

FINAL REPORT

COVID19: MACROECONOMIC AND SOCIAL IMPACT AND FRAMEWORK FOR DEVELOPMENT RESPONSE IN SINDH

Draft submitted on November 10, 2020

First revision: December 5, 2020

Second revision: December 30, 2020

Third revision: February 28, 2021

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Abbreviations

ADP	Annual Development Plan
CCI	Council of Common Interests
CDLD	Community Driven Local Development
CEF	Coronavirus Emergency Fund
CNIC	Computerized National Identity Card
FBR	Federal Board of Revenue
FY	Fiscal year
GRASP	Growth for rural advancement and sustainable progress
GAVI	The Vaccine Alliance
GoS	Government of Sindh
IBA	Institute of Business Administration
IMF	International Monetary Fund
LSM	Large Scale Manufacturing
MSMEs	Micro, small and medium enterprises
MHI	Micro Health Insurance
NAC	National Accounts Committee
NDMA	National Disaster Management Authority
NCOC	National Command and Operation Center
PDMA	Provincial Disaster Management Authority
PFM	Public Finance Management
PFC	Provincial Finance Commission
PIDE	Pakistan Institute of Trade & Development
PPE	Personal Protective Equipment
PBW	Pink Boll Worm
P&DD	Planning and Development Department
PSDP	Public Sector Development Program
PPRP	Peoples' Poverty Reduction Programme
SPSU	Social Protection Strategy Unit
SMEDA	Small and Medium Enterprise Development Authority
SBP	State Bank of Pakistan
SDPI	Sustainable Development Policy Institute
SoPs	Standard Operating Procedures
USF	Universal Service Fund

Acknowledgements

This work was possible with cooperation and support from the following:

- For overseeing and reviewing the study: Dr. Naeem-uz-Zafar & Mr. Obaid Arshad Khan;
- For facilitation with line departments: Mr. Rafique Mustafa Shaikh and Dr. Fawad Shaikh;
- For providing insights on GoS COVID-19 sector strategies: Mr. Haris Gazdar; Dr. Shereen Mustafa, Secretary (Planning); Mr. Nasim-ul-Ghani Sahito, Secretary (Industries & Commerce); Mr. Abdul Rahim Soomro, Secretary (Agriculture, Supply & Prices); Mr. Muhammad Hanif Channa (School Education & Literacy Department); Dr. Fouzia Khan (School Education & Literacy Department); Mr. Mansoor Ali Wasan (Health Department); Mr. Shehzad Hasan (PFM team lead); Mr. Zulfiqar Mirza (PFM Expert); Mr. Syed Aftab Raza (PFM Expert) Finance Department;
- Meetings were also held with officials at National Command and Operation Center (NCOC), Ministry of Planning Development & Special Initiatives, and Economic Advisor Wing, Finance Division;
- Important inputs were also received during presentation of first draft to various line departments in December 2020.

Executive Summary

This report aims to develop an improved understanding of magnitude and impact of the pandemic for Sindh province. In order to undertake this analysis, we have used the updated forecast on future waves of COVID-19 and how this could impact the fiscal performance in Sindh. As the government has limited avenues for raising public debt, to remain fiscally sustainable over the medium-term, expenditure prioritization will be required. Also, an effort is required to ensure timely utilization of COVID-19 related allocations.

The analysis also offers a review of sector policy priorities amid COVID-19. While Sindh government is prioritizing health sector response and a number of initiatives have been taken in public health facilities, there is a need to document the initiatives and provide policy options over the medium-term and as part of the post-pandemic recovery. Similarly, the pandemic is likely to adversely impact an already alarming situation in the education sector and employment generation activities in agriculture and industry. In addition, social protection will need to be strengthened. We therefore also discuss how Annual Development Program (ADP) can be effectively used for socio-economic recovery.

Our methodology includes detailed review of emerging research, interviews with relevant sectoral departments of GoS, and macroeconomic forecast developed in collaboration with the Finance Division. We have also collaborated with PFM team at Finance Department, GoS to arrive at the budget projections. The main sectors covered include: health, education, social protection, agriculture, livestock, fisheries, and MSMEs in industry and retail trade.

This effort is expected to provide recommendations for the GoS in the areas which include: protecting and improving fiscal operations for COVID-19 response; expediting implementation of already announced Covid-19 strategies; improving design of planned Covid-19 strategies; and building synergies and linkages between COVID-19 response and other social sector uplift priorities of the GoS as outlined in ADP.

After a detailed review of current and planned COVID-19 related sectoral measures, we highlight select gaps in (sectoral) response. For example, as regards the budgetary response to the pandemic, there is negligible investment directed towards transport and logistics sector, known to have contributed in the spread of the disease. Second, while there are plans to improve targeting, there is no timeline by when a dynamic registry of the vulnerable population may be prepared based upon which the social protection related decisions

may be undertaken. Third, public finance interventions are much desired to help improve the utilization rate. Even the COVID-19 related funds approved for the initial wave could not be utilized in a timely manner – prompting development partners to downgrade some assistance programs. Finally, the rules and forum to execute such emergency funds need to be revisited. A key reason cited for weak utilization of COVID-19 emergency funds and related budgets with the line departments was a lack of orientation regarding relevant rules and forum which could allow expediting the usual processes of review, approval and execution. This also applies to federal funded projects for Sindh whether from vertical arrangement or PSDP.

We also study here if PSDP or Sindh's ADP FY21 is able to support the COVID-19 response by line departments. It is not currently possible to trace COVID-19 related projects to any single province-wide strategy document. Likewise, ADP 2020-21 is also silent on distribution of allocated COVID-19 specific amount across the various departments. It will be a timely effort to update past initiatives such as Sindh Vision 2030 and also include details regarding pandemic-related public investments.

Sindh's ADP 2020-21 also includes some unapproved projects. In view of changed priorities during and post-pandemic, it is essential to revisit the need for such projects awaiting approval and funding. The inclusion of unapproved projects also represents lack of capacities to prepare timely project proposals – a deficit also seen while line departments were asked to prepare concept notes for COVID-19. Finance Department will also need to see how COVID-19 response initiatives can be insulated from cost and time overruns which are a usual phenomenon in the ADP portfolio. Also, procurement mechanisms could be revised and relatively more efficient process introduced for any project which has implications for human health in emergency times.

We make a note of structural constraints which will need to be addressed during the future waves of the pandemic. These relate to: possible fiscal resource gaps; lack of information and data sharing mechanisms across the provincial government's relevant departments dealing with the pandemic response; human resource gaps curtailing coordination and implementation of COVID-19 sector strategies; strengthening response capacities of the local administrations; lack of public-private dialogue to improve understanding around pandemic-related legislation in Sindh and how private sector or public-private partnerships could help; and having a gender lens to the overall response.

This report advocates the need to arrive at informed provincial growth forecast for FY21 and the medium term (after consultation with P&DD and PBS). We also

note that two aspects would remain critical to Sindh's fiscal sustainability i.e. completion of ongoing public finance management (PFM) reform, and efficiency in revenue mobilization.

No revenue mobilization effort could be complete without data sharing across GoS, FBR, NADRA, SECP, and central bank which could ultimately improve validation and audit functions at the tax authorities. Furthermore, improving revenue mobilization in a manner that does not create distortions in production incentives should also be seen as a response to the pandemic. Ultimately this will strengthen the fiscal sustainability in times when there is increased spending expected on social protection.

We propose the need to initiate sector-specific studies which link the COVID-19 outcomes with provincial government's response. Such studies should remain live exercise until the time the threat of pandemic is fully over. Such studies will also guide how to put the various SDGs back on track.

The outcomes of federal government's response in Sindh also requires in-depth analysis but more importantly, provincially disaggregated data – missing for most sector. The adequacy of province wise federal government spending for COVID-19 response under various heads including support to MSMEs, health systems, and education can be better assessed after more liberal data sharing becomes possible in the coming days.

Going forward, and in line with the team's presentation in December 2020, the PFM-II team stands ready to provide support in working with two or three high priority sectors to make sure ADP is aligned with these sector priorities. We can continue to monitor emerging pandemic waves for economic and social impact with the team at P&DD. Finally, we look forward to partner with P&DD in defining post-pandemic recovery scenarios for Sindh province.

1. Background

Based on the request made by the Planning and Development Department (P&DD), Sindh, the PFM-II project team undertook a review of the study titled 'Covid19: Sindh's macro-economic and socio-economic impact assessment and development response framework'. The main purpose is to inform policymakers about the impact and possible mitigating strategies that GoS can consider over the medium-term.

PFM-II team provided an initial feedback to the Chief Economist in the week of 13th July. Two main ideas discussed include: a) need for a deeper understanding of how the COVID-19 pandemic is likely to affect the policy environment, and b) provide medium term estimates of the impact of the pandemic, especially in a context where we anticipate that there will be reduction in fiscal space confronting the Government of Sindh (GoS).

As per the terms of reference we have tried to address the following main tasks:

- a. Development of an improved understanding of magnitude and duration of the pandemic and its impact on medium-term macroeconomic forecasts: In order to undertake this analysis, we have used the updated forecast around the future waves of COVID-19 and how this could impact the fiscal performance in Sindh . As the government has limited avenues for raising public debt, to remain fiscally sustainable over the medium-term, expenditure prioritization will be required. Also, an effort is required to ensure timely utilization of COVID-19 related allocation.
- b. Review of sector policy priorities and recommendations: while Sindh government is prioritizing health sector response and a number of initiatives have been taken in government health facilities, there is a need to document the initiatives and provide policy options over the medium-term. Similarly, the pandemic is likely to adversely impact an already alarming situation in the education sector and employment generation activities in agriculture and industry. In addition, social protection will need to be strengthened.

The situation also needs to be analysed in the context of future COVID-19 waves. The question of how Annual Development Program (ADP) can be effectively used to enhance productivity and employment will need to be

answered. An advisor to PFM-II team worked with key sector departments to document their existing and planned strategies, provide a critical review and suggest alternate policy options. The main areas covered include: health, education, social protection, agriculture, livestock, industry, and retail trade. Through this review, a list of plausible strategies has emerged which can be recommended to be pursued in the budget over the medium-term.

This effort is expected to provide recommendations for the GoS in the following specific areas:

- Protecting and improving fiscal operations for Covid-19 response;
- Expediting implementation of Covid-19 strategies;
- Improving design of planned Covid-19 strategies;
- Building synergies and linkages between Covid-19 response and other social sector uplift priorities as outlined in ADP.

2. Our Approach & Methodology

To analyse the impact of COVID-19 on Sindh province and to review the responses of federal, and Sindh governments, sources such as existing survey data, survey-based reports, working papers, policy briefs and studies authored by various local and international organization including think tanks and governmental and non-governmental public policy organizations have been looked at.

The team also visited Karachi to interview the senior management of line departments including health, education, agriculture, industries, and SPSU at Chief Minister's office. For assessment of fiscal pressures the team also interviewed officials at Planning & Development Department, Finance Department, Government of Sindh, Ministry of Planning, Development & Special Initiatives, and Ministry of Finance. Among the development partners, we have benefited from the World Bank Group and IMF Pakistan offices who have been involved in the public finance expenditure review exercise at sub-national level. This team's work with other EU initiatives including GRASP also benefited this exercise.

We have gained from initial assessment by GoS provided in Annex-A. In addition, official proposals and policy announcements or fiscal measures taken by federal and Sindh governments have also been reviewed.

These include federal and Sindh budgetary documents, and relief measures taken through legislative and executive arms such as Covid-19 Emergency Relief Ordinance, 2020 promulgated by Sindh. An indicative list of the organisations, their various studies and key findings is reproduced in the table below; the list, however, is not exhaustive.

Institution	Title	Selected/Key Findings¹
IBA, Karachi	Policy Response During Challenging Times, Insights from the Federal Budget 2020-21, and the way forward	Federal budget FY21 a “lost opportunity” to rethink policy & address structural issues
SMEDA	Survey Report: Impact of Covid-19 on SMEs	Liquidity crunch, low sales, & supply chain disruption among key issues faced by SMEs because of lockdown
	Covid 19 SME Liquidity Support & Business Formalization Survey Report	85 percent SMEs lacking NTN (surveyed) would consider registration against interest-free loans
SDPI	Projected Impact of Lockdown on SMEs in Pakistan	0.76 – 0.95 million may not survive one-month lockdown
Gallup Pakistan	Pakistan Labor Force At Risk	28 percent provincial labour at high risk of unemployment
Karandaaz	Impact of Covid-19 on SMEs	SMEs forecast reduction in revenue by two-thirds
International Trade Centre	Covid-19: The Great Lockdown and its Impact on Small Businesses	Shutdown of factories in EU may lead to global supply chain disruption of \$126 billion
PIDE	Relief Package for SMEs	GDP contribution of SMEs; lack of access to finance
	Covid-19 Bulletins	Job losses in the wake of Covid-19 may reach 12 million
IMF	Policy Responses to Covid-19	Sindh government cash grant & ration distribution program of Rs 1.5 billion
GRASP, Pakistan	Competitiveness of Rural MSMEs & their resilience to Covid-19 crisis – Evidence from Sindh	At least two-thirds of rural enterprises in both Sindh & Balochistan estimated closure for up to 6 months
	Competitiveness of Rural MSMEs and their resilience to Covid-19 crisis – Evidence from Balochistan	

¹ Only those relevant for this paper have been highlighted here

Finance, Sindh Government	Finance Bill (Act), 2020-2021; annual budget documents	Rs 34.25 billion fiscal stimulus by GoS in budget FY21
Government of Pakistan	Annual Economic Survey 2019-2020	Sub-sector wise economic contraction due to lockdown
	Finance Bill (Act), 2020-2021; annual budget documents	Details of of Rs 1.2 trillion Prime Minister Covid relief package
Asian Development Bank	Pakistan: Covid-19 Active Response and Expenditure Support Program	
	Pakistan: Emergency Assistance for Fighting the Covid-19 Pandemic	\$1.5 billion program to support national response to impact of Covid-19
KPMG	Pakistan: Government and institution measures in response to Covid-19.	Details of Prime Minister Covid-19 relief package, and reduction in tariffs on raw material import in Budget FY21
World Bank	Pandemic Response Effectiveness in Pakistan under the Covid-19 Strategic Preparedness And Response Program	\$100 Mn assistance program to facilitate national Covid response
Dr. Kaiser Bengali & GoS	Post-Covid Economic Management – position paper that informed Sindh's Policy Strategy Action Matrix	State must take lead; "some shift towards 'autarky' may become necessary". Food security, medical textiles, medicines, water supply and sanitation, health and education services should be key areas of focus
Mr. Asim Bashir Khan & Finance Dept., GoS	Post COVID Crisis – Fiscal Stimulus, Economic Recovery and Social Protection: Concept Note and Policy Strategy Action Matrix	Provides policy action matrix on wide range of affairs – ranging from subsidies, taxation, soft loans, governance, digitisation
Planning & Development Dept (P&DD), GoS	COVID-19: Sindh's Macroeconomic & Socio-economic Impact Assessment & Development Response Framework	Assesses the estimated impact of the outbreak to adopt evidence-based strategic planning and policy formulation. Identifies prioritized areas of intervention for the Government to guide economic recovery and social

		protection of the vulnerable segments of population.
UNDP	COVID-19 – Pakistan Socioeconomic impact assessment & response plan	50 percent of households rely on agriculture & livestock as income source. Lays out multidimensional aspects of the COVID-19, and a strategy to minimize, mitigate and manage its adverse

In addition, several reports and opinion pieces published in local dailies, especially The News, Business Recorder, Dawn and Express Tribune have been reviewed to develop a timeline of salient events and policy measures to augment our understanding of the background and implications of the policies adopted and communicated by different institutions. Due to time constraints, the team was not able to review local dailies being published in Urdu or other languages.

At this stage, it is important to highlight an important research gap. Exploratory review of the available literature shows that despite a noisy 'lives-versus-livelihood' debate that marked the first three months of Covid-19 in Pakistan, the impact of COVID-19 on sub-national economies was poorly studied. Save for a few exceptions², one is hard pressed to find cross sectoral estimates of losses to jobs and economy across provinces. This is a combined result of weak civil society institutions at provincial level, weak institutional and research capacity in provincial governments, and the case of missing and/or outdated economic datasets³, especially in so far as rural economies are concerned. As such this limitation, prevents detailed provincial and district-level analyses, and should be construed as a part of one of the key findings of this paper.

It needs to be emphasized here that the results of poll-based surveys undertaken by various organizations suffer from self-selection bias. Social distancing measures meant that most surveys were conducted online, and thus were restricted to enterprises with access to web. Moreover, segments related to rural economy are particularly underrepresented, including agricultural enterprises, wholesale and retail trade, transport, and communication. Geographically,

² ITC 2020; Nasir, M & Faraz N 2020; & Gallup 2020. But these too, do not dwell on losses to sectoral output across provinces. The latter two rely on labour force estimates to assess employment vulnerability in sectors across provinces, whereas the ITC study relies on a poll-based survey. SMEDA 2020 also relies on rapid response survey but does not shed light on comparative provincial impact

³ More on SME data limitation in next section.

respondents from rural Sindh are underrepresented in the surveys. In the case, where estimates of losses to economic output and Covid-19's impact on poverty and unemployment were available, the methodology was acknowledged to be crude by its authors.

The findings of this paper are not exhaustive, given the tight constraints of time⁴ and resources that did not allow a physical visit to district-level administration, whereas rains in Karachi kept a check on smooth research operations in the city during the while team was visiting Sindh Secretariat. That the center and Sindh are marked by information and data deficit in agriculture, industries and other economic sectors added to the constraints. The team has tried to fill up some of the information gaps through telephonic and online inquiries, including consultations with business associations.⁵

3. Assessment of Economic Impact

a. Damage Assessment Efforts at National Level

The impact of lockdown imposed to curb the spread of Covid-19 pandemic in Pakistan is still unfolding.⁶ But literature indicates that MSMEs segment in Pakistan was largely ill-equipped to adapt to the crisis resulting in reduced operations, disruption in supply chain, liquidity crunch, and inability to service orders.

The extended lockdown and its impact on MSMEs also contributed towards job insecurity and unemployment in sectors that are largely undocumented, The informal employment mechanisms lack healthcare and other benefits, such as enrolment in social services programs such as by Employees' Old-Age Benefits Institution (EOBI). This not only frustrated official efforts to mitigate the health impact of Covid-19, but also resulted in public resentment towards disease mitigation measures such as lockdown of trade and commerce.

⁴ The deadline for the first draft of this paper being three weeks.

⁵ Assistance towards collecting some of this important data and information was provided by Mahnoor Arshad and Sohaib Jamali.

⁶ The authors of this report have benefited from their meetings and work in collaboration with EU GRASP program.

Initial estimates suggested GDP contraction of 1.3 percent⁷. This was later revised to contraction of 0.4 percent due to better than expected performance of agriculture sector, as per provisional estimates released by National Accounts Committee in May-2020. However, contraction in various sub-sectors manufacturing and services sectors was more pronounced.⁸

Pakistan does not produce quarterly GDP, which makes it difficult to separate economic performance in the quarter ending June 2020, the period in which the impact of Covid-19 on economy would have been most visible.

However, the Large-Scale Manufacturing (LSM) Index reported every month provides a clue. By the nine months ending March 2020, the LSM for 9MFY20 was down 5.4 percent; however, by June 2020 the full year FY20 LSM was down 10.2 percent. This clearly reflects the impact of COVID-19 in the last quarter.

Pakistan also does not officially produce provincial or sub-national GDP estimates on annual basis, leading to gaps in understanding of trends in provincial economies, which in turns impairs effective decision making by both federal and provincial governments as well local and international development partners.

In terms of jobs, preliminary estimates conducted by Pakistan Institute of Development Economics (PIDE) showed that lockdown measures and resultant slowdown in economic activity could result in high levels of unemployment. In case of limited restrictions, PIDE estimated that job losses may stand at 1.4 million; under moderate restriction, loss of employment could reach to 12.3 million; in the case of complete shutdown, up to 18.53 million people may have been rendered unemployed⁹.

Estimates of impact on micro, small, and medium enterprises (MSMEs) are similarly dire. According to International Trade Center, globally SMEs have faced “decrease in demand, financial instability, job insecurity, and disruptions in supply chain”¹⁰. Annual Economic Survey notes that SMEs may not only see mass layoffs and furloughs, but severe cash flow and liquidity crunch the impact of

⁷ World Bank (2020). “The World Bank in Pakistan”.

<https://www.worldbank.org/en/country/pakistan/overview> Accessed on: 12 August, 2020

⁸ National Accounts Committee (2020). “Real Growth Rates of GDP at constant basic prices of 2005-06”. Accessed on: 13 August, 2020

⁹ Pakistan Institute of Development Economics (2020). Covid-19 Bulletin no. 4: Sectoral Analysis of the Vulnerably Employed – Covid-19 and the Pakistan's Labour Market. <https://www.pide.org.pk/pdf/PIDE-COVID-Bulletin-4.pdf> Accessed on: 12 August, 2020

¹⁰ International Trade Centre (2020). “SME Competitiveness Outlook 2020: COVID-19: The Great Lockdown and its Impact on Small Business”. ITC, Geneva

which may be compounded due to largely informal nature of the segment¹¹. Lack of documentation of businesses further limits the efficacy of any administrative measures taken for targeted relief and intervention, such as monetary stimulus by the central bank to extend loans for salary support and working capital requirements.

Any estimate of damage, however, must account for limitations in data availability, which faces serious challenges of credibility due to obsolescence and lack of robustness in methodology employed. Various government census such as Census of Economic Establishments are at least 15 years old and thus outdated, as fresh census exercise has been long overdue. The challenge is particularly magnified for the rural segment of the economy, where estimates available are invariably outdated: Agricultural Machinery census was last conducted in 2004; Livestock Census in 2006; Mouza/Village Census in 2008; and Agriculture Census in 2010.

Moreover, no official consensus even exists on total number of MSMEs in the country, as official quarters rely on various proxies, given extensive nature of informality, and lack of registration or documentation in the segment, usually for tax evasion purposes.

According to a SME Policy, 2007 that uses commercial and industrial electricity connections as a proxy, 90 percent of total economic establishments in Pakistan consists of SMEs¹². Various estimates arrived at using GDP and population growth rates places number of these enterprises anywhere between 3.8 – 4.75 million¹³. Consider also that these estimates do not include micro-enterprises, which may number up to two or even three times the total numbers of SMEs in the country¹⁴.

