



# Pakistan Case Study

Situation Analysis on the Effects  
of and Responses to COVID-19  
on the Education Sector in Asia



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October 2021

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# Foreword

The pandemic caused a major children's rights crisis: all service sectors being profoundly impacted, with the most disadvantaged being disproportionately affected.

COVID-19 – possibly the largest pandemic the world has ever seen- led to an economic crisis probably more radical and global than ever before; as well as disruption of learning on an unprecedented scale. The pandemic caused a major children's rights crisis: all service sectors being profoundly impacted, with the most disadvantaged being disproportionately affected.

In response, with support from the Global Partnership for Education, UNICEF and UNESCO joined forces with Mott MacDonald, Cambridge Education to carry out a situation analysis, primarily to generate analyses to inform strategic responses to the crisis going forward. While the extension and duration of the pandemic required to invest more time to produce the final analyses and reports, fortunately information had already been discussed through webinars and national conversations with Ministries of Education and other partners across large parts of the Asia Pacific region.

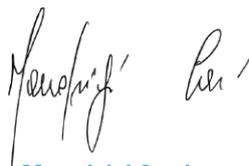
Furthermore, the reports continue to be of utmost relevance given subsequent waves of COVID-19 sweeping across the world in 2021 and very likely in 2022 as well. The task of learning from the crisis and how to mitigate its effects in education is on-going. More than one academic year has now been lost for many children. To ensure continuity of learning whilst schools are closed, the delivery of education is radically changing today through distance education: digital, blended or hybrid learning have become part of the new learning reality which all Governments, teachers and learners will have to adjust to.

While major efforts are needed to mitigate the learning loss of those children who return to school in the post-COVID-19 recovery phase, we must also remember that many children were not learning before the crisis and several million were not even in schools. The reports therefore also explore opportunities to build back better and to re-imagine education; to shift from fact-based didactic methodologies to competency-based approaches, which are more flexible, better respond to the holistic needs and aspirations of all children, and provide opportunities for life-long learning as per the Sustainable Development Goals (SDG) 4 agenda.

While the suite of reports provided within the Regional Situation Analysis are particularly relevant to the Asia Pacific region, contexts of course vary considerably across our huge region. At the same time, the reports may also provide insights that are relevant to other regions around the world. Hopefully the findings, including the country case studies, and regional budget needs analysis will help governments resume and accelerate progress towards SDG 4. The way education is conceptualized and delivered is changing fast, and the transformation journey will be steep and full of challenges. Governments, donors, all partners and the private sector will need to work together, not only to get the strategies and levels of investment right, but to build more resilient, effective and inclusive systems, able to deliver on the promise of education as a fundamental human right for all children, whether schools are open or closed.



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# List of acronyms

<b>ADB</b>	Asian Development Bank
<b>AEPAM</b>	Academy of Educational Planning and Management
<b>ASWA</b>	Accelerating Sanitation and Water for All
<b>BISP</b>	Benazir Bhutto Income Support Programme
<b>BBC</b>	British Broadcasting Corporation
<b>COVID-19</b>	Coronavirus disease
<b>ECC</b>	Economic Coordination Committee
<b>EdTech</b>	Education Technology
<b>EMIS</b>	Education Management Information System
<b>ESP</b>	Education Sector Plan
<b>EU</b>	European Union
<b>FATA</b>	Federally Administered Tribal Areas
<b>FER</b>	First Emergency Response
<b>FESP</b>	Family Education Services Foundation
<b>FCDO</b>	UK Foreign, Commonwealth and Development Office
<b>GDP</b>	Gross domestic product
<b>GPE</b>	Global Partnership for Education
<b>ICT</b>	Information and communications technology
<b>IDP</b>	Internally-displaced person
<b>IPC</b>	Infection prevention and control
<b>IMF</b>	International Monetary Fund
<b>JICA</b>	Japan International Cooperation Agency
<b>KP</b>	Khyber Pakhtunkhwa
<b>LEGs</b>	Local Education Groups
<b>MCQs</b>	Multiple-Choice Questions
<b>MPI</b>	Multidimensional poverty index
<b>NDMA</b>	National Disaster Management Authority
<b>NDRMF</b>	National Disaster Risk Management Fund
<b>NGO</b>	Non-governmental organization
<b>NSER</b>	National Socio-Economic Register
<b>OOS</b>	Out of school

