

Just-in-Time Policy
Note on Agriculture
and Food in Pakistan



2

Resilient Systems: Moving Beyond the COVID-19 Crisis



Investing in rural people



WORLD BANK GROUP



April 2022

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JIT Policy Note on Resilient Systems: Moving Beyond the COVID-19 Crisis

Prepared by Namesh Nazar (Agriculture Economist, World Bank), Fida Muhammad (Country Programme Officer for Pakistan, IFAD) and Daud Khan (Lead Consultant, World Bank), with inputs from Willem Janssen (Lead Agriculture Economist, World Bank). The document benefited from review and data provided by Noriko Sato (Senior Natural Resources Specialist, ADB), Babur Wasim (ADB Consultant), Takashi Yamano (Principal Economist, ADB), Matthias Leitner (Natural Resources and Agriculture Economist, ADB), Aamer Irshad (Head of Program, FAO) and Wajid Rana (Program Leader, IFPRI).

The Partnership for Agricultural Transformation in Pakistan (PAT-P) is a coalition of multilateral international agencies that provides a platform for fostering analytical work on agriculture. Members of PAT-P are preparing a series of Just-in-Time (JIT) Policy Notes that aim to address pressing issues related to agriculture and food security in Pakistan, and propose improvements in the short and medium term. The primary objective of this work is to assist the Government, at both federal and provincial levels, to move forward with the implementation of a policy framework and take reform actions that are potentially of high impact

and politically critical. The overall objective is to transform agriculture into a dynamic, competitive, efficient and climate smart sector, and to reposition it as an engine of growth in rural areas.

This Note is the second in the series and examines the impact of the COVID-19 pandemic on Pakistan's food system and provides recommendations on key policy actions and adjustments to make the food systems more resilient to future shocks including possible future waves of COVID and other risks.



SUMMARY

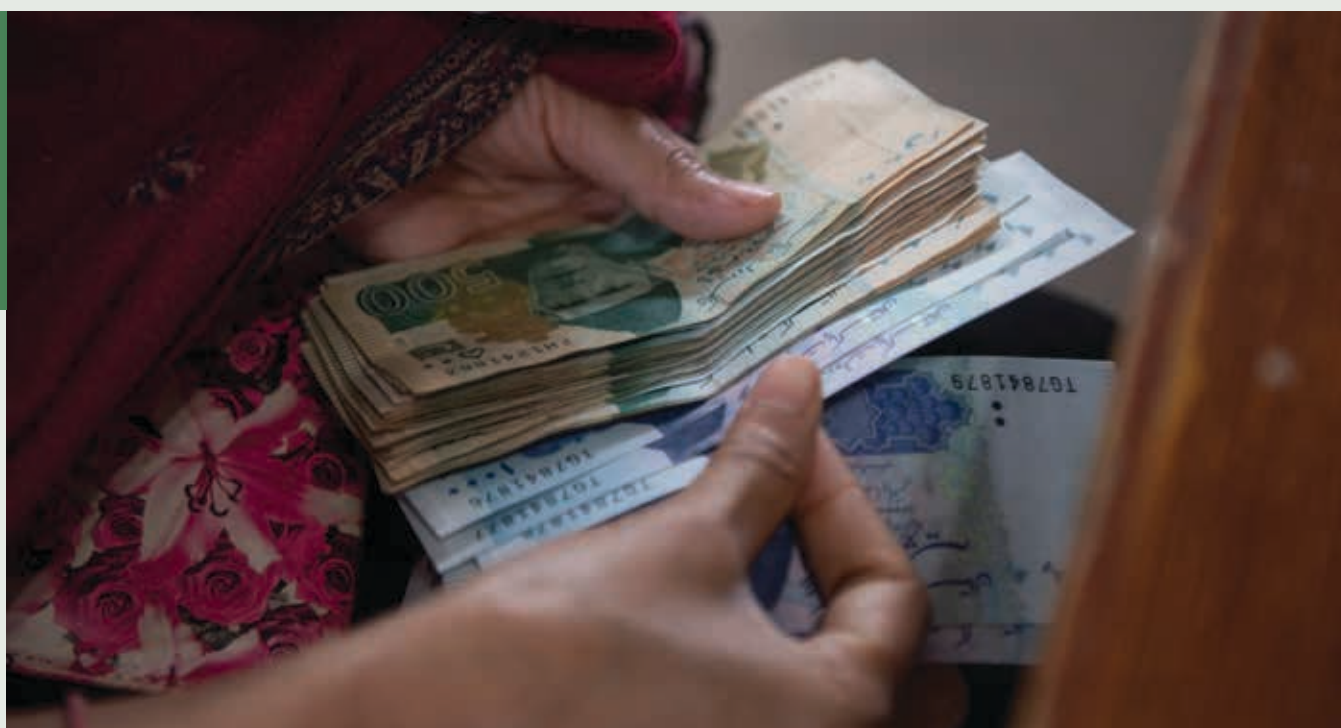
COVID and the Food System

The lockdowns and other COVID related restrictions introduced in early 2020 severely affected all sections of the population. It resulted in reduced employment, especially among workers and small enterprises in construction, manufacturing and services in both urban and rural areas. This has had a severe impact on incomes, and many households were compelled to cut spending, including on food. An estimated 50% of the population has reduced the quantity of food consumed or switched to lower quality food, and around 40% of the population faced moderate to severe food insecurity from April to July 2020. This compares to 16% estimated in the 2018/19 Household Integrated Economic Survey.

The agriculture and food sector was also affected by restrictions on marketing of inputs and outputs, as well as hampered by labour shortages and difficulties to hire machinery services. Marketing of perishables such as fruit, vegetables, poultry and dairy was hit particularly hard. COVID also changed the conditions in the international markets. Prices for energy increased considerably, and food prices remain at their highest level since mid-2011

with particularly sharp increments over the last year. In addition, increased shipping costs and supply bottlenecks disrupted supplies.

