

REAPING A POOR HARVEST: FOOD SECURITY IN A PANDEMIC

FAUZIA YAZDANI AND SHIRIN GUL

COVID and Food Security

Among other disruptions taking place during the COVID-19 pandemic was the periodic shortage of food staples in Pakistan over 2020. Much of this was attributed to malfunctioning supply chains, poor governance or hoarding scandals. But it also exposed the dire food insecurity of a country whose traditional strengths include agricultural production and export. The pandemic placed immense strain on already weak governance structures and slowed down large segments of the economy. Like the rest of the world, Pakistan struggled to provide for its poorest cohorts who continue to experience a near permanent state of food vulnerability.

However, food shortages predate the pandemic by decades. Unchecked population growth, climate induced stress and diminishing growth in the agriculture sector are the usual factors explaining why food availability is constrained. This brief will contextualise additional stresses that have emerged as a result of the COVID-19 pandemic, and review economic, political and social patterns that structure Pakistan's path to food security. It highlights national policy stances towards reducing multidimensional poverty, of which food insecurity is a primary component, and provides recommendations to course-correct policy frameworks and implementation, based on later-day evidence.

The Challenge is Universal

Before the pandemic, in 2019, 821 million people were estimated to be food insecure, of which approximately 149 million suffered crisis-level hunger or worse.¹ Natural and human vulnerabilities have shown food supply chains to be as critical as the availability and advancement of healthcare systems. All across the world, food safety and

sufficiency have transformed from a basic necessity to a major public expectation with political consequences.

Food security deals with the state of having reliable access to sufficient quantity of affordable, nutritious food.

According to the Food and Agriculture Organization (FAO), the concept of food security is flexible, but is widely believed to exist when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Simply, it is the idea that a person can depend on eating enough, eating right and eating throughout the year.

There is knowledge of this expectation in food governance, and many national governments have moved towards agricultural liberalisation schemes for enabling food security and broadening the operative space for farmers. This rests on the assumption that the market is competitive, and not dominated by large monopolies and oligopolies². But in reality, most markets are dominated by a “masked market control”³ that determines the how producers negotiate or collude with authorities, and the extent to which consumers can expect fair pricing. This is further elaborated by the idea of “disaster capitalism” or the tendency of national governments to ram through markets in the wake of major crises, such as natural disasters or even terrorism.⁴ This is particularly problematic for food markets, where illegal hoarding in crises brings about dramatic food inflation.

Conflicted borders or hostilities within regions further impact food supply chains. Food has often been weaponised during times of conflict, through withholding supplies or destroying sources of food. Evidence from countries as diverse as Uganda, Peru and India suggests that conflict

¹ Oxfam. 2020. The Hunger Virus.

<https://oxfamlibrary.openrepository.com/bitstream/handle/10546/621023/mb-the-hunger-virus-090720-en.pdf>

² Hunt, Pascale. 2020. Indian Farmers' Hidden Enemy: Disaster Capitalism.

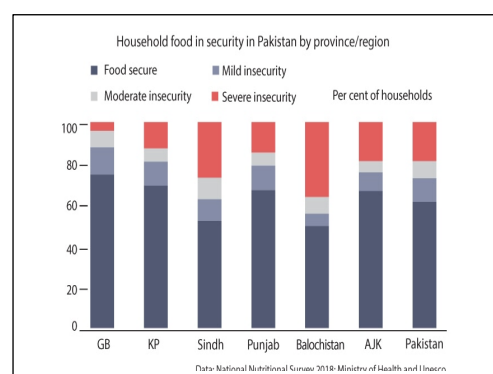
<https://thediplomat.com/2020/12/indian-farmers-hidden-enemy-disaster-capitalism/>

³ Michel Foucault. 2012. *The History of Sexuality: An Introduction*. p.86. Vintage. Foucault uses the term to explain how power works: “Power is tolerable only on condition that it mask a substantial part of itself. Its success is proportional to its ability to hide its own mechanisms.”