<b>PEC</b>	Pakistan Engineering Council
<b>PHED</b>	Public Health Engineering Department
<b>PMIU</b>	Programme Monitoring and Implementation Unit
<b>RRREP</b>	Response, Recovery and Resilience in Education Project
<b>SAFWCO</b>	Sustainable Agriculture Farmer's Welfare Organization
<b>SBA</b>	School-Based Assessments
<b>SDG</b>	Sustainable Development Goals
<b>SED</b>	School Education Department
<b>SMS</b>	Short Message Service
<b>SOPs</b>	Standard operating procedures
<b>TCF</b>	The Citizens Foundation
<b>TfP</b>	Teach for Pakistan
<b>TVET</b>	Technical and vocational education and training
<b>UCB</b>	Universal Child Benefit
<b>UNICEF</b>	United Nations Children's Fund
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>USAID</b>	United States Agency for International Development
<b>WASH</b>	Water, sanitation and hygiene
<b>WFP</b>	World Food Programme
<b>WHO</b>	World Health Organization



# Executive summary

## Introduction

This Situation Analysis has been undertaken as part of the broader analysis initiated by UNICEF and UNESCO to provide a snapshot of the impact and educational responses to COVID-19 across Asia. It considers the direct effects of school closures and reopenings and identifies the initial impact that this may have had on learners, their families as well as on the overall education system. In doing so, it aims to develop insights based on the range of responses to the pandemic with a view to assessing their efficacy in Asia. It seeks to understand the contextual factors that may have supported or hindered learning, with particular attention on disadvantaged groups most affected by the pandemic. For this, the analysis has the following objectives:

- To assess and estimate the impact of the COVID-19 pandemic on the education sector and stakeholders in Asia.
- To examine the policy and financial implications on progress towards achieving SDG4-Education 2030.
- To identify examples of promising responses and strategies in education and associated social sectors, which can be shared with other countries.

This Situation Analysis identifies examples of effective country approaches which could be replicated or adapted for use in other countries. Following the development of the case studies (including this Pakistan Situation Analysis), the overall study will include an overview of the situation in each of the three Asian sub-regions and finally of the region as a whole.

The Government of Pakistan took rapid action at the start of the COVID-19 pandemic to respond and to mitigate its impact. A large number of policy papers about how to respond to the pandemic have been developed by the Government and other interested parties, but the challenge was, and is, to ensure a coordinated implementation of best practice and guidance across one of the largest education systems in the world.

The World Health Organization has praised Pakistan for efforts made to keep the numbers of infections down. The first case was declared on 18 March 2020, and the Government held its first strategic meeting on 26 March 2020. The National Disaster Risk Management Fund allocated funds and, in May 2020, the Government published its National Response and Resilience Plan – a framework for strategies and responses to the pandemic.



Despite such success, this study highlights some of the adverse impacts of the pandemic on Pakistan's education sector, as well as diving deeper into the way in which the Ministry of Education has worked with the private sector to increase the use of technology for learning. The Pakistan Government is planning to invest heavily in digital development, to ensure the population is prepared for the future. With 64 per cent of its population under the age of 30,<sup>1</sup> it is imperative that the digital divide is redressed, to give young people a greater chance to access education and the resulting opportunities it brings, not least as much employment is increasingly demanding digital skills. At the close of this report, recommendations are shared that link back to lessons learned during the pandemic and point to the need to increase resilience to future shocks to education.

## Effects and responses

When all Pakistan's schools were closed in March 2020, and in order to address the needs of the 46 million children affected, there was rapid education sector action both at the federal and provincial levels to provide some continuity of learning and mitigate potential learning loss.

The Ministry of Education focused initially on managing continuity of education, deploying a federal-level Teleschool programme for an hour a day at every level of education. Then, beyond ensuring continued learning during closures, the next priority was to get children back to school and to ensure their safety while doing so, which led to development of standard operating procedures (SOPs) for schools.

The School Education Department of Punjab designed and implemented 'Taleem Ghar.' On 1 April 2020, Taleem Ghar was launched on cable channels across Punjab to enable students to continue learning from home. Initially it was launched in three subjects (science, mathematics and general knowledge), from Grades 1-8. Various departments of the government came together to ensure the success of this intervention. The Programme Management and Implementation Unit (PMIU) led the process by planning and managing the project. The Punjab Information Technology Board (PITB) orchestrated the development of all digital platforms, while also creating and curating content for Taleem Ghar. The district administration from across Punjab has been responsible for ensuring implementation on the ground by engaging all cable operators.

Closures presented challenges for all children in terms of accessing continuous learning, remaining motivated to learn, and gaining the necessary support at home and remotely from teaching staff to learn. Nonetheless, as elaborated throughout this study, the following groups were affected more severely: children from rural communities; children in urban and peri-urban slums;<sup>2</sup> children with disabilities, including blind, deaf and children with physical disabilities; girls; Afghan refugee children (registered and unregistered); and children from minority groups, such as in the emerging former Federally Administered Tribal Areas (FATA) districts of Khyber Pakhtunkhwa (KP) where they have suffered displacement, insecurity and conflict.