As a result, both government and private sector lack material insights on MSME and rural economy. This reduces the efficacy of the analysis, as both local and international research organizations and policy think tanks base their analyses on data that is in some ways obsolete. This is an outcome of historic indifference to developments of SMEs at policy-level, especially for those in rural economy.

Despite the challenges of measurement and reliable estimates, the integral role of SMEs in a developing economy cannot be overemphasized. According to

¹¹Finance Ministry, Government of Pakistan (2020). Annual Economic Survey 2019-2020. http://www.finance.gov.pk/survey/chapter_20/PES_2019_20.pdf. Accessed on 12 August, 2020

¹² Karandaaz (2017), "The Legacy of Toxic SME Assets in Pakistan. <https://karandaaz.com.pk/blog/legacy-toxic-sme-assets-pakistan/> Accessed on 12 August, 2020

¹³NEPRA (2018). State of Industry's Report, 2018. <https://www.nepra.org.pk/publications/State%20of%20Industry%20Reports/State%20of%20Industry%20Report%202018.pdf>. Accessed on 11 August 2020

¹⁴ Interviews with private sector.

SME Asia Finance Monitor 2014, on average SMEs account for 96 percent of all enterprises in the Asian region¹⁵. Sustainable Development Policy Institute places SME contribution to GDP at 40 percent; to exports at 40 percent; 80 percent to non-agricultural employment; and 35 percent to total value addition¹⁶.

Attempting to measure the impact of lockdown, the SDPI study noted in April 2020 that over two-thirds of SMEs would struggle to survive beyond three-month due to cashflow crunch¹⁷. As SMEs operate outside the formal sector, access to finance is constrained even under ordinary circumstances. According to State Bank of Pakistan (SBP), only 0.18 million SMEs have access to financing from commercial banks, while 0.2 million micro enterprises have access to credit from microfinance lending institutions. As a result, it is questionable whether these enterprises have been able to benefit from relief measures announced by SBP to manage their liquidity crunch.

According to a survey conducted by Karandaaz Pakistan, of 123 self-selected SME respondents, nearly half had either laid off employees or reduced employee salaries. One-third expressed fears of insolvency within a month of lockdown; more than three-fourths noted having faced supply chain disruptions, which included both exporters and domestic-focused enterprises.¹⁸

Similarly, study conducted by SMEDA in April-2020 noted that up to 95 percent of surveyed enterprises experienced reduction in production and supply chain disruption. One-fourth of respondents reported loss of up to hundred percent of export orders. Close to half of the enterprises admitted having laid off workers. However, up to 84 percent of these organizations planned to rehire employees within a quarter, provided the lockdown were to be lifted¹⁹.

b. Damage Assessment Efforts by Sindh Government

The overall GDP loss in Sindh for FY20 was estimated in the range between \$2.25 billion to \$2.31 billion in two analyzed scenarios (Annex-A). In Industrial sector,

¹⁵Asian Development Bank (2014). Asia SME Finance Monitor 2014. <https://www.adb.org/sites/default/files/publication/173205/asia-sme-finance-monitor2014.pdf>. Accessed on 12 August 2020

¹⁶ Javed S. (2020), SDPI. "Projected Impact of Lockdown on SMEs in Pakistan", <https://sdpi.org/wp-content/uploads/2020/04/COVID-19-Impact-of-Lockdown-on-SMEs.pdf> Accessed on: 12 August 2020

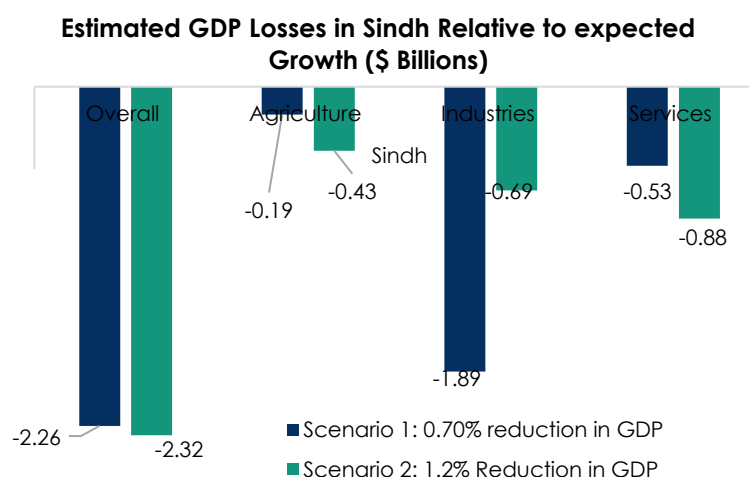
¹⁷ Ibid

¹⁸ Karandaaz (2020). "Survey Findings: Impact of Covid-19 on SMEs (April 2020)".

¹⁹ SMEDA (2020). "Survey Report: Impact of Covid-19 on SMEs".

losses will range between \$0.69 billion to \$1.89 billion while in services sector losses were in the range around \$0.52 billion to \$0.87 billion. In agriculture, losses will range from \$0.1858 to \$0.42 billion. To stimulate economic activity, GoS needs to adopt multiple policy responses.

SMEs form close to 90% of all enterprises in Sindh and generate 40% of non-agriculture employment. In Sindh 41% of employed persons are engaged in informal sector and 54.48% of individuals earn income of Rs.15, 000 and below.²⁰ According to estimates of Pasha, H and Karder, S (2020)²¹, 10.5 million people will be temporary out of employment which includes daily wage and contractual workers. So, it is estimated that in Sindh (23% share of employment), 2.4 million people will be temporarily out of employment. Additionally, as impact of COVID-19 transpires, 2.8- 4.3 million people will be out of jobs in Sindh²².



Source: P&DD, GoS

Gallup Pakistan's publication from June 2020 estimates up to 28.1 percent of labor force in Sindh at high risk of unemployment. Gallup estimates that one-third of those at high risk of losing unemployment work in Karachi, while remainder two-thirds are employed in interior regions of the province²³.

²⁰ Labor Force Survey (2017-18)

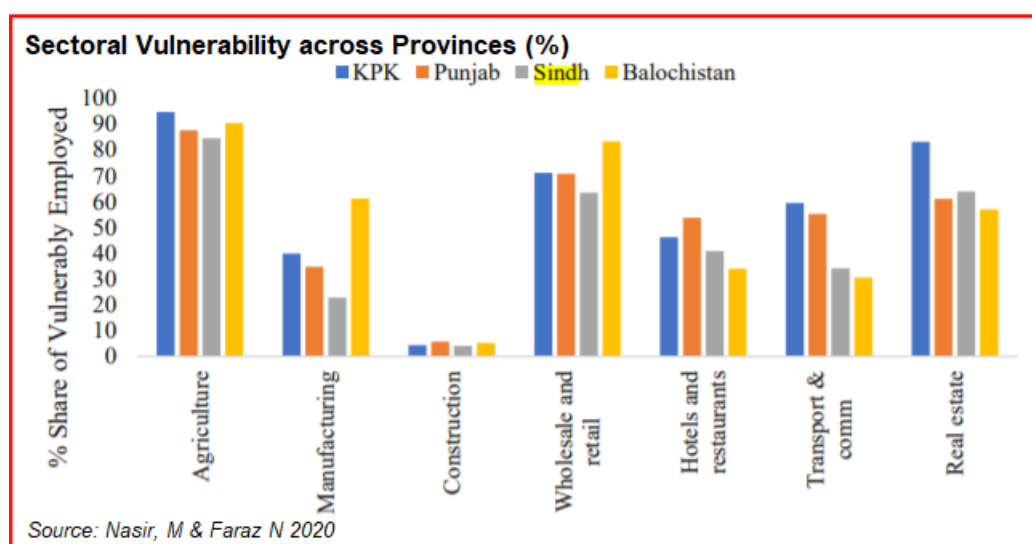
²¹ Pasha, H and Karder, S (2020), Economic Impact of Corona Virus and the Relief Package

²² Estimates for Sindh based on COVID-19 Impact: Preliminary Macro-Economic and Socio-Economic Assessments, Sub-Committee of NCC,

²³ Gallup Pakistan (2020). "Pakistan Labor Force At Risk".

However, when analyzed as percentage of regional population, Gallup estimates that up to 42 percent of labor force in Karachi is at high risk of unemployment. For interior Sindh, the ratio stands at as high as 35 percent of total provincial labor force.²⁴

In their provincial level analysis of vulnerable employment across sectors, Nasir & Faraz²⁵ show that the share of vulnerable employment in various sectors varies across the provinces. Sindh's labour force is seen most vulnerable in agriculture and wholesale and retail trade.



In Sindh, the review on rural economy also cast dark shadows; close to half of both agri-businesses and farms in the MSME segment reported being strongly affected by the pandemic, anticipating closure of business for a period of up to six months.²⁶ Up to 98 percent of the agribusinesses and 94 percent of farms interviewed by GRASP²⁷ in May 2020 said “their business operations had been affected by the pandemic, with half of them reporting as being strongly affected”²⁸.

²⁴ Ibid

²⁵ Nasir, M & Faraz N, 2020, Labour Market and COVID-19: Provincial-Level Analysis of Vulnerable Employment Across Sectors, PIDE, Available at <https://www.pide.org.pk/pdf/PIDE-COVID-Bulletin-13.pdf>, Accessed on 11 August 2020

²⁶ International Trade Centre (2020). “Competitiveness of Rural MSMEs & their resilience to Covid-19 crisis – Evidence from Sindh

²⁷ Growth for rural advancement and sustainable progress (GRASP) programme (<https://www.intracen.org/GRASP/>)

²⁸ Ibid

More than three-fourths of agri-based MSME enterprises in Sindh reported temporary shutdown as the biggest challenge caused by Covid-19. This sentiment was also echoed by farm based MSMEs in the province.²⁹

Other challenges such as employee absence, reduced investment, and administrative bottlenecks were reported to a lesser degree. However, majority of MSME respondents (both agri-based businesses and farms) agreed to have been affected by supply chain disruption, while nearly half reported lower sales to firms and consumers, and delayed payments and defaults as significant challenges faced.

Sindh has no government-wide integrated formal process for damage and need assessment, even as certain departments, such as health, may do such assessment regularly on their own³⁰. Accordingly, no sector-wise damage and need assessment was conducted, nor were (sectoral) strategies formulated to cope with future waves of COVID-19.

Two studies with somewhat broad scope of work were conducted by external consultants, one by Dr Kaiser Bengali³¹ and other jointly by Mr. Asim Bashir Khan in collaboration with Sindh's Finance Department³². The former study informed the latter, whereas the latter informed the provincial Annual Development Plan (ADP), which is the main instrument used by the province towards its economic response to COVID-19.

In addition to these two studies, which will be discussed in next section, Sindh's Industries Department had tasked Sindh Small Industries Directorate to conduct a survey of losses to small industries. Preliminary findings of the survey were compiled in the form of report by mid-August 2020. The findings of the report was not made public at the time at the time of finalizing this paper; we are told that the findings were being reviewed and corroborated with provincial Labour Department which monitors wages, layoffs and other labour related affairs.

However, long before the commissioning of the survey by Sindh's industries department, there was a general consensus among Sindh's policymakers from the outset of COVID-19 that purchasing power will shrink as a result of lockdown; that COVID-19 will affect high density urban centers (Karachi, Sukkur, and Hyderabad) more than other regions of the province; and that the only sector

²⁹ Ibid

³⁰ Consensus among respondents from Sindh

³¹ Bengali, K (2020). "Post-Covid Economic Management", unpublished

³² Asim Bashir Khan & Government of Sindh (2020). "Post COVID Crisis – Fiscal Stimulus, Economic Recovery and Social Protection: Concept Note and Policy Strategy Action Matrix", unpublished

likely to remain protected from the loss inflicted by the pandemic is agriculture where practicing social distancing is relatively easier.

Interaction with Sindh's Agriculture Department officials reveal that soon after the lockdown began, Sindh's home department was requested to exempt agriculture sector services, such as movement of farm machinery and labour for harvesting, from the list of banned activities. As a result, agriculture was added to essential services during the wheat harvest and kharif sowing season. Likewise, distribution and retail of pesticides, chemicals and fertilizer in the province was largely unaffected by lockdown. However, according to Sindh's livestock department, regular breeding services to poor livestock farmers suffered badly from COVID-19 as several important tasks such as bovine semen collection, distribution of bovine semen, and artificial insemination were disturbed during the lockdown.

Following the direction by Sindh's Cabinet, a consultation process was kicked off which requisitioned proposals from relevant departments for reinforcements/incremental allocations/budgetary support measures required by them to exercise relief interventions. The broad contours of interventions were decided for departments of food, agriculture, home, social welfare & services, irrigation, livestock, fishery, finance, planning & development, investment and other relevant departments.

There are some province-specific activities which influence the output and productivity of MSMEs. Karachi being the leading port city provides backward linkages to various rural and urban MSMEs. It is not clear at this point how closure of ports for several days, reduced hours of work, and implementation of new SoPs in line with WHO rules may have impacted the output of MSMEs involved in the port supply chains. Pakistan Afghanistan Joint Chamber of Commerce and Industries has reported delays and implications for MSMEs involved in the Afghanistan Pakistan transit trade operations (including transport, packaging, storage, warehousing etc.)

Another aspect that will require assessment is to see how farm and non-farm output in rural areas continued to be affected as COVID-19's immediate impact was prolonged due to unprecedented scale of locusts attack in various districts of the province. A prolonged spell of rains during the July and August months is set to also extend until September. This according to anecdotal evidence also had disease-related implications for the livestock sector.

Impact on small exporters in agriculture and livestock space also requires a dedicated assessment. Current surveys are not comprehensive for all sub-sectors in which small exporters operate. Safeguarding this segment of private

enterprise is also becoming difficult as small and medium sized exporters in agriculture space are informing of border closures in buyer countries (particularly those countries facing further rounds of COVID-19), and higher costs faced due to new hygiene related trade and port conditions. The small exporters in rural economy are also unable to access the usual tax related exemption schemes offered by FBR for traditional export sectors such as textile and garments.

As the first wave of COVID-19 subsides, the threat to lives and livelihoods persists. A COVID-19 vaccine if it proves effective, could save future costs, however it could be several months and possibly years before GoS will have the capacity to vaccinate everyone. The concerns about reinfection even after the vaccine also persist. There is also lack of consensus if currently available vaccine options adequately cover the new strains of coronavirus that emerged in UK and some other parts of the world.

The best possible interventions at hand include: detecting disease, reducing the number of new cases, and limiting mortality—and these can be tailored for specific populations and settings. For this, GoS still needs to envisage a medium-term plan even when vaccines become a possibility for all.

c. Modelling the Future COVID-19 Waves

The following key assumptions have been used for modeling the impact of any future wave in FY21. A financial programming model available with the Economic Advisor's Wing, Ministry of Finance has been used to simulate the impact of a future wave of COVID-19.

Production & Prices

We assume most annual sectoral growth rates seen in FY20 constant for FY21. However, a downward shock is assumed for the following select sectors and their growth in FY21.

1. Decline in LSM: This is assumed at half of the Annual Plan target of FY21 considering that instead of 'hard lockdown', the government will be resorting to 'smart lockdowns'. The model may not allow monthly change in LSM, however we considered an annual growth of -1.25% after consultations with the Pakistan Bureau of Statistics.
2. Decline in Wholesale and Retail Trade (WRT): Given the share of the manufacturing sector in WRT, we are assuming the growth @ 0.55% for FY21.

3. Decline in crop sector for FY21 is assumed at 0.9%.
4. Inflation outlook – CPI growth: Due to expected market failures in the wake of a future waves of the pandemic we have assumed a slightly higher growth vis-à-vis the target in Annual Plan i.e. 8%.

Fiscal sector

1. The FBR revenue target is assumed to decline by half of the difference between pre-Covid projection and actual receipts for FY20. For FY21, FBR target is assumed at PKR 4653 billion. Likewise, petroleum surcharge = PKR 350 billion; provincial revenue = PKR 455 billion.
2. In the wake of possible reduction in tax collection and other inflows, federal PSDP = PKR 500 billion (in FY21); consolidated provincial ADP = PKR 600 billion.
3. The expenditure on subsidies could remain high. We are projecting this to be half of FY20 i.e. PKR 454 (FY21)
4. Provincial surplus of PKR 242 billion may not be realized. A surplus of PKR 100 billion has been assumed.

Balance of payments

1. Changes in export of goods: half of targeted growth rate of exports could be lost. Export growth rate for FY21 is therefore assumed @ 0.75%
2. Changes in import of goods: a quarter of targeted growth rate of imports could be lost. Import growth rate for FY21 is therefore assumed @ 0.95%.
3. The recent increase seen in remittances from abroad could taper. Among other things, this is also attributed to lockdowns being extended in US, EU, and Middle East. In light of our discussion and literature we are assuming a 3% decline.
4. Our assumption for interest rate for FY21 is that of 'no change', while exchange rate is assumed at PKR 166 = 1 USD for FY21, going up to PKR 185 = 1 USD by FY24.

Based on the above mentioned assumptions, our team projected in August 2020, a 2.0% GDP growth for FY21. This is in line with the E.A. Wing, Finance Division's projection of 2.1%. We are however projecting a higher inflation level, partially attributed to a larger fiscal deficit. The deficit is large vis-à-vis Finance Division's projections given a lower revenue collection assumed in a weak growth milieu.

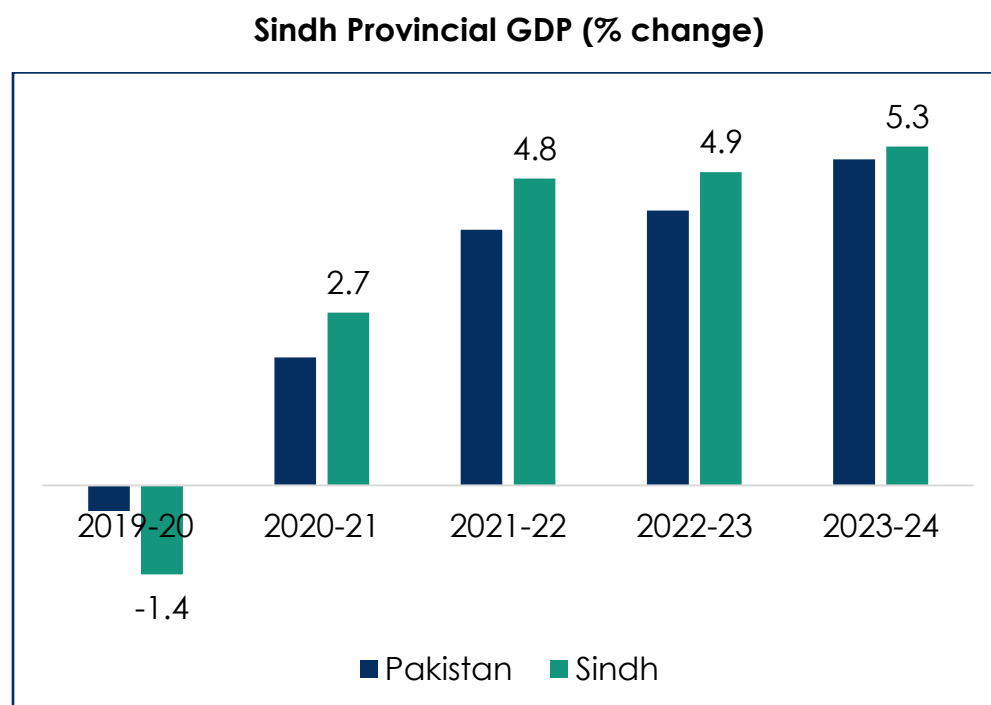
Pakistan: Macroeconomic Framework, FY 2020 – FY2024									
Indicators	FY 2019	Baseli ne		FY 2021			FY 2022	FY 2023	FY 2024
		FY 2020		MoF ³³	PFM Team				
(Annual percentage change)									
Output and prices									
Real GDP at factor cost	1.9	-0.4 ³⁴		2.1	2.0		4.0	4.3	5.1
Consumer prices (period average)	6.8	10.74		6.5	8.5		8.0	7.7	7.2
Nominal GDP (market prices) Rs. Billion	37,972	41,727		45,567	45,647		50,961	56,410	62,235
(In billions of U.S. dollars, unless otherwise indicated)									
Balance of payments									
Current account balance	(13.4)	(3.0)		(4.4)	(3.8)		(6.6)	(4.1)	(4.8)
Current account balance (% of GDP)	(4.8)	(1.1)		(1.6)	(1.4)		(1.5)	(1.8)	(2.0)
Exports, f.o.b.	24.3	22.5		23.7	22.7		23.6	25.1	27.2
Imports, f.o.b.	55.7	42.4		44.5	42.8		44.9	48.1	51.8
Workers' remittances	19.9	23.1		20.8	22.4		23.5	24.7	25.9
Exchange rate (=1USD)					166.0		173.5	177.0	185.0
(In billions of Rs, unless otherwise indicated)									
Public finances									
Revenue and grants	4,934	6,306		7,291	6,734		7,358	8,532	9,738
Revenue and grants (% of GDP)	13.0	15.1		16.0	14.8		14.4	15.1	15.6
Tax Revenue (FBR)	3,829	3,998		4,800	4,653		4,957	5,713	6,460
Expenditure	8,346	9,648		10,435	10,353		11,008	11,955	12,842
Expenditure (as % of GDP)	22.0	23.1		22.9	22.7		21.6	21.2	20.6
Overall fiscal balance (including grants)	-3,412	-3,343		-3,144	-3,619		-3,650	-3,423	-3,104
Overall fiscal balance (including grants) (% of GDP)	(9.0)	(8.0)		(6.9)	(7.9)		(7.2)	(6.1)	(5.0)

Source: PFM Team and EA Wing, MoF.

³³ MoF: Projections by EA Wing, Finance Division. PFM: Our projects based on assumptions described above. Our assumptions are relatively more optimistic compared with those adopted by the multilateral bodies projecting Pakistan's GDP between 0.5 to 1%.

³⁴ This provisional estimate may have been lower as it was based on 9-months data of National Accounts Committee (NAC). The final estimate will be provided during the NAC meeting in May 2021.

In line with the P&DD's earlier calculations our working reveals that due to the higher share of industries sector in Sindh's economy, the net industrial losses could be higher in the province vis-à-vis national losses. Due to this recovery in Sindh during 2020-21 and beyond could be slow even under an optimistic scenario (i.e. where no hard lockdowns are in place).