⁴ Klein, Naomi. 2007. *The Shock Doctrine*. Kopf Canada. Klein proposed the concept in her book.

dynamics are closely associated with food resources.⁵ Conflict and war disrupt seasonal crop growing, displace farming populations, effect food availability and informal food trade/routes in conflict zones. Food security has its own “hot spots” that include¹:

- fragile and conflict-affected states, where logistics and distribution are difficult even without morbidity and social distancing.
- countries affected by multiple crises resulting from more frequent extreme weather events (floods, droughts) and pests, such as the desert locusts plague impacting food production in 23 countries.
- the poor and vulnerable, including the 690 million people who were already chronically or acutely food insecure before the COVID-19 crisis.
- countries with significant currency depreciation (driving up the cost of food imports) and countries seeing other commodity prices collapse (reducing their capacity to import food).



Food insecurity in Pakistan

Pakistan is presently self-sufficient in major staples—ranked 8th in producing wheat, 10th in rice, 5th in sugarcane, and 4th in milk production. 63.1 percent households are food secure, according to the Ministry of Health

and UNICEF’s National Nutritional Survey 2018 that incorporated the Food Insecurity Experience Scale (FIES) of FAO. 36.9 percent of the households in Pakistan are labelled food insecure while 18.3 percent face severe food insecurity.⁶

The State of Food Security and Nutrition in the World (SOFI) 2020 report indicates that agriculture contributes 19.8 percent of Pakistan’s GDP and employs 42 percent of the workforce. Pakistan is largely a food insecure country due to challenges in access and affordability; about 36.9 percent of the population is food insecure⁷. The UN categorised 34 districts in Pakistan as having ‘Very High Vulnerability’, and 43 as ‘High Vulnerability’ districts owing to food insecurity during COVID-19, which comes to about 67.8 million citizens.⁸

Food self-sufficiency per se does not guarantee food security. Poverty is a particularly strong predictor of household food insecurity. Daily wages have increased, but food price inflation has reduced the purchasing power of poor households. More than 20 percent of Pakistan’s population is undernourished, and nearly 45 percent of children younger than five years of age are stunted, according to the World Food Program (WFP)⁹. A country is considered food secure if food is not only available, but is also accessible, nutritious, and stable, regardless of its origin.

The state of food insecurity in Pakistan needs to be contextualised with rapid population growth and changing consumption behaviours. Food imports rose consistently over recent years—adding some part to the negative balance of payments—and remained exposed to global fluctuations in price, in turn disproportionately impacting poorer households.¹⁰

⁵ Koren, Ore. 2018. Food Resources and Strategic Conflict. The US Institute of Peace.

⁶ Ministry of Planning, Development and Reform. 2017. The Economic Consequences of Undernutrition in Pakistan: An Assessment of Losses. <https://www.sbp.org.pk/reports/quarterly/fy19/Third/Special-Section-2.pdf>

⁷ World Food Programme. 2020. Pakistan—Country Brief. [https://docs.wfp.org/api/documents/WFP-](https://docs.wfp.org/api/documents/WFP-0000117781/download/?_ga=2.187027951.613249901.1596351707-898704687.159427384)

[0000117781/download/?_ga=2.187027951.613249901.1596351707-898704687.159427384](https://docs.wfp.org/api/documents/WFP-0000117781/download/?_ga=2.187027951.613249901.1596351707-898704687.159427384)

⁸ UNDP. 2020. COVID-19 Pakistan Socioeconomic Framework.

⁹ USAID. 2020. Food Assistance Fact Sheet—Pakistan. <https://www.usaid.gov/pakistan/food-assistance>

¹⁰ Ministry of Planning, Development and Reform. 2017.

The National Nutrition Survey 2018 indicates that 36.9 percent of the population faces food insecurity due to limited economic access by the poorest and vulnerable—particularly women—to an adequate and diverse diet.¹¹ Pakistan has the second highest rate of malnutrition in the region i.e. 18 percent children under 5 years suffer from acute malnutrition; around 40 percent in the same age group are stunted and 29 percent are underweight. All complementary feeding indicators are far below acceptable levels.¹²

An average Pakistani household spends 50.8 percent of monthly income on food. As per the Household Income and Expenditure Survey (2015-16), the bottom 60 percent of households in the country spend a substantial part of their incomes on food. This makes them particularly vulnerable to shocks, including high food prices.

