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Integrated Policy Strategies and Regional Policy Coordination for Resilient, Green and Transformative Development: Supporting Selected Asian BRI Partner Countries to Achieve 2030 Sustainable Development Agenda

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Micro-Sectoral Study on Re-greening the Wheat Market

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Introduction

In a Social Market Economy, the government insulates the staple food from profit in the form of speculative buying, hoarding, excessive profiteering etc. The contemporary discourse on Green Transformation focuses more on sustainable production of wheat, and less on the post-harvest supply and value chain of wheat. Over a period of time, the Commercial Practice around Wheat, has evolved into such ways and directions that the objectives of equity, sustainability and fair trade may have been compromised.

It is possible that both the farmers and the consumers are worse off in a green transformation narrative, which is not rooted in the Social Market economy, or in other words takes staple as a public/social good. How should we strengthen the nexus between greening and such Commercial Practices, which are pro-poor/pro-social? This study aims to address this question by presenting and arguing for an notion of 'social' in Environmental and Social Governance, [ESG] positioning greening as the dominant medium of equity and sustainability. By letting profit play with wheat, a staple, we are ushering ourselves in an un-green revolution after the green revolution, which helped avoid hunger in 1960s. The resultant food inflation has increased the dependence of poor people on income transfers; another neoliberal policy where social protection is not considered as a right but is given as a charity.

1.1. Analytical approach

Our Study on Agriculture done under the UNCTAD Pakistan Project in 2023 highlighted the common problems associated with the intensive agriculture like overuse of chemical fertilizers and pesticides, water management problems like over-irrigation and groundwater depletion, residue burning and mono-cropping and loss of biodiversity might be another issue. As a result we see in Pakistan soil degradation, water scarcity, pollution from chemicals and residue burning, and greenhouse gas emissions. The farmers face health issues from chemical residues, lower nutritional quality, and economic impacts like debt. However, our current study is focused more on the un-green commercial practice around wheat.

This paper proposes a two-pronged approach, and firstly it argues that protecting wheat from profit-driven practices is no less important than reducing greenhouse gases in wheat production in order to advance greening in the wheat production agenda in Pakistan.

Secondly, we propose a subsidiary argument as a necessary condition for the long-term success of greening the wheat sector agenda in Pakistan, since the wheat sector is entangled in the wider political economy of food where the question of social protection is gaining attention. We argue that social protection issues should inform the agenda of greening the wheat sector, alongside the reduction of greenhouse gas emissions and environmental degradation. This alignment between social protection and the social, economic and environmental policies for greening the wheat sector is necessary as environmental problems have interlinkages with the social problems, in this case with the profit-centered market structure. In sum our second subsidiary argument suggests to expand greening the wheat agenda in Pakistan to encompass social protection and protection from profit-centred wheat sector. Our overall argument thus calls for protecting wheat from profit-only motive, and integrating social protection with greening the wheat or greening industrialization in Pakistan. Our argument is justified on the premise, as we

show in this paper, that an absence of social protection in the face of profit-oriented trade in wheat constitutes the biggest barrier in the way of realizing the SDG 2.

We reiterate that the current green agenda focuses on sustainability in production but neglects post-harvest issues, leading to elite capture and poor-quality wheat for the masses. The challenge is to link greening with pro-poor policies, ensuring that social protection isn't just charity but a right.

2. Current Situation and Trend

Hammered by the double jeopardy of demand push inflation [by the affluent households] coupled with mismanaged cost push [petrol etc.], the poor households in Pakistan are constraint to cope with the high inflation through child labour, crime, low quality jobs particularly for youth, unsustainable micro-enterprises, household indebtedness, increase in begging and dependence on charity.

Pakistan has faced the problem of increasing the yield of wheat crop 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.