Source: PFM

Based on the above-mentioned scenario, and our discussions with the Finance Department, the updated fiscal framework for Sindh province is provided below. As the timeline for the pandemic outbreak is still uncertain therefore expenditure needs and deficit remains large even in FY22. However, the growth in deficit is lesser than FY21. While some growth in provincial tax revenues is expected however an increased reliance on non-tax revenues will continue. In terms of expenditure prioritization, education and social protection could take a lead during the post-pandemic phase as per our consultations with GoS.

Sindh: Fiscal Framework, FY2018 – FY2022 (PKR Billion)

Sindh	FY18	FY19		FY20		FY21	FY22
	Actual	BE	Actual	BE	Actual	BE	P
Total Revenue	783	923	810.3	1129	829	1088.1	1129.6
Federal transfers	592	680	624	840	637	774.7	805.7
Tax Revenue	175	223	177.3	267	183	263.5	274.0
Non Tax Revenue	15	20	9.1	22	10	49.9	50.0
Total Expenditure	854	1,117	782	1,154	794	1,202	1225.5
Current Expenditure	620	773	659.2	870	691	969	986.5
Education	152	205	152.9	216	164	236.2	240.9
Health	83	100	91.9	117	112	135.9	138.5
Social Protection	7	9	7.7	10	7	35.3	35.9
Inter-governmental transfers	57	71	66.5	75	68	78	78
Others	322	388	340	453	341	484	493.1
Development Expenditure	235	344	122.6	284	103	232.9	238.9
Education	12	24	9.1	26	6	27.5	28.3
Health	5	12	6.2	15	7	30.5	31.3
Social Protection	109	62	42.7	63	35	31.6	32.4
District ADP	26.7	30	11.1	20	5	15	15.4
Others	81	216	54	160	51	128	131.4
Sindh Fiscal Balance	-71	-194	28	-25	35	-114	-95.9

Financed By

Loans (Net) ,public account, capital receipts and other Assets	81	169	-6	26	30	85	-
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Sindh Cash Balance³⁵	10	-25	22	0	65	-29	-
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Source: PFM Team. BE: Budget Estimate, P: Projected

Our projections reveal that Sindh fiscal framework will remain under pressure as timeline for COVID-19 crisis extends. A higher fiscal effort will be required to

³⁵ Updated in September 2020.

mobilize own revenues under a grim production outlook. Second, further increases to both recurrent and development spending may not be possible in real terms. Third, projections around health and social protection are subject to the assumption that the (health) incidence of future waves of COVID-19 will not be as harsh as the first instance. Fourth, it is likely that in the event of short fall in provincial tax revenues, we could see a higher level of non-tax revenue mobilization.

We have also held some consultations to see if procurement of COVID-19 vaccine could put pressures on Sindh's fiscal framework. Currently, we don't see this as a major risk. The federal government has already increased its allocation for acquiring the vaccine. This allocation was increased on December 12, 2020 to USD 250 million from earlier figure of USD 150 million.

This amount however will only be sufficient for the first two phases i.e. vaccination of healthcare workers attending to Covid-19 patients and population over 65 years, and second phase where remaining healthcare workers and people over 60 years of age will be provided vaccine.

The support from GAVI is also available which will vaccinate 20 percent of the national population i.e. 45 million citizens. The trials of Chinese vaccines are also nearing their end. Depending upon the success of these trials it is expected that Pakistan may get up to 500,000 doses by end-February 2021.

For the rest of the population, budgetary estimates are being firmed up. The main costs include capital expenditure on storage infrastructure, transport costs, hiring of healthcare workers, orientation to health care workers, outreach to convince masses to get vaccinated on priority. As per information provided by Ministry Of National Health Services, Regulations and Coordination, it is expected that financing of COVID-19 vaccine will be federal government's responsibility and existing Expanded Programme for Immunization (EPI) setup will be utilized to administer vaccines. There is a decision of Council of Common Interests dated 28th April 2011 which guides that any emergency immunization needs will be vertically funded.

In terms of the timeline it is clear that while frontline workers and old-age population in urban areas may get some doses in 2021, however availability of this vaccine and administrating this across the province could take another two years as per current analyses by Health Department.³⁶

For the future waves it will have to be seen if GoS is keen to increase testing process and accordingly budget estimates for health sector may be firmed up.

³⁶ 'Covid second wave likely to intensify'. The Express Tribune. December 13, 2020.

Currently 16000 to 18000 tests are conducted every day in the province – still lower than what is recommended by international bodies for a population as large as Sindh.

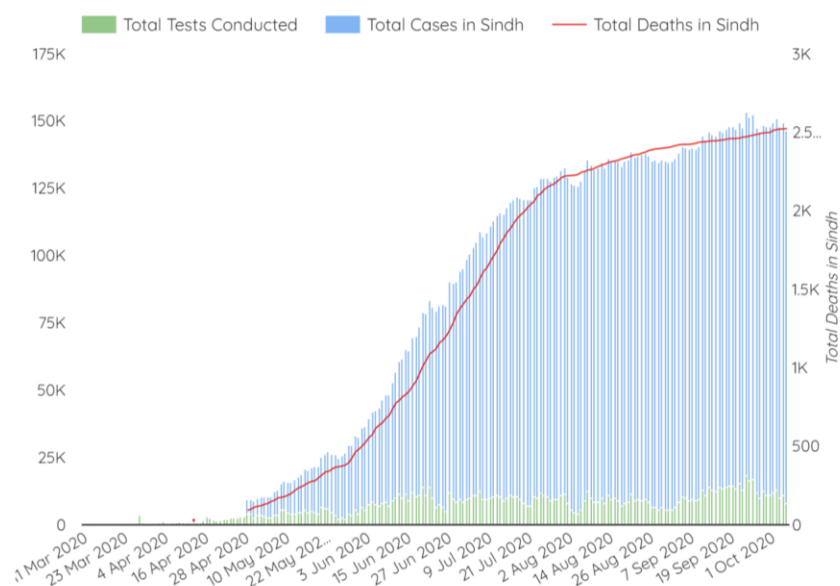
d. Select Sectoral Assessments

Health

The first and foremost challenge for Sindh's health system was to augment human resource. In the face of rising number of cases (Figure below) the number of doctors, nurses, and other staff was found inadequate to tackle with the outbreak.³⁷ The track, trace and treat system proved to be a substantially complex activity for the existing resources. The estimates regarding possible addition to existing staff were at best guestimates. The government of Sindh hired temporary health professions for a period of 89 days to support the efforts of already available human resource at hospitals and other facilities. This included more than a thousand doctors and 1500 nursing staff members. Currently, more informed evidence is required on how much of this staff is needed during future waves of Covid-19 to support in intensive care units, higher dependency units and isolation wards.

³⁷ "COVID-19 cases rise to 464 in Pak, Sindh looking to hire more doctors." Accessed from <https://www.bignewsnetwork.com/news/264362214/covid-19-cases-rise-to-464-in-pak-sindh-looking-to-hire-more-doctors>, accessed on October 6, 2020.

Burden of disease in Sindh



Source: <http://covid.gov.pk/stats/sindh>

This will also have financial implications. This additional staff was initially hired on contract basis. A well thought out plan is required now whether to extend their contracts, or as some in Sindh Government are calling for a regularization of their services. Those demanding regularization are of the view that significant investment has been made to train these professionals. In case Sindh plans to have more facilities across the province to defend against infectious diseases, the same human resource could be absorbed in the new units – a view not shared by all given the fiscal costs.

Public's awareness and attitude towards COVID-19 pandemic has also posed challenges for the provincial government. A survey analysis presented in Ali (2020)³⁸ indicates that “every 5 out of 10 respondents believed that the most susceptible persons for COVID-19 are adults and older age groups and only 4 out of 10 respondents understand that COVID-19 is not age specific. When asked about chances of recovery after getting infected by COVID-19, only 5 out of 10 respondents were aware that there are more than 97% chances of recovery after getting infected from COVID-19”. In some segments of

³⁸ Ali et al. (2020) “Awareness, Attitude and Practices Related to COVID-19 Pandemic in General Public of Province Sindh, Pakistan”. Pakistan Journal of Medicine and Dentistry, vol. 9, issue 3.

populations where there is a perception of low survival probability after COVID-19, patients and their families faced stigmatization in several ways.

Among the other challenges faced by the health sector was discontinuity in routine immunization services. The coverage of essential immunization services went down drastically during the initial days of outbreak. Sindh EPI offices were augmented through support from the Ministry of National Health Services, Regulations and Coordination to accelerate outreach and provide coverage to children in existing EPI centres and integrate EPI and PEI to achieve economies of scale in this effort.

The traditional donors of EPI including the World Bank Group, GAVI, Bill and Melinda Gates Foundation and USAID have also been in touch regarding the putting of routine immunization back on track. It is expected that in the coming days efforts will have to be expedited through interventions at fixed sites, outreach points and mobile units for protecting target population against 10 vaccine preventable diseases and approximately same number of pregnant women and women of child bearing age by vaccinating them against Tetanus. GoS has only recently introduced Typhoid Conjugate vaccine in its routine immunization schedule.

Health sector also faced the challenge of another outbreak in 2019-20, dealing with which became more difficult amid COVID-19. Planning Commission's Annual Plan FY21 noted "there was a setback with recent outbreak of more than one thousand new HIV cases in Larkana district, the situation being declared by WHO as a "Grade 2 Emergency" requiring urgent need of Anti-Retro Viral medicines, Rapid HIV Diagnostic Kits (RDTs) and strengthening of Infection Prevention and Control at Health Facilities. The required funding gap of Rs195 million was pledged by Global Fund to Fight AIDS, Tuberculosis and Malaria."

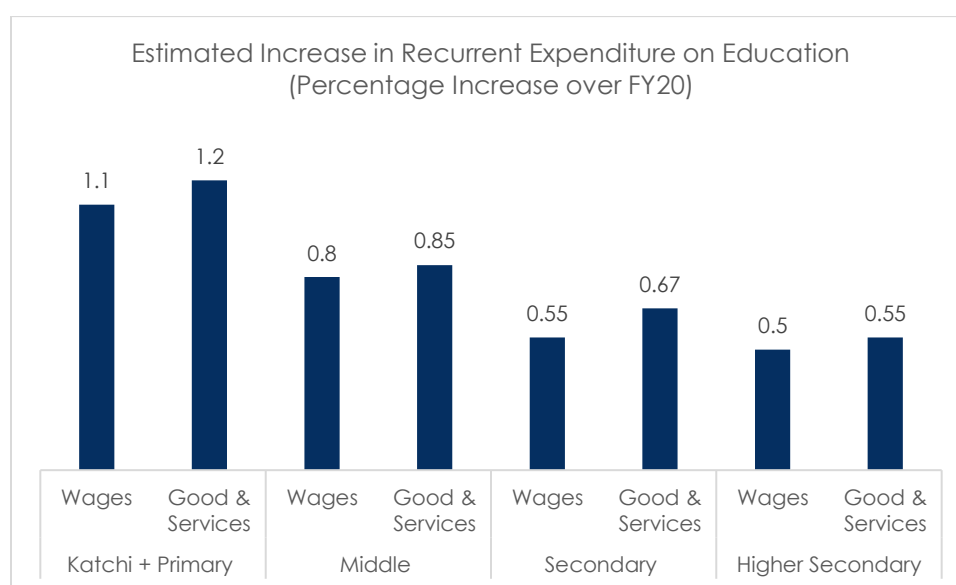
Going forward, there remains a need for an exercise where all institutions responsible to respond to healthcare needs during current and future COVID-19 rounds have greater clarity on the demands on their capacities. This includes not only responders such as the Health Department and PDMA but also regulator - Sindh Health Care Commission.

Education

The closure of over 43,000 schools in Sindh during the outbreak has left a clear education divide. While some schools and their clients were able to pivot and enjoy online delivery of teaching, most could not undertake such an effort

which involved time and financial costs. The underlying digital divide in the country has heightened the fears regarding widening of inequalities in educational attainment and learning. Most schools, including private ones are not sure if this year's curriculum will be covered in-time even after the opening of the schools.

In August, the provincial authorities initiated efforts to communicate SoPs to school authorities including providing financial and PPE-related support to public sector schools to open their campus. Furthermore, a parallel exercise was conducted to arrange the necessary budget to provide PPE, disinfectants, and related equipment in all schools. This budgetary impact (estimated in figure below) will now have to be factored in all annual budget demands until the time medical solutions for COVID-19 becomes available. This was followed by a monitoring exercise to check if SoPs were in place by early September and if schools, colleges and universities could be allowed to open.



Source: PFM Team

After mid-September, as schools started to open, the next challenge faced by the schooling system was to ensure cooperation with health authorities and enable regular random tests of faculty and students. This exercise did yield results and schools where incidence of COVID-19 was found at dangerous levels were shut again. The October 2020 report by Directorate General Monitoring and Evaluation indicated that "857 schools were found violating social distancing guidelines, 1,039 did not have proper facilities to wash hands or

sanitizers, the classrooms at 807 schools were not being disinfected, 1,204 schools did not have clean toilets and 1,352 schools did not display guidelines about coronavirus".³⁹

The above mentioned also calls for a large-scale behavioral change exercise which is now required in the education sector. The teaching and administrative staff has to be convinced about the threats posed by future waves of Covid-19 and how this could jeopardize the lives and livelihoods of pupils' households. Such an intervention has to be part of the responsibilities of school management committees which at many places are not effective or lacking budget. In the case of some committees it was found that funds allocated for them had not been released for the past two years. In some cases, there were human resource constraints, for example, the post of Director Secondary Schools was found vacant in cities as large as Karachi. At the lower tier of administration, even farash, qasids, and janitorial staff were found lacking in knowledge regarding disinfecting of premises.⁴⁰

The Sindh province continues to face the challenge of high numbers of out-of-school children, stubborn drop out rates and less than encouraging retention rates. It is not clear at this point how COVID-19 may have exacerbated this challenge. Once schools are fully open, the provincial authorities will need to undertake a detailed assessment based on these indicators and other goals set under SDG-4.

Anecdotal evidence informs that net enrolment rates may not present a good picture and drop out rates may have increased and children in some of the poorest parts of Sindh may have gone on to opt for part-time or full-time employment. Apart from this, past efforts to bring female students to school, through province-wide social mobilization efforts may have lost their momentum. So, the likelihood of both male and female child exiting school during COVID-19 will continue to exist during the current and future waves of the pandemic.

The impact on various other reforms in the education space still needs a careful evaluation and policy response. These include teachers training, infrastructure augmentation, improving school finances and accountability, student learning assessments, early childhood development, and school health and feeding.

The learning outcomes could present discouraging results as future COVID-19 pressures are faced by the school administrations. Already, we have evidence

³⁹ "380 school staffers test Covid-positive in Sindh". The Express Tribune. October 8, 2020.

⁴⁰ See also: "Schools in Sindh ill-prepared for Covid-19 SOPs" The Express Tribune. September 14, 2020.

from days just prior to COVID-19 outbreak suggesting “learning growth (based on Urdu, English, and Arithmetic scores) is even more disheartening. Measures from the independent assessment (on learning growth) show that test scores have fluctuated over the past five years”.⁴¹

Another emerging concern is around increase in out-of-pocket expenditure on education faced by parents. With strict SoPs in place, and several schools short on budget, parents have to invest in ensuring the essential PPE required in schools. New survey’s also reveal that parents invested in improved (or hygienic) transportation arrangements to get their children to schools. Past evidence informs that children from poor families constitute 57% of out-of-school children and this percentage could increase if schooling costs are higher.⁴²

The disruption in higher education may also be prolonged. The faculty and students have been found pointing towards inadequacies of tele-learning and home-based assignments. The problem is acute for curriculum which requires in-person use of laboratories particularly for natural science subjects. The faculty members also resisted recording of lectures and upload them online. The college education department did try to develop a YouTube channel during the first lockdown in Sindh however the uptake of this initiative was low. Teachers were not found trained in recording professionally and uploading of teaching material lacked sequence. Even with recorded lectures, access to internet remained a challenge for students in higher education across various parts of Sindh.⁴³ More accurate guidelines with helpline services is still awaiting for newly-enrolled students or those graduating this year and awaiting their final credentials.

Agriculture

From the production point of view there remained a perception during the initial days of COVID-19 that the pandemic didn’t affect the output significantly. While this was true to some extent, we however did see agriculture processing, distribution, storage, transport and even trade get affected due to district-

⁴¹ “The Analytical Angle: Why Haven’t Past Education Reforms Had More Effect?” Accessed via web: <https://riseprogramme.org/blog/analytical-angle-past-education-reforms-effect>, accessed on October 8, 2020.

⁴² “10 alarming statistics about Pakistan’s out-of-school children”. DAWN. April 10, 2015.

⁴³ “<https://www.geo.tv/latest/322027-education-for-sindh-college-students-at-a-standstill-without-government-guidelines-for-home-learning>” December 3, 2020. Accessed via web on December 18, 2020.

specific restrictions, inter-provincial transport restrictions, travel restrictions even for workers, and micro smart lockdowns faced in some areas.⁴⁴

This sector perhaps was unfortunate that amid COVID-19, locusts attack and monsoon rains also affected crop sector output. In fact, COVID-19 tested the resilience of individuals and organizations responsible for responding to locusts attack and floods in farm lands.⁴⁵ The last round of the monsoon rains ended up causing damages to the farms in some of the poorest districts of Sindh province - Badin, Sujawal, Mirpurkhas, Umerkot and Sanghar districts.

Given the food shortages faced in the initial days of lockdown, there were reports of wheat and some other items being smuggled out of the province. This phase also saw some increase in food and input prices and threatened the overall food security in the province.⁴⁶ The farmers also started to face cashflow shortages due to closure of shops in select areas of Sindh and other provinces. This in turn implied lesser savings available to invest in inputs for the next season. This was particularly the case for fruits and vegetables.

Keeping in view the above mentioned, and rising demand for fertilizer, seed, and pesticides during the Kharif season⁴⁷, the Sindh government decided in the last week of March to exempt the agriculture sector and its entire supply chain from the lockdown.

The provinces also looked towards the federal government to revive the agriculture emergency programme. Alongside, there were demands that the promised PKR 37 billion subsidy for fertilizer should be revived; farmers given compensation for their lost crops; and make aerial spray a regular feature.⁴⁸

The prevalent situation and expected future waves of COVID-19 may also force changes to goals and outputs in Sindh Agriculture Policy as well as World Bank supported Sindh Agriculture Growth Project and the Sindh Irrigated Agriculture Productivity Enhancement Project.

⁴⁴ Assessment by GRASP program has been discussed in the sections above.

⁴⁵ "Six Agriculture Dept employees died in the line of duty due to COVID-19: Ismail Rahu". Daily Times. September 23, 2020.

⁴⁶ "Sindh exempts agriculture supply chain from lockdown in view of Kharif season". The NEWS. March 27, 2020.

⁴⁷ April to June months.

⁴⁸ "Centre urged to revive agriculture emergency programme, enforce Rs37bn subsidy plan". DAWN. July 6, 2020.

Industries

The pandemic outbreak and lock downs impacted the MSMEs in the manufacturing sector through disruption in supply chains, border closures for nonessential trade, and limited demand locally and abroad. The micro-level enterprises (smaller in size than SMEs) faced several cashflow issues resulting in closure of operations for several days. We still do not have an assessment regarding how many of these units have gone out of business for good or haven't opened up after the initial COVID-19 lockdowns. There is a need to arrive at a better understanding of transmission channels through which Covid-19, low local and global demand, and volatility in prices impacted or could impact Sindh's SMEs during future waves.

For those SMEs involved in trade, we do know through recent econometric studies that a 1% decline in demand is leading to a 1.2-1.5% decline in overall sales.⁴⁹ The responses designed by public sector and central bank do well to cover some risks of private enterprises which could help minimize employment loss. However on-going debates argue that the design of such relief packages also need to take in to account how these enterprises could protect and possibly win back their business and market share as the domestic commerce and economies abroad normalize.⁵⁰

The industries department is also faced with the challenge to customize their approach of reaching the affected firms as per their sector-specific requirements. For example, the support required by start-ups, creative enterprises, and social enterprises may differ from the SMEs in traditional sectors.⁵¹

We also understand from the emerging literature that the 'missing middle' or mid-sized exporters are usually left out in crisis response. Most policies to help private enterprise end up favoring either micro and small businesses (due to their relatively large population), or large businesses (due to voice and access to policy makers). In the absence of recent census of manufacturing industries, it is therefore difficult to identify who are the mid-sized enterprises prone to risk of being downgraded to small-sized after the crisis; which sector do they belong to; and estimates and nature of their loss. It will be important to respond to their

⁴⁹ Pasha, H. A. and S. Kardar (2020) Economic Impact of the Coronavirus and the Relief Package. BNU Lahore.

⁵⁰ "Trade set to plunge as COVID-19 pandemic upends global economy", Press release, April 8, 2020, World Trade Organisation.

⁵¹ "COVID-19: Applications welcome from startups and SMEs with innovative solutions to tackle Coronavirus outbreak," accessed via: <https://connectamericas.com/content/covid-19-applications-welcome-startups-and-smes-innovative-solutions-tackle-coronavirus>, accessed on April 21, 2020.

needs as saving them eventually implies potential large firms with learning capabilities, and better future resilience.

The experience of Sindh province also indicates that access to capital speeds up recovery, but 'capital' alone is not enough when supply chains get disrupted. As we understand that there are going to be several rounds of COVID-19 therefore it is important to understand from current, new, and potential firms in manufacturing sector what their specific needs beyond 'finance' are. Also, this will highlight, why for some firms it is difficult to access financial assistance despite low interest rate. The evidence also shows that directed credit via private banks may not reach the smallest and most constrained firms.⁵² Therefore, when providing support, policymakers in Sindh will need to consider a range of instruments to ensure that particularly vulnerable firms are not left out of the support net.

Livestock and Fisheries

During the initial days of pandemic, there was a lack of clarity with regard to regulation of slaughterhouses. This situation is also being seen during the micro smart lockdowns which may well be the new normal. The traders union was of the view that they were exempt from such lockdowns due to their role in the food security. However in most urban jurisdictions of Sindh, the district administration was not of the same view and expected cooperation of this sector once lockdowns are announced. Such uncertainty has multifarious implications for the producers in this sector.