Food security is admittedly precarious for more than half the population, and the Pakistani government acknowledges it as much. In 2018, the first national food security policy was launched, which aims to alleviate poverty, eradicate hunger and promote sustainable food production. It lays out the landscape of policy actions that has since been impacted by COVID; provincial action plans are being developed under NCOC guidance. This requires close collaboration and coordination between federal and provincial governments, as well as the implementation of new food safety measures and the launch of a “zero hunger” programme. Thus far, the policy implementation measures are well directed, but welfare programming seldom flows seamlessly between federal and provincial mandates. Policy action at the centre has not translated into downstream delivery as yet, and will become a hard won outcome.

Furthermore, Pakistan’s economic governance framework is subject to top-heavy IMF imperatives and will impede the progress of a pro-poor agenda, as it has in the past. COVID-19 is ravaging through the economy, and is further likely to drain social sector resources, with the result that food security indicators will probably worsen before they become better.

Stressors for a Fragile Food System

“The term “food system” refers to the constellation of activities involved in producing, processing, transporting and consuming food. Food systems touch every aspect of human existence. The health of our food systems profoundly affects the health of our bodies, as well as the health of our environment, our economies and our cultures. When they function well, food systems have the power to bring us together as families, communities and nations.”

The COVID-19 pandemic and climate degradation have undermined both the agriculture sector and food value chains across Pakistan.¹³ There is greater risk of food insecurity, and a downward spiral of lost livelihoods, reduced purchasing power, falling farm incomes, outmigration and internal displacement that are clear markers of climate induced stress. COVID-19 has enhanced vulnerabilities manifold among poor households whose incomes and food consumption are connected to the agricultural sector, as well as among the urban poor whose livelihoods were disrupted by lockdowns. The stresses on food security are identified as below:

Population Growth: Between 1987 and 2007, Pakistan’s population increased annually by 1.5 percent and food production grew by two percent for the same period.¹⁴ Some policy literature has referred to famine

¹¹ World Food Programme. 2018. Pakistan. <https://www.wfp.org/countries/pakistan> & Ministry of National Health Services. 2018. National Nutrition Survey. <https://www.unicef.org/pakistan/media/1951/file/Final%20Key%20Findings%20Report%202019.pdf>

¹² Only one in seven children aged 6–23 months receives a meal with minimum dietary diversity, with at least four different food groups, and around 82 percent children are deprived of the minimum number of the meals a day.

¹³ Ministry of Human Rights. 2020. COVID-19 and Disaster Vulnerability in Pakistan: a Human Rights Based Analysis. <http://www.mohr.gov.pk/SiteImage/Misc/files/COVID-19%20and%20Human%20Rights%20Taskforce%20Report%20-%20FINAL%20edit.pdf>

¹⁴ South Asia is among the fastest growing regions in the world and within the region, Pakistan and Afghanistan are among the fastest growing populations. See Reiff, 2015.

as an extreme food crisis occasioned by population pressures, or where population growth outstrips food production. Unavailability of food may be a lesser challenge than affordability of food for poor households, especially where ‘false shortages’ are created by suppliers in the political economy of food. 20.5 percent of the population is undernourished,¹⁵ driven by high poverty rates, and rising food prices. Poor physical infrastructure, particularly in the remote rural areas throughout Pakistan limits access to food and influences market prices. This is also linked to inadequate water and sanitation, education and health service delivery, which, combined with lack of awareness about appropriate dietary intake, contributes to greater food insecurity and malnutrition.

Climate-Induced Vulnerabilities: Pakistan is the 5th most vulnerable country to climate change as per the Global Climate Risk Index.¹⁶ It is located in a region prone to extreme weather events, and recurrently affected by catastrophes. Pakistan has faced around 150 freak weather incidents attributed to climate change in the past 20 years, in the form of flash floods, drought, smog in winter, forest fires in summer, melting glaciers, heat waves with devastating heat indices, and landslides. Pakistan has borne annual economic losses of \$3.8 million, over a 20-year period due to climatic induced stress; and the economy continues to be at risk from climatic catastrophes. Food production is directly impacted by loss of crop, fisheries or livestock,¹⁷ whereas indirect health effects include malnutrition and water borne diseases, etc. Loss of livelihoods from climate degradation compromises citizens’ ability to purchase food, even if it is available.

The impact of climate change on population displacement exacerbates the situation. A part of this can be explained by the prevalence of

poverty in the country: almost a quarter of Pakistan’s total population lives below the poverty line (set at Rs 3,030.3 per adult equivalent per month)¹⁸. Studies of food price inflation in Pakistan link it to a number of variables including GDP, unemployment, fiscal deficits and interest rates. In effect, as Pakistan’s economy deteriorates, the risk of food inflation rates increases.