As new COVID cases started falling in mid-June 2020, restrictions were eased and general lockdowns were replaced with a series of “smart lockdowns”. Government attention shifted to responding to the economic impacts of the COVID crisis through strong expansionary fiscal and monetary measures. These included targeted cash transfers and subsidized food supplies through the Utility Stores Corporation. As a key response, the Government provided a cushion to vulnerable households affected by the pandemic –some 19% of households received Government assistance with about an estimated equal number receiving assistance from private sources, CSOs and NGOs. In the case of agriculture, several relief options were rolled out including provision of subsidies, interest rate cuts and loan moratoria. Despite the widespread problems caused by the pandemic, the sector grew at over 3%. The GDP growth rate has rebounded in 2020/21 but structural inefficiencies remain and will continue to constrain overall economic performance. Agriculture, on the other hand, is expected to grow more slowly in 2021/22 than in 2020/21 as distorted incentives and poor policies remain unaddressed.



Lessons Learned from the COVID Crisis

Agricultural-based families demonstrated resilience to withstand and absorb shocks. However, the impacts were severe on non-agriculture rural households, as well as on landless and migrant workers. Supply chains for higher-value and perishable products such as meat, milk, fruits and vegetables were disrupted. As a result, both producers and consumers faced difficulties. New marketing arrangements, many based on digital platforms, are emerging to improve the commercialization of high-value perishable products but there is a need to keep improving the ecosystem.

Government efforts to promote post-COVID growth through input subsidies and credit programmes have had little effect on raising overall productivity and output. Such subsidy-driven efforts are unlikely to work unless complemented by longer-term structural interventions related to innovation, pricing and trade. Such interventions should promote a transformation in agriculture to high-value products for which domestic and foreign demand is rising. Subsidies and credit programmes also have a limited impact on small farmers. There is a need for an improved set of tools, including improved technologies along the value chain and targeted financial and credit support programmes for small farmers. There is also greater need for sustaining food consumption by vulnerable groups through new joint efforts implemented with the participation of the private sector, NGOs, CSOs and charitable organizations. Targeted resilience-building approaches are also needed to reduce the risk of future outbreaks of zoonotic diseases, natural disasters and market shocks.

The new price configuration that is emerging post-COVID is characterized by higher food and energy prices. These price trends have been exacerbated by the war in Ukraine and pose major challenges that will require significant adjustments throughout the food systems. This should include a strong effort to raise productivity and also reduce the use of energy for production, processing, transport and storage. It will also imply a reduced and more efficient use of chemical fertilizers through better crop rotations, use of nitrogen fixing crops, and better utilization of crop residue to enhance soil fertility. There is also a need to shift staple crops production out of the de-



pleted soils in the main irrigated areas where ever higher fertilizer applications are needed to maintain yields.

Building a Post-COVID Agriculture and Food System

The COVID crisis and the emerging post-COVID situation require responses at three levels. Firstly, the crisis highlighted several strengths and weaknesses in the food systems that need to be addressed. Secondly, major structural adjustments are necessary to respond to the global post-COVID situation. And finally, there is a need for enhanced measures to reduce risks related to the emergence and spread of zoonotic diseases.



Problem	Recommendation
Make food systems more efficient and resilient to shocks	
<ul style="list-style-type: none"> - Fragmentation of social protection systems - Lack of updated data to identify vulnerable households - Insufficient mechanisms available to reach vulnerable households with much needed emergency protection 	Design holistic approaches to cover the food insecure in both rural and urban areas. <ul style="list-style-type: none"> ▪ Improve targeting to identify and reach the food- and nutrition-insecure population through greater use of digital technologies and update and strengthen the National Socio-Economic Registry. ▪ Enhance the collaboration with the private sector, civil society, charitable organizations and NGOs for better targeting and implementation. ▪ Improve support programmes for informal workers in both urban and rural areas.
Lack of clarity on agriculture produce marketing regulation constraining the ability of the private sector to add flexibility, efficiency, and responsiveness in the food system. A marketing system heavily reliant on public institutions alone is more vulnerable to shocks with long, fragmented, and inefficient value chains.	Strengthen value chains. <ul style="list-style-type: none"> ▪ Accelerate digital innovations in the food value chains. ▪ Review and revise legislation, guidelines and regulations for enhanced quality control, certification, and protocols for branding, better payment systems, and consumer protection regulations.
Adjust the post-COVID food system to higher food and energy prices	
Unproductive agricultural practices leave little room to absorb shocks and increase reliance on imports to fill gaps. In times of shock, international prices may also rise and further expose the food system.	Improve the profitability of agriculture and livestock producers through better production and marketing technologies. <ul style="list-style-type: none"> ▪ Prioritize agricultural innovation to deal with the emerging price/cost configuration and climate change. ▪ Enhance regional and international collaboration in seed technology, precision planting, efficient use of water and other inputs. ▪ Promote aggregation and consolidation of produce of smallholder farmers.
Delay in imports to ease post-shock inflationary pressures can have significant consequence on the affordability of food, particularly when the shock also causes the loss of livelihoods.	Improve management of both domestic markets and international trade. <ul style="list-style-type: none"> ▪ Formulate clear, transparent, and reliable international and national trade regimes. ▪ Improve regulations and operating procedures of domestic markets.
Informal workers, particularly rural migrant labourers in cities, suffered the loss of their livelihoods and struggled to find work in their home villages.	Create new rural employment opportunities. <ul style="list-style-type: none"> ▪ Strengthen training and reskilling programmes for rural and migrant labour to meet emerging demands in agriculture, livestock, and rural off-farm and non-farm enterprises. ▪ Strengthen legislation to provide protection to rural labour.
The government continues to use the same instruments to try to deal with all challenges, whether it is an economic shock or a natural disaster.	Improve the effectiveness of government expenditures. <ul style="list-style-type: none"> ▪ Reduce ineffective agricultural subsidies and cut unproductive current expenditures in related departments. ▪ Improve the quality, performance, monitoring and evaluation of public sector development projects and programs.
Asset- or behaviour-based coping mechanisms in the absence of credit, insurance, and social protection systems increase household vulnerability.	Address weaknesses in the credit system. <ul style="list-style-type: none"> ▪ Take steps to enhance formal credit flows to small farmers. ▪ Monitor and regulate the informal credit system.
Reduce the risk and build resilience against shocks, including zoonotic diseases	
The current market regulation policies, surveillance systems, and health infrastructure are inadequate to prevent the spread of zoonotic diseases.	Build resilience towards animal/zoonotic diseases and other risks. <ul style="list-style-type: none"> ▪ Enhance vaccination campaigns against common livestock diseases to reduce the viral and bacterial loads in animals. ▪ Formulate improved regulations for the establishment and operations of livestock colonies, wet markets, abattoirs and poultry farms. Establish protocols for common surveillance, monitoring and reporting for human, animal, and plant health.



