Q3) spend around 13% of their cereal expenditure on wheat, indicating a significant reliance on wheat, though less severe than for Q1.

# Figure 8







The food purchase and consumption behaviours lately have significantly changed with massive urbanization, which is a combination of multifaceted social, cultural, economic, and physical processes. (FAO, 2023). More and more people are switching to ready-made and partially prepared meals in homes as well as at workplaces, notwithstanding the fact that Pakistan is a social norm-driven society where decision-making in the agriculture sector is often communal and influenced by tribal customs and value systems (Aftab et al., 2021). Understanding the wheat value chain in Pakistan involves the historical, cultural, and social aspects of grain markets as the governance structure, laws, property rights, and informal practices are drawn from historical, and sociocultural aspects of Pakistani society (Khan, 2014).

# **Political Economy of Wheat Crop**

Feudal production relations have had a central position in rural Pakistan in almost all regions which produce key crops due to the British system of land ownership (Khan, 2014). The post-independence political economy of

Pakistan continued with the traditions of the colonial past. Pakistan like developing countries pursued 'productionist' policies to generate an economic surplus from the agriculture sector. On top of that, the development planning in Pakistan was sponsored by Bretton Woods Institutions—the IMF and World Bank, resulting in contradictions and tension between Pakistan's internal economic conditions and external economic relations. In India, the state policies and investment strategies can be attributed more to the way the elite coalitions work there. The noticeable differences in terms of state power in the two countries and the different objectives of development, including agricultural policy are behind the different growth trajectories in otherwise similar regions.

The political culture in Pakistan helps explain the behaviour of the group with power as often powerful and influential people use the accepted cultural norms to reinforce their influence and social standing. This empowers them to serve their interests, including manipulating market settings in their favour. Thus, the structure of the grain markets in Pakistan is never free from the plurality of social relations rooted in the rural political economy. Furthermore, the government's role enables gaining power and influence in market settings, instead of curtailing the power. This way, the wheat economy and national politics are intertwined, undermining both the free markets as well social market economy frameworks, endowing our markets a unique character of its own undergirded by the political economy of grain markets interweaving economic practices and micro-politics of value chain relationships, leaving behind big questions of equity and justice, efficiency, and competitiveness.

## Profit Margins of Stakeholders Across the Wheat Value Chain

The farmer's share in consumer price of the food commodities which are essential for the food security, needs to be optimised to provide maximum profit to the farmers. The higher profit margins for the farmer provides them incentive to grow wheat apart from the minimum support price. A study from Rajasthan Indian finds that share of farmers in consumer price of wheat flour is 53.7% (Figure 10).



# Figure 9

Price Distribution of Wheat (Value change analysis of wheat in Rajasthan)

| Activity  | Value per Quintal (Rs.)   | Existing Stakeholder's share in<br>Consumer's Rupee (%) |
|---|---|---|
| Retailing: Sale by retailer to<br>consumer  | About Rs. 2980 per quintal which<br>makes a margin of 15% (Includes<br>local logistics and storage)   | Retailers<br>14.4%                                      |
| Wholesaling: Sale by<br>wholesalers to retailers  | Rs. 2550 per quintal (Includes a margin of 5% and local logistics and handling)   | Wholesalers<br>6.7%                                     |
| Secondary processing: Sale after grinding and packaging   | Rs 2350 per quintal (Gross value<br>on sale after grinding, packaging<br>and 10% margin)  | Secondary Processors<br>15.5%                           |
| Primary Processing: Sale after<br>sorting/grading to processors                                 | Rs. 1889 per quintal (Gross value<br>on sale with gross profit margin of<br>5% after sorting grading )  | Primary Processors<br>7.6%                              |
| APMC: Sale upon trading at<br>the mandi through auction   | Rs. 1,664 per quintal (1.6% mandi<br>tax, 2% aadat, loading, unloading)   | Traders<br>2.1%   |
| Production: Cost of production<br>is Rs. 43150 per ha or Rs 863<br>per quintal (without fodder) | Rs. 1,600 per quintal (Gross value<br>on procurement at Rs. 1600; net<br>value accrual to producers after<br>cultivation costs is Rs. 737/quintal | Farmers<br>53.7%  |

A similar study in Pakistan would help indicate the actual value captured by each stakeholder along the value chain. It is speculated that due to low storage capacity of government and less efficient post-harvest practices, the value captured by framers is usually very low. Adoption of good harvest practices and improved storage could help enhance the income of farmers from wheat crop.