The COVID-19 pandemic is intensifying vulnerabilities and inadequacies of global food systems—understood as all processes involved in the production, distribution and consumption of food. The State of Food Security and Nutrition in the World (2020) estimates that the global number of hungry people increased by 10 million in 2019. Asia remains home to the greatest number of undernourished (381 million) and hungry population. Economic and non-economic

Dimensions of Food Security

- (i) *Food availability:* The availability of sufficient quantities and appropriate quality of food, supplied through domestic production or imports (or aid).
- (ii) *Food access:* Access/entitlement by individuals to adequate resources for acquiring appropriate foods for a nutritious diet.
- (iii) *Utilisation:* Utilisation of food through adequate diet, clean water, sanitation and healthcare to reach a state of nutritional well-being where all physiological needs are met (this reflects importance of non-food inputs in food security).

inequalities reinforce each other to create food insecurity.

Agriculture, once the backbone of Pakistan’s economy, and currently employing 42 percent of the national labour force, has halved its contribution to GDP over a decade. According to the Economic Survey 2019-2020, agriculture contributed about 19.3 percent to GDP. The locust attack was the

The Reproach of Hunger: Food, Justice and Money in the 21st Century.

¹⁵ Food and Agriculture Organisation of United Nations. 2019. FAO to develop first SOFI Pakistan report with SDC. <http://www.fao.org/pakistan/news/detail-events/en/c/1185051/>

¹⁶ Abubakar, Syed Muhammad. 2020. Pakistan 5th most vulnerable country to climate change, reveals Germanwatch

report. <https://www.dawn.com/news/1520402>. According to the report, Pakistan lost 9,989 lives, suffered economic losses worth \$3.8 billion and witnessed 152 extreme weather events from 1999 to 2018 and based on this data, the think-tank has concluded that Pakistan's vulnerability to climate change is increasing.

¹⁷ Ibid.

biggest challenge confronted by the agriculture sector. Cotton crop yield in FY21 fell by 34.5 percent from 8.48 million bales last year to 5.57 million bales earlier this year. This negative growth has been attributed to climate change, among other challenges, and has depleted cotton-growing areas as well as yield per acre. Pakistan's cotton varieties are no more resistant to weather change, are open to pest attacks and incur higher input costs, with lower yields and fewer profits.

Locust attacks in Balochistan, Sindh and Punjab created crop losses between PKR 490 billion and PKR 2,451 billion. Torrential monsoon rains inundated large agricultural tracts in Sindh, Balochistan, and Northern Pakistan. Sindh reported 60 percent loss of the cotton crop, 90 percent chilli crop, 80 percent onion crop, and 30 percent of the rice crop because of rain. The inundated farmlands add to growing financial losses.

Furthermore, Pakistan's water stress is well documented. Sugarcane and wheat use around four times the global average of irrigation water, whereas rice consumes more than six times the world's average. Growing water stress is already turning people away from agriculture, and shrinking crop yields considerably.

Supply Chain Challenges: Wheat shortages during 2020 necessitated urgent import of grain at higher prices. The difference in increased provincial Minimum Support Price (MSP) led to wheat hoarding and smuggling across provinces. Sugar cane and paddy also suffered an erratic supply during 2020. Overall, the agricultural value chain was in a chokehold because of COVID-19 lockdowns, and the movement of food from wholesale markets to consumers became the greatest challenge during this time. Transport restrictions, shortage of labour and limited market access for farmers to sell and procure farming inputs had a corresponding effect on prices. The pandemic disproportionately undermined fruit, vegetable and dairy farmers.

Keeping up with the rest of the world: Global Food Summit 2021

The world is preparing for the SDG Food Summit in 2021 that aims to bring governments' attention back to the fragilities in their food systems that have undergone immense strain during COVID, and to retool systems in ways that respond better to people's needs. The Summit is expected to shape collective pathways to sustainable food security in line with SDG-2—Zero Hunger through five action tracks.