In this section of the study, the following four dimensions of 'effect' are covered:

- Access to and participation in learning
- Safe operations
- Health, well-being and protection
- Finance

Prior to the pandemic, participation in education had been on the increase in Pakistan, with gross enrolment rates at 95 per cent by 2019;<sup>3</sup> overall youth literacy rates have improved in the past five years. However, over 44 per cent of school-age children were already out of school, and the literacy rate is still far below the Asia-Pacific regional average.<sup>4</sup> In this context, many of the existing challenges in the system have been brought into sharper relief.

The following impacts have been observed:

- There are large regional/provincial disparities in access to and quality of education.
- Gender is a significant factor in the experience of education, as well as the felt impact of the pandemic. Prior to the pandemic, there were already disparities in literacy levels. The closure of schools, however, is likely to enhance the gender divide, as girls are less likely to have access to digital devices, they are more likely to experience demands to work or take care of households and siblings, the levels of violence against girls and women is higher and exacerbated by emergency situations such as the pandemic, and the overall likelihood of girls returning to school when they reopen is lower than for their male counterparts.
- According to the Pakistan Telecommunication Authority, only one million school-age children have regular access to a digital device and the bandwidth to access educational content. This calls into question the capacity of the system to respond to school closures

with continuous learning at distance – for example, access to Teleschool, which still only provides one hour of schooling a day per grade, is likely to be very low. Furthermore, teachers have not been trained to manage remote learning or to provide an ‘enhanced’ role in distance- and blended-learning approaches, and parents are struggling to manage with children at home all day and to support their learning. In addition, evidence from previous school closures has shown that spending time out of school has a cumulative adverse effect on children’s progress. Research from the Pakistan earthquake found that, after 14 weeks of lost learning in Grade 3, by Grade 10 these children had 1.5 years of learning loss as compared to their peers.<sup>5</sup>

- The challenge to meet benchmarks in the provision of water, sanitation and hygiene in school reopenings, and the infrastructure required for this, is enormous – ‘of the estimated 127,000 government-run schools, 10.9 per cent lack a proper building, 33.9 per cent lack water and 59.6 per cent lack electricity.’<sup>6</sup> Furthermore, this comes at a time when resources are being diverted away from water, sanitation and hygiene (WASH) programmes and being redirected from rural to urban settings due to the higher risks of COVID-19 in more populated areas.
- In Pakistan, approximately 40 per cent of children are stunted<sup>7</sup> and many children also suffer from other levels of malnutrition. This situation is, therefore, highly impacted by school lockdowns and the associated cancellation of school meals – the World Food Programme estimates over 2 million children have been impacted by this.<sup>8</sup> Without proper nutrition, and given the significant pressures now falling on household income and capacity to feed children at home, more children are likely to suffer malnutrition and stunting – all of which adversely impacts their development and capacity to learn.
- The limited healthcare capacity across Pakistan prior to the pandemic is leading to concerns that child mortality rates will increase and that long-term health prospects will decline – 17 million children are at risk of missing immunizations<sup>9</sup> which are essential in ensuring the overall health of a child is met and is sustained.
- The fiscal picture is mixed for Pakistan’s education system – although gross domestic product (GDP) has declined as a result of the pandemic, and the national budget for education remains below the target of 4 per cent of the overall budget, the federal Government has increased the education budget from Rs 81.2 billion to Rs 83.3 billion for this year.<sup>10</sup> However, this sign of positive prioritisation of education does not combat the existing challenges within the budget – namely,

that the majority of it is spent on teacher salaries, and that there are large provincial differences in education spend.

- Household incomes meanwhile have also been adversely affected. Lockdowns have not only led to school closures, but to business closures, and a lack of consumer spending. As a result, the Government estimates that there will be ‘14 million job losses, increasing poverty levels for the first time in two decades.’<sup>11</sup> At the same time as incomes have decreased, households have been faced with additional costs, such as rising food prices, feeding children who are no longer receiving free school meals, medical care, and the need to access devices to enable children’s continued learning. Since a significant proportion of household expenditure is already spent on education expenses, the reduction of income is very concerning for the future education opportunities of children from the poorest and most vulnerable families.