This sector is often lifeline for the poorest of the poor who are seen selling of their cattle in the face of household-level cashflow difficulties. A closure of retail-end and slaughterhouses who are buyers of this cattle could have livelihood implications for this segment of the population. The unanticipated lockdowns could also disturb the vaccination cycle of animals which in turn could result in hesitation by informed buyers to buy from unknown sources. This has been a concern for the leather sector as well.

Despite SoPs communicated by Sindh Livestock and Fisheries Department, in as early as April 18, it has been challenging to ensure compliance in the fisheries sector with requirements of social distancing, essential wearing of masks and gloves, and use sanitizers. Against the notification of April 19, 2020 there has

⁵² McKenzie, D. et al. (2020) What Can We Learn from Past Research about Policies for Small and Informal Firms in Response to COVID-19? Accessed via web: <http://pubdocs.worldbank.org/en/402511586445763447/Miriam-Bruhn-Lessons-for-Small-Firm-Policies-in-Response-to-COVID-19-v2.pdf>, accessed on April 21, 2020.

been resistance to following the new timings of landing for all types of boats and the congregation of no more than four persons anywhere on the harbour. The entry of vendors was also stopped and only KFHA and Fishermen's Cooperative Society (FCS) members were allowed to enter the harbour. The designated walk-through disinfection gates were to be installed by the FCS. No more than five buyers were allowed at a time at the auction site and once each auction is finished, the FCS must spray the entire jetties and harbour with sanitizers.

The new requirements also imply that during future COVID-19 rounds the marketing efforts of the livestock sector could be limited. It is expected that Sindh Livestock Expo may not take place at the same scale as seen previously. The last expo attracted 130 animal and bird breeders in Hyderabad from all across Pakistan and included exhibits of goats, sheep, cows, buffaloes, horses, camels, ostrich, and exotic birds and poultry. This is also expected to disrupt the complimentary plans by four other provincial departments i.e. culture, tourism, sports and agriculture. The industry associated with animal sports events could see an adverse impact.

A priority for the dairy sector now is to increase awareness about animal care, breeding and farming management amid COVID-19. In this regard the relevant institutions in GoS have been discussing with stakeholders how to reduce information costs in accessing knowledge regarding safe methods and available technologies. This is important as GoS has already invested heavily in improving capacities of women belonging to the primary dairy sector and trained them in seven districts of the province. Several of them have only recently initiated their work and could need facilitation to pivot in times of pandemic.

5. Economic Response Plan

a. Brief review of federal-level response

As we have already discussed various aspects of the federal response above, therefore this section highlights only select gaps in federal-level response which could affect provincial government's ability to respond to the crisis.

Given the immediate nature of the response, most measures by GoS, as well as by federal government that impact MSMEs and rural economies of Sindh, are cash-based or subsidy-based. For instance, in the case of provincial

governments, almost all the provinces have proposed a reduction in GST on Services for specific sectors which are believed to be hit hard by the pandemic.

In the case of federal government, their response included (but not limited to) tax relief on food and health items, relief to daily wage workers, funding to Utility Stores, power & gas subsidy/ payment deferral measures, and increase in FY21 budget allocation for Ehsaas Programme. However, the province wise federal government spending under each of these heads and many others are not publicly available at the time of furnishing this report.

Similar is the case with the central bank's response to COVID-19. The bank introduced a host of measures to allow households and businesses to avail subsidized financing for various purposes⁵³, the monetary details of which is updated by the central bank every week⁵⁴. However, as is the case with federal government spending, the province wise details of central bank's measures are not yet publicly available⁵⁵.

Here it is important to bear in mind that several fiscal support measures under COVID-19 package are those that are announced every year under ordinary circumstances as well. These include subsidies on agricultural inputs, wheat procurement, and IT support loans that have been routinely announced by provincial governments in annual budgets during the past decade. A comparative analysis of increases in allocation in real terms is therefore necessary to understand incremental response which can be purely attributable to the impact of COVID-19.

b. Measures by Sindh government

Critical measures to combat the impact of COVID-19, especially for health and administration were announced immediately with the beginning of lockdown in the last week of March-2020.⁵⁶ These were followed by fiscal and regulatory interventions to support commercial activity amid social distancing measures which appeared to be the only remedy in face of a deadly virus. However, before taking stock of Sindh's economic response to COVID-19, it is important to

⁵³ See <http://www.sbp.org.pk/corona.asp> for details

⁵⁴ <http://www.sbp.org.pk/corona-update.html>

⁵⁵ The central bank was approached to share province wise details; however, they replied that they did not have province or sector-wise data at this stage; usually such datasets are updated with a long lag

⁵⁶ Dawn, 2020

review the proposals which were discussed or provided to the provincial government.

The first set of proposals, led by Dr. Kaiser Bengali argued that “in terms of economic governance, the market-centered growth and development model is not likely to be effective anymore. The state may need to take the lead in policy direction to the private sector with respect to prioritization of sectors and the composition and quantity of output. The situation is akin to 1971, when the state intervened to stand as a bulwark to prevent a post-war economic collapse”...”some shift towards ‘autarky’ may become necessary” as there may not be the same demand for Pakistan's exports and with export income curtailed, the levels of imports may no longer be affordable (for the country).

In particular, he advised the provincial government to focus on the following key aspects:

- Production and supply priorities: food security; medical textiles; and medicines; advised to focus boosting production and strengthening supply chain
- Services priorities: uninterrupted functioning of water supply and sanitation; health and education services
- Employment: overarching theme to promote employment in SME sector and prevent layoffs
- Advise to prioritize funds to construct ‘SME compounds’ for shops and workshops – at least one each – in all district and taluka headquarter towns and in Police Station precincts of cities. This proposed measure is made considering the largely informal MSME sector that does not even have physical working space in many cases, forcing them to locate in residential areas and even operating on the roadside.
- Universal Social Security: Sindh government should consider universalization of social security to cover all Sindh domiciled individuals, and merge SESSI, WWF, EOBI into one Social Security Authority
- Fiscal Management: In recognition of fiscal constraints, reprioritisation of development spending to above mentioned sectors, and suspension of certain non-salary current expenditures. To our knowledge no revenue side measures were proposed.

As part of this study our view is that provincial Investment Department may also like to commission a study which identifies barriers to preventing private investment in the province. At least those barriers which are in the domain of provincial government may be regularly updated. Some groundwork in this

direction is already present as Investment Department has provided inputs to Pakistan Regulatory Modernization Initiative (PRMI).

The second set of initial proposals furnished by Mr. Asim Bashir Khan formed the basis of Sindh's FY21 ADP, and was also informed by Dr Bengali's proposals discussed above. It covers a wide range of topics, exhaustive summary of which cannot be reproduced here. However, below are briefs of some of the key proposals made in that study.

- Economic recovery and self-reliance: Given tight resource constraints, reforms in GST on services advised by decreasing rates while expanding the tax net.
- Agriculture targeting: Agriculture sector in Pakistan has already been overly subsidized with generous blanket subsidies, which favours large farm holders and large livestock owners. Any intervention in agriculture must consider existing subsidies in the sector, and therefore, a policy design based on clearly defined incentive, proper targeting, clear understanding of fiscal stimulus and food security is warranted.
- Support with agri inputs including fertilizer: Out of 1.12 million farms in Sindh, 1.02 million farms are less than 25 acres which constitute 92 per cent of the total farms and 56 per cent of the total cultivable area. It means any intervention for such small framers will lift them out of poverty and provide sustained livelihood for next two to three crop seasons.
- Agri commodity selection: Global demand for cash crops, cotton and textile related items is decreasing, but the demand for rice will remain unaltered, because many countries will prioritize the food security for a longer horizon. Pakistan should target bumper rice crop with more than usual exportable surplus
- Date processing: Presently dates from Sindh are stored in Lahore, which leads to added cost and time delays. Emulating Punjab where private sector in Lahore has developed cold storage with the support of Government of Punjab, government of Sindh through public-private-partnership unit should help private sector entrepreneurs willing to establish storage facilities of dates.
- Local government and provincial finance commission: Importance of data and citizens' outreach is challenging at this moment. Properly functioning LGs will act as medium of data collection of people unemployed during crises, daily wagers, small shop owners. There are 1526 union councils in Sindh and a large institutional set up. Normally UCs provide services of birth

and death registration, however, in this particular case UCs can act as information centres at grass root level. On the other, the local councils in Sindh have been inefficient since long, so there is need to reform the LCs with proper checks and balances from GOS. For this very reason, formulation of a new evidence-based PFC transfer system, performance-based targets against transfers (at least for part of transfers) is the need of the hour. In addition to their regular mandates LCs will be collecting data of daily wagers, small shop owners, livestock and will be assisting GOS in distribution of ration.

- E-Portal/E-Desk for Social Registry/Industries and MSMEs: For any evidence-based policy design and intervention the significance of data cannot be undermined. GoS may initiate an e-portal for registration of employment records and social protection through a phase wise system of data collection of daily wagers, unemployed persons, with the second phase being include extensive screening using verification at Union Council level, bank accounts verification, NADRA verification, utility bills, house location etc. The provincial government may also initiate an e-portal for registration of industries/MSMEs, human resource/employment records through a phase wise system of data collection using excise and taxation, Board of Revenue, Industries Department, Labour Department accounts verification etc. This census record will help provincial government in designing better response during future waves or similar emergencies.
- Soft loans for MSMEs: GoS may invest in a dedicated fund of Rs5 billion to provide short term soft loans to MSMEs. Sindh Bank in consultation with Industries Department could design a comprehensive framework. For micro enterprises, partnership with non-profit foundations may be explored since neither GoS nor Sindh Bank has expertise to reach to small shop owners and other micro units.

In light of the aforementioned and various other consultations, including with PFM Reform team, GoS took various budgetary measures to support MSMEs, in a total COVID-19 package of PKR 34.25 billion social protection and economic sustainability program"⁵⁷. Main allocations include:

- PKR 20 billion in cash transfers under Sindh Peoples Support Program

⁵⁷ Finance, Sindh Government, 2020

- PKR 5 billion in soft loans to SMEs: loan size ranging between PKR 0.5 million – PKR 2 million
- PKR 3 billion for Small Business Support Fund in urban areas: loan size up to PKR 0.2 million
- PKR 500 million for supporting technology-based incubators, and accelerators
- PKR 700 million for IT interventions and innovative solutions in goods and supply chain

Above measures were further augmented with fiscal support for agri-based MSMEs in rural areas. For farmers with land holding size less than 25 acres, these included input subsidies on:⁵⁸

- Rs1 billion in subsidy for rice seeds
- Rs1 billion in subsidy for fertilizer
- Rs1 billion in subsidy for pesticides

In addition, the MSME package included PKR 2 billion under Poverty Alleviation Program for small farmers/community-based loans in rural areas, with maximum loan size of PKR 25,000; and, PKR 500 million to support livestock breeding.⁵⁹

Other than the economic support package, the provincial government also allocated PKR 11 billion in wheat subsidy for commodity procurement during FY21. The allocation is 1.2 times higher than previous year to support farming incomes vulnerable to COVID-19 induced slowdown.⁶⁰

In addition to these cash or subsidy-based support, GoS also rolled out a law called Sindh COVID-19 Emergency Relief Ordinance, 2020, which was later converted into an Act. The law offers support to businesses and households through various measures such as reduction in monthly fees by educational institutes, relief to residential consumers in monthly bills of water and sewerage, reduction in tenancy rental.

The act also prevents businesses, both large businesses and MSME such as shops, restaurants and educational institutes, from laying off workers during the closure of businesses under periods of lockdown. It also prevents businesses from reducing salaries of workers. In addition to these, GoS announced 25% exemption on various taxes including on commercial motor vehicles and tax on professions and trades for the fiscal year 2020.

⁵⁸ Finance, Sindh Government, 2020

⁵⁹ Ibid

⁶⁰ Ibid

Critical to these measures is the issue of targeting. GoS opines that the federal government has already targeted the medium-size firms in the MSME segment – firms that are part of the documented sector. Federal government has already reached out to them through SBP's initiatives, as well as through relief in utility bill and allowing loans to cover wages. It is the micro and small entrepreneur segment in the undocumented that has not been reached through federal fiscal stimulus, and that's what the provincial government aims to target through its SME loans and even smaller loans through non-profit foundations.

Likewise, rice seed subsidy and other chemical and fertilizer subsidies are issued to small sized and landless growers with an upper land holding limit of 16 acres. These growers are registered with Regional Agricultural offices on Form-7 along with CNIC copies. These are then linked to a database maintained with DG Agriculture Extension Services, Hyderabad.

While these measures have been approved by Sindh's cabinet, a steering committee⁶¹ chaired by Sindh's Chief Secretary was yet to finalise and oversee the implementation of most of these measures (at the time of furnishing this report) including the SME soft loan and various farming subsidies. For example, in the case of loans to SMEs, managed by Sindh's industries department, Sindh Bank has been engaged to execute the project as per banking sector regulations and as per the policy direction to be provided by the industries department. Our discussions reveal that preference is likely to be given to businesses worst affected by COVID-19 in different geographical or sectoral clusters. The department is also considering allocating 10 percent quota for SME loans for women-led businesses, and the rest on merit. However, final modalities to be adopted by Sindh Bank, and the policy direction by the industries department are expected to be finalised and approved by the steering committee.

The same holds true for all other COVID-19 measures by GoS where the purpose of the steering committee is to ensure that implementation of SME-related measures is subject to need assessment, identification of target beneficiaries, and impact study prior to disbursement. With implementation targeted to be rolled out in the second quarter, the deadline for submission of operational plan was mid to end September 2020.

At the time of writing this report, plans for tech-based interventions and livestock breeding programme were the only COVID-related budgetary interventions that

⁶¹ Members include Finance Secretary, secretaries of concerned departments such as Livestock, Fishery, Agriculture, Planning & Development, Investment etc

were finalised by Sindh's steering committee for COVID. The same are discussed below.

Tech-based intervention: Two types of tech-based interventions have been finalised: (a) \$500 million for incubators; and (b) \$700 million for start-ups.

Under the first intervention, a cohort⁶² of general-purpose start-ups will be supported through existing incubators in Karachi and Sukkur. Whilst relevant institutions are clear that they do not use Rs500 million to set up hard infrastructure for incubators across the province, it is exploring the prospects of setting up facilities for pre-screening of candidates in Hyderabad, Shaheed Benazirabad, and Larkana. The second intervention is sector specific, where, as per the advice of external consultants, GoS has decided to focus on fintech, agro-tech, health-tech, artificial intelligence, and any other ideas that improve response to COVID-19.

Livestock breeding: Sindh's livestock department estimates that breeding of one livestock bull creates an economic impact of Rs126 million through natural breeding and about Rs5.25 billion through artificial insemination in ten years. In recognition of it, livestock breeding revolves around (a) provision of breeding bulls to poor livestock farmers where 1200 bulls and 2000 poultry breeding males will be provided, (b) provision of artificial insemination poor livestock farmers, (c) and capacity building of youth from poor household in the field of artificial insemination. With the help of latter two, the department aims to increase artificial insemination services by 15-20%.

Sindh livestock department plans to provide 1-2 breeding bulls in each Union Council in the province where selection will be based on poverty score card of 1-20. Similarly, provision of artificial insemination is based on poverty score card of 1-28, whereas selection of youth for training in artificial insemination will be based on poverty score card of 1-12.

c. Sindh: Budgetary measures for COVID-19

Our consultations with the Finance Department reveal that total development outlay for FY21 will see a decline of 18.8% due to lesser revenue generation during COVID-19 period. The current development budget will be supported by austerity measures adopted to bring down the non-development budget. These

⁶² According to industry estimates funding a cohort of 18-20 people for a six-month period costs about Rs30 million

austerity measures are not expected to hurt the priority sectors requiring response during the pandemic outbreak.

Apart from the Coronavirus Emergency Fund (CEF) the current expenditure has been allowed an increase in health (16.1%), education (10.2%), financial support to SMEs (513%), social welfare (1360%), and support to small farmers (40%). We discuss some of the sector-specific budgetary measures below.

Health

The GoS released PKR 1.1 billion out of CEF to support the operations at field isolation centers by May 2020. Additional resources were also made available to purchase personal protective equipment, and improve COVID-19 detection capacity.

These resources include: establishment of 200 bedded infectious diseases control hospitals at Hyderabad, Sukkur and Larkano (PKR 2 billion each); establishment of 200 bedded infectious diseases control hospital Mirpurkhas (PKR 1.3 billion); establishment of 200 bedded infectious diseases control hospital Shaheed Benazirabad (PKR 1.1 billion); expansion of DHQ Hospitals at Thatta, Dadu, N. Feroze, Mirpurkhas, Sanghar and Ghotki (PKR 1.5 billion); and upgrading of 45 THQ hospitals (PKR 2.4 billion).⁶³

Education

An Emergent Need Fund was set up in view of COVID-19 with an initial amount of PKR 480 million. An additional PKR 451 million has been provided for the planned distance learning programme in the college education. Most colleges will need to plan and execute parallel online activities given the possibilities of micro lockdowns faced by education institutions. In the coming days it is likely that enhanced allocation may be provided to ensure decent connectivity infrastructure at education institutions in the rural communities.

In the coming days, it is also expected that some of the activities planned with development partners will also see alignment with pandemic response. These activities will also to some extent respond to COVID-19. These include: PKR 3.1 billion under EU-supported 'Development through Enhanced Education Program'; PKR 1.1 billion under World Bank-supported 'Sindh Early Learning Enhancement through Class Room Transformation'; and PKR 1.9 billion

⁶³ "Salient Features of Budget 2020-21". Finance Department, Government of Sindh.

programme supported by Global Partnership for Education for transforming teaching practices and improving learning assessments.

Agriculture, livestock, and fisheries

The agriculture sector MSMEs are entitled to COVID-19 specific budgetary measures in FY21 provincial budget, provided generally for the small enterprises. For labor force in this sector, social welfare department's intervention is available. However to increase capabilities in this sector to face such emergencies including locusts attack, current revenue expenditure allowed for FY21 has been increased to PKR 14.48 billion (compared to PKR 10.62 billion in previous year). Similarly for livestock and fisheries department, recurrent budget was increased by 30% from PKR 6.63 billion to PKR 8.59 billion.

As prolonged monsoon rains coincided with COVID-19 pressures, therefore Sindh flood emergency reconstruction project was allowed PKR 615 million for bunds and canals in Jamshoro, Hyderabad, Ghotki, Khairpur, N. Feroze, Matiari, Larkano, Kamber, Dadu, Sajawal, Thatta, Kashmore, Sukkur, and Shikarpur.

Social Protection

To start with GoS enhanced social welfare departments CRE allocation from PKR 1.86 billion to PKR 27.11 billion – an increase of 1360%. Out of this PKR 3 billion was allowed for Covid-hit small farmers. For micro enterprises in Sindh working in small scale manufacturing and related sectors an allocation of PKR 6 billion was allowed.

As per P&DD's assessment⁶⁴, the additional number of people falling below poverty line due to COVID-19 and its impact on Sindh may range from 2.98 million to 5.69 million. The Pakistan Institute of Development Economics (PIDE) estimations also suggest that an additional 6.26 million in Sindh could fall below the poverty line.⁶⁵

While the federal government's Ehsaas Program is disbursing Rs. 144 billion to 12 million families with Rs. 12000 per family. GoS also released financial tranche for immediate procurement and distribution of ration bags worth Rs. 1.08 billion across 29 districts.

⁶⁴ "Covid-19 Sindh's Macroeconomic and Socio-economic Impact Assessment and Development Response Framework". Planning & Development Department, Government of Sindh.

⁶⁵ Pakistan Institute of Development Economics April 2020, <https://www.pide.org.pk/pdf/PIDE-COVID19-EBook.pdf>

There are also plans to expand the ambit of Sindh's Poverty Reduction and Social Protection programs to cater to social assistance⁶⁶, social insurance⁶⁷ and labor markets⁶⁸. The GoS has earmarked about Rs 7.2 billion for Social Protection and Poverty Reduction in ADP 2019-20.

The 'Social Protection Strategy Unit'⁶⁹ will serve as an overarching execution body to consolidate and rationalize social protection efforts. The tasks at hand will include: rapid identification surveys to assess economic vulnerability due to the outbreak; identifying the coverage and funding gap to streamline timely disbursement of social assistance; and development of a dynamic registry which goes beyond the data provided by National Socio-Economic Registry Data.

Another PKR 500 million has been earmarked to pilot Rural Growth Center (RGC) in Sujawal district in line with the poverty reduction strategy – having a focus on community-driven local development (CDLD) policy. The intention is to pursue a three-dimensional approach to reducing poverty at both rural and urban level.

First, there will be strengthening of the Peoples Poverty Reduction Programme to provide financial and non-financial support to the beneficiaries and capacity-building of communities to undertake social mobilization. Second, there is an intent to reducing urban poverty by adding urban clusters and creating linkages between rural and urban poverty reduction measures. Third, rural growth centers will aim to function as service hubs to provide improved facilities and services to clusters of geographically connected villages. Pursuing such an approach will be more important in the context of post pandemic recovery and focusing on 'growth' perspective to revitalize rural and urban economies could result in improvements along end-to-end value-chains.

⁶⁶ For example, Zakat & Ushr, People's Poverty Reduction Program, Worker's Welfare Board, and Sindh Social Relief Fund.

⁶⁷ For example, old age pensions and healthcare for workers in the formal sector.

⁶⁸ For example, Sindh Technical Education and Vocational Training Authority (STEVTA) comprising of Sindh Skills Development Project and Benazir Bhutto Shaheed Human Resource Research & Development Board.

⁶⁹ Sindh Social Protection Policy Note, April 2019, <http://documents.worldbank.org/curated/en/941321557209507700/pdf/Sindh-Social-Protection-Policy-Note.pdf>

6. Gaps in Budgetary Response to COVID-19

Logistics and transport

The provincial budget remained silent on any pandemic-specific support to the transport and logistics sector. This sector is known to have contributed to the increase in infection rate. Literature from other regions informs how through planned budgetary measures, proper implementation of SoPs in the public and commercial transport sector were ensured.

This aspect is related to need for COVID-19 compliant measures for transportation and logistics networks which serve the port operations. The buyers of Pakistani exports now have stringent requirements with regards to 'safe trade' and overall hygiene of transported goods.

Water, Sanitation & Hygiene

The pandemic has exposed the sanitation workers to medical waste and with missing or at times no PPE, these workers are vulnerable to several health related threats. The sewer cleaners often found infected with COVID-19 are not provided formal social protection given the *ad hoc* nature of employment contracts. In some places this led to a reduction in supply of sanitation workforce or increased absenteeism (on health grounds).