A CLOSER LOOK AT THE ISSUES

Overall Impacts of COVID on Pakistan's Economy

Pakistan is currently facing a fifth wave of COVID but vaccination is gathering pace. Infection rates hit high levels in June and December of 2020 and again in April and August of 2021. The arrival of the Omicron variant led to another sharp spike in new cases from a few hundred per day at the end of 2021 to around 7,000 on January 20, 2022. The impact of the latest wave on the number of deaths has been, however, limited due to the nature of the new variant but also due to the impact of vaccination efforts that have been proceeding rapidly. As of March 2022 over 132 million vaccine doses have been administered and over 50% of the population has received a double dose.

Pakistan's economy was hard hit by the first round of the pandemic and the poor and food-insecure segments of the population proved to be particularly vulnerable. In 2019/20, the Pakistan economy

contracted for the first time in its history by 0.5%. There were particularly large falls in manufacturing, mining, and transport and communications. Exports, specially of textiles, fell as international borders were closed and demand in Pakistan's major markets dropped. The impact of lower economic activity was widespread with almost 50% (27.3 million) of the economically active population (55.7 million) being affected either because of losing their job, not being able to work or suffering a decrease in their income.¹ The impact was particularly hard on daily wage earners in agriculture, construction and small-scale informal enterprises; also on those with no employment protection, such as people employed in the retail and hospitality trade, as well as on domestic workers. Women and female-headed households were hit the hardest, and so was youth. Workers who lost their jobs, or worked less, reduced their expenditure on both food and non-food items, sold assets, drew upon their savings, and borrowed from friends and family.² An estimated 50% of the population reduced the quantity of food consumed or switched to lower quality food and around 40% faced moderate to severe food insecurity from April to July of 2020, compared to the 16% estimated in the 2018/19

¹ https://www.pbs.gov.pk/sites/default/files/other/covid/Final_Report_for_Covid_Survey_0.pdf

² https://www.finance.gov.pk/survey/chapters_21/Annex%20IV%20Covid.pdf

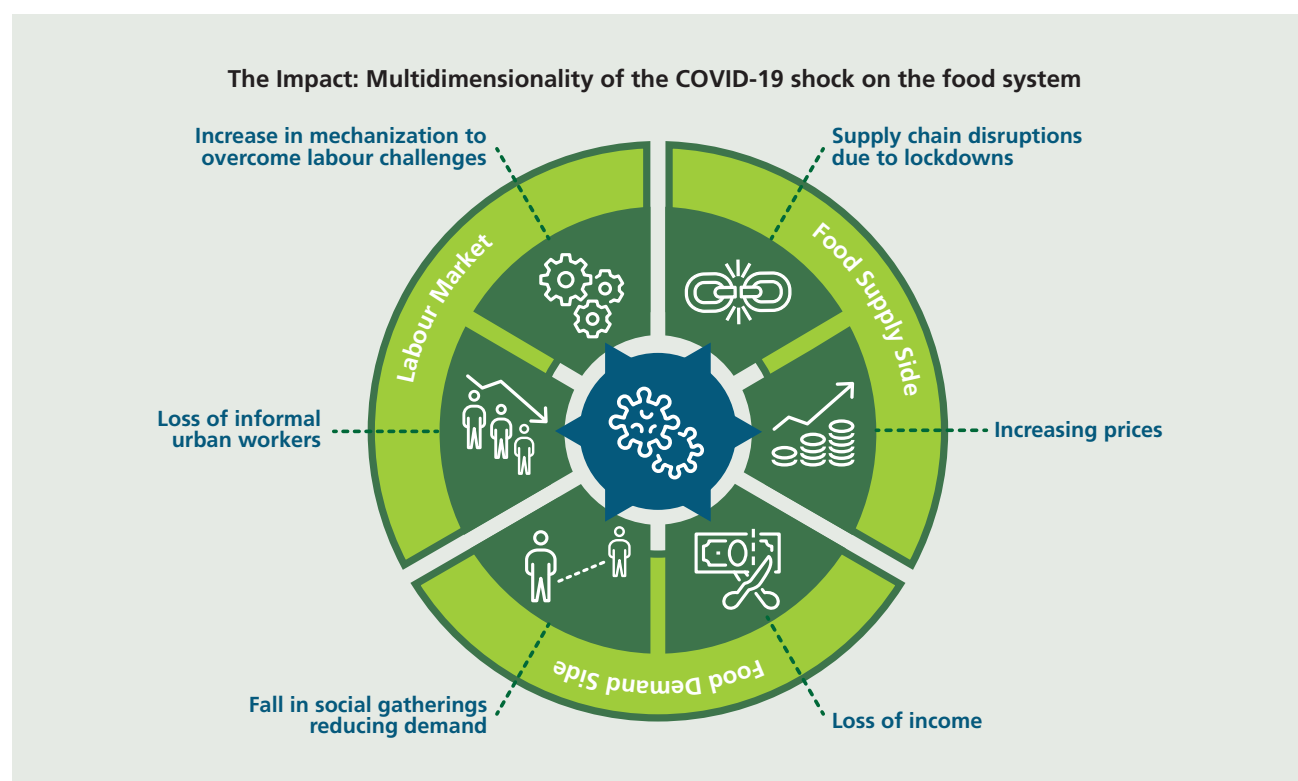
Household Integrated Economic Survey (HIES). Urban families were more affected than rural families and Sindh was the hardest hit.