In response to the challenges raised by the COVID-19 pandemic, the Ministry of Federal Education and Professional Training authored the Pakistan National Education Response and Resilience Plan for COVID-19 (K-12), the main document underpinning the response to the COVID-19 pandemic at the federal and provincial level. Provinces also took up the mantle to design their own tailored responses, which are described in more detail in the study below. Nationally, the main flagship of the response has been Teleschool, as well as the emerging (November 2020) Radio School to cater to more children. In addition, the Ministry was already putting emphasis on the digitalization of education, which is an agenda that has now been accelerated by the impact of COVID-19.

Nonetheless, as Pakistan looks forward to generating a more resilient and robust education system, it faces three key factors: (i) a lack of data, which needs to be systematic and comprehensive, on where the needs are and how their distance learning services are being accessed; (ii) huge levels of disparity between rural and urban areas, and between different groups of children depending on factors such as gender, minority, language, disability, etc.; and (iii) an overall massive number of children are still unable to access any form of device that would enable them to watch/listen to/read, etc. educational content remotely. Better planning for the future, including plans already developed by Pakistan’s Government, relies upon improved systems of data collection and evaluation, as well as more careful targeting of hard-to-reach and vulnerable groups. The underpinning responses and cross-cutting aspects of these challenges are elaborated in Chapter 2.

## Deep dive

In this chapter, the focus is on deepening the understanding of one aspect of Pakistan's approach to the pandemic, namely its effort to improve connectivity and access to remote learning through the use of technology. The COVID-19 pandemic has done a good job of demonstrating that the government and the private Education Technology (EdTech) sector can combine their efforts and innovate quickly. Furthermore, given the ongoing restrictions and waves of infection being witnessed in the COVID-19 pandemic, it is essential that Pakistan's education system is better prepared for more continuous interruptions and 'shocks'. Ultimately, the aim needs to be blended approaches that enable greater independence among students, as well as demanding pedagogical shifts among teachers. We know the return to school by both pupils and teachers is not a foregone conclusion for a variety of economic, social and psycho-social reasons. Therefore, in Pakistan, there is also a need to consider how technology can be used differentially with specific marginalized groups, out-of-school groups and school attendees, and how innovative learning approaches will be required if all young people are to access their basic right to education.

The deep-dive focuses more specifically on two aspects of the digital response – namely, access and connectivity. In 2018 only 71 per cent of the population<sup>12</sup> had access to electricity, and less than 30 per cent of children in Pakistan had mobile internet. According to the Inclusive Internet Index, which looks at over 100 countries across the world, Pakistan was ranked 86th for availability, 57th for affordability, 71st for relevance of content and local language use and 64th for readiness.<sup>13</sup> Furthermore, huge disparities in access exist between rural and urban areas, with the former containing a majority of the population and yet a minority of infrastructure development. The challenges, therefore, that children face in accessing education content from a distance are heavily influenced by infrastructural drivers, which in turn hampers not only their ability to keep learning (e.g., during the pandemic), but also opportunities in the future job market, where digital literacy is becoming an essential skill.

In 2018, therefore, it is encouraging that the Government of Pakistan launched its first digital policy, 'Digital Pakistan'.<sup>14</sup> As yet, this policy is not matched by associated curriculum reform, teacher training emphasis, and monitoring of results. Therefore, the COVID-19 pandemic has helped to highlight the need for longer-term thinking around the implementation of 'Digital Pakistan' and what

this means in terms of cost, capacity, and infrastructure. Recommendations for establishing a national vision and framework for delivery, as well as guiding principles that can underpin this are outlined in Chapter 3.

## Lessons learned

the following lessons emerged from the study:

- There has potentially been severe learning loss during the pandemic: given that schools in Pakistan were closed in March 2020 and open again in September, and then closed again in November until January 2021, learning loss may be significant, especially if the engagement of parents/communities has been a challenge.
- Although the outcomes of partnering with private-sector organizations to enhance the education technology response during the pandemic has not yet been assessed, it is clear that this engagement between Government and the private sector has enabled a much greater reach and coverage than would otherwise have been possible.

### Learning losses – Punjab Examination Council (PEC) Study, Punjab:

Due to the shutdown of school since mid-March 2020 and until they reopened, students faced significant learning loss in their academic performance. The Punjab Examination Commission designed a diagnostic study to estimate the learning loss of Grade 5 students, using School-Based Assessments (SBA) as a reference point. The findings of the study were as follows:

Almost all students from the 48 sampled schools showed a decrease in all four subjects based on Constructed Response Questions (CRQs). Reading comprehension based CRQs of Urdu and English showed a significant fall.

Reading comprehension-based Multiple-Choice Questions (MCQs) showed a gain in all 6 districts.