- *Action Track 1: Ensure access to safe and nutritious food for all*
- *Action Track 2: Shift to sustainable consumption patterns*
- *Action Track 3: Boost nature-positive production*
- *Action Track 4: Advance equitable livelihoods*
- *Action Track 5: Build resilience to vulnerabilities, shocks and stress*

In addition, this agenda urges a transformation of food systems to reduce the cost of nutritious foods and increase the affordability of healthy diets. While specific solutions will differ from country to country, and even within them, the overall answers lie with interventions along the entire food supply chain, in the food environment, and in the political economy that shapes trade, public expenditure and investment policies. National governments are expected to mainstream nutrition in their approaches to agriculture; work to cut cost-escalating factors in the production, storage, transport, distribution and marketing of food—including by reducing inefficiencies and food loss and waste; support local small-scale producers to grow and sell more nutritious foods, and secure their access to markets; prioritise children's nutrition as the category in greatest need; foster behaviour change through education and communication; and embed nutrition in national social protection systems and investment strategies.



Unfortunately, international support for eradicating hunger has been slow to come. The UN launched a \$2 billion COVID-19 global humanitarian response plan to mitigate the worst outcomes of hunger in fragile states, but was able to raise only about nine percent through pledges around July.¹⁸ For shortage of funds, the World Food Programme was forced to halve rations for 8.5 million people in Yemen,¹⁹ and Afghanistan received a mere 6 percent of the total \$60 million pledge for food security.²⁰ During the same period, eight multinational food and beverage corporations paid their shareholders over \$18 billion in dividends between January and July 2020,²¹ ten times more than the UN's COVID-19 appeal.²²

What decision makers must consider

Food systems intersect with land, water, climate, biodiversity, national economies, institutional capacities and citizens' needs. Devising systemic national approaches to address the complexity of food systems requires policy action that can synergise and create trade-offs as well. Self-sufficiency in food is one way to sustain food security, as Pakistan has managed for major staples,

despite sporadic shortfalls that necessitate imports. It has also been extending support to encourage sufficient production of major food crops i.e. wheat and sugarcane. However, population growth at the current rate will outstrip the marginal lead food production enjoys, and soon create an enormous socio-political challenge. Pakistan's population is estimated to double over the next 25 years and the urgency of addressing food security needs to commensurately escalate.

Any country would do well by focusing on population control and timely implementation of policies that ensure food security, but Pakistan's added stresses of climate degradation and COVID have exacerbated the demand-supply gap in domestic markets. This is likely to impact major food crops, even if population growth is controlled, and will bring about a steady increase in import bills for food and non-food farm products.

Therefore, close coordination is needed at the federal Economic Coordination Committee; in the inclusion in provincial governments' priorities through Annual Development Planning, for example. This is easier said than done given limited fiscal space and persistent balance of payments constraints. The core COVID responses have included a mix of cash and in-kind hand-outs, legal provisions, and monetary incentives aimed to reduce the risk of mass food insecurity, besides social protection-based food support measures²³. The major concern is that the fiscal cost of ensuring food security—in the form of food subsidies, cash transfers through BISP, a nutrition interventions programme, school feeding/Tawana Pakistan—would escalate steadily if the population continues to grow at a rapid pace.

The Draft National Food Security Policy in 2018 by the Ministry of National Food

¹⁸ Oxfam. 2020. The Hunger Virus.

¹⁹ Ibid.

²⁰ Ibid.

²¹ Ibid.

²² Ibid.

²³ It includes PKR 50 billion relief package for Utility Stores to offer subsidised food; enactment of the Essential Services Act of 1962 for Utility Stores 2020 to maintain the uninterrupted supply of food and other essential items; and the COVID-19 Prevention of Hoarding Ordinance 2020 enacted to control food inflation.

Security and Research (MNFS&R) focuses on food security and its linked impact.²⁴ As part of the National Action Plan for COVID-19, the MNFS&R is devising a National Food Security Plan; provincial departments are expected to prepare corresponding plans as well as ensuring sufficiency of food supplies.²⁵ There is a recognition that the pandemic and its effects will continue at least till 2022. Hence, federal and provincial governments are making a collective push for turning institutional and legal measures into comprehensive, long-term food and nutrition resilience plans that withstand natural and anthropogenic disasters.