As new cases started declining after June 2020, the Government turned its focus to recovery. It put in place a series of monetary, fiscal and social protection measures to cushion the population; development partners, civil society and NGOs also played a major role. In response to the crisis, the Government launched a PKR 1.2 trillion stimulus package. The key mechanism for assistance was through cash transfers to low-income families (PKR 12,000 per family) and relief to workers (PKR 12,000 to each household where a job was lost due to COVID). Other measures included the sale of food at subsidized prices through the Utility Stores, as well as support for energy users and trade facilitation measures, which together reached about 19% of households (see Annex 1). Private individuals, singly or collectively through CSOs and NGOs, also played a major role in providing help in cash and kind, reaching 20% of households. About 5.5% of households received support from both

Government and private sources.³ On the monetary side, measures included a cut in the State Bank's discount rate of almost 50% from 13.25% to 7%; a one year deferral of the payment of principal on loan obligations; the easing of credit requirements for exporters and importers; and refinancing options for new manufacturing plants and machinery and for purchase of equipment to detect, contain and treat COVID-19 patients.

The economy has seen a “V” shaped recovery over the last year but growth remains fragile.

As a result of the easing of domestic restrictions, Government stimulus, and the recovery in the world economy, Pakistan's GDP, which had fallen by 1.0% in real terms between 2018/19 and 2019/20, rose by 5.6% between 2019/20 and 2020/21. This quick rebound from COVID, along with an almost 33.4% increase in net factor income from abroad, allowed per capita GNP in 2020/21 to rise by 4.1% above its level of 2018/19. The Government needs to manage the external imbalances that were exacerbated by rising international commodity and energy prices; a budget deficit running at over 6% of GDP in 2020/21,



³ https://www.pbs.gov.pk/sites/default/files/other/covid/Final_Report_for_Covid_Survey_0.pdf



which is raising debt and interest payments; the need to contain increases in the money supply to rein in inflation; and a continuous slide in the exchange rate. These factors will require a tapering of domestic expansionary monetary and fiscal measures, and suggest that growth will moderate in 2021/22 with projections ranging between 4.3% (World Bank) and almost 5% (Government).⁴

Impact of COVID on the Agriculture and Food Systems

Strict COVID-related restrictions were imposed but agricultural and food systems were generally ex-

empted. During the early months of the pandemic in March/April of 2020, the provincial governments, followed by the federal government, imposed strict lockdowns. All non-essential sectors were closed; inter- and intra-city/province transport was banned; religious and other gatherings were prohibited; domestic and international flights were suspended; and international borders were closed. However, the transportation, marketing and sale of food items were allowed and food shops were allowed to stay open from 9 a.m. to 5 p.m.

The agriculture and food sectors nevertheless faced market disruptions. In the rural areas of most provinces, only a partial opening of wholesale livestock, vegetable, fruit and other markets was reported, despite the fact that the government permitted all markets to operate since the beginning of the outbreak.⁵ Many rural markets were unable to adjust their operations to accommodate government Standard Operating Procedures and increased hygiene standards, forcing them to close. Federal and provincial governments allowed agricultural workers to return to the fields at harvest time in mid-April, but because of the lack of intra- and inter-provincial transport, skilled labour was hard to find and produce was often unable to reach the markets.⁶

Closed markets, other market disruptions and reduced demand resulted in lower prices for several perishable products. For example, prices for chicken, the most widely-consumed meat in Pakistan, fell due to the suspension of social events such as weddings, as well as the closure of hotels, restaurants and cafeterias. Other perishable products that were affected were milk, meat, and several fruits and vegetables. Market disruptions and low prices seem to have discouraged farmers to produce these products and shift to crops and products that are less perishable.⁷ Several small and medium enterprises that have substantial fixed overheads and wage costs closed as a result of the falls in prices and revenues. For example, in the case of dairy, the lower prices of milk and higher prices for inputs led to closures, the increased sale of animals and a running down of dairy herds.

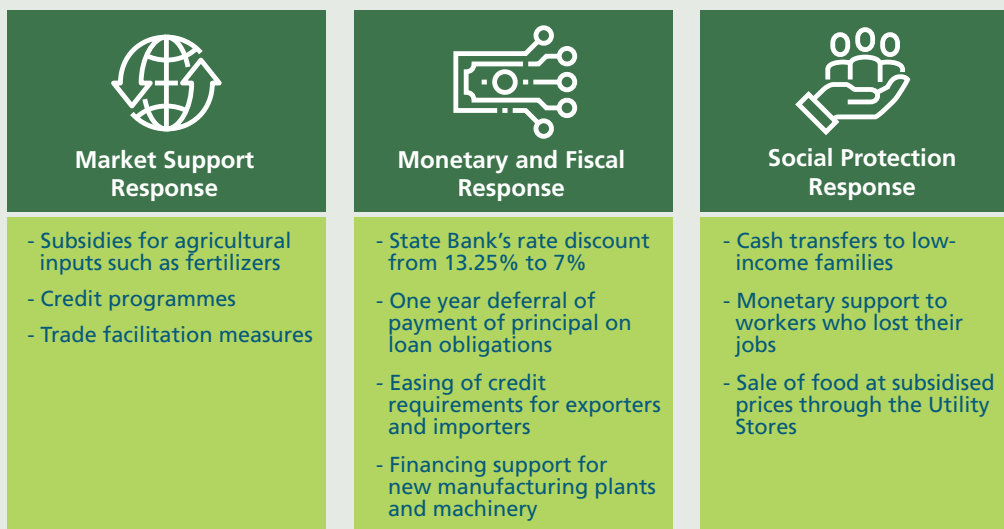
4 https://www.sbp.org.pk/m_policy/2021/MPS-Nov-2021-Eng.pdf

5 <https://www.adb.org/publications/impact-covid-19-locust-farm-households-punjab-sindh>

6 <https://www.fao.org/3/cb1343en/CB1343EN.pdf>

7 A forthcoming ADB report based on a phone survey in 2021.

The Response: There was a need to address the emergency from different angles



Price disruptions were also seen in the case of internationally traded crops. For example, in the case of tomatoes, the lack of imports created shortages and price increases; whereas in the case of mangoes, whose exports were impacted, there were gluts and price falls. Trade and transport problems also impacted the availability of inputs particularly seeds but also weedicides, pesticides and animal feed such as oilseed meals much of which are imported.