School closures affected higher-performing students more than lower-performing students in all four subjects across all six districts.

Students showed a reversal in their academic progress in areas of conceptual thinking (i.e., analysis, application and synthesis).

- There are many data limitations hampering forward planning. For example, little is known about:
  - » The impact of the pandemic on learning;
  - » The potential learning loss already experienced.
  - » Which children have or have not accessed remote learning during closures;
  - » How the pandemic and prolonged school closures and isolation have impacted on the emotional well-being of students and teachers.

Such data gaps need to be filled and more systematically collected, so that all of Pakistan's education planning can be reviewed in light of lessons emerging from the COVID-19 pandemic. Not least the way in which shocks and emergencies affect the poorest and most vulnerable hardest, and how to mitigate for this in future.

- COVID-19 has exacerbated existing divides, and highlighted the particular challenges for children with disabilities, children speaking different languages and dialects not catered for by the mainstream, and other minority or disadvantaged groups. It is clear that their needs are more complex than straightforward 'national' responses can cater for, and much more tailoring and mobilization of capacity is needed to generate adequate options for all children.

## Recommendations

The following recommendations are proposed in response to the challenges, impacts and lessons emerging from the study:

- The 'Digital Pakistan' policy provides a platform that the Government, at both federal and provincial levels, now needs to ensure is reviewed and translated into action, including:
  - » A review of the current curriculum and teacher training needs to ensure there is content and capacity to realize a vision for blended (and resilient) learning;
  - » Mapping across schools to highlight where electricity is available for internet and devices, and then to provide timelines for addressing the gaps;
  - » Setting out clear goals and targets in the digitalization agenda that focus on marginalized and vulnerable children;
  - » Identifying gaps and opportunities where private sector partners can be engaged to enhance capacity, and looking carefully at the framework for regulating and monitoring such partnerships;
  - » Revisiting Education Sector Plans to include 'distance learning strategies' and emergency budget lines, for future scenarios such as the pandemic;
- » Outlining the risks of digitalization and mitigation strategies; and
- » Providing costing parameters for the digital agenda, linked with education budgeting and fiscal space.
- The 'Digital Pakistan' agenda should not be taken as 'standalone' in responding to the needs of students, given that so many still do not come to school, or are at risk of drop-out, or cannot access education content online/on TV/by radio, etc. The requirements still go beyond digital infrastructure and capacity and must continue to focus also on low-technology solutions as a key part of the response. A digital agenda may require more incremental and secondary attention in light of the equity challenges presented, and will also rely heavily on private sector engagement to bolster capacity.
- The requirements for improvements in WASH and electricity infrastructure across schools are huge – this needs immediate and serious redress. This means SOPs should form part of School Development Plans, and schools need to be monitored to assess their status, and their ability to comply with SOPs outlined as part of the COVID-19 response plan.
- Overall, the gaps in data and the demands on the sector for reform dictate the need for all provinces to ensure readiness to systematically collect information on, for example, daily attendance in schools, attendance and drop-out, compliance with SOPs, and potential learning losses. A major part of this data collection must be 'real-time' monitoring at the school/district level feeding upwards into wider systems of monitoring.
- Develop and implement a comprehensive teacher development strategy that responds to the lessons emerging from the pandemic (full details of the strategic areas provided in Chapter 4).
- Finally, in response to the economic challenges emerging and to redress the major equity issues facing Pakistan, a Universal Child Benefit is proposed. This would ensure that there is a minimum level of income support for Pakistan's families, and the benefits to child well-being, the economy, social cohesion and political stability are likely to be significant while recovery from the crisis would be much quicker. In addition, such an initiative will reduce the scope of economic collapse and civil unrest, while simultaneously increasing trust in the Government, which it is hypothesized could have the longer-term impact of supporting willingness among the population to pay higher taxes.