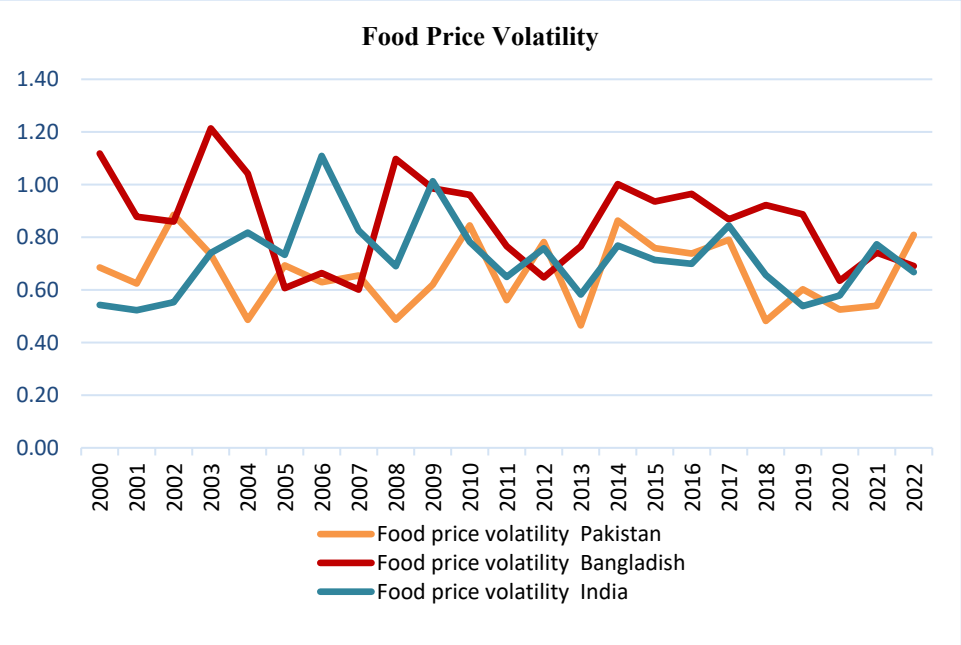

Figure 1. Food Price Volatility (FAO Stats)

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

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 (See fig 1). In India, food price volatility exhibited higher peaks, particularly around 2003 and 2007, indicating higher fluctuations compared to Pakistan and Bangladesh. Countries with higher volatility, like Pakistan and India, experience more pronounced effects on food security compared to Bangladesh. Therefore, stable food price management is crucial for mitigating the impact on food security.

2.1. 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), The Constitution of the Islamic Republic of Pakistan, 1973). 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.

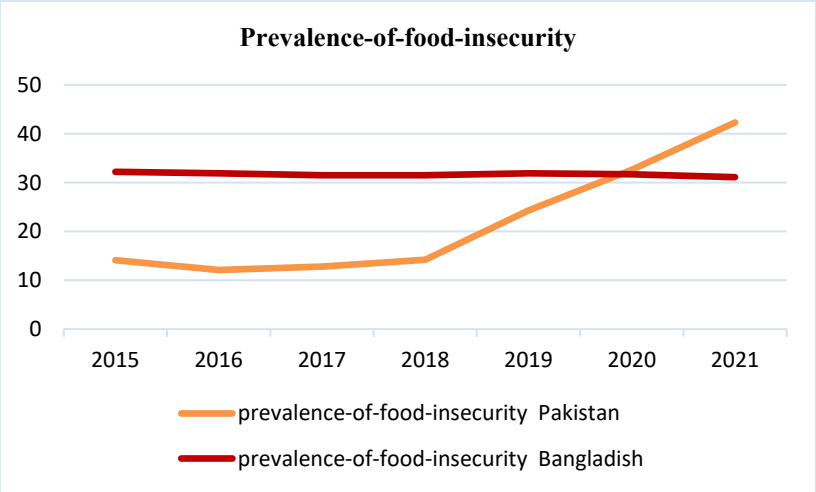

Figure 2. Prevalence of food insecurity (FAOSTAT)

In Pakistan, the prevalence of food insecurity increased dramatically from 15% in 2015 to 40% in 2021 (See Fig 2). 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. 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 (See fig 3).

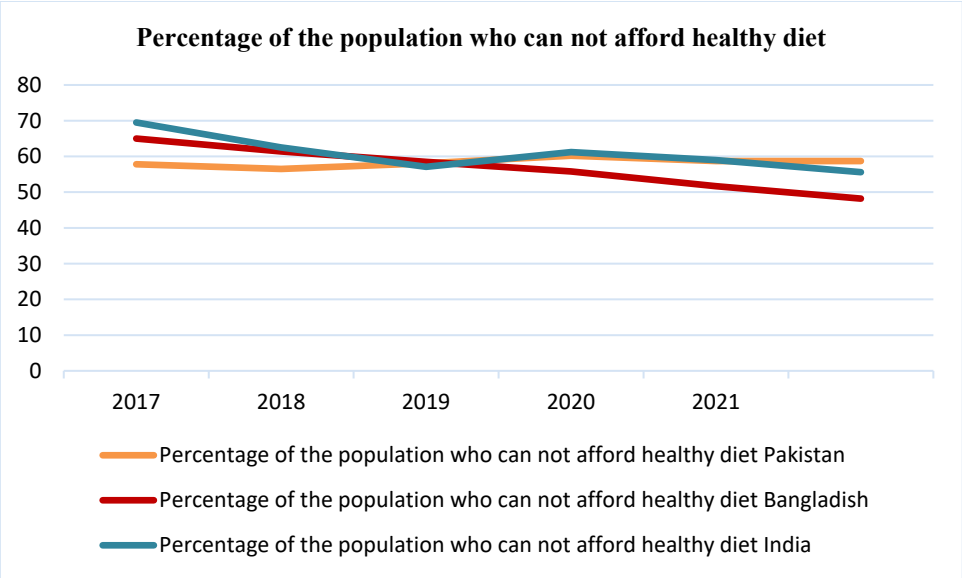

Figure 3. Percentage of population that cannot afford a healthy diet. (FAOSTATS)

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 (See fig 4).