Agricultural workers were allowed to travel for work at harvest time in mid-April, but the lack of intra- and inter-provincial transport resulted in labour shortages.⁸ The lack of unskilled labour for harvesting and other farm operations increased the ongoing push for greater mechanization of farm operations. However, this accentuated the shortages of skilled labour for operations and maintenance of farm machinery.

The agriculture sector performed relatively well during the first year of the pandemic but higher imports were necessary to maintain food supplies and contain food price inflation. The quick easing of restrictions led to a fast recovery and over the year agri-

culture GDP grew 3.3% in FY2019/20 compared to falls of 7-8% in some other sectors such as mining and quarrying, large-scale manufacturing, and transport, storage and communications. Despite lower food demand due to falling incomes, particularly in urban areas, food prices rose significantly (see the JiT Note on Food Price Inflation). However, additional imports of several food items, particularly of wheat, prevented panic buying and uncompetitive behaviour (but not price hikes) even through periods of high demand such as Ramzan and Eid.

Government measures included substantially increased current spending on agriculture. The Economic Coordination Committee introduced a relief package worth about PKR 40 billion to provide subsidies for fertilizers and chemicals.⁹ The mark-up on agricultural loans has also been reduced from 18.4 percent to 10 percent through a subsidy that would amount to PKR 8.8 billion and in March 2020 the State Bank of Pakistan announced a moratorium of all agricultural loans for one year. An amount of PKR 4.7 billion has been reserved by the Government for the relief of the poultry sector, in the form of delays in bank payment installments and reduced mark-ups.

⁸ <https://www.fao.org/3/cb1343en/CB1343EN.pdf>

⁹ This was subsequently raised to PKR 50 billion and disbursements have been taking place over the various cropping cycles starting on Kharif (summer) 2020.



Notwithstanding the good overall growth performance of the agriculture sector during the pandemic, food security conditions in rural areas deteriorated. About 10% of farm households in Punjab and more than half the farm households in Sindh reported reduced food- and non-food expenditure –problems in Sindh were compounded by an invasion of locusts at the same time as the COVID crisis.¹⁰ Rural household incomes and expenditures were also impacted by reduced opportunities for off-farm work, lower remittances as workers in urban areas lost their jobs, and increased expenses by associated with workers returning from urban areas.

The performance of the agriculture sector in the second year of the pandemic was below expectations.

Despite the easing of restrictions, a rebound of domestic and international demand, and strong Government support, Pakistan's overall agricultural GDP growth in 2020/21 is estimated at only 2.8% –lower than during the previous pandemic-affected year. The disappointing performance is largely the result of the lower production

of cotton which fell by 22%, the lowest level since 1985. Lower cotton production has serious knock-on effects as much of Pakistan's industrial output and exports are dependent on it.¹¹ Low cotton production reflects poor weather conditions but also problems in input supplies (particularly seeds and chemicals) as well as continued Government prioritization of other relatively low-value crops such as wheat and sugarcane.

The poor performance of agriculture reflects operational and policy weaknesses of the Government's support programmes.

The Government continues to focus on a limited number of "strategic crops" such as sugarcane and wheat (e.g. the support price for the latter was raised from PKR 1,400 to PKR 1,950 per 40 kg). Much less attention in terms of development efforts is given to other high-value products including livestock. Moreover, subsidies and incentives on fertilizer and credit, as well as various current expenditures such as those on wheat procurement, often end up in the hands of larger farmers and have little impact on productivity. Public expenditure

¹⁰ The Impact of COVID-19 and the Locust Invasion on Farm Households in Punjab and Sindh: Analysis from Cross-Sectional Surveys in Pakistan, Asian Development Bank, July 2021. <https://www.adb.org/sites/default/files/publication/714791/cwwp-010-impact-covid-19-locust-farm-households.pdf>.

¹¹ <https://www.sbp.org.pk/reports/quarterly/fy21/Third/Chap-2.pdf>

BOX 1. Continuing Impacts of COVID-19 on Production and Marketing of High-value Products in Punjab and Sindh^a

Under the lockdowns and movement restrictions to suppress the COVID-19 infections the government exempted food systems workers, grocery shops, and agricultural markets. Despite the exemptions, many rural markets could not adjust their operations to accommodate government Standard Operating Procedures (SOPs) and were unable to operate normally. Federal and provincial governments allowed agricultural workers to return to the fields, but because traders were not available and there was a lack of intra- and inter-provincial transport, producers were unable to sell their products. Furthermore, as many restaurants and markets closed, the demand for high-value agricultural products, such as tomatoes and milk collapsed, resulting in low market prices.

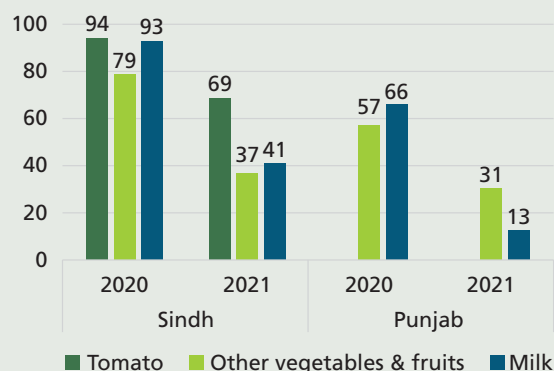
To empirically examine the impacts of COVID-19 related restrictions on agricultural production and marketing of high-value products in Punjab and Sindh,^b the ADB conducted two rounds of mobile phone surveys with farmers in May-June 2020 and 2021. In 2020, 839 farmers were interviewed and in 2021, 744 farmers were re-interviewed. The two surveys found that while the mobility within and across provinces has improved since the lockdown period of the pandemic, i.e., April-May 2020, Sindh province faces a lag to restart its agro-based economy. In 2021, fewer farmers in Sindh province produced high-value crops presumably because they were afraid of continued market disruptions.