## Conclusion

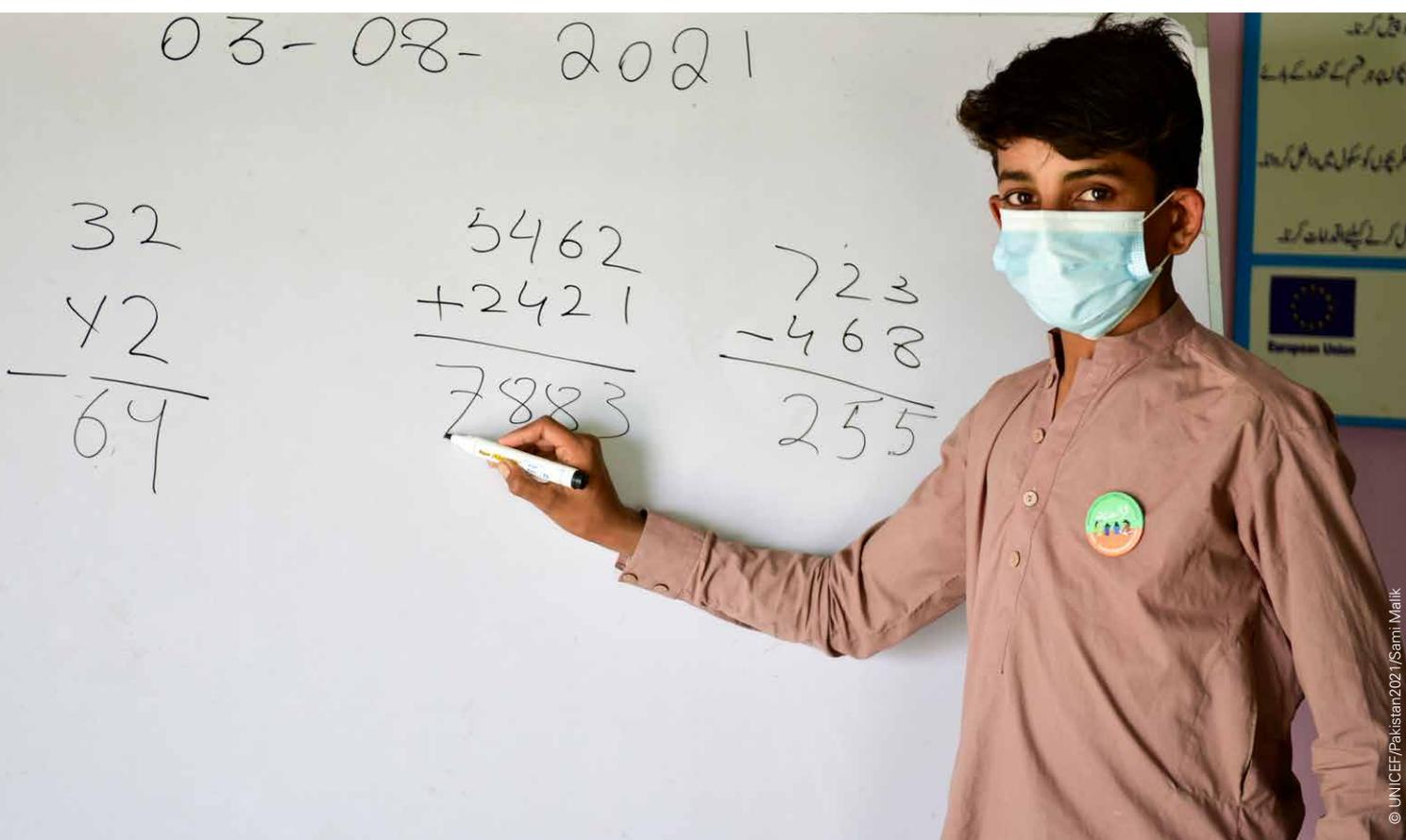
As one of the largest education systems in the world, and with over 40 million children out of school when the COVID-19 pandemic led to school closures,<sup>15</sup> it is very encouraging that the Government of Pakistan responded quickly and in a coordinated manner to introduce a range of measures for aiding its learners. The focus first on continuity of learning and then safe reopening of schools has led to a number of important milestones, including the establishment of the 'Taleem Ghar' and Teleschool programme to enable distance learning, and the roll-out of new standard operating procedures for schools to cater for their students safely. The elaboration of these examples of success in this study answers to the second objective of this study, namely:

- To identify examples of promising responses and strategies in education and associated social sectors, which can be shared with other countries.

In addition, the study aimed:

- To assess and estimate the various impacts of the COVID-19 pandemic on the education sector and stakeholders (children, adolescents, teachers, parents, education officials, etc.).

The effects of the pandemic have served to highlight a number of challenges for Pakistan's education sector, including huge disparities and inequities in access and quality of education, particular challenges in households as well as schools in gaining access to online and other media platforms for distance education delivery, low capacity among teachers who have not been trained to deliver remote and digital education and may also lack the infrastructure to do so, lack of infrastructure in schools to provide safe environments that meet with the new standard operating procedures for COVID-19, large gaps in data and evaluation to monitor the progress of actions and policies initiated as a result of the pandemic, and, overall, a weak communications systems between provincial and federal Government to ensure a coherent and consistent vision across the country. The recommendations aim to propose actions for redressing these challenges for a more equitable and resilient education system going forward. Although a major component of that is the digitalization of schools and teaching, there is an equal emphasis on the huge numbers of schools and students still unable to access digital media for various reasons, and thus an overall need for a planned approach to blended learning that delivers across learning needs and barriers, and avoids the risk of overlooking these complexities for a one-size-fits-all approach.