In an assessment by WaterAid it was revealed that some protective gear provided to these workers was 'uncomfortable to use and of poor quality, especially gloves and mask. Apart from shortages of equipment, respondents also complained about their faulty fitting and the cost implications of buying/acquiring them repeatedly.' The report calls for the Local Government Department to look in to this matter on urgent basis. With regard to poor quality PPE being provided to workers due audit of procurement process may be carried out to avoid any such instances in the future (as also demanded by the Supreme Court).⁷⁰

⁷⁰ 'Society: Sindh's Forgotten Sanitation Workers'. DAWN. December 21, 2020.

Targeting for social protection initiatives

The social insurance initiatives can be expanded to include much larger number of informal workers, daily wagers, piece-rate workers, street vendors and other vulnerably employed segments of population. The networks of Rural Support Programs (SRSO, TRDP, etc.) can be utilized to identify vulnerable households along with rapid vulnerability surveys to offer health insurance services. There is also a proposal to expand the scope of MHI being offered under PPRP which in turn can help reduce out of pocket expenditures.

In the wake of underemployment and unemployed, both active and passive labour market programs will have to be designed and executed on a war footing to facilitate labour mobility. The main proposals that require execution include public employment services, increased vocational training programs and employment subsidies.

From the view point of social care services, Social Welfare Department could increase initiatives towards rehabilitating street children, providing shelter to women victims of violence and rehabilitate disabled persons. The Women Development Department could provide enhanced support through day-care centers to working women, skills development of women and alternate dispute resolution centers for women.

There are some gaps in social care interventions which need to be addressed. For example, relief efforts through identification of vulnerable women and children in need of cash, in-kind and social support services will need to be prioritized. The COVID-19 has also increased the education divide which needs to be rectified. One possible way of doing so could be through the behavior change communication programs and community awareness programs that can be conducted to raise awareness. Such outreach programs are also required to inform regarding importance of social distancing and other necessary behaviors and public places including educational institutions. There has been heightened concerns regarding mental wellness issues for which psycho-social support needs to be expanded for the mentally stressed.

The subsidies to smaller farmers could be enhanced in a targeted manner and with a sunset clause. Currently available subsidies include wheat subsidy to maintain the support price and reduce fluctuation in the price of flour, subsidy on urea fertilizers to reduce input costs for farmers and subsidy to support small sugar-cane growers, subsidy towards provision of tractors, solar-pumps/tube-wells and agricultural machinery at subsidized rates. Most of these subsidies

originally aimed for small farmers could be improved in their design and execution through a rapid beneficiary and needs-assessment analysis.

The P&DD has suggested a more streamlined process of identification and targeting which in turn can amplify the positive impact of subsidies. Seven most vulnerable districts in terms of food security (Badin, Dadu, Sanghar, Tharparkar, Umerkot, Jamshoro, and Shahdadt) may be prioritized for food subsidies.⁷¹

Desired improvements in utilization rate

A key issue across all departments responsible for responding to COVID-19 was low utilization of already available funds. Primary reasons for the low utilization rate include: a perceived fear of accountability drive, weaknesses in design and execution of concept notes required for execution, slow pace of intra- and inter-agency approvals, and weaknesses in procurement capacities.

Apart from this, it is feared that COVID-19 may temporarily take the attention away from public finance management (PFM) reforms and revenue mobilization drive initiated by the GoS –crucial to improve the fiscal space and utilization of funds. The PFM measures whose implementation need to be expedited include: The Sindh Public Financial Administration Act; Sindh Financial Rules; Sindh Treasury and Subsidiary Treasury Rules; Sindh Budget Manual; Sindh Government's Manual for Development Projects; and Sindh Financial Rules.

It will also be appropriate to have an evaluation at this stage to assess the outcomes and implementation status of recently notified PFM measures including The Sindh Delegation of Financial Powers and Financial Control Rules 2019 and if these new measures were able to contribute to the flexibility in budgeting process required during times of emergency.

The PFM reforms related to service delivery at a district level also need to be prioritized. In this regard, a pilot initiative for Jamshoro was notified whereby primary and secondary schools will be capacitated to develop procurement plans which help both expenditure execution and service delivery.

Several automation related measures need to be expedited which in turn could improve the utilization and transparent use of available resources. These include the already initiated Integrated Financial Management Information System

⁷¹ See Annex-B and Annex-C for a summary of interventions desired by P&DD in various social protection areas.

(IFMIS) connectivity to line departments and implementation of e-payment system.

Orientation on rules and forum to execute emergency funds

A key reason cited for weak utilization of COVID-19 emergency funds and related budgets with the line departments was a lack of orientation regarding rules and forum which could allow expediting the usual processes of appraisal and approval. In this context, GoS could take an overarching approval from the relevant forum with regard to rules which will be followed during future waves of the pandemic or similar emergencies.

For example, at the federal level several options are being studied in this regard. The Finance Division is considering setting the timelines for Ministries and Divisions to open assignment accounts in respect of emergency projects requested from PSDP. Real time and actual expenditure reporting in the SAP system by the AGPR/CGA may be ensured through the assignment account. Mere transfer of funds may not be treated as expenditure. Therefore, in order to capture actual expenditure / utilization of the projects, separate heads for transfer and actual expenditure may be created in SAP system.

In order to capture expenditure of local and foreign aid release/ disbursement and expenditure of foreign funded projects, separate sub-assignment accounts may be put in place. Furthermore, to ensure expedited and timely release of federally funded PSDP projects being executed by the provincial governments, separate assignment accounts may be opened for such projects and funds may be released directly into project assignment accounts rather than transferring the PSDP funds into Account No. 01 of the respective Provincial Government. This will discourage idle parking of federal funds at the provincial level.

A number of federally funded projects are also being implemented on cost sharing basis between the federal and provincial governments; therefore, a joint assignment account may be opened to ensure the matching releases and expenditure as per approved by the competent fora.

The federal PFM Act, 2019, ensures that the practice of non-lapsable accounts may be discouraged at all levels which will help streamline the expenditure patterns. Each development project should be operated either through a pre-audit system of account or assignment account. Assignment account may not be used for more than one development project.

7. Planned sector-specific responses for FY21 and beyond

This section draws from team's consultation and in-depth interviews with the line departments, P&DD, and Finance Department regarding their preparedness and planned activities to manage the pressures emanating from future COVID-19 waves. The discussion also brings out the constraints on the relevant departments during this fiscal year or the medium term and what could be possible remedial measures.

a. Planning & Development Department

In our consultation with Planning & Development Department Sindh as well as Ministry of Planning, Development and Special Initiatives, there seems like a consensus that mechanisms for rapid response are missing. Even when emergency funds are available there is lack of clarity on how to quickly disburse for various outputs. This has prompted the planning bodies to reimagining how a more effective rapid response should look like, particularly when emergencies like COVID-19 are met with other disasters including locusts attack and monsoon rains.

A second immediate concern of the P&DD is to focus on the non-poor who could fast slip below the poverty line as a result of prolonged economic downturn. In this regard, P&DD looks towards line departments to come forward and pitch ideas which could be multisectoral in nature so that maximum gains are achieved with minimum resources.

While planning for provincial growth, two critical elements that will be addressed include: bridging of capacity gaps at the agriculture department and its various district level offices – also important if food security has to be prioritized across the province; and the need to motivate the industries department to come forward with a cogent provincial industrial policy which has linkages with other provincial initiatives including investment promotion measures and tax-related reforms.

In the coming days, P&DD also aims to augment capacities for scientific evaluation. From the perspective of COVID-19, it will now be important to reform internal systems which receive and analyze epidemiological data and also integrate the same with provincial fiscal framework – in turn presenting the policy makers with various types of risks associated with future waves of the

pandemic. An important outcome of augmented evaluation capacities will be the ability to simulate how much more critical care facilities may be required; in which regions; from where to reappropriate spending etc.

P&DD will also be looking to adopt best practices including strengthening of e-library on this subject, virtual knowledge repository, and if required online trainings which help build capacity of line departments to frame a better sectoral response to health-related emergencies.

P&DD will also support line departments in improving their utilization rates. This department has been most involved in resource mobilization for COVID-19. Extensive meetings were held with development partners and Finance Department focusing on repurposing scarce resources. Still however issues related to procedural, capacity, and perceived apprehensions with regard to the accountability framework hindered utilization.

The success stories which exhibit better utilization of resources will be highlighted during upcoming meetings and possibly replicated for other programs as well. For example, under the Sindh Resilience Project, PDMA was able to expedite the work with support from the World Bank Group. PDMA was further able to partner with the Indus Hospital to achieve outcomes which could have otherwise taken a much longer time period.

P&DD will also engage with Ministry of Planning, Development, and Special Initiatives to help frame rules which could expedite utilization during emergencies. The federal government has expressed that there is a need for the relevant forum such as CDWP to have separate approval and processing rules for emergency times.

The department will also engage with donors to change their monitoring and reporting procedures seen in usual times. For example, most sectoral interventions for COVID-19 may require the field review requirement to be changed to desk review. Internally also an understanding is required with the Finance Department to expedite the payments flow. For example, currently drawing from the assignment account is not possible until finance department allows – something which has been changed at the federal level and may also be considered by the GoS.

To bring greater clarity in procurement from local sources, P&DD will work with procurement and relevant accountability agencies to unpack and arrive at a better interpretation which could allow single bid to be accepted based on market survey. In this regard, it will be important to also agree on the contours of such a survey. Likewise if relevant sections of the procurement law allow

emergency spending, a better agreement is required on the definition of emergency and forum to decide that a particular situation can be considered as emergency.

P&DD team is also focused on ensuring that COVID-19 doesn't distract the attention from SDGs and the gains which Sindh has achieved in this direction. In this regard, P&DD has already completed mapping and tracking of budgetary allocations and expenditures on SDGs. Furthermore an alignment of ADP with SDGs is also available which could help in bringing the SDGs back on track during the medium term.

b. Finance Department

The Finance Department is striving to regularly update the fiscal framework and cash balance position in line with the evolving priorities including COVID-19. To help this exercise, Finance Department will rely mainly on the P&DD to consolidate the sector plans of all line departments and then develop the costed activities plan for budget strategy paper and related exercises.

The department is also keen to receive advice from the Sindh COVID-19 Coordination Committee which also includes members from the civil society. The independent representation (from civil society) in this committee has brought out important demands from the public which could be factored in the sector plans and budgets.

While increased releases were ensured during the initial days of pandemic outbreak, however it was noted by the Finance team that most line departments lacked capacity to utilize even the released amount. There were capacity issues related to timely procurement as well in departments responsible to respond to the outbreak. The Finance Department will aim to augment such capacities in the medium term. In this regard, decent progress has been made with Education and Health Departments in turn leading to improvements in financial management. For other departments, there is a proposal to provide short term advisory support to improve PFM skills, possibly also seconding relevant officials from Finance Department to line departments or hiring experts who can guide the departments towards improving utilization rate.

The transparency aspects around managing of COVID-19 emergency funds are important for most development partners and local stakeholders. The GoS has taken various initiatives which will be replicated in other departments to improve transparency, efficiency and good governance. For example, the project

“Competitive and Liveable City of Karachi Project (CLICK)” at a total cost of PKR 33.6 billion with the financial support of World Bank has been launched. The project envisages to improve the performance of Karachi Local Councils and agencies in urban management, financing institutional reforms and governance and service delivery. Lessons related to improved PFM, learnt from this initiative could then be replicated for other districts too.

Similarly, the “Sindh Public Sector Management Reform” project is being implemented to enhance performance of PFM systems including capacity building of Sindh Revenue Board, Excise, Taxation and Narcotic Department. It is expected that this initiative will allow Government of Sindh to move towards better debt restructuring; tax reforms; expenditure management reforms as well as sector and regulatory reforms. These reforms will help to create the fiscal space desired by the line departments to implement more ambitious response to COVID-19.

The expansion in services sectors including IT & ICT services during COVID-19 have in fact led to increase in revenues collected by SRB. This should provide some space as social protection spending will remain high during the second wave.

There is room for creating fiscal space within each sector's allocations. This will be carefully assessed in light of recent evidence.⁷² For example, additional fiscal space could be created for agriculture-related needs amid pandemic through rationalization of direct and implicit subsidies. The tax rate on agriculture income could be at par with non-agriculture incomes. The automation of land registry system, now underway, should also help identify more taxable units and individuals. Reducing the wheat quantity of wheat procurement will also allow the food department to temporarily downsize the workforce hired for this purpose. The lost jobs here could be compensated through more private sector participation in wheat procurement. The silo-storage facilities could also be completed through public private partnerships rather than imposing the burden on provincial budget.

Similarly, in other commodities, for example, sugar, subsidies may be only directed towards small farmers. Any implicit or explicit sugar export subsidy may be removed, and short term subsidies like Ramazan Package may be temporarily suspended. All these options will be discussed in the run up to ongoing year's budget review and next fiscal year's budget preparations.

⁷² Rana (2019) Creating Fiscal Space for Enhancing Public Investment in Sindh Agriculture Sector: A Qualitative Study of Provincial Spending in Pakistan. International food Policy Research Institute – Pakistan (IFPRI).

c. Agriculture, Livestock and Fisheries Departments

During the first quarter of FY21, the agriculture department was focused on mitigating threats to cotton, chiles, and rice. While the wheat target had been completed however COVID-19 and requirement of 'safe agriculture practices' become difficult to comply with as locusts attack also started to affect other crops.

COVID-19 outbreak coincided with monsoon rain spells, and ensuring availability of seed, pesticides, and other necessary inputs was a priority for the agriculture sector. In the coming days this department intends to draw on the available evidence and emerging research on how to keep agriculture supply chains safe from the threat of COVID-19.

A province-level food security working group will also be convened to discuss options. The department has already initiated a PC-I - 'Dynamic Controlled Atmosphere Storage to Combat Pandemic through Complete Automation' project in October 2020, having a cost of PKR 2.4 billion. Likewise, Livestock and Fisheries Department has also initiated a PC-I - 'Upgradation of Veterinary Laboratories in Sindh for Detection and Handling of Corona and other Zoonotic Viruses' at a cost of PKR 600 million.

For the revival of productivity in livestock sector, there will be a support available for poor livestock farmers for breeding of bulls. The department will help in procuring 1,000 bulls and 2,000 poultry males which will be available at the union council level. In the second phase livestock breeding would be made possible, free of cost, through artificial insemination services, provided to poor livestock farmers.

Support is also planned for farmer communities to help them understand hygiene related requirements during any COVID-19 surge. In this regard, FAO has initiated and plans to scale up the hands-on, participatory training to deliver best practices which could help the local farming communities in protecting against infections. While larger farms have managed to pivot and obtain such knowledge on their own, there is a concern that information deficits may be faced by smallholder farmers which need to be bridged.

The CM-led committee on COVID-19 also received advice from various civil society organizations and their representatives. Some of these recommendations will now be part of the future sectoral plan for this sector. We discuss a summary of these below.

The smaller units will be bracing for a prolonged COVID-19 impact which will also keep their cashflow under stress. Therefore investing in improving rural firm capabilities will be a priority for Agriculture Department. Our findings indicate that most agribusinesses do not have the general awareness to appropriately forecast the challenges which could arise in the face of continued COVID-19 rounds, locusts attacks and prolonged rains/droughts. These knowledge gaps at a firm-level can only be bridged through sustained capacity building in risk management.

In this regard, GoS will liaise with the federal government to expedite the projects planned from PSDP. This includes Up gradation of Central Cotton Research Institute Sakrand and Cotton Productivity Enhancement through Capacity Building and Management of PBW in Sindh under PM Emergency Programme, Strengthening and Up-gradation of Agriculture and Livestock Research System of Arid Zone Research Institute, Umerkot.

Development partners who are active in agriculture sector of Sindh, such as the EU could help strengthen the nexus between relevant government departments, agriculture universities, extension service firms, and agribusiness associations in Sindh. Collaboration across the various actors in the ecosystem will help to crowdsource new and evolving knowledge. EU could also consider developing capacity of Sindh based independent think tanks working in agriculture space. Such organisations usually continue awareness related interventions even after donor-supported programs stand completed.

COVID-19 has revealed the lack of timely and relevant data at all levels of development administration. Therefore boosting capacity of provincial bureaus of statistics to improve data and evidence around crop and livestock sectors, and other private enterprise in agriculture, industries and commerce has become important. COVID-19 and the losses to agribusinesses have also promoted the need to have more recent agriculture and livestock census in the country. Greater autonomy to produce and publish evidence may be allowed to the bureau. This will also require legal changes to the current status of Sindh Bureau of Statistics for which a scoping study in the future may be supported.

The federal government should utilize Universal Service Fund to expand telecom and digital footprint in rural Sindh. Provincial government should leverage technology and use new techniques to collate dataset for better policymaking and targeting. In this regard, USF's support may also be requested to improve internet connectivity in major farm clusters across Sindh.

There is a need to strengthen think tanks that focus on provincial economies of Sindh. There is an equal need to strengthen private sector business associations

such that they know their market size, they can identify regulatory bottlenecks, and make specific recommendations in a manner that is representative of their community.

Helpline portal for agribusinesses hosted in provincial agriculture department with access to CM office and other relevant officials may be executed. Farm and non-farm enterprises in agri sector could download app to share regular COVID-19 related feedback/grievance. Information, Science and Technology Department may like to take this proposal forward with relevant line departments particularly agriculture and livestock.

Real-time assessment of supply chain issues faced by agribusinesses is need of the hour. The helpline (above mentioned) could in fact provide high frequency data for such an assessment. The province-specific agriculture information systems need to incorporate elements which note on real-time basis issues faced by agribusinesses during various stages of operations. Sindh Agriculture Department is working closely with FAO and may also update the current MIS available with the department and its field offices

To ease the liquidity constraints, access to tailored finance instruments to help output growth, productivity or accessing (extension) services will be required. P&DD and Sindh Bank may form a working group with SBP, engage with specific business associations with in all agribusiness sub-sectors and understand their varied financing needs. Currently the uniform design of agri financing across all sub-sectors is not helping all segments of formal and informal agribusinesses. Some customization will be required going ahead taking in view of the specific provincial risks and challenges

Sindh is already supporting modernization of rice mills by funding interest on loans for modernization taken by rice millers. This is being managed by Sindh Enterprise Development Fund (SEDF). A program may be introduced to help Sindh government pick up interest on loans taken by rice farmers for on-farm mechanization. Supporting rice supply chain will help ensure food security during crisis times and beyond.

The development of livestock, dairy and meat market, and their supply chain will be important. Karachi alone has milk production of 4.5 million litres nearly all of which forms an informal market. Currently Sindh does not have a comprehensive livestock policy; livestock and fisheries is a part of Sindh Agriculture Policy 2018. Local experts and development partners can help Sindh government draft livestock and dairy policy and as well as minimum pasteurization law and its implementation thereof. This will help kickstart growth in a host of urban and rural SMEs related to dairy value added sector and also

help the province document its dairy supply chain resulting in higher tax collection.

Sindh has the potential for fresh water fish, inland fish farming as well as marine fishing. However, the potential remains unexploited. Development partners may help the province finalise and implement fisheries policy. In 2014, the USAID had already drafted a 'Fisheries Policy Report and Recommendations for Sindh' under its USAID Firms Project. However, Sindh faces capacity constraints to operationalize fisheries sector strategy.

Horticulture needs to be developed especially as the importance of packaged food industry gains prominence in the wake of social distancing. Reforms are needed in genetics, technology, modern farm and food processing practices as well as pricing regime/market development. Development partners may explore interventions in these areas as well as advise for fiscal incentives for the sector in the face of rising input costs, and lack of subsidies.

Sindh Agriculture Growth policy does not have a separate focus on horticulture but it does want to strengthen credit programs, public research and extension systems to help increase availability of fresh, quality and safe horticulture. It flags Sindh's advantage for horticulture products because its crops are earlier in the season. Development partners can explore interventions in these areas.

The government is also mindful of shortage of agricultural labour force in some supply chain segments. This may be analysed and options discussed.

d. Social Protection Strategy Unit

The GoS has designed its social welfare interventions for the less developed districts as identified in the study "Multidimensional Poverty in Pakistan" prepared by the Planning Commission and UNDP. These districts include Umerkot, Dadu, Tharparkar, Ghotki, Badin, Jamshoro, Kashmore, Khairpur, Tando Muhmmmed Khan, Tando Allahyar, Qamber, Mirpurkhas, Nawabshah, Thatta, Shikarpur, Matiari, Sujawal, Jacobabad, Sanghar.

Anticipating food supply disruptions and price hike during various phases of the pandemic, GoS has announced Corona Emergency Ration Package, for which an allocation has been ensured for each district. The priority for this ration is being given to the daily wagers whose basic food needs are covered.

Furthermore, to bring back the focus on poverty and welfare related SDGs in a post COVID-19 milieu, GoS aims to commission urgent policy papers on priority SDGs to assess the current resource allocation; existing sectoral plans; projects

tied with sectoral plans; intended beneficiary population and geographical coverage. The analysis will also provide recommendations for FY21 and the medium term. The SDGs implementation apparatus and communication strategy will also see some revision based on the current priorities.

Given the expected budgetary constraints amid the pandemic, GoS is also looking into expanding public private partnerships as well as collaboration with civil society organisations. In this regard, a model sustainable Taluka is planned at Islamkot with support from Thar Foundation. This could prove to be a template for districts other than Tharparkar as well.

The Social Protection Strategy Unit aims to develop a dynamic social registry to overcome existing data gaps including the information deficit seen in National Socio-economic Registry (NSER). The dynamic registry is aimed to bring together various datasets available with public and private sources including NADRA. It is expected that such a measure could improve targeting of beneficiaries during future waves of COVID-19.

The targeting and process to reach the beneficiary remains a challenge in some areas. The targeting priorities could vary across regions based upon geospatial challenges, disease containment priorities, or families facing food and income losses. Therefore dynamic registry will also make use of data from utilities, telcos, polio classification, and datasets developed as part of foreign supported projects including SUCCESS.

Regarding the process of reaching the beneficiaries, improved ways of verification of registry data will be ensured. New registration drives will also be conducted along with background reference check of applicant information through other sources.