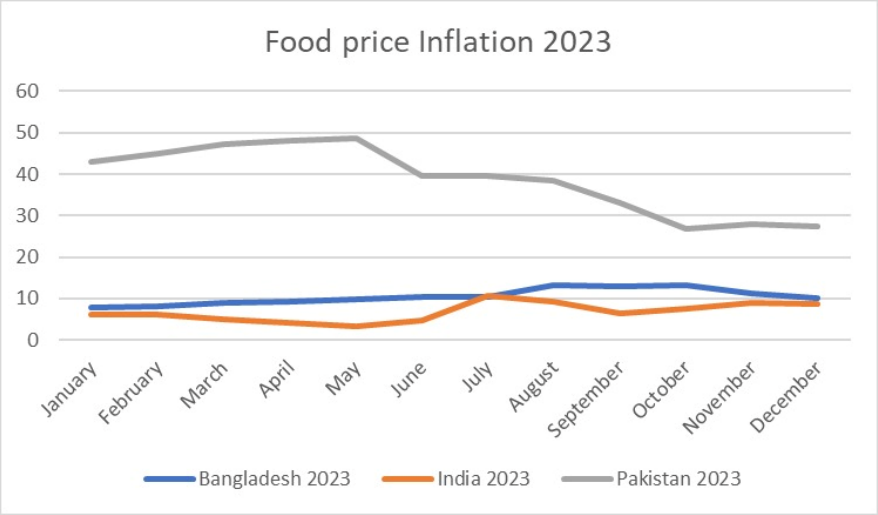

Figure 4. Food price inflation (FAO Stats)

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.

2.2. Traditional 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 behavior 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 favor. 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.

2.3. Profit margins of wheat crop

The farmer's share in consumer price of the food commodities which are essential for the food security, needs to be enlarged 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 India finds that share of farmers in consumer price of wheat flour is 53.7% (See Fig 5).

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

Figure 5. Price distribution of wheat at different stages of value addition from a study on Value Chain Analysis of Wheat in Rajasthan

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 very low. Adoption of good harvest practices and improved storage could help enhance the income of farmers from wheat crop.

3. Policy landscape

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's possibly poorly managed 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, alongside food inflation and supply shortages, the management of wheat is not appropriate in terms of equity and consumer and farmer well-being. Notwithstanding, this did not cause social unrest often attributed to food shortages in developing countries.

4. Diagnostic analysis of Non-Green Commercial Practices in Wheat Sector

4.1. Solving food insecurity by deepening market economy reforms

The promotion of market economy in the name of achieving economic efficiency is an old mantra. These days it is being used to introduce more financialisation, which accompanies competitive markets. It is likely that in an environment of a heightened awareness of public sector governance weaknesses, even for a crop as crucial as wheat, key market players try to leverage their greater influence to manipulate and serve their vested interests. This generates several forms of inequity in the wheat market, which we pointed out in our Paper on Agriculture in the UNCTAD Pakistan Project 2023. This has significant implications for the purchasing power of low-income consumers, compromising their food security and social well-being on the one hand and compromising the well-being of farmers in terms of relatively low crop returns on the other.

4.2. Contested role of financialisation and speculative investments in grains

4.2.1. Financialisation of food

Financialisation 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 volatility (Manogna and Kulkarni, 2024).

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 financialisation of food and subsequent profiteering could lead to wealth accumulation from food businesses which has serious implications for small farmers, consumers, food security, food prices, and farmers' general social well-being.

4.2.2. 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.

4.2.3. Alignment of food financialisation and digitalization

There is growing evidence that the digitalization phenomenon in agri-food systems interacts with and reinforces the financialisation. (Burch and 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.

4.2.4. 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 US's 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 (ETC Group, 2019). This supermarketization of food has further augmented the phenomena of financialisation even in Global South and Pakistan is getting ready to get on the bandwagon.