COVID-19 impact on marketing of high value products in 2020 and 2021

In 2020, 94% of farmers from Sindh who cultivated tomato reported they faced difficulties in selling tomato crop or could not sell at all, although this figure has declined to 69% in 2021.^c Due to marketing difficulties and low price, two-third of farmers in 2020 and around one-half in 2021 ploughed their tomato crop as green manure without completing pickings. The percentage of vegetable and/or fruit producers who faced difficulties in selling their products declined from 79% to 37% in Sindh and 57% to 31% in Punjab, from 2020 to 2021 respectively. A majority of farmers reporting difficulties in marketing associated the difficulties with COVID-19 related restrictions.

Similarly, the percentage of dairy farmers who faced difficulties in selling milk declined from 93% to 41% in Sindh and 66% to 13% in Punjab over the same period. Almost all dairy farmers reported marketing difficulties due to COVID-19 related restrictions and more than three-fourth of dairy farmers reported a decrease in price in milk.

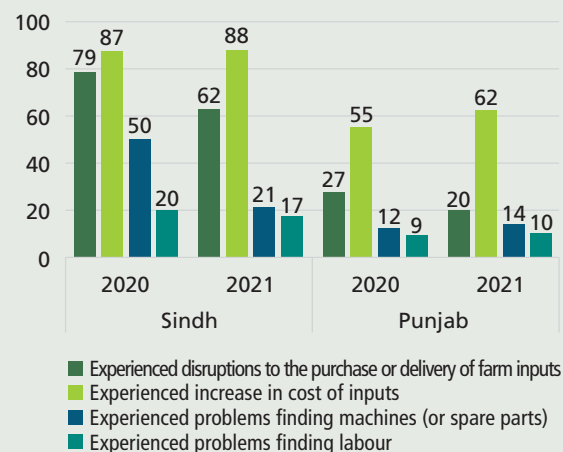
Farmers reporting difficulties in marketing products (% of farmers who offered produce/products for sale)



COVID-19 impact on farm inputs in 2020 and 2021

A large percentage of farmers from both provinces reported disruptions in purchase of farm inputs and increase in prices. Similarly, many farmers reported difficulty in finding machinery and spare parts, as well as labor for land preparation for next sowing. Even though conditions have improved for both provinces, Sindh remains relatively more in duress than Punjab, as shown in the figure.

Farmers experiencing disruptions and increases in input prices (% of surveyed farmers)



a ADB (2022). *Continuing impacts of the COVID-19 pandemic on farm households in Pakistan*. Asian Development Bank, Manila.

b These provinces contribute more than 80% of the agricultural GDP in Pakistan.

c In 2020, 96% of those reported difficulties answered the difficulties were due to the COVID-19 pandemic. In 2021, the percentage due to COVID-19 declined to 88%.

BOX 1. Continuing Impacts of COVID-19 on Production and Marketing of High-value Products in Punjab and Sindh (continued)

Conclusion and recommendations

The COVID-19 pandemic, and the economic and movement disruptions, negatively affected the marketing of vegetables, fruits, and milk in both Punjab and Sindh. Since the lockdown period in April-May 2020, the marketing conditions have improved. However, the surveys found that the proportion of farmers producing high-value crop or products (such vegetables, fruits, and milk) has declined in Sindh. Farmers were probably afraid of market disruptions that they experienced in 2020 and switched away from high-value crops to other products. The reduced production of high-value crops and products might have contributed to the reduced supply of these products.

To encourage farmers to produce high-value crops and earn high returns, national and provincial governments in Pakistan need to reassure farmers that they will be exempt from lockdowns and movements restrictions in case there is an emergence of a new variant of the COVID-19 or other infectious diseases in the future.

other than on subsidies is also poorly managed. Most public funds allocated for agriculture, livestock and food departments are spent on underqualified support staff while developmental projects are poorly conceived and badly implemented, often with large delays. Similarly, agriculture credit continues to be dominated by larger farmers. As a result, little of the benefits of the recent monetary policy measures benefit the poor. For example, while overall credit disbursements to the agriculture sector in 2020/21 showed a healthy increase of 12%, the microfinance banks, who cater to small farmers, achieved only 73% of their lending targets. Traders, wholesalers and other market intermediaries, who supply most of the credit needs of small farmers and livestock producers, also faced cash flow problems and, as a result, cut financing operations.

The post-COVID international price configuration for several essential commodities has changed substantially. As the world rebounded from the crisis of 2020, the mix of rising demand and supply constraints have led to sharply rising prices for food and related commodities. These price trends have accelerated following the war in Ukraine. FAO's Food Price Index is in real terms now higher than in the 2008-10 period and almost at the level of those in the mid-1970s food crisis. Food prices rose by over 35% in the last 12 months with an even higher increase (50%) in the price of vegetable oils—one of Pakistan's main imports.¹² Energy prices, particularly of

natural gas, have also gone up sharply and are increasing the costs of production, transport, storage and processing of food in Pakistan. Fertilizer prices have followed energy prices—with the prices of urea and phosphate rising sharply to levels not seen for a decade. Urea prices rose by 130% and DAP by 60% since the start of 2021.¹³

LESSONS LEARNED

Lessons Learned from the COVID Crisis

The COVID crisis, even as it draws to a close with all restrictions now removed, highlighted several strengths and weaknesses in the food systems in Pakistan. These include:

- **Overall the food systems displayed strengths and weaknesses.** There were price increases and fluctuations but there was no panic buying or no food queues in the case of staple foods. In part, this was due to lower demand and in part to higher imports—for example wheat imports reached 3.6 million tons in 2020— a level not seen for several decades. On the other hand, the supply chains linking producers to consumers for higher-value and perishable products such as meat, milk, fruits and vegetables proved to be more fragile with both producers and consumers facing difficulties. Some production activities such

¹² <https://www.fao.org/worldfoodsituation/foodpricesindex/en/>

¹³ <https://blogs.worldbank.org/opendata/soaring-fertilizer-prices-add-inflationary-pressure-and-food-security-concerns>

as dairy and poultry will take time to recover due to the need to rebuild stocks and supply chains.