# Country fact sheet

The table below provides a snapshot of the pandemic, education sector response and background information for Pakistan.

**TABLE 1 | PANDEMIC, EDUCATION SECTOR RESPONSE AND BACKGROUND INFORMATION FOR PAKISTAN**

DIMENSION	INDICATOR/QUESTION	INFORMATION
Epidemiology	Date of first confirmed case	26 February 2020
	Date of first confirmed death	18 March 2020
	COVID-19 cases and deaths over time	The first death was reported on 18 March, the peak of the pandemic thus far was from mid-June to mid-July. A second wave occurred in November and, as of 30 November, there are 341,423 recoveries; 48,576 active cases and 8,025 reported deaths, with wide variations between and within provinces.
	Details about the pandemic and Government responses and support	<p>The Government took rapid action on 26 March 2020, calling a first Strategic Coordination meeting. The Pakistan National Disaster Risk Management Fund (NDRMF) approved grant of \$50 million to the National Disaster Management Authority (NDMA) to supplement the Government's response to the prevention and containment of the spread of COVID-19.<sup>16</sup></p> <p>On 4 May 2020, the Government published its National Response and Resilience Plan - a framework for strategies and responses to the pandemic.</p> <p>There was recognition of the need for more coordination between the federal and provincial Government.</p> <p>Donors provided emergency support. The GPE granted UNICEF Pakistan \$140,000 to support the Ministry of Education to develop a national report and recovery plan.</p> <p>Pakistan was recognized by the international community, including the World Health Organization, for its response to the pandemic and its ability to keep caseloads relatively low by comparison to those numbers predicted.<sup>17</sup></p>
School closure	Were schools closed, partially or fully?	Schools were fully closed on 13 March 2020 and partially reopened on 15 September. All schools were closed again between 24 November and 10 January 2021, due to a second wave of the virus.
	What phase is the country currently? Phase 1, 2 or 3 and is this nationally or regionally?	Most of the country seemed to be in recovery and in Phase 2: 'process of reopening', after the first wave. Pakistan had moved firmly and strongly, balancing health and economic issues and keeping shops open. But the second wave caused local lockdowns, restaurants and shop closures and a countrywide closure of schools until 15 January 2020, moving the country back to Phase 1: 'prior to reopening'.

DIMENSION	INDICATOR/QUESTION	INFORMATION
<p><b>Key vulnerable groups</b></p>	<p>Key vulnerable groups affected by the impact of COVID-19 on the education sector</p>	<ul style="list-style-type: none"> <li>• Children in poverty                             <ul style="list-style-type: none"> <li>» Based on the Household Integrated Economic Survey 2015-16, the country's average national household size is 6.31. Larger families are the norm in the first (poorest) quintile, while family sizes are much smaller among the fifth, richest quintile. Thus, impoverished households have a heavy burden of dependents, which stretches their limited household resources, often to a breaking point.<sup>18</sup></li> <li>» "Significant rural-urban disparities exist, with a higher proportion of rural inhabitants living in multidimensional poverty (54.6 per cent) than their urban counterparts (9.4 per cent)."<sup>19</sup></li> </ul> </li> <li>• Children with disabilities. While Pakistan has taken vital steps to advance the right to education through the provision of free and compulsory education for children aged 5-16, the national school system still faces huge challenges in the quality of education, the capacity of teachers and governance mechanisms. Prior to the pandemic, these challenges impacted marginalized groups of children the most, especially those with disabilities who experienced difficulties in accessing schools, a lack of access to relevant learning materials and information, and adequately staffed services. The pandemic has only amplified these challenges.</li> <li>• Girls – before the pandemic, in 2016-17, over 12 million girls were already out of school (OOS) (across primary to upper secondary levels, i.e., ages 5 to 16).<sup>20</sup> Girls are more at risk of dropping out as a result of the pandemic,<sup>21</sup> which could massively increase the numbers of OOS girls and further disproportionately impact girls of COVID-19. Out of school children – though the impact of factors influencing drop-out or never having attended school are stronger for girls in Pakistan, overall Pakistan has the highest proportion of out-of-school children in South Asia.<sup>22</sup> Out-of-school children often experience deeply rooted structural inequalities. Overall, the profile of excluded children includes girls, rural children, children in the poorest wealth quintile, and Balochi-speaking children, followed by those from other ethnic groups. Rural girls were more likely to be out-of-school at the lower secondary level and to experience more pronounced deprivation in terms of their right to education.<sup>23</sup></li> <li>• Women working from home are faced with increased household duties and reduced bargaining abilities<sup>24</sup> - which can have a knock-on effect on their children's education.</li> <li>• 417,000 Afghan refugee children.</li> <li>• Children in the former FATA area affected by terrorism, displacement and military action.</li> </ul>
<p><b>Education system structure</b></p>	<p>Brief description of the structure of the education system – federal or centralized</p>	<p>Under Article 25A of the constitution, the State provides free and compulsory education for children 5-16.<sup>25</sup> The Federal Government, under the 18th Amendment, retains responsibility for the curriculum, values and standards. Implementation of education is the responsibility of each province, which leads to differentiation. The Federal Government introduced a new single curriculum (2017), rolled out across the country.<sup>26</sup></p>
<p><b>Pre-COVID-19 progress towards SDG4 indicators</b></p>	<p>Aggregated rates do not show the true picture province-by-province where there are significant differences.</p> <hr/> <p>Out-of-school rate</p> <hr/> <p>Primary school completion rate</p> <hr/> <p>Reading proficiency</p>	<p>21.3% (elementary Grades 1-5)</p> <p>50.9% (middle Grades 6-8)</p> <p>70% (secondary Grades 9-12)<sup>27</sup></p> <hr/> <p>65.67%<sup>28</sup></p> <hr/> <p>75% of children in upper primary are not proficient in reading<sup>29</sup></p>