As the incidence of COVID-19 prolongs, the Social Protection Unit will also look into revisiting the design aspects of pipeline or under implementation programs including - Bhook Mitao program, Family health program, Maternal and Child Support, Peoples Poverty reduction, Benazir Kissan program, Benazir Women Agricultural Workers program and Internship Guarantee Program. An assessment will be conducted if the livelihoods impacted through pandemic could also deteriorate the hunger profile.

The Social Protection Strategy Unit will also initiate an inter-departmental discussion on preparedness for future waves. Such a discussion will aim to bring out lessons with respect to readiness and preparation for future smart lockdowns - anticipating any threats to mortality rate, containment measures desired in public venues like workplaces and schools, compensation in event of lockdowns

in formal and informal productive sectors, family support grant, basic food support, and support to laid off workers during the lockdowns.

The potential of local microfinance companies in quick disbursement of resources to the micro-level formal and informal enterprise is also under study. To minimize the risk of these companies and yet reach the beneficiaries in a timely manner a proposal of revolving funds may also be evaluated.

In the coming days, institutional framework of Social Protection Strategy Unit (currently based out of Chief Minister's Office) will also be finalized. In this regard, a need-assessment exercise followed by adoption of an appropriate institutional model (e.g. on the lines of Punjab Social Protection Authority) may be considered.

COVID-19 clearly presents several gender dimensions. Learning from the Punjab Human Capital Investment Project, it is likely that GoS may consider a dedicated program to help women in the workforce and particularly address their needs in times when mobility and access is constrained by health crisis.

It is likely that the scope or design of the "Improvement of livelihood and well-being of Female Home-Based Workers (FHBWs)" program at estimated cost of PKR 541.086 million may see some change. The project will aim for improvements in livelihood and wellbeing of female Home-Based workers with economic empowerment of women through capacity building, access to financial services and imparting the skills necessary for income generation during the ongoing economic uncertainty. Initially a total of 6800 females were to benefit under this project during the four years until 2023. It is now expected that a number larger than this may be accommodated through enhanced allocation.

e. Health Department

Health being a priority has received enhanced allocation for FY21. In terms of direct response to COVID-19, Health Department and PDMA have remained at the forefront. The PDMA also banks on the resources available with Sindh Resilience Project for a timely response. The other major investments are directed towards: a) establishment of 6 infectious diseases control hospitals at divisional level (estimated cost of Rs. 10 billion); b) addition of Bio-Safety Labs at 7 Teaching Hospitals (estimated cost of Rs. 245 million); c) upgradation of labs at 18 DHQ Hospitals (estimated cost of Rs. 540 million). Health sector will also remain a priority in the PKR 5 billion set aside by GoS as COVID-19 Emergency Fund.

As construction of new facilities has to be complemented with improved staff quality therefore planning is being initiated to assess qualitative aspects and soft

skills required by the relevant staff. Strengthening health systems will complement the conventional brick-and-mortar components in health projects to improve overall delivery and emergency preparedness for effective response.

The health department favours a multisectoral approach. In this regard, linkages across existing multisectoral programs and how they can have linkages to pandemic response will be conceived. These include most projects under the nutrition portfolio which also have components related to Saaf Suthro Sindh Programme, Nutrition Sensitive Agriculture, and Accelerated Action Plan for the Reduction of Stunting and Malnutrition.

Keeping in view the prolonged expected impact of the outbreak the coverage of Sehat Sahulat Programme as micro health insurance programme is being expanded. A Sindh-wide m-Health initiative has been in the pipeline for some time which may be expedited to provide smartphone-based health application, Tibbi, in every public health facility in the province.

The health department aims to work with the development partners to improve the demand-side and strengthen behavioral change interventions. In this regard, improvement to social messaging to curb the spread of COVID-19 are being regularly made including working with media celebrities and seeking their help to spread the message around social distancing. Field testing will inform future campaign strategies.

The capacity deficits at BHUs will also be mapped and addressed. For example, infection prevention control is found missing even in the most established hospitals. The public health officials in place also required up-to-date evidence as it emerges from the experience of COVID-19 from other parts of the country and globally. With respect to training of paramedics, there is also a JSI-PDMA master training program which will soon be operationalized. Capacities enhanced through emergency plans will also remain available for future waves of the pandemic. For example, uplifting of tertiary units, isolation hospitals will continue to be work-in-progress during FY21. For timely maintenance of health-related infrastructure expanded in view of COVID-19, training activities will continue with support from USAID through NDMA which in turn will enable due care of ventilators and other related machinery.

A decent template to partner with the civil society organizations is available in the form of Aman Foundation's Emergency Medical Service. In the coming days, the health department wishes to form new public private partnerships, especially with a view to strengthening surveillance systems.

The improvement to data and information systems is also planned. For example, currently the District Health Information System (DHIS) lacks surveillance component and real time reporting. The Monitoring Wing at Health Department has benefited from support by WHO and local research collaborators.⁷³ However with the new and emerging evidence on COVID-19, this wing will need to house human resource abreast with new research on far reaching consequences of the pandemic. The enhanced internal capacities will be crucial for updating the Sindh health sector plans if the incidence of COVID-19 prolongs.

The monitoring and evaluation plan for upgraded health facilities will also need to be chalked out in consultation with the staff on ground. Improvements in data sharing systems are also need of the hour. In this regard, while there is data sharing between health department and PDMA however such a facility is not available between health department and planning and budgeting bodies including P&DD and Finance Department. This has resulted in lack of information on part of officials responsible to forecast health expenditures in the medium term. This anomaly will be addressed in near future.

It has become increasingly important to see monitoring, evaluation, and learning as an exercise which could help expedite the planned initiatives. There are synergies across health department and population welfare program which need to be harnessed. For example, there is a need now to look into the scope of some of the population welfare projects with a COVID-19 lens. These projects include: Behavior Change Communication at village level, training of Women Medical Officers, and planned training of NGOs at Karachi, Hyderabad, Larkana, Sukkur and Shikarpur.

The preparedness for future health crises also requires upgrading of existing testing laboratory facilities. In this regard, GoS will be upgrading labs to BSL-3 level. The BSL-3 [=high containment] laboratories are necessary to tackle biosafety issues involved in handling highly infectious disease agents required for basic research and diagnosis. While the awareness about biocontainment is on the rise however operating BSL-3 laboratories need regular infrastructure upgrading, clear definition of risk groups and their handling in line with the best practices.

The GoS also plans to engage with the federal government during FY21 on how to gradually transfer part or full portfolio of vertical programs. The provincial

⁷³ These include London School of Economics, JSI, USAID, and UNICEF.

government aims to make the interventions currently in the vertical programs a part of the non-development expenditure of DHO-level activities.

To focus on the sustainability of existing health initiatives which may be threatened due to future epidemics the government plans a detailed assessment including remedial strategies for the future. COVID-19 delayed routine immunization which has longer term implications. To prevent this from happening in future a strategy will be devised in collaboration with development partners. In this regard, advice will also be sought from NCOC which has also discussed this matter at length during several meetings.

In the coming days, GoS will rely on the flexibility of private sector and potential public private partnership initiatives in the health sector. Therefore public private dialogue on COVID-19 related legislation with a focus on gender and marginalized lens is pivotal. Sindh province have undertaken new or amendments to existing legislation to facilitate speedy delivery of social safety nets, health care, and private sector in health care. A structured and regular public private dialogue is required with a view point to: a) better understand private sectors reservations (where they exist) towards this legislation, and b) improve awareness of beneficiaries of these legislative exercises particularly women in healthcare sector.

Synergies with health also exist in the planned outputs identified by the Social Protection Unit. Both offices will work closely to make future initiatives more sustainable with strong local ownership. Based on the proposal from several Asian countries, we suggest a provincial law to encourage establishment and growth of 'social enterprises' who could work in the health space. GoS may engage with SECP to arrive at a better understanding of social enterprise framework and legal definition of these enterprises. The firms participating in these discussions are mostly based in urban areas and cities. An equal voice from rural sector is required.

With regard to the rollout of vaccinations, Health Department has started to identify human resources for administering the vaccination. The department in the coming days will also identify fixed sites for vaccination and engage private enterprises or civil society organizations for supporting the implementation plan. GoS will also ask federal government to support the establishing of cold storage, cold chain maintenance, and setting up databases of vaccinated citizens.⁷⁴

⁷⁴ 'Sindh devises initial plan for Covid vaccination'. The Express Tribune. December 17, 2020

f. Education Department

Rapid evidence is required by the Education Department with regard to: a) options available to complete the academic calendar, b) keeping schools safe and open in the coming days (and implementation of necessary SoPs); testing of various ways of closing and reopening of schools during smart lockdown instances, and c) addressing financial distress faced by schools amid COVID-19.

The Education Department will continue to work with the relevant institutions including at the district level to ensure preparedness of schools for online teaching. An assessment to gauge household-level access to smartphones and basic computers to access online lessons is also planned. The infrastructure-related issues which give rise to low internet penetration rate will also be studied in detail for future planning. Currently an estimated 43,000 schools in Sindh face connectivity deficits.

The ability of the private schools to pivot was better in comparison to the public schools. This is leading to an education divide which may require innovative solutions including increased public private partnerships – an area being thought about currently in the Education Department.

Due to increased household poverty during the pandemic outbreak, low-income families could have a myopic incentive to put their children to work. Behavioural campaigns and social messaging interventions are planned lure out-of-school children. Retention will be a challenge as schools face closure and reopening at frequent intervals. Current proposals under study include cash grants to families so that at least the girl child is attending school. These proposals are under discussion with BISP and GoS Social Protection Unit.

In terms of the capacity building of teachers, online interventions are planned to help them in assessment of COVID-19 threat level from children and staff, SoPs for reopening, adoption of ensuring minimum personal protective equipment (PPE). Induction training to new teachers is now also being undertaken online. Other possible interventions under discussions include: providing IT-based app access to school principal to stay connected with district and provincial offices; improvements to MIS at Education Department.

Keeping the literacy rate in line with commitments in SDGs will be a challenge. Therefore, in terms of service delivery, the most significant challenge will be to manage the loss in learning seen in the case of schooling at all levels. While the ambition is to either cover a minimum percentage of syllabus for each subject or prioritize and only focus on the select two to three subjects during this year. However, both these approaches are still under discussion as the expected duration of the prevalence of COVID-19 has increased. The World Bank

supported program 'Actions to Strengthen Performance for Inclusive and Responsive Education Program (ASPIRE)' aims to help 4 districts in Sindh to address school disruptions due to COVID-19. There will be a focus on "accelerating virtual and distance learning opportunities for out-of-school children, particularly among disadvantaged communities". Additionally, the program will help to strengthen coordination among federal and provincial authorities to generate new funding opportunities in ongoing and alternative education programs to accelerate recovery. The learning from this effort will then also be replicated in other districts of Sindh.

To improve utilization amid COVID-19 the Education Department will engage with P&DD to discuss 100% releases for priority projects. Furthermore, to fast track implementation of planned activities, Education Department will bank on the on-ground capacities of the civil society organizations – working through, for example, EU-RSPN programme and SRSO. Teams from Thardeep Rural Development Programme, NRSP, IRC, Indus, Hands, Sindh Education Foundation, TCF, and ECF will also be consulted. CSOs will also be involved in monitoring activities of the Education Department. Currently, apart from 43,000 schools, there are 8000 unregistered schools, and 20,000 madaris, requiring different monitoring and evaluation approaches.

g. Industries Department

The GoS has tried to supplement the stimulus package made available by the Federal Government and State Bank of Pakistan. There is a two-pronged focus; first, to keep liquidity position of MSMEs as sound as possible, and second, to also ensure that demand doesn't dampen to the extent that inventories start to pile up.

A sector-specific support is also being planned after careful analysis of sectors most hit from the pandemic. GoS is cognizant that needs of the sectors and the labour working therein could vary depending upon the exposure to direct and indirect impacts of the pandemic. Based upon this and other considerations GoS and Sindh Bank will disburse loans worth PKR 5000 million. A maximum loan of PKR 2 million will be provided to MSMEs. The Labour Department will also be contributing to developing the criteria to priorities industries. Additionally, P&DD has suggested to support MSMEs through wholesale funding via Sindh Enterprise Development Fund.⁷⁵

⁷⁵ For further details see Annex-D.

A more rapid assistance may soon become available through the social welfare department. For the micro and small enterprises including retails sector, the social welfare department has prepared PC-I to offer grants to fisheries, livestock, and small shopkeepers. In the event, the impact of COVID-19 prolongs, it is expected that the number of sectors and beneficiaries will be increased.

COVID-19 should not take away the focus from already planned enabling infrastructure development. Therefore, Sindh Infrastructure Development Co. Ltd. (SIDCL) has been allocated PKR 12.5 billion for ongoing as well as new schemes under the Prime Minister Package in Sindh including Karachi. For new industrialization, sites for industrial zones have been identified at Larkana, Kotli, and Halla. These sites range between 50 to 90 acres. SITE will execute the planned civil work. It is expected that GoS will approach the federal government to make these zones tax-free or provide them SEZ status.

The pandemic may also have disturbed to some extent the budget allocations with in and across various departmental priorities. An example of this is the combined effluent treatment plant project. The request has now been sent to the federal government to support this. Despite repeated attempts (according to GoS) this initiative has run into cost and time escalations. In case response from federal government is not received soon, GoS may attempt to deliver this and other support services to the industry in public private partnership mode.

The pandemic has also made it necessary for the federation as a whole to pursue a national industrial policy – draft of which has been pending approval since long. GoS will continue to emphasize the importance of this aspect and collaborate with the federal government for approval of this policy at the earliest. A similar effort will be made in the context of a national-level SME policy and to highlight Sindh's priorities in such a policy.

The CM-led committee on COVID-19 also received advice from various civil society organizations and their representatives. Some of these recommendations will now be part of the future sectoral plan for this sector. We discuss a summary of these below.

Understanding the new-normal business environment will be important for both public and private stakeholders. A regulatory impact assessment (RIA) is required across the province. Based upon this RIA, provincial governments could rationalize the regulatory burden on MSMEs which has been a major portion of the overall costs during COVID-19.

While some assessment is coming out from independent studies however little is known regarding preparedness of rural businesses to embrace the new normal. It is therefore recommended to work with agriculture, livestock and industries department in the province to understand the new demands on rural enterprise which could threaten future resilience. Easing regulatory compliance and reducing its cost is one way to improve sustainability of private enterprise.

Inclusion of informal agribusinesses in social protection databases. As BISP updated NSER database could take more than two years before it is fully released, provinces could therefore make use of their own data sources.

Sindh government has reserved PKR 34 billion for its 'Pro-poor Social Protection and Economic Sustainability Initiative'. As part of this activity, the provincial government plans to initiate its own provincial poverty registry.

Recommendations could be forwarded and support provided with regard to inclusion of informal rural enterprises in this database.

Transitioning to digital regulatory compliance has become important amid Covid-19. It is therefore important to study how sector specific trade licenses can be electronically obtained and renewed annually. Any fee payments for these licenses or penalties should also be made through online modes.

This measure can be undertaken by Investment Department, Government of Sindh. While the Ease of Doing Business portal of Sindh provides facility of online payments, we found that most trade licenses required by food sector, for example, could still not be processed on line.

The development partners can provide technical support vis-à-vis comparative local government aspects of various constitutions and creating awareness thereof. The current constitution needs to more clearly spell out powers, roles, responsibilities and structures of local governments and how they can better deliver in agriculture and industries space. It is due to such lack of clarity that draft SME policy of the federal government has been delayed.

Until such time there is constitutional amendment, provincial governments need to provide more fiscal and administrative autonomy to the third tier – local administrations. This perhaps is the only way to improve utilization of public funds efficiently and on-time. At the time of writing this text, Covid emergency funds could not be fully disbursed due to weak targeting and validation mechanisms at local levels. In our assessment standing committees on industries, agriculture and livestock in Sindh assembly could be provided orientation on this aspect.

Promoting digital transformation and encouraging agribusinesses to go online will help pivot during COVID-19. The outbreak has increased the demand for

remote and online services and payment mechanisms. However rural businesses are lacking in knowledge and financial resources to shift their internal operations, distribution, marketing activities online.

A collaboration between SMEDA and Sindh Bank Limited could be initiated whereby those agribusinesses who complete SMEDA's training on firm-level digital transformation will become eligible for small-scale loans which could be used to finance basic IT equipment set up and software costs for rural (micro) firms. SMEDA is already delivering such trainings however graduation is not followed by financial assistance.

8. Analysis of ADP 2020-21 and gaps vis-à-vis sector strategies

For the purpose of our exercise, it is not currently possible to trace COVID-19 related projects to any single province-wide strategy document. Likewise, ADP 2020-21 only provides partial guidance on distribution of allocated COVID-19 specific amount across the various departments.

In this regard, it will be a timely effort to update past initiatives such as Sindh Vision 2030. Unlike the past tradition, it will be important now to also move forward from the overarching thought process in the Vision document and convert this thinking into programmes and projects in consultation with the sectoral departments.

Finance Department attaches significant importance to exercises such as the draft Sindh Growth Strategy, which according to them will be easier from costing point of view and to align public investment portfolio with specific growth priorities during and post-pandemic times.

A technical working group may be required for those sectors and line departments who haven't prepared any sector plans to respond to the pandemic and bring back the focus on their longer-term objectives including SDGs. In our assessment this includes Agriculture and Industries Departments as well.

From the viewpoint of budgeting the planned activities it is important now to also address the technical gaps in costing of PC-I. While the approved unit cost rates are available for infrastructure or social sector interventions, however these are not updated on a regular basis in turn often rendering the costs provided in

PC-I obsolete. This will continue to remain an issue while updating costs towards COVID-19 response including expenses towards field isolation centers, PPE, ventilators and other ICU equipment required on-ground.

Lack of regular updating of unit costs also implies that it will become increasingly difficult to anticipate or forecast the special grants to be provided during any surge of COVID-19 to both public and private sector entities. Such special grants are also made available for Deputy Commissioner offices to allow for emergency response.

Sindh's ADP 2020-21 also includes some unapproved projects. In view of changed priorities during and post COVID-19 it is essential to revisit the need for such projects awaiting approval and funding. The inclusion of unapproved projects also represents lack of capacities to prepare timely project proposals – a deficit also seen while line departments were asked to prepare concept notes for COVID-19.

The practice of appraising projects after selection may also need to be revisited. Optimization of resources towards COVID-19 response requires careful scrutiny after which selection should be made. In view of the future micro smart lock downs and prolonged health impacts, there will be a need for greater economies of scale in spending which could promote the need for multisectoral public investment interventions – requiring a deeper scientific evaluation and feasibility study.

In the event, a medium to longer term intervention may be desired by a line department, this will then be an opportunity to see how COVID-19 response initiatives can be insulated from cost and time overruns which are a usual phenomenon in the ADP portfolio. On average, in a single year, Sindh's ADP contains one-fifth of projects which are in the portfolio for over a year without any expense incurred. One possibility is to reduce the number of approvals required in single financial year to access the already approved sum. Second, procurement mechanisms could be revised for any project which has implications for human health in emergency times.

Among the sectors discussed in this report, education portfolio exhibits a large throw forward. As this sector is of high priority during the COVID-19 outbreak therefore it will be timely to revisit the rationale of slow performing, non-performing, or unapproved projects in this sector.

ADP remains an important tool for any redistributive policy. In this regard, this instrument will be used in the future to mitigate any disparities. Currently, one-quarter of the bottom (backward) population districts are receiving only 11

percent ADP. It will be important to also assess as part of a separate review if COVID-19 response was also asymmetric.

P&DD in the coming days may also require a dedicated monitoring and evaluation mechanism for disbursements towards COVID-19 response. The network district monitoring officers of P&DD may be provided the necessary capacity to report back through faster feedback approaches. In the case where Project Management Implementation Units employ consultants, there seems to be a frequent turnover. A key reason for this is that the market rates at which these advisory services need to be procured haven't been updated. There is lack of interest from good human resource available in the market – most of whom are reluctant to apply for government positions. As pandemic response will require services of technical nature, therefore current rates in PC-I allowed for such services need revision. The frequent disagreements often seen between consultants and the PMIU are also a result of gaps in procurement capacity and contract management.

PC-I implementation process as currently in vogue may not provide the ideal flexibility required to respond to the future waves of the pandemic. The existing process doesn't provide standard operating procedures or a set checklist against which execution or completion of projects (particularly setting up of hospitals, isolation centers etc.) could be validated.⁷⁶ Such deficit in the PC-I implementation will soon be addressed by P&DD.

9. Addressing Structural Constraints in implementation of Sectoral Strategies

The plans for post-Covid economic recovery are marked by a host of risks and resource gaps, which if left unaddressed could prevent implementation. Some of the most critical ones are briefly discussed below. In addition to these, donor funded programs run the risk of slow design and execution because of weak coordination between relevant provincial departments as well as a general environment of mistrust where provincial bureaucracy is perceived to be hesitant to provide detailed data and other legal or institutional insights to development partners.

⁷⁶ World Bank (2017) had informed that this issue is leading to reduced efficiency of ADP spending in Sindh. For details see: "Pakistan: Sindh Public Expenditure Review" South Asia Region, The World Bank Group, June 2017.

- Fiscal constraints: Although Sindh's collection of GST on services has grown remarkably in recent years, the province still relies heavily on transfers from the divisible pool. Our consultations suggest that Sindh's finance department expects the divisible pool to fall Rs500 to Rs600 billion short of the target. This could impair Sindh's pandemic spending plans, especially considering that despite the recommendation to increase province's own revenue, Sindh's FY21 budget does not spell out significant steps to significantly increase own revenues.

In view of the above mentioned, improving provincial revenue mobilization in a manner that does not create distortions in production incentives should also be seen as a response to the pandemic.⁷⁷ Ultimately this will strengthen the fiscal sustainability in times when there is increased spending expected on social protection. Some suggestions in this regard, are already available in existing literature.⁷⁸

- Information & data constraints: The GoS faces weak cooperation from the public in triangulating the information and feedback being received around COVID-19 response. For example, in the case of response for MSMEs, business community – even those which are already in the registered formal sector - does not cooperate with GoS when it comes filling out surveys of losses to manufacturing industries during the pandemic. The absence of a dynamic database of potential beneficiaries has been felt very strongly in dealing with the challenge. Until the time this difficulty is overcome, Research and Training Wing at P&DD should have own-budget to procure firm-level survey to better inform provincial response.