- **Government assistance programmes reached large numbers of the poor and the food insecure but there were operational problems.** These included difficulties faced by the Utility Stores Corporation to ensure the transfer of subsidies to the most vulnerable segments of the society as per the directions of the Government. There were service delivery issues in the emergency cash program that resulted in non-disbursement of cash transfers to about 1.32 million enrolled beneficiaries.¹⁴
- **Agricultural-based families demonstrated a strong capacity to withstand and absorb shocks but the poorest in both urban and rural areas suffered.** Notwithstanding various problems, the production, storage, processing and marketing of the main staples continued throughout the pandemic and food continued to reach consumers. Moreover, unemployed workers who returned from cities and towns were accommodated and fed, although this caused problems to the poorest households who had to cut back food intake. The effects of the pandemic were however much more severe on workers in urban areas, non-agriculture rural households and landless migrant workers.
- **COVID has given a major boost to the digitization of the food system.** An increasing number of wholesalers and retailers are providing home delivery services; several major supermarkets found it efficient to source produce directly from farmers and local aggregators; and there is an emergence of integrated “farm-to-fork” enterprises. However, these have been largely restricted to a few commodities, mainly fruits, vegetables and livestock products, and to top-end shoppers in the larger towns and cities. However, in general, food supply chains remain long, fragmented and inefficient with middle men and in-

efficient markets creating large margins between producers and consumers.

- **COVID also changed the composition of the labour demand in rural areas.** Over time there has been a trend towards mechanization of farm operations. This process has resulted in reduced demand for unskilled labour, particularly migrant labour, but an increased demand for skilled workers. COVID has accelerated this trend with farm enterprises increasingly looking to mechanize and accentuating the shortage of skills related to the operation and maintenance of farm equipment.
- **The tools and programmes that the Government has used to promote post-COVID growth have had little effect on raising overall productivity.** The Government's response to COVID has largely relied on input subsidies and credit programmes. Often, these do not benefit small-scale farmers, the poor and the food insecure due to inadequate mechanisms to



14 <https://agp.gov.pk/SiteImage/Policy/53.%20Covid-19%20Audit%20Report%2008.06.2021.pdf>

identify and reach them with benefits. Such subsidy-driven efforts are unlikely to work unless targeting is improved and they are complemented by effective measures to promote a transformation to high-value products for which domestic and foreign demand is rising. Such transformation will require longer-term structural interventions and better project design and management of public policies, programmes and projects related to innovation, pricing and trade.

- **Credit flows, particularly to small farmers and small- and medium-scale enterprises were reduced.** The financial needs for small producers and for small enterprises providing transport and storage services for food and other agricultural commodities is largely met by informal credit sources, mostly originating from traders and wholesalers. Many of this informal credit flows were reduced due to market uncertainties, and credit from other sources, for example from micro-credit institutions, was not able to compensate for this fall. The benefit of the moratorium on loan repayments and subsidies has hardly reached small farmers and remains a persistent challenge in terms of financial inclusion.
- **The emerging price/costs structure in international markets has created new constraints, as well as new opportunities for the food systems in Pakistan.** Higher international food prices and the devaluation of the PKR means that food inflation will remain an issue for urban areas and for net food buyers in rural areas. However, this will also improve domestic terms-of-trade in favour of agriculture and raise returns for investment and innovation.
- **COVID has highlighted the importance of containing zoonotic diseases and building resilience towards other shocks.** The species barrier between humans and animals, particularly domestic animals, is permeable and the consequences of viruses and bacteria crossing such barrier can be devastating. In Pakistan, higher incomes and urbanization has resulted in a growing demand for livestock products and the creation of

large cattle colonies and wet markets inside and in the periphery of big towns and cities, including Karachi and Lahore, as well intensive poultry farms in many peri-urban areas. These cattle colonies, wet markets and intensive poultry units are high-risk incubators for new zoonotic diseases, as well as for the possible spread of endemic diseases such as brucellosis and foot and mouth disease (FMD). In addition, rural communities and their livelihoods are permanently threatened by climate change and natural disasters. Building resilience is critical at the community level and putting in place coping institutional capacities is a must.