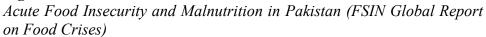
# Food Insecurity in Pakistan

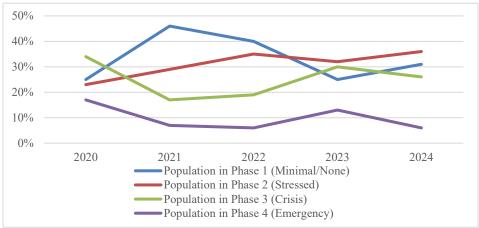
The rising population (3% growth) of Pakistan faces several socioeconomic challenges; including sluggish economic growth; rising poverty, inequality, unemployment, and food insecurity. However, the problem of food insecurity is a major challenge as it has serious implications for the health, human capital, and overall social and economic well-being of society.

Food insecurity has increased from 18.6 million to 19.8 million people between 2021 and 2022 (Food Security Information Network [FSIN], 2023). A larger proportion of the population is currently in the stressed phase of food insecurity (Figure 11).



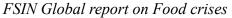
#### Figure 10

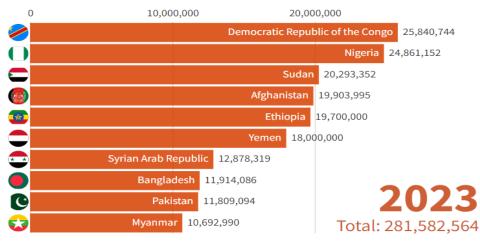




In general, several factors contribute to this, including population growth, changes in diet patterns, low production, resource use inefficiencies, urbanization, and vulnerability of the agriculture sector to climate change and natural disasters, e.g., flooding in 2022. The current deepening food insecurity is directly linked with affordability. Pakistan is ranked 9<sup>th</sup> among countries with the largest number of people in acute food insecurity, whereas around 11 million people are food insecure (Figure 12).

# Figure 11





Nevertheless, this has serious implications for society in general, and low-income groups of the population. Hammered by the double jeopardy of demand push inflation [by the affluent households] coupled with mismanaged cost push [petrol etc.] stresses the poor households to cope through child labor, crime, low quality jobs particularly for youth, unsustainable micro-enterprises, household indebtedness, increase in begging and dependence on charity. The proportion of children aged 10-14 engaged in labor in Pakistan was 9.8% in 2022, compared to 4.90% in 2020-21 (Bureau of International Labor Affairs & Pakistan Bureau Statistics).

Pakistan has faced the problem of increasing wheat and wheat flour prices in the past years, aggravating the existing food security challenges in the country. Since wheat is the main staple food for the majority population in Pakistan, this has massively affected low-income groups due to their limited purchasing power and wheat flour being the primary food.

#### Solving Food Insecurity by Deepening Market Economy Reforms

The promotion of market economy in the name of achieving economic efficiency is quite an old mantra. These days it is being used to introduce more financialization, accompanying freer markets, magnifying public sector governance weaknesses, which would eventually help key market players manipulate and serve their vested interests. The phenomenon, if taken to its logical conclusion, is bound to generate greater inequities, compromising the food security and social well-being of poorer consumers on the one hand and the well-being of farmers on the other hand in terms of drastically low crop returns.

Traditionally, the government of Pakistan has been responding to the wheat shortages and price volatility by deregulating the market which empowers the political and other forces, resulting also in practices such as hoarding and cartelization. For example, the Pakistani government responded to the wheat shortages and extreme price volatility in 2019-2020 by considerably deregulating the wheat markets.

The simplistic contraposition of the efficacy of market dynamics versus government intervention is questionable in terms of staple food due to its profound implications for farmers, consumers, and the broader economy, highlighting the need for careful consideration of trade-offs and alternative approaches. Considering the role of markets regarding wheat crops in the past and food inflation and supply shortages, the management of wheat is



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not appropriate in terms of equity and consumer and farmer well-being, notwithstanding that this did not cause social unrest often attributed to food shortages in developing countries.