There is a realization across various levels within GoS that the province needs a reformed provincial Bureau of Statistics. In this respect, there are plans to emulate the program by the Urban Unit in Punjab who have better

⁷⁷ For example, during the meeting in which first draft of this report was presented, Board of Revenue informed that they have a 'taluka-level' assessment/study that computed the existing agriculture income tax (about Rs. 9.7 million) and compared this with ten-times the potential (i.e. Rs. 100 million).

⁷⁸ GoS (2014) Sindh Tax Revenue Mobilization Plan, Finance Department, Karachi. GoS (2020) Consolidating Growth – Annual Report 2018-19. Sindh Revenue Board, Karachi. Rana (2019) Creating Fiscal Space for Enhancing Public Investment in Sindh Agriculture Sector: A Qualitative Study of Provincial Spending in Pakistan. International food Policy Research Institute – Pakistan (IFPRI).

capabilities to target a specific population group. However, these suggestions have not taken any formal shape yet.

To this end, one possible solution is to use Universal Service Fund (USF) window to expand telecom and digital footprint in the hinterlands of Sindh gearing towards new techniques to collate dataset for better policymaking and targeting. In the same vein, GoS should tap on the growing appreciation among multilaterals over the need to improve sub-national statistics organisations⁷⁹.

- Human resource constraints: While the Finance Department, P&DD, education and health have demonstrated better project management capabilities, the HR constraints in other departments are a critical challenge to coordination and implementation of COVID-19 response. In the GRASP program, it was suggested that at least one in-house officer or relevant consultant proficient in sector's planning and budgeting may be ensured by every line department as focal person to work with the Finance Department and P&DD on COVID-19 related response.
- Private sector coordination: If the prevalence of COVID-19 prolongs, Sindh government aims to increasingly rely on public private partnerships. Currently, no forum has yet been established to discuss this intent and possible interventions with leading private sector professionals and entities.
- Flexible budgeting: An agile approach to budgeting should be an important feature in every budget making process, however, the onset of pandemic and fears of next wave warrants greater flexibility – perhaps by creating a permanent contingency fund - up front to be able to respond quickly to the possibly volatile change in needs. Such a permanent fund should not be subject to usual approval and procurement processes.
- Local government reform: The response of local government in Sindh in the aftermath of COVID-19 was termed weak. Local government has the mandate to play an active role in emergency response. In its absence, district administration, provincial relief departments and Provincial Disaster Management Authority (PDMAs) are leading COVID-19 response in the province. However, being orchestrated from federal and provincial

⁷⁹ BR Research 2020f

headquarters, this response is not tailored for each community's context and needs.

This risks neglecting local voices, and increases the risk of marginalization and grievances. Likewise, proper functioning of local government remains elusive amid an absence of proper provincial finance award. Local government laws are weak, as is their implementation. Unlike Indian and Nepalese constitutions, Pakistan's constitution does not spell out the roles, responsibilities and structures of local governments⁸⁰. These gaps need to be addressed to ensure smooth supply chain of public goods and of citizens' needs between the state and society.

Local community groups have informed in a recent survey that the disbursements of *Ehsaas* funds could have been complemented with a dialogue process between community groups and disbursing authorities in Sindh. This could have helped the local community groups to identify those left behind and vulnerable segments.

While Sindh province had an elected local government until 2020 but the current law doesn't allow fully independent functioning. The approval of the provincial government is required with regard to planning and spending decisions.⁸¹ The absence of active and empowered local level officials in the delivery of COVID-19 response (due to capacity or other constraints) made it difficult to combat mis-information and false social safety claims.

Emergency Relief Bill-2020: The Sindh COVID-19 Emergency Relief Bill-2020 offers a number of relief measures to the people of the province during the coronavirus emergency. While the law has been promulgated with good intent it is less clear if finances and HR capacity to implement various provisions of this law are in place. Any current plans to arrange external finance or HR are also not known by the officials at the moment. There is an indication given to us during the consultations that senior political leadership will at some point engage with the donor community

⁸⁰ Jamali S, 2019

⁸¹ "How local government can strengthen Pakistan's fight against covid-19". Democracy Reporting International. Accessed via web: https://democracy-reporting.org/dri_publications/how-local-government-can-strengthen-pakistans-fight-against-covid-19/, accessed on August 28, 2020.

for a comprehensive assessment and support in agriculture, industries, health, and education sectors in Sindh.

In the coming days the pandemic-related legislation may need some further evidence-based amendments. For example, respondents from MSMEs in crop and livestock sector informed that these laws have stringent measures including protection of job tenure and minimum wage to be given to employees; and protection measures for tenants. These measures have high business cost for MSMEs (particularly those unable to access refinance facility).

Sindh Epidemic Diseases (Amendment) Bill-2020: introduced penal measures against people and institutions responsible for deliberate spread of the infectious disease. Again, the law has been put in place with good intent however its understanding among local level law enforcing authorities was found vague. Such lack of clarity in the official circles could lead to unfair treatment of rural communities and enterprises.

One interpretation of this law is extended to farm sector whereby all farming communities also need to ensure SoPs for farming under safe and hygienic conditions. The food processing sector also requires SoPs regarding post-Covid19 workplace safety. Due to lack of widespread outreach, such SoPs are still less understood by entrepreneurs in the rural space. The violation of newly enacted laws in Sindh carry fines starting from PKR 1 million.

Sindh Women Agricultural Women Bill-2019: correctly recognizes agri-women as formal labourers. However, at the time of our consultations such information was not known to even the progressive farmers across the province. The women farm owners who also have a high ratio of female employed on their land and related activity are eligible for certain allowances – an information which wasn't known.

Private sector's response: A deeper public private dialogue is required to discuss how provincial government could share the monetary burden after full implementation of COVID-19 laws. The response of Karachi Chamber of Commerce and Industry on Sindh Covid-19 Emergency Relief Bill-2020 is provided below:⁸²

⁸² "Businesses reject Sindh emergency relief ordinance". The News, April 11, 2020.

“A special relief package has to be announced and made part of the ordinance in which either the entire cost of salaries/wages has to be borne by the government or a mechanism has to be adopted for a period of at least two to three months in which the aggregate amount of salaries payable by businesses and industries should be fragmented into three equal portions. The first portion should be paid by the relevant industrialists and second portion must be contributed by the government while the last portion has to be borne by employees.”

Ensuring greater transparency in social safety nets: A lack of transparency was noted by the Supreme Court particularly with respect to rural disbursements. For this, the court had suggested to strengthen rules around current accountability arrangements. The Supreme Court also noted that political differences and weak working relationship between Center and Sindh province have led to wastage of scarce resources and precious time. The Chief Justice was of the view that in the face of expected future rounds of COVID-19 it is important that both federal and Sindh government device a mechanism to work together. He advised to discuss this matter in the parliament.⁸³

Opportunity to formalize the informal activities: COVID-19 could attract the unorganised sector in the formal segment through existing or more luring economic stimulus. This will not only accelerate corporatization in the economy but also boost provincial government's revenues in the medium to long-run. In a rare opportunity presented by the pandemic, informal firms find themselves in a place where cost of formal incorporation seem lower in comparison to potential benefits – including access to interest free liquidity. This however will require urgent legislation at a provincial level to provide the above-mentioned cover, certainty of policy towards informal firms, and protect newly formalized units from any instances of harassment. This measure will have positive spillovers. For example, such formalization could improve database of informal workers ultimately bringing them into social protection cover. In this regard, lessons from the region are already emerging.⁸⁴

⁸³ “Covid-19: SC directs federal, Sindh govts to get their act together”. Pakistan Today, May 4, 2020.

⁸⁴ “ Covid-19: An opportunity to redesign India's formal-informal economy dynamics”. <https://www.orfonline.org/expert-speak/covid19-opportunity-redesign-india-formal-informal-economy-dynamics/>. Accessed via web on December 18, 2020.

Gender lens in response to COVID-19: Due to their social positioning, the impact of Covid-19 on women is proportionately more than the male workforce. Lockdowns have impacted 20 million home-based women workers through multiple channels. Unfortunately, women represent only 5.5 percent of the COVID-19 committee members. Sindh had only one member.

In Sindh, PKR 54 million for poor women and children in Karachi, Hyderabad, Jacobabad, Benazirabad & Naushero Feroze has been earmarked. The proper design and execution of such programs is important to mitigate the surge in incidence of violence against women during COVID-19. Currently it is not clear if gender-sensitive quarantine facilities have been ensured and what was the true picture of restrictions on women to participate in the rural economy during the outbreak.

Women's access to technology remains an under addressed area. According to Global Digital Report, women are 37% less likely to have access to internet or mobile phones – limiting their access to awareness campaigns, health & economic relief measures.

10. Conclusion

There is no doubt that national and sub-national governments should remain ready for the feared future rounds of the COVID-19. The review of response to Covid-19 thus far reveals that data limitations not only prevent in-depth analyses for policymaking but also it limits the effectiveness of policy or program. High degrees of level of informality of businesses also prevents national and sub-national governments to reach out to businesses and help them. The tax cuts, subsidised bank loans, and reduced energy rates can be enjoyed by those who are already a part of tax net and banking systems.

Another important find is that nearly all of the national and sub-national responses to Covid-19 for jobs and businesses are either a price signal or are otherwise cash-based; an example of the former is tax cuts, whereas an example of the latter are handouts. Changes relating to governance, policy, institutions, legal⁸⁵ and procedures to trigger growth across various sectors as a response to Covid-19 have not been made in Sindh.

⁸⁵ Sans Sindh's exception discussed earlier

A large part of response to COVID-19 which was supposed to be delivered by line departments and civil institutions in the end had to be completed by the NDMA which was already overstretched with responsibilities given by NCOC and National Locusts Control Centre. In view of demands on NDMA it is important to do an urgent mapping of factors which prompt inviting NDMA even if rules of business clearly show this as provincial government responsibility. This mapping exercise could reveal clearly which department-specific gaps need to be bridged to face future such challenges. In Annex-E we have proposed an action matrix exhibiting some gaps which need to be bridged.

The coordination platforms between the public and private sector as well as with the NGOs and other civil society institutions need strengthening. The former is critical for effective policymaking and the latter for effective distribution and allocation of handouts to the poor. In the case of Sindh, as a result of COVID-19, public private partnerships were observed in the health sector (e.g. partnership with Indus Hospital) however not in the livelihoods space.

On resource mobilization and utilization, two aspects would remain critical to Sindh's fiscal sustainability.

- a. Public Finance Management reform: This aspect will be crucial for improvements to the utilization rate and transparency in use of resources. Detailed recommendations have already been provided by PFM Reform Unit at the Finance Division. Additionally, a more comprehensive forecasting of fiscal inputs and outputs will require improvements in data sharing. The increased data requirements are not only limited to fiscal variables but access to epidemiological information will also be crucial.
- b. Efficiency in revenue mobilization: Future waves of COVID-19 could put a strain on Sindh's fiscal resources. While Sindh has made progress to integrate tax related databases across the province and with the federal government, a lot more needs to be done. For example, integration with NADRA, SECP, and central bank databases is required for improving validation and audit functions at the tax authorities. This is expected to check evasion and avoidance and in turn help in improving the Sindh-wide revenue mobilization efforts. Improving revenue mobilization in a manner that does not create distortions in production incentives should also be seen as a response to the pandemic. Ultimately this will strengthen the fiscal sustainability in times when there is increased spending expected on social protection.⁸⁶

⁸⁶ During the meeting to discuss the first draft of this study, Team Leader for EU's PFM Sindh programme had appraised about their teams readiness to support revenue mobilization reforms.

It will be timely to initiate sector-specific studies which link the COVID-19 outcomes with provincial government's response. Such studies should remain live exercise until the time the threat of pandemic is fully over. For example, Sindh province continues to face the challenge of high numbers of out-of-school children, stubborn drop-out rates and less than encouraging retention rates. It is not clear at this point how Covid-19 may have exacerbated this challenge. Once schools are fully open the provincial authorities will need to undertake a detailed assessment based on these indicators and other goals set under SDG-4.

Likewise, in agriculture and livestock sectors, the missing digital infrastructure at rural farm level prevents any pivot for these communities. The relevant departments may do a needs-assessment and what may be required to bring rural farms and communities online.

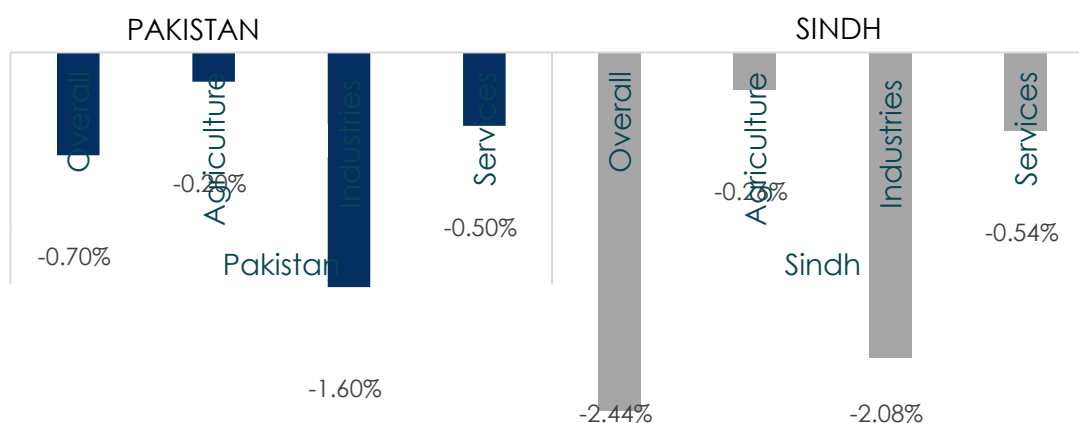
The outcomes of federal government's response in Sindh also requires in-depth analysis but more importantly, provincially disaggregated data – missing for most sector. The province wise federal government spending for COVID-19 response under various heads including support to MSMEs, health systems, Ehsaas, education etc. and many others are not publicly available.

Going forward, and in line with the team's presentation in December 2020, the PFM-II team stands ready to provide support in working with two or three high priority sectors to make sure ADP is aligned with these sector priorities. We can continue to monitor emerging pandemic waves for economic and social impact with the team at P&DD. Finally, we look forward to partner with P&DD in defining post-pandemic recovery scenarios for Sindh province.

Annex-A: Production Loss in Sindh⁸⁷

This section draws from an earlier effort by P&DD to arrive at production loss for FY20. In scenario 1, it was anticipated that GDP in Pakistan will decrease from 3.3% to 2.6%. In absolute numbers, the GDP was expected to fall from \$335 billion to \$332 billion. The highest predicted decrease was expected in the industries sector (-1.60%) followed by services sector (0.50%). The Agriculture sector was expected to witness a reduction of 0.20% hence a lower growth. The aggregation of sector wise GDP losses were to manifest into overall GDP loss of 0.70%.

GDP (%) change after COVID 19 (Scenario 1: 0.7% reduction in GDP)



Due to the higher comparative share of industries sector in Sindh's economy, the net industrial losses were expected to be significantly higher (-2.08%) in the province, when compared with national losses. The negative growth in the industrial sector is attributed to many factors such as fall in labor supply due to quarantine measures, fall in economic activity, supply chain disruptions, fall in demand (consumption + investment), etc.

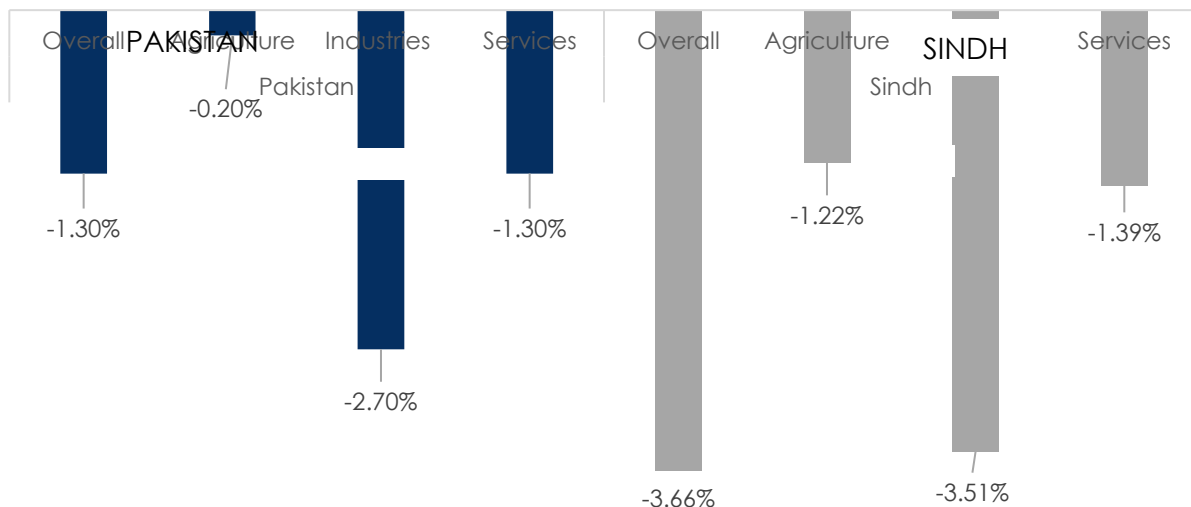
GDP growth in services sector was expected to decrease by 0.54% while agriculture sector, growth pattern was expected to reduce by 0.26%. The cumulative sector wise GDP losses was to translate into net GDP loss of 2.44% in Sindh. The overall GDP was projected to reduce from \$101.19 billion to \$100.12 billion.

⁸⁷ The annexures to this report are derived (after permission) from: "Covid-19 Sindh's Macroeconomic and Socio-economic Impact Assessment and Development Response Framework", June 2020. Planning & Development Department, Government of Sindh.

Year	Region	Expected GDP at constant prices (World Bank & IMF estimates)- (3.3% Growth)	GDP Loss Percentage scenario 1 (0.7% reduction in GDP Growth)		
			GDP Percentage Decline after COVID 19	change in GDP (loss/increase)	Total Net GDP
2020	Pakistan	335	-0.70%	-3	332
	Agriculture	62	-0.20%	-0.12	61.96
	Industries	68	-1.60%	-2.76	65.15
	Services	205	-0.50%	0.60	205.67
2020	Sindh	101	-2.44%	-1.07	100.12
	Agriculture	16.25	-0.26%	-0.04	16.22
	Industries	30	-2.08%	-1.46	28.20
	Services	55.27	-0.54%	-0.07	55.20

In scenario 2, GDP in Pakistan was expected to decrease from 3.3% to 2.0%. Resultantly, GDP at constant prices was expected to reduce from \$335 billion to \$331 billion. A GDP (%) decrease of (-1.30%) was expected in industries sector, followed by services sector (-5.30%). On the other hand, agriculture sector was expected to witness a percentage reduction of -0.20%. In Sindh, the greatest hit will be on industries sector (-3.66%), followed by services sector (-1.39%). Therefore, based on parameters/principles defined for the socio-economic assessment by sub-committee on COVID-19 economic analysis, the overall GDP losses in Sindh was projected at -0.37% a reduction from \$101.19 to \$98.94 billion.

GDP (%) change after COVID 19 (Scenario 2: 1.3% reduction in GDP)



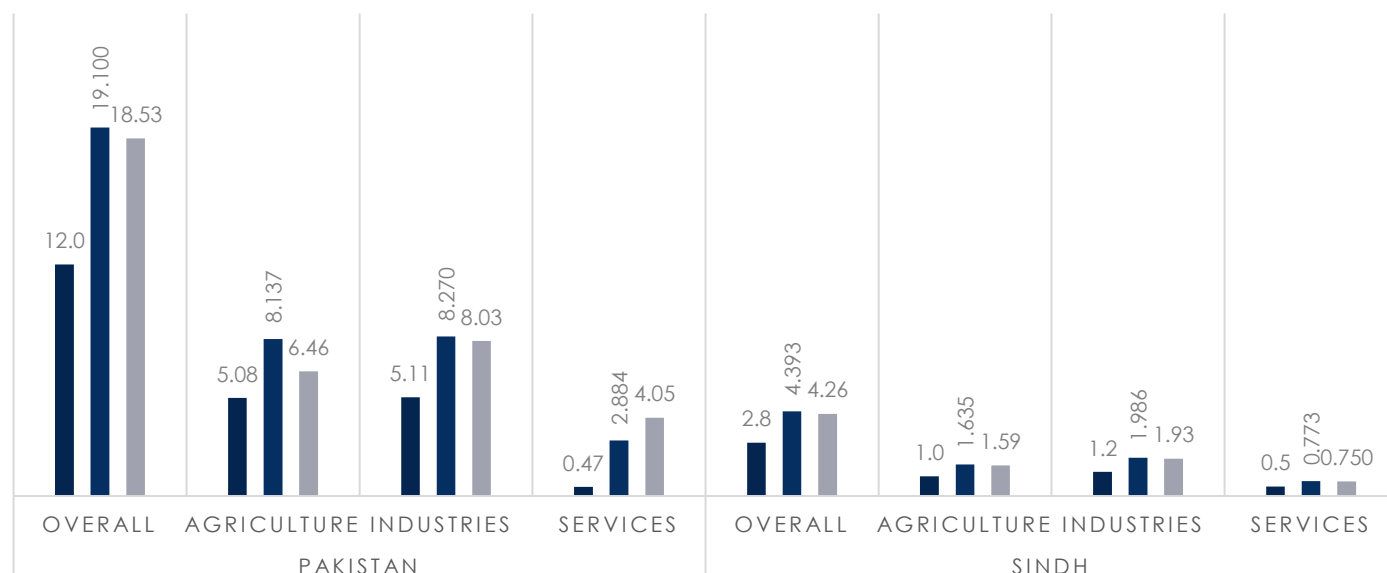
Year	Region	GDP at constant prices (World Bank & IMF estimates) 3.3% Growth	GDP Loss Percentage scenario 2 (1.3% reduction in expected GDP)		
			GDP Percentage Decline after COVID 19	change in GDP (loss/increase)	Total Net GDP
2020	Pakistan	335	-1.30%	-5	331
	Agriculture	62	-0.20%	-0.120	62
	Industries	68	-2.70%	-3.48	64.43
	Services	205	-1.30%	-0.99	204.09
2020	Sindh	101.19	-3.66%	-2.26	98.94
	Agriculture	16.25	-1.22%	-0.19	16.07
	Industries	29.67	-3.51%	-1.89	27.78
	Services	55.27	-1.39%	-0.53	54.75

Analysis of Expected Job Losses

In scenario 1, job losses in Pakistan are estimated at 12.0 million with the highest effect in industries (5.08 million) and agriculture (5.11 million), respectively. Sindh has a share of 23% in total employed persons in Pakistan which translates into expected job losses of 2.8 million in the province. The highest share again will be in industries (1.2 million) and agriculture (1 million), respectively.