With mounting climate stress, Pakistan's current cropping practices and water shortages will make it challenging to improve yields substantially. Agricultural land has undergone steady degradation over the years caused by water and wind erosion, depletion of soil fertility, deforestation, unsustainable livestock grazing and water logging practices. As per estimates for sugarcane and wheat production, even a combination of maximum crop area and record yields would not produce sufficient volumes to meet growing domestic demand beyond 2020.²⁶ Therefore, governments need to introduce non-traditional cropping techniques that focus on yield improvements to sustain agricultural growth.

Natural disasters have overwhelmed the food value chain in the past, and disrupted trade flows of agricultural commodities, sectoral growth, food and non-food agro-industries, and ultimately caused lasting damages to the national economy. National and provincial disaster preparedness, prevention and mitigation plans need to integrate food security and agriculture growth in resilience building as an essential component of humanitarian and development support. It is critically important to have a complete

database of disasters and their impact on agriculture, its subsectors and related natural resources and ecosystem services, so that sustainable development planning and implementation can be done effectively. Agriculture sector development plans, policy and investments need to embed post-disaster recovery efforts to ensure that these efforts build resilience against future shocks.

Pakistan needs to initiate national and regional dialogues to add-value to existing policy processes and initiatives in such a way to broaden partnerships to transform food systems. Issues related to food systems are being globally addressed, via the SDG Food summit, at global governance processes that can accelerate efforts, new thinking and approaches that deliver systems-level transformation in line with the Summit's principles and objectives. Pakistan has already initiated this process through an action plan for food security, under COVID-19, that has recommended short to long term recommendations besides anchoring it into SDF+G food summit.

Recommendations

The impact of **formal and informal cross border food trade** e.g. wheat smuggling to Afghanistan and tomatoes/potatoes from India has its own effects. During abundance, the cross-border flow of goods reduces shortages and helps bring down prices. On the other hand, in case the price of a food product is high in neighbouring countries, it leads to internal shortages and a linked price hike. This parallel black economy leads to an artificial national food shortage as well as a loss in government revenues. The southern region of Afghanistan is considered dependent upon northern Pakistan with respect to wheat and wheat flour.

²⁴ Ministry of Planning, Development and Reform. 2017. It focuses on inadequate nutrition, supply-side constraints for agricultural inputs, slow rate of technological diffusion; trade restrictions; degradation of land; alarming water scarcity levels; impact of climate change.

²⁵ Ministry of National Health Services, Regulation and Coordination. 2020. National Action Plan for Coronavirus

disease (COVID-19) Pakistan.

<https://www.nih.org.pk/wp-content/uploads/2020/03/COVID-19-NAP-V2-13-March-2020.pdf>

²⁶ Ministry of Planning, Development and Reform. 2017. Page 15.

Understanding the political economy of the region: Constraints to forming production supply chains in the region may not be visible as they are a function of the existing political economy of the region. It is important to analyse patterns of disruptions and stability, and the factors that lead to policy decision making and what role different actors play in the process. People-to-people exchanges that bring civil societies, the media, the private sector and most importantly, the people of the region together need to be undertaken, continued and strengthened to promote goodwill and reduce the trust deficit in the region.

Deepening dialogue on the use of river water: The efficient and sustainable use of natural resources is a primary concern and need. Proper and judicious use of river waters is most important in this context. Major rivers in the region flow across contiguous national borders. The countries in the region, whether upper or lower riparian, should be able to make the best use of these waters. This entails that states proactively work together to create confidence-building measures around equitable sharing of this important resource.

Climate risks and early warning systems: Ecosystems do not recognise national boundaries as the recent locust incident and the persistent smog issue in recent years has shown. An early warning system developed and managed through regional cooperation, can go a long way in coping with climate risks that can turn into disasters in a much more effective way.

Initiatives for collaborative agriculture research and innovation: The contiguous ecosystems and conditions present an advantage to collaborate on agricultural research and innovation to increase yield. This is specifically true for scaling up subsistence farming across the Pak-Afghan border, innovating in wheat and rice in Pakistan and India and looking to preserve the shared ecological systems of India and Bangladesh.

Collaboration of SPS for reducing NTBs: Countries in the region need to consider a regime for Mutual Recognition Agreements (MRAs), especially, and address issues related to Sanitary and Phytosanitary (SPS) aspects in agriculture trade, to help reduce technical barriers. Investments made in SPS standards, policies and systems for opening regional trade would—in the longer run—help open up global markets for export.