# **Contested Role of Financialization and Speculative Investments in Grains**

# Financialization of Food

Financialization of agricultural products means speculating on the price of agricultural commodities using financial instruments, e.g. buy inventories or surplus stocks and hoard, commodity futures and options contracts, whereby speculators obtain futures contracts for agricultural goods such as wheat, soybeans, or maize hoping to benefit from price increases in the future. While this may help reduce the risks, such arrangements, more often than not, allow speculators to manipulate markets and induce price increase volatility (Manogna & Kulkarni, <u>2024</u>).

The present global grain markets feature capitalist food and farming systems. Scholarship on grain markets divides food regimes into three categories: colonial trade in bulk commodities such as wheat and sugar, industrial agriculture and manufactured foods, and global food corporations re-organisation of agri-food chains for profits. Burch and Lawrence (2009) argue that the third regime of food corporations is based on a financial arrangement whereby the increased influence of finance in the agri-food systems allows profit-making by investors and private equity consortia. Replicating in developing countries like Pakistan, this massive financialization of food and subsequent profiteering could to wealth accumulation from food businesses which has serious implications for small farmers, consumers, food security, food prices, and farmers' general social well-being.

# Digitalization in Food and Agriculture

Corporate sector led food systems are pushing big time digitalization. This involves the deployment of digital technologies in agri-food systems and their impact on the organization of agri-food chains. The digitalization of food and agriculture refers to the use of digital technologies and other advanced innovations such as AI and big data, smart sensors, satellite imagery, and drones to monitor, collect data, and facilitate precise agricultural inputs on time. The digitalization of food and agriculture also helps with mapping using GIS and spatial planning. However, digitalization



has ethical, social, political, cultural, and environmental impacts and it is important that digitalization has society-wide benefits and there should be actions to prevent potential negative impacts of digitalization.

## Alignment of Food Financialization and Digitalization

There is growing evidence that the digitalization phenomenon in agrifood systems interacts with and reinforces the financialization (Burch & Lawrence, 2009). In this respect, Prause et al. (2020) claim that digital technology use in the entire food chain also strengthens the retail sector's global commodity chains, introducing additional layers of control and value extraction by corporations utilizing the power of data. Authors maintain that this enables large tech companies to take over market shares in the agri-food sector in addition to a mutually beneficial interface with agri-food companies. An example of this is digital platforms in the agri-food chain which facilitates the broader economic restructuring and digital capitalism, engulfing agri-food systems.

Prause et al. (2020) also highlighted the invasive role of supermarkets in controlling global food commodity chains using the power of technology and information it leverages to corporations regarding different compliances, resulting in taking over the regulatory space of government for food quality standards enforcement. Authors indicate that linking technologies with the enforcement of various standards, including environmental sustainability and health claims, allows corporate actors to gain more institutional support which helps them amass further legitimacy and control. The profit gouging and excessive value capture by the corporation could be easily seen in the Biscuit Industry of Pakistan.

## Corporate Capital and Investment in Food

Tech companies invest capital in the retail sector, gaining market shares of corporations facing less competition. For example, the USs four largest retailers share in grocery sales in 2015 was almost 40% whereas the top five retailers in the 13 member states of the EU in 2011 accounted for about 60% of total grocery sales (IPES-Food, 2017). Similarly, evidence shows that there are only five big asset managers who own major shares in the retail sector indicating an even greater concentration of investment (Shand & Wetter, 2019). This super marketization of food has further augmented the phenomena of financialization even in Global South and Pakistan is getting ready to get on the bandwagon.