RECOMMENDATIONS

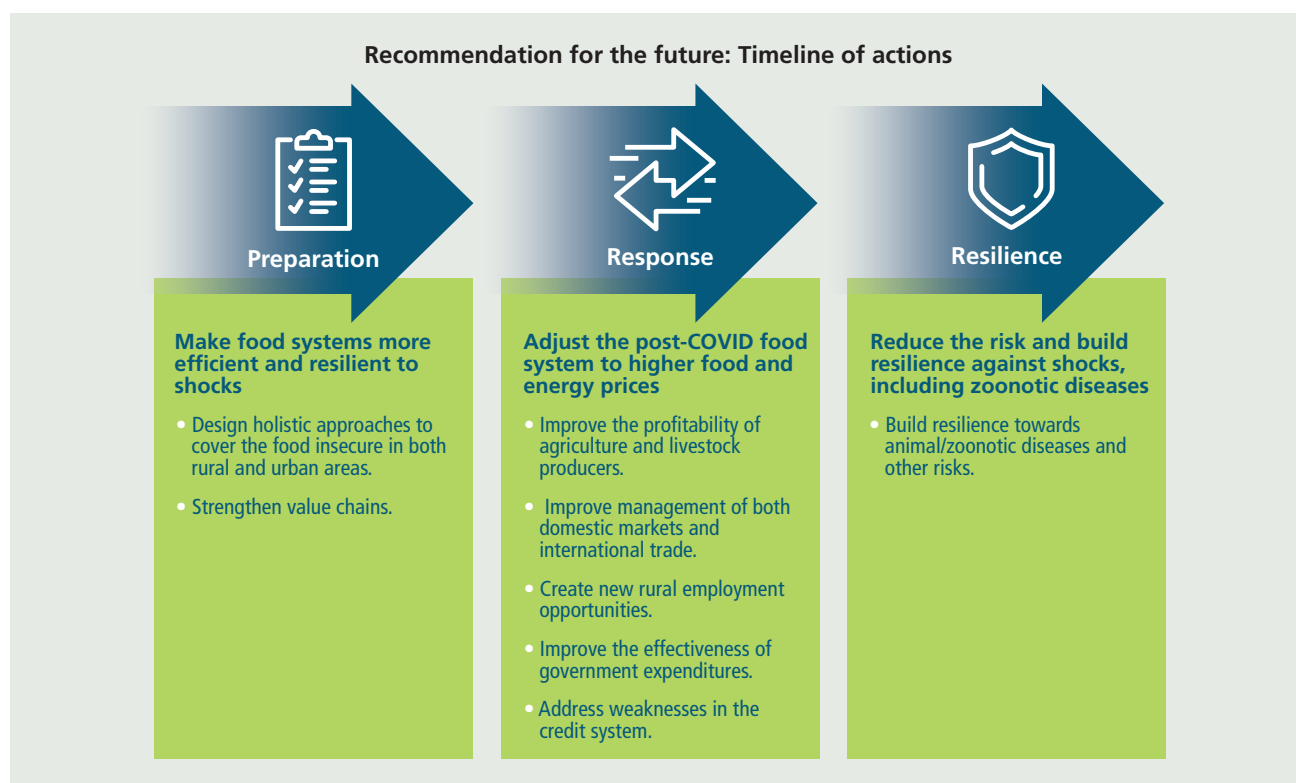
Building a Post-COVID Agriculture and Food System

The COVID crisis highlighted the need to build a more efficient and resilient food system –a need that has become ever more urgent in the face of the events in Ukraine that are creating major shocks in the world food, fertilizer and energy markets. Building a more resilient food system in Pakistan require responses at three levels. Firstly, the crisis highlighted several strengths and weaknesses in the food systems that need to be addressed. Secondly, major structural adjustments are necessary to respond to the current global situation where food, fertilizer and energy prices are likely to remain high. And finally, there is a need for enhanced measures to reduce risks, in particular those related to emergence and spread of zoonotic diseases.

1. Make food systems more efficient and resilient to shocks.

Pakistan is prone to multiple shocks. Some could be related to climate change and may include floods, heat waves or pest attacks; others may be black swan events such as the COVID pandemic. To meet these challenges it is necessary to:

- a) Design holistic approaches to cover the food insecure in both rural and urban areas.** Food insecurity and malnutrition are chronic problems in Pakistan and are accentuated further by any crises. Cash transfers and



subsidized sales through the Utility Stores are useful but not sufficient to maintain access, especially to nutritious food. Better targeting and greater use of digital technologies are needed to identify and reach populations that face chronic or acute food insecurity and malnutrition. Current mechanisms such as the National Socio-Economic Registry need to be more dynamic and based on the most recent information. At the same time the Government needs to work with the private sector, civil society, charitable organizations and NGOs to create better targeting, as well as implementation and oversight mechanisms. In addition there is a need for improved support programmes for informal workers in both rural and urban areas.

- b) **Strengthen value chains.** There is a need to promote and accelerate innovations in the food value chains to make them more efficient, including by facilitating the penetration of digital technology. The Government, at both the federal and provincial levels, needs to work on legislation, guidelines and

regulations for enhanced quality control, certification, and protocols for branding, better payments systems, and consumer protection regulations.

2. Adjust the post-COVID food system to higher food and energy prices.

- a) **Improve the profitability of agriculture and livestock producers primarily through better production and marketing technologies.** A major new thrust on agricultural innovation is necessary to deal with the emerging price/cost configuration as well as with the likely changes in climatic conditions. Strong regional and international collaboration in research and development and the adoption of new technologies at the farm level is critical with respect to seed technology, precision planting, efficient use of water and other inputs and, above all, the consolidation of produce of smallholder farmers.
- b) **Improve management of both domestic markets and international trade.** During



the pandemic, both international and domestic trade policies sometimes enhanced, rather than dampened, price instability and fluctuations. This harmed both consumers and producers. The federal and provincial governments need to formulate clear, transparent and reliable trade regimes allowing access to international markets, as well as the free movement of goods between local markets. It is also critical to address governance issues in the domestic market systems to address the power imbalance among the different value chain actors.

- c) Improve the effectiveness of government expenditures.** The Government needs to reduce ineffective agricultural subsidies and cut unproductive current expenditures in related departments. Funds should instead be used for catalytic investments that leverage the participation of the domestic and international private sector. However, a precondition for higher allocations for development spending in agriculture and food systems is an improvement in the quality, performance, monitoring and evaluation of public sector development projects and programs.

d) Address weaknesses in the credit system.

Traders, wholesalers and input suppliers are the main sources of agricultural credit and the COVID crisis has affected their willingness and ability to finance producers, transporters and processors. The Government and the State Bank need to work with commercial banks and micro-finance institutions to enhance formal credit flows, as well as monitor and regulate the informal credit support systems that are prevalent in the food sector.

3. Reduce the risk and build resilience against zoonotic diseases.

a) Build resilience towards animal/zoonotic diseases and other risks.

Provincial governments, along with the federal government, need to enhance vaccination campaigns against common livestock diseases as a means to reduce the viral and bacterial loads in the domesticated animal herds and poultry flocks. At the same time, provincial governments, along with concerned municipalities, need to formulate improved regulations for the establishment and operation of livestock colonies, wet markets, abattoirs and poultry farms, particularly in and around cities and towns where there is a high risk for animal to human infections. There is also a need for developing institutional capacities, protocols for common surveillance, and a monitoring and reporting system in both rural and urban areas that facilitates the early identification of problems across the livestock, human and environment interface. Communities of practice will have to play a leading role.