4.3. Key impacts of financialisation 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 financialisation on food security (Manogna and 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, financialisation 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, financialisation gives market power to a few players, potentially distorting market prices and supply chains in low-income countries which adversely affect food security, reducing access to food for low-income consumers (Manogna and 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 adopts 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 influence the government to 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., financialisation, digitalization and **internationalization**. The shock and crisis this produced in 2023-3 resulted in the new politics of welfare in Pakistan, 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 year's time, the debt-ridden Pakistan would be dependent on foreign aid for food. It could not only lead to sudden social unrest it could result in more crime. Even in the food abundant USA, according to a recent Study, 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. 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.

5. Policy Recommendations

5.1. Reimagining Environmental, Social, and Governance (ESG)

Integrating Environmental, Social, and Governance (ESG) frameworks into agricultural policies can effectively align green transformation initiatives with social protection, particularly in the context of staple foods like wheat. Several ESG frameworks and analyses support the approach of safeguarding staple foods from profit-driven market distortions to ensure food security and affirm social protection as a right. Sustainalytics emphasizes the importance of addressing food security within ESG considerations. Their analysis identifies mounting concerns about food security and the growing environmental and social impacts of food production and consumption as key macro trends. They advocate for sustainable solutions that encompass both environmental stewardship and social equity, highlighting the need for responsible management of food resources to ensure accessibility and affordability for all segments of the population.

The Sustainable Agriculture Network underscores the significance of integrating social factors into ESG investing within the agricultural sector. They highlight that promoting food security is a key component of social considerations, advocating for investments that lead to more equitable and sustainable outcomes. This perspective aligns with policies that protect staple foods from speculative trading and excessive profiteering, ensuring that basic nutritional needs are met across all socioeconomic groups.
Nossadata highlights the role of ESG reporting frameworks like the Carbon Disclosure Project (CDP) and the International Sustainability Standards Board's standards in driving sustainability in the food and beverage industry. They emphasize the importance of fair labor practices, sustainable procurement, and ethical supply chains, which contribute to both environmental sustainability and social equity. This approach supports the integration of social protection measures within green industrialization policies, ensuring that sustainability efforts do not compromise societal interests.
The above references illustrate that integrating ESG frameworks into agricultural and food distribution policies can promote both environmental sustainability and social equity. By protecting staple foods like wheat from profit-driven market distortions, policies can ensure that green transformation efforts are inclusive and uphold social protection as a fundamental right.

5.2. Key Pillars of a new Policy Framework

- Regulate non-staple use of Wheat in the sectors such as biscuits, noodles etc.
- Support smallholders by valuing his contribution to produce wheat for his own family by providing production subsidy

- Strengthen public procurement and promote public private partnerships in storage.
- Monitor and document the movement of wheat from one economic actor to another, restricting its transfers to non-processors
- Re-negotiate the profit-margins with flour mills

6. Conclusion

Pakistan needs to integrate social market economy principles into green policies, which is essential for true sustainability. Without that, we fear that the green policies, by ignoring social equity, are condemned to perpetuate systemic inequality. In our Wheat Study, under the UNCTAD Project, we have tried to provide the foundations for initiating a debate on greening the Social Goods. The 'right to food' is mentioned in Pakistan Constitution but in practice Pakistan is moving away in ensuring the provision of wheat on affordable rates. With IMF Program keen on liberalizing the Wheat Sector --- the government of Punjab bought vert little of the 2024 crop and have not given any clarity regarding the 2025 crops--- the environmental benefits would be negated by social harm. Out of these debates, we hope that a robust emerges which reduces the reliance on income transfers, sanitizes the Commercial Practices in supply chains, redefines the notion of 'market efficiency' vis a vis staple food and reforms the current procurement system of wheat. According to an ADB publication, while noticing the 'quiet revolution' in the food supply chains, which is increasing jobs and incomes from new links with commercial urban centers and vibrant intermediaries, technologies, infrastructure, advocates for developing critical guideposts for assessing and addressing all segments of the food chains that inflate food prices. In Pakistan's fraught transformation of Wheat, a social product being staple food, from traditional mode [long and fragmented supply chains] to a situation with fewer intermediary actors, better integration and technology adoption in producing a 'modern wheat market', we have identified three critical guideposts, which unnecessarily contribute to higher retail prices, resulting in a compromised food security i.e., financialisation, internationalization and speculation on wheat.

In the context of ecological modernization in Pakistan, we need to approach food security as a centre piece of new real green revolution for Pakistan, with greener agro-processing, 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.

The global experience tells us that the financialisation of staple food liquifies the life of the farmer's household. The new poverty staring us in the face of further liberalization of wheat could be significantly reduced if we significantly definancialize the wheat. It is hard to practice genuine post-productivism in Pakistan without ushering ourselves conceptually in a post-efficiency era. 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 and ban 'investment' across the supply chain of Wheat.

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