## **Key Impacts of Financialization of Food**

It is believed that the 2008 global food crisis and subsequent sharp increases in food costs and social unrest were the possible consequences of financialization on food security (Manogna & Kulkarni, 2024). The research claims that futures markets can cause market distortions, exacerbating the impact of supply shocks, and affecting farmers due to their lack of access to the financial instruments to tackle price risk (Gilbert, 2010). Furthermore, financialization promotes monoculture farming as a small set of staple crops are grown to reduce investment risk, which has implications for the diversity of agricultural production and food security (Mamabolo et al., 2021). Similarly, financialization gives market power to a few players, potentially distorting market prices and supply chains in lowincome countries which adversely affect food security, reducing access to food for low-income consumers (Manogna & Kulkarni, 2024). Shaken by the fresh food insecurity in the North after Ukraine crisis, there is now a renewed focus on internationalizing the food systems, which are likely to create food insecurity in Global South particularly for the countries battered by the debt stress and weak currencies dependent on energy and food imports. If Pakistan makes the money-making in the staple food, the exporters of cereals would be too happy when the wheat prices are low immediately after the harvest and let the government import when the Wheat stocks are low. In order to make this structural change work, they would like to peg the local wheat prices with the international prices adding the third dimension to the mix i.e., financialization, digitalization and internationalization. The shock and crisis this produced would result in the new politics of welfare, allowing the governments in power to use income transfers to the food insecure. As our public finances are already stressed, it is written on the wall that in a few years' time, after Debt, we would be begging for food too from the international donors. It could not only lead to sudden social unrest; it could result in more crime. Even in the food abundant USA, ten percent of Georgia households reported being food insecure between 2018 to 2020, and 3.8 percent of Georgia households with children reported being food insecure (Finnerty, 2023). The US has seen the food inflation rising during the recent years. A corollary to the food insecurity this created is that from the beginning of 2021 to the beginning of 2023, Atlanta saw the third-largest increase in homicide rates.

#### Need to Reconceptualise Critical Research Agenda as Pakistan moves from 'productionist' to a 'post-productionist' model of Agricultural Development

The government of Pakistan responded to the wheat shortages and extreme price volatility in 2019-2020 by considerably deregulating the Wheat Markets. The advice by the Competition Commission of Pakistan for a cautious follow up of the 2020 Wheat Policy was not enough to avoid another bout of price escalation and volatility of Atta prices with long lines to collect subsidized Atta in 2023. The government this time, however did not change its policy. Instead, it significantly increased the social protection spending to make Atta affordable for the poor sections of the society and plans to give a big boost to the wheat production with Special Investment Facilitation Council (SIFC) sponsored expansion of corporate farming in Pakistan. The sudden decision of the Punjab government of procuring very little wheat in the face of bumper crop in April 2024 indicates that the agribusiness appear to have chosen the Wheat to be cut flowers to protect and promote the interests of all the economic actors in the Wheat Supply chains and weoponize Atta as the mainstay of Pakistan's social protection system to 'save ultra-poor from hunger'. If this looks like the alternative, shedding Wheat as a hallmark of an indigenously developed model of Social Market Economy of Pakistan, it is intriguing that this alternative, which gets a fair bit of lip-service in Pakistan otherwise, does not get quality research attention. We have seen above that Pakistan's management of Wheat in terms of equity appears to be the worst in South Asia. Yet, we fear, our research and development community was not providing our policy makers such quality research inputs, which they would require for a robust wheat policy review, before the spectre of food riots become real. In our considered view, it is the socialization of our Wheat policy community in a certain narrative of food security coming on wheat from the North is stopping them from finding the inflection point where the politics of financialization takes a pervasive form and correlate the extent of its perversity with the nature of the drivers that facilitate the financialization and its diffusion. Such research would galvanize the research and policy communities around a new consensus on the historically developed unique challenges present in Pakistan for all those who want to combat the combined, perverse effects of financialization, digitalization and globalization and the kind of Social Politics needed to manage and confront it better. Such a consensus is more likely to emerge if the following major

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factors of transition from the traditional social economy of wheat to productionism introduced by the British and green revolution and the postproductionism marked by financialization and servitization of agriculture and rural landscape respectively.

# Value in Land or Value of Land

Our research community appears to be shy of revisiting the question of 'Value' in Land and agriculture vis-à-vis the staple food security for the grower and for the community. As an extension, the nexus between Land and Community is lost. We lack the critical studies, which trace the history of this weakening started by the British colonial administration, who taxed the land, not the produce as used to happen under Mughals and sanctified the private ownership of land in the process. The productionism introduced by the British brought efficiency and famine in its wake at the same time. Our researchers should be able to see the history repeating itself.

# **Green Revolution**

We also need a more critical study of the so-called green revolution, as prior to its introduction, in Punjab, the capacity of the farmer to save himself from hunger had been remarkable, as they could keep a better balance between the marketable surplus and household consumption. The so-called green revolution brought more surpluses and wheat gradually became a cash crop, though still, the government kept wheat prices low, which served primarily the consumer but encouraged the farmer to concentrate on other crops and livestock as a source of disposable income. In the case of Rice, Cotton, Sugar and Maize the markets have been loosened and these have helped the rural economy. The commercialization of Maize, Sugar, and Cotton has promoted the corporatization of agriculture in Pakistan and changed the value system of land in many ways. The corporatization of agriculture is made possible by a control of policy-making, financialization and control on information and access to international markets. Excessive profiteering and high inflation in this case go hand in hand. The rural economy has grown big but the value distribution now has a different character as hinted above.