JOB LOSSES IN MILLIONS DUE TO COVID 19 IMPACT

- Job Losses (millions) Estimates Scenario 1: Job losses (Moderate Slow Down of Economic Activity)
- Job Losses (millions) Estimates Scenario 2 Job losses by decrease in GDP share in relation to expected growth
- Job Losses (millions) Estimates Job Losses by PIDE Vulnerability assessment data



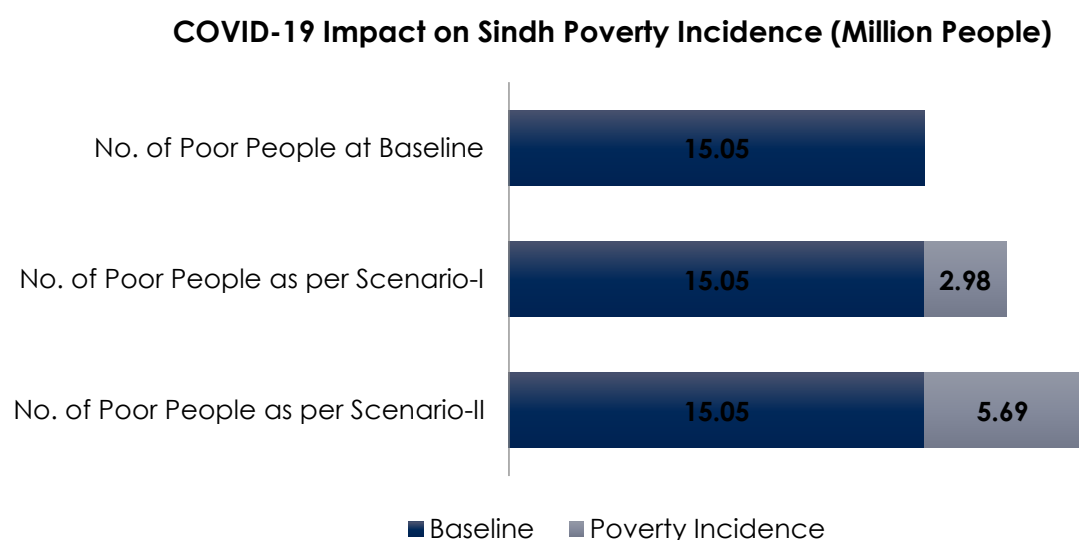
In scenario 2, job losses are expected to increase to 19.0 million in Pakistan and Sindh's share is expected to increase to 4.3 million from 2.8 million, as given in scenario 1. The highest increase in job losses will be in industries sector (1.2 million), followed by agriculture (1.0 million).⁸⁸

Region	Sectors	Job Losses (millions) Estimates		
		Scenario 1: Job losses (Moderate Slow Down of Economic Activity)	Scenario 2 Job losses by decrease in GDP share in relation to expected growth	Job Losses by PIDE Vulnerability assessment data
Pakistan	Overall	12.0	19.100	18.53
	Agriculture	5.08	8.137	6.46
	Industries	5.11	8.270	8.03
	Services	0.47	2.884	4.05
Sindh	Overall	2.8	4.393	4.26
	Agriculture	1.0	1.635	1.59
	Industries	1.2	1.986	1.93
	Services	0.5	0.773	0.750

⁸⁸ Pakistan Institute of Development Economics (PIDE) has also conducted a similar analysis on job losses based on Labor Force Survey (2017-18). Based on their estimates, job losses in the worst-case scenario are expected to reach 18.53 million in Pakistan. In Sindh, the resultant losses could reach 4.26 million. The table below provides comparison and analysis of different scenarios.

Annex-B: Poverty Assessment

Presently, 24.3% of population is living below the \$1.90 poverty line at PPP in Pakistan. This essentially means that 50.49 million out of 207.78 million people are below poverty line. Assuming Sindh's share of 29.8% in terms of total poor population in Pakistan, it means that 15.05 million people in the province are living below poverty today (i.e. 29.8% of 50.49 million total population living below the poverty line in the country).⁸⁹



⁸⁹ District Development Portal Data4Pakistan, <http://www.data4pakistan.com/map.html>

Sub-Committee of NCOC for COVID-19 on economic analysis has estimated that the poverty headcount will increase from 24.3 percent to 29 percent in Scenario-I and to 33.5 percent in Scenario-II⁹⁰. The estimation is predicated on the assumption that aggregated consumption of households will fall by 5 percent (Scenario-I) and by 10 percent (Scenario-II). The number of additional people who could fall below poverty line in Pakistan ranges from about 10 million in Scenario-I (29 percent headcount ratio) to 19.1 million in Scenario-II (33.5 percent headcount ratio). This essentially means that the total number of people below poverty line in Sindh could range from 18.03 million to 20.74 million people due to COVID-19 Impact.

Monetary and Multi-Dimensional Poverty: Total number of poor people in Sindh was 14,048,000 which was 47,092,000 in Pakistan according to PSLM 2014.⁹¹ This means that 29.8% of the total poor people of Pakistan reside in Sindh. In Pakistan, 24.3% of population is living below the \$1.90 poverty line at PPP, (i.e. 50.49 million out of 207.78 million people).⁹² Assuming Sindh's share of 29.8% in terms of total poor population in Pakistan, it means that 15.05 million people in the province are living below poverty today. Sub-committee of NCOC estimate that number of additional people who could fall below poverty line in Pakistan ranges from 10 million in Scenario-I (29 percent headcount) to 19.1 million in Scenario-II (33.5 percent headcount). Extrapolating these numbers to Sindh would mean that an additional number of 2.98 million (Scenario-I) to 5.69 million (Scenario-II) people could fall below the poverty line as a result of the outbreak-related economic shocks.

⁹⁰ COVID-19 Impact: Preliminary Macro-Economic and Socio-Economic Assessments, Sub-Committee of NCC, <https://www.thenews.com.pk/print/649600-covid-19-scenario-govt-fears-gdp-growth-to-go-down-by-1-3pc>

⁹¹ PSLM 2013-14, <http://www.data4pakistan.com/map.html>

⁹² Pakistan Economic Survey 2018-19, http://www.finance.gov.pk/survey/chapters_19/15-Social%20Protection.pdf

Annex-C: Priorities for Social Protection Response to COVID-19

Area of Support	Interventions	Relevant Institutions
Social Assistance	Identification of vulnerable households Streamlining disbursement of social assistance Harmonization of efforts to address coverage and funding gaps	Social Protection Strategy Unit, PPRP, Ehsaas (PASS), Finance Department, Zakat & Ushr Department
Social Insurance	Expand the ambit of health insurance to include unemployed and vulnerably employed	Finance Department, Health Department, PPRP
Labor Market Programs	Active labor market program: Public employment services Vocational training programs Employment subsidies	STEVTA, Finance Department, Works & Services, Labor Department
Social Care Services	Bolster relief efforts by identification of vulnerable women and children Support remedial education to affected children Support skills development initiatives for impoverished women Social support service extension (e.g. mental health)	Social Welfare Department, Women Development Department, Social Protection Strategy Unit, STEVTA, PPRP
General Subsidies	Restructure scope of subsidies with 'equity' objective Conduct economic vulnerability assessment	Agriculture Department, Food Department, Finance Department, PPRP

for identification and
targeting
Prioritize phase-wise
provision of subsidies
based on vulnerabilities

Annex-D: Industrial support mechanisms suggested by P&DD

Area of Support	Interventions	Relevant Institutions
Supporting Businesses	<p>Monitor the impact of the crisis on SMEs and enhance the governance of SME related policy responses;</p> <p>Identification of key value chains in agriculture and other consumables;</p> <p>Access to finance through grants, equity and debt instruments to support working capital, growth capital and wage subsidy to Medium Small and Micro Enterprises;</p> <p>Support Startups and entrepreneurs (especially in the technology, information and communication space) through the National Incubation Center, and other accelerators and incubators operating in Sindh</p>	Sindh Enterprise Development Fund, Sindh Bank, Industries and Commerce Department, PPP Unit, Finance Department, National Incubation Center, Sindh Small Industries Corporation, Commercial Banks
Sector Specific Protocols	<p>Government of Sindh to develop sector specific SOPs particular for high value added and vulnerable sectors</p> <p>Support e-commerce through implementing tax exemptions and other measures;</p> <p>Implement tax exemptions to e-commerce</p>	Public-health leaders, industry associations, and Planning and Development Department
Mitigate effect of Sector wise GDP Losses	The expected GDP losses in Sindh will range between \$2.25 billion to \$2.317 billion. Particular focus should be on	Sindh Board of Revenue (SBOR) Sindh Board of Investment (SBOI)

	<p>services and industrial sector in form of following interventions</p> <ol style="list-style-type: none"> 1) Strategies should be developed to mobilize funds and inject investments equating to at least 10-15% of GDP loss. 2) Develop phase wise subsidies schemes for vulnerable industries (transportation and retail industries included) 3) Permitting delays in the deposits of tax liabilities and reduction in tax rates (especially through the halving of the minimum turnover tax). This includes cement, iron and steel, fertilizer, chemicals, paper and board, 4) Tax refund and duty relief schemes to exporting industries 5) Deferment of appropriate share of loan balance. Cost to be picked up by banks assuming there is no compounding of interest charges on the delayed servicing of the debt. 	<p>Sindh Exercise and Taxation Department Industries and Commerce Department Labor Department Finance Department</p>
Wage Support Scheme	<p>It is expected that 2.4 million people will be temporarily out employment in Sindh. So based on this estimate, actual identification of partial unemployment and working</p>	<p>Finance Department, Industries and Commerce Department Labor Department</p>

	<p>hour reduction in daily wagers and vulnerable employees needs to be undertaken</p> <p>Identification of partial unemployment and working hours reduction in daily wagers, particularly the vulnerable employees</p> <p>The government may develop a mechanism to finance temporary layoffs; and incentivize businesses to discourage layoffs;</p> <p>Leverage G2P Payment Infrastructure for cash transfers using solutions like mobile money and e-transfers, etc.</p>	
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Annex-E: Action matrix based on findings of the report

Note: This action matrix does not exhibit complete set of policy recommendations contained in the report and discussed with Government of Sindh's various line departments during August-December 2020. The full report text (above mentioned) may be seen for more sector-specific discussion.

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
Finance Department				
I.1	Quarterly meetings with relevant line departments to review COVID-19 related budgets and sectors strategies. Prior to each meeting an expenditure prioritization report may be furnished by line departments and sent to Finance Department. Finance Department could provide a proforma for this exercise			P&DD and line departments in health, education, agriculture, livestock, industries, social welfare, social protection strategy unit, and transport
I.2	Prepare proposals for improving the utilization rate in COVID-19 interventions/schemes. This will also address lack of orientation in some line departments regarding relevant rules and forum which allow expediting the usual project execution under PSDP/ADP			Planning & Development Department
I.3	A proposal may be prepared for rationalizing subsidies in agriculture through proper targeting towards small farmers only. The saved budget may be diverted towards promoting 'safe agriculture' practices amid and after pandemic			Agriculture, Supply & Prices Department
I.4	A proposal may be prepared for rationalizing subsidies in manufacturing sub-sectors through proper targeting towards			Industries Department

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	micro and small units only. The saved resources may be diverted towards promoting 'safe production & trade' practices and compliance with SoPs amid and after pandemic			
I.5	A workshop may be convened to provide orientation to line departments regarding accessing rules and forum to execute emergency funds			Line departments in health, education, agriculture, livestock, industries, social welfare, social protection strategy unit, and transport
I.6	To demonstrate strengthened transparency aspects around managing of emergency funds and give confidence to donors and tax payers, funds utilization report may be presented to parliament and uploaded on the web on a weekly basis			
Planning & Development Department				
I.1	Initiate rapid research on adequacy of response by line departments to COVID-19 at a district level. Select districts with high incidence may be considered for such a study			Social Protection Strategy Unit; Agriculture Supply & Prices Department; Industries Department; Social Welfare Department
I.2	Research and Training Wing at P&DD may be capacitated to receive and analyze epidemiological data and also integrate the same with provincial fiscal framework. Live			Health Department and PDMA

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	sharing of epidemiological data between P&DD, PDMA and health department may be discussed as well.			
I.3	Social enterprises in healthcare space were most effective at a community level during the first wave of pandemic. A provincial law to encourage civic entrepreneurship and establishment of social enterprises in health and education sectors may be initiated for processing.			Law, Parliamentary Affairs & Human Rights Department
I.4	Overall provincial development framework e.g. 'Sindh Vision' may be updated to take account of post pandemic recovery and priorities, and bringing provincial SDGs back on track. Likewise Sindh Poverty Reduction Strategy may also be updated			
I.5	A checklist against which execution or completion of emergency projects (e.g. setting up of hospitals, isolation centres etc.) could be issued. The unit cost rates allowed in PC-I/other project forms should be updated			Finance Department, SPPRA
I.6	The impact of pandemic on women is proportionately more than the male workforce.			Women Development Department, Finance Department

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	A gendered analysis of COVID-19 disbursements may be conducted for current and future waves and post pandemic period			
1.7	Ensuring alignment of future ADPs with COVID-19 sectoral plans. To start with P&DD may convene a workshop with health and education departments to improve alignment			Relevant line departments
1.8	Continue to monitor emerging pandemic waves for economic and social impact at district level. A monthly monitoring bulletin may be initiated until the time incidence of pandemic diminishes			Local Government, Rural Development, & HTP Department
1.9	Defining post-pandemic recovery scenarios for Sindh province under various assumptions regarding future medical solutions/vaccine availability options			Health Department and Finance Department
Health Department				
1.1	Health department would require a forward-looking assessment on how much of the <i>ad hoc</i> staff hired during 2020 to respond to COVID-19 will be required beyond 2021-22 as the incidence of disease decline. We understand that some of this trained human resource will still support intensive care units,			

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	higher dependency units and isolation wards			
I.2	Behavior change communication programs and community awareness programs need to be scaled up to ensure that SoPs are ensured even when infection rate is manageable or comes down in future			Information Department
I.3	A regular field study/survey exercise may be conducted to check the effectiveness of ongoing social messaging/campaigns			Information Department, SPSU
I.4	An exercise to map the capacity deficits at BHUs may be completed on priority. For example, infection prevention control missing at most places.			Health Department, PPHI
I.5	District Health Information System (DHIS) needs to incorporate surveillance component and allow real time reporting. Access to DHIS may be allowed to other relevant departments including P&DD.			Planning & Development Department
I.6	Upgrading of existing testing laboratories (to BSL-3) needs to be expedited. Any resource constraints in this regard may be informed to the relevant			Planning & Development Department

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	departments/federal government			
I.7	COVID-19 infection and hospitalizations are resulting in high out-of-pocket medical costs. Design of social protection interventions for FY22 and beyond may study this trend and propose changes to existing schemes			Social Protection Strategy Unit, Social Welfare Department
I.8	A study may be conducted in-house or outsourced to see how prolonged incidence of pandemic is impacting routine services including mother and child health and immunization			Women Development Department
Sindh Education and Literacy Department				
I.1	An assessment is required on how COVID-19 may have increased the number of out-of-school children in each district. Once schools are fully open the provincial authorities will need to undertake this and swiftly bring SDG-4 back on track			
I.2	A district level assessment is required on how COVID-19 is resulting in increased out-of-pocket expenditures and how targeted social protection measures could address this challenge			Social Protection Strategy Unit, Social Welfare Department

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
I.3	Behavior change communication programs and community awareness programs needed to raise awareness regarding schooling during lockdowns; bringing dropouts during lockdown back to school			Information Department
I.4	A regular field study/survey exercise may be conducted to check the effectiveness of ongoing social messaging/campaigns			Information Department
I.5	The department continues to develop service delivery partnerships with various civil society organizations. It is therefore timely to assess which partnership models deliver best in crisis times. This will offer lessons for improving public private partnerships during emergency times			Finance Department (Public Private Partnership Unit); Sindh Public Procurement Regulatory Authority; Planning & Development Department
I.6	The pandemic has imposed cashflow challenges for school management and additional financial burden to ensure SoPs over the longer run. An audit-based study could inform how to better manage finances at school level			Finance Department
I.7	COVID-19 has impacted education attainment, learning and			College Education Department, Sindh

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	competencies. A comprehensive study across all districts is required regarding the losses incurred. This exercise may also include higher education			Higher Education Department
Industries Department				
I.1	To respond to the needs of dormant firms, a district level outreach campaign is required to register the enterprises that have gone out-of-business for good or haven't opened up after the initial COVID-19 lockdowns. For example, enterprises in retail, transport, hospitality, schooling, tourism sectors were still not allowed to operate on full scale even until start of January 2021. Many were forced to shut down permanently as could not cover overheads/fixed costs			Information Department
I.2	Based on the registration drive in I.1, Industries Department could approach the relevant institutions to prepare a support package			State Bank of Pakistan, Sindh Bank, Sindh Enterprise Development Fund
I.3	The provincial government may initiate an e-portal for registration of MSMEs and human resource/employment records of MSMEs. This			Social Protection Strategy Unit; Information, Science & Technology Department

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	database will help provincial government in designing better response during future waves or similar emergencies			
I.4	To revive post pandemic investor interest all existing small zones/estates may be allowed same provisions as under national SEZs framework. The department may formally approach the federal government/CCI			Investment Department, Board of Investment (Federal)
I.5	For the medium term a provincial MSMEs policy may be introduced to give certainty regarding fiscal, cost and price incentives. Agro-based MSMEs may also be included			Agriculture, Supply & Prices Department, Livestock & Fisheries Department
Agriculture, Supply & Prices Department				
I.1	Helpline portal for agribusinesses needs strengthening. Access to this portal may be provided through easy-to-use app on smart phones of all provincial and district officials who in turn may be able to see the live updates on the portal regarding evolving needs and grievances			Social Protection Strategy Unit; Information, Science & Technology Department
I.2	Sindh is already supporting modernization of rice mills by funding interest on loans for modernization taken by rice millers. This is being managed by Sindh			Sindh Enterprise Development Fund

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	Enterprise Development Fund. A program may be introduced to cover interest charges on loans taken by rice farmers for on-farm mechanization. Supporting rice supply chain will help ensure food security during crisis times and beyond			
I.3	Orientation programs for farmers to help understand online payment/transaction methods. In future credit facility may also be processed online. Support from reputed fintech firms may be procured			State Bank of Pakistan, Sindh Bank, Pakistan Banks' Association
I.4	COVID-19 coincided with floods and locusts attack testing farm sectors resilience. In collaboration with PDMA and relevant development partners, a comprehensive study may be conducted to look at interventions required for future resilience and farm sector capabilities to deal with multiple emergencies. Future ADP schemes may be aligned with this goal			PDMA and development partners
Livestock & Fisheries Department				
I.1	Helpline portal for livestock and fisheries units may be established.			Social Protection Strategy Unit; Information, Science

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	Access to this portal may be provided through easy-to-use app on smart phones of all provincial and district officials who in turn may be able to see the live updates on the portal regarding evolving needs and grievances			& Technology Department
I.2	A dedicated livestock and dairy policy may be formulated and minimum pasteurization law implemented to help ensure smooth supply chains			Law, Parliamentary Affairs & Human Rights Department
I.3	Updating the draft fisheries policy to take account of SoPs in this sector and increased costs of small scale operators in fisheries			Social Protection Strategy Unit
I.4	Orientation programs to help understand online payment/transaction methods may be introduced. In future credit facility may also be processed online. Support from reputed fintechs may be procured			State Bank of Pakistan, Sindh Bank, Pakistan Banks' Association
I.5	Action item #I.4 in agriculture department's section (above mentioned) applies for livestock and fisheries sector as well			PDMA and development partners
Investment Department				
I.1	As part of post-pandemic economic revival, the department may convene sector-specific public			Planning & Development Department

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	private dialogue to discuss what measures could be adopted by GoS to improve competitiveness of export-oriented enterprises			
I.2	A regulatory impact analysis (RIA) may be conducted for sectors most hit by the pandemic. A reduction in regulatory burden will lessen the overall cost of doing business			Industries Department, SEDF
I.3	A study may be required to understand effectiveness of COVID-19 fiscal and credit package provided to formal sector (medium and large enterprises). Any gaps could then be addressed in budget FY22 and beyond			
Transport & Mass Transit Department				
I.1	COVID-19 compliant measures and SoPs in public transportation need strengthening. Social messaging campaigns for public transport operators is missing			Health Department, Information Department
I.2	As regards local cargo and warehousing, requirements with regards to 'safe trade and logistics' standards are being demanded by local and foreign buyers. An immediate evaluation is desired with regard to			Line departments of health, agriculture, livestock, and industries

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	current situation and necessary improvements			
Public Health Engineering & Rural Development Department				
I.1	As per assessment in this report there is a need to ensure timely and quality personal protective equipment (PPE) for sewer cleaners. Regular random tests of this workforce also need to be ensured to arrest the spread of infection			Health Department
I.2	Outreach and increased social messaging is required to reach sanitation workers in the informal sector with regard to SoPs compliance and available PPE options			Information Department, Health Department
Information, Science & Technology Department				
I.1	Low internet penetration has not allowed farm sector or non-farm sector in rural areas to pivot during the pandemic. In this regard, Universal Service Fund (Ministry of IT & Telecom) may be accessed to expand the digital footprint in rural Sindh. At least, the major farm clusters across the province may be provided improved connectivity			Ministry of IT & Telecom; Pakistan Telecommunications Authority
I.2	Various line departments have raised e-portals to ensure efficiency in their work and to respond to the needs of their			

Action Items & Lead Departments	Tasks	Proposed for Immediate Action	Medium to Long Term Actions	Collaborating Departments (if any)
	stakeholders. These portals need to be connected for improved inter-agency coordination during emergency times			
Social Protection Strategy Unit				
I.I	The institutional framework of Social Protection Strategy Unit (currently based out of Chief Minister's Office) may be finalized to provide necessary certainty to the working of this office. In this regard, a comparative assessment of institutional models may also be carried out (e.g. in the case of Punjab a Punjab Social Protection Authority was established, learning from the sub-national models in the region)			