## Servitization of Rural Economy

The rural household is under pressure to buy those services which were available to him before in kind by the state i.e., education and health. Due to a variety of reasons, some linked with corporate criminality, the burden



of crime and litigation has increased many folds resulting in mounting household debt. In another context, the levels of household debts and the inability even of multiple jobs in creating a household break-even should have acted as 'efficiency shutdown feedbacks'. There is a need to study the reasons this is not happening, particularly the nature and advent of the arrival of Pakistan style post-productionist forms of agri-land businesses in rural Pakistan. The land is being used for recreation as country homes and housing colonies proliferate. With cash crops doing well and connectivity improving a lot, the rural economy is now in the process of being highly servitized. This is transforming the identity of household employment with the farm, though, in Pakistan we do not have the romantic postproductionism leading to an ecological modernization in such a way that the post-productionism suppresses the excesses of producing for the sake of profit denuding the sustenance capacity of land.

# **Much-Awaited Arrival of Cooperatives**

Post-productionism usually is associated with the return of cooperatives. In Pakistan, we do not see the local cooperative solution emerging to improve the local food insecurity. In the process the value of land as a socioeconomic asset is diminished, paving the way for the corporate landgrab. Left unchecked, we risk replicating the economic subjugation experienced by the manufacturing and services sectors in the cities in Pakistan becoming a norm in the rural areas too, disconnecting the linkage between subsistence land-holding and self-sufficiency, liquifying the rural communities in the process. The financialization of land and staple would end any semblance of social harmony in the country-side, because, when the government allows the private sector to buy the surplus, the speculative investor would change the notion of surplus.

# Transition from Subsistence and Autonomy to the New Politics of Welfare in Rural Pakistan

Food security is still better in Pakistan as compared to some other countries in South Asia but we are fast losing the way. We need to study the Indian model where they have managed to considerably reduce the penury by not financializing the staples, helped by ration cards, extensive and deep health insurance and minimum employment under National Rural Employment Guarantee Act (NREGA). Very recently, the Indian farmers successfully protested on the crop policy reform. In our case, the Staff Level



agreement with IMF mandates us to further liberalize the food system. Pakistan Cereal Exporters Association has already demanded that we should export wheat when surplus and import when it is short. There is an urgent need to critically examine their claim that the undesirable impacts of dollarization of the wheat economy would be adequately mitigated through BISP transfers as the losses in the wake of their monopolizing the value capture of wheat would be socialized through inflation and government subsidies, making a new social politics of welfare the key feature of Pakistan-style post-productionism.

## Conclusion

The production of wheat, the operations of flour mills and the distribution of Atta are considered green activities due to their social relevance, with reasonable fixed returns being the norm in a social market economy. In an elite captured hyper-capitalist system, with little regulatory efficacy, the private production of public goods could become very un-green. These days, in Pakistan, some new economic actors in the wheat value chain are enamoured by the dollarization of profits and returns, lobbying to benefit from the arbitrage between international dollar prices and the local prices. Steeper poverty is staring us in the face of further liberalization of wheat. It could be markedly reduced if we significantly definancialize the wheat and resocialize the three public services i.e., delivery of staple food, health and criminal justice. Lower minimum support price and economic local storage could be encouraged by making available wheat production support to all the farmers to reduce the pressure to sell should be a better strategy than the liberalization of wheat and provision of BISP support to some.

It is challenging to practice genuine post-productivism in Pakistan without ushering conceptually in a post-efficiency era. In the context of ecological modernization in Pakistan, food security should be as a centre piece of new real green revolution for Pakistan, with greener agroprocessing, a more organic staple, with nutritious ingredients added across the value chain [the private sector selectively does so] and enhance the yield and acreage of staple by better adaptation of climate change. The green is the new morality. We should make wheat as a special case with a legally enforceable duty of easy rescue requiring sellers of basic necessities to refrain from price gouging. This way we would be able to reasonably solve the modernity paradox. The capitalistic modernity has forced people to live in two worlds; house & community [microcosm] and extended world



[macrocosm]. In the case of food insecurity, the market should not invade or destabilize the communities.

# **Conflict of Interest**

The author of the manuscript has no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

# Data Availability Statement

Data availability is not applicable as no new data is used.

# **Funding Details**

No funding has been received for this research.

# References

- Aftab, A., Ahmed, A., & Sacrpa, R. (2021). Farm households perception of weather change and flood adaptations in Northern Pakistan. *Ecological Economics*, 182, Article e106882. <u>https://doi.org/10.1016/j.ecolecon.2020.106882</u>
- Burch, D., & Lawrence, G. (2009). Towards a third food regime: Behind the transformation. *Agriculture and Human Values*, *26*, 267–279. <u>https://doi.org/10.1007/s10460-009-9219-4</u>
- Food and Agriculture Organization of United Nation. (2023). *The state of food security and nutrition in the world 2023: Urbanization, agrifood systems transformation and healthy diets across the rural-urban continuum*. <u>http://openknowledge.fao.org/items/445c9d27-b396-4126-96c9-50b335364d01</u>
- Finnerty, S. (2023). An analysis of the association between food insecurity and violent crime in Georgia in 2020 [Master thesis, Georgia State University]. Scholarworks. https://scholarworks.gsu.edu/iph\_theses/800/
- Food and Agriculture Organization of United Nation. (n.d.). *FAOSTAT*. Retrieved July 22, 2024 from <u>https://www.fao.org/faostat/en/#data</u>
- Food and Agriculture Organization of United Nation. (2009). Agro-Value chain analysis and development The UNIDO approach. https://www.fao.org/sustainable-food-valuechains/library/details/en/c/266279/



- Food Security Information Network. (2023). *Global report on food crises* 2023. https://www.fsinplatform.org/sites/default/files/resources/files/GRFC2 023-compressed.pdf
- Gereffi, G., & Fernandez-Stark, K. (2011). *Global value chain analysis: A primer*. Center on Globalization, Governance & Competitiveness (CGGC), Duke University.
- Gilbert, C. L. (2010). How to understand high food prices. Journal of Agricultural Economics, 61(2), 398-425.
- IPES-Food. (2017, October 16). *Too big to feed: Exploring the impacts of megamergers, concentration, concentration of power in the agri-food sector*. <u>https://ipes-food.org/report/too-big-to-feed/</u></u>
- Khan, A. S. (2014), *Pakistan's food security from wheat value chain perspective* [Unpublished doctoral dissertation]. University of Auckland.
- Mamabolo, M. A., Sebola, M. P., & Tsheola, J. P. (2021). The economics of communal smallholder farming within South Africa's historical agricultural structure. *Journal of Global Business & Technology*, 17(2), 81–97.
- Manogna, R. L., & Kulkarni, N. (2024). Does the financialization of agricultural commodities impact food security? An empirical investigation. *Borsa Istanbul Review*, 24(2), 280–291. <u>https://doi.org/10.1016/j.bir.2024.01.001</u>
- Prause, L., Hackfort, S., & Lindgren, M. (2021). Digitalization and the third food regime. *Agriculture and Human Values*, *38*, 641–655. <u>https://doi.org/10.1007/s10460-020-10161-2</u>
- Sen, A. (1981). *Poverty and famines: An essay on entitlement and deprivation*. Oxford University Press.
- Shand, H., & Wetter, K. J. (2019). Plate tectonics: Mapping corporate power in big food: Corporate concentration by sector and industry rankings by 2018 revenue. ETC Group. https://etcgroup.org/sites/www.etcgroup.org/fles/fles/etc\_platetechtoni cs\_a4\_nov2019\_web.pdf



- Streeten, P. (1987). Towards a country and crop typology. In P. Streeten (Ed.), *What price food? Agricultural price policies in developing countries* (pp. 8–10). Palgrave Macmillan UK.
- Streeten, P. (1993). Markets and states: Against minimalism. World Development, 21(8), 1281–1298.
- Timmer, C. P. (1988). The agricultural transformation. In T. P. Schultz & J. Strauss (Eds.), *Handbook of development economics* (pp. 275–331). Elsevier.



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