# 01

## Introduction



This Situation Analysis identifies examples of effective country approaches which could be replicated or adapted for use in other countries.

## 1.1 Background

The global nature of the COVID-19 pandemic makes it unique in modern times, affecting the whole world with the twin shocks of a health emergency and an economic recession. This will lead to long-term costs on human capital accumulation, development prospects and welfare. The pandemic, though global, has disproportionately affected the most vulnerable and marginalized members of society.

**"Some of the most vulnerable children felt the impact of COVID-19-related restrictions from the moment nationwide lockdowns were put in place to control the spread of the disease. Markets, workshops, farms, and factories closed, leaving children and families stranded. For many, the fear and uncertainty continue. Some minorities find themselves stigmatized and accused of causing or spreading the pandemic. Deep-rooted inequalities in societies are being exposed."**<sup>30</sup>

Asia, with its huge population and many overcrowded cities, is potentially very vulnerable to COVID-19 which spreads through close contact with infected people. The contexts within which the people of South Asia, South East Asia and East Asia, are coping with the virus are vastly different, with a disparity in living conditions and varying degrees of access to and quality of essential services such as health and education. Across the continent there is vast inequality between the rich and the poor and therefore different levels of resilience to the shocks that this disease has brought, putting the poor at long-term risk that reaches far beyond contracting the virus. For example, during the pandemic, Bangladesh and India were in the path of a cyclone and recent floods across the continent which have threatened communities and resulted in a double shock.

This Situation Analysis has been undertaken as part of the broader analysis initiated by UNICEF and UNESCO to provide a snapshot of the response of the education sector to the effects of COVID-19 across Asia. It considers the direct effects of school closures and reopenings and identifies the initial impact that this may have had on learners, their families, and the overall education system. In so doing, it aims to develop insights based on the variety of responses to the pandemic with a view to assessing their efficacy in Asia. It seeks an understanding of the contextual factors that may have supported or hindered learning, with particular attention on the most disadvantaged groups, who have been disproportionately affected by the pandemic. For this, the analysis has the following objectives:

- To assess and estimate the impact of the COVID-19 pandemic on the education sector and its stakeholders in Asia;
- To examine the financial and policy implications of progress towards achieving SDG4-Education 2030; and
- To identify examples of promising responses and strategies in education and associated social sectors, which can be shared with other countries.

This Situation Analysis identifies examples of effective country approaches which could be replicated or adapted for use in other countries. Following the development of the case studies (including this Pakistan situation analysis), the overall study will include an overview of the situation in each of the three Asian sub-regions, as well as an overview of the region.

## 1.2 Methodology

This case study is part of a broader study into the impact of COVID-19 across Asia. The case studies have been supported by the UNICEF and UNESCO country offices which have provided relevant information and assisted the researchers in contacting relevant officials to collect country-specific documents, grey literature and data.

In addition to a literature review, each case study also involved interviews with key stakeholders, including, Government policymakers and implementers, UNICEF and UNESCO teams, and EdTech providers.

## 1.3 Structure of the case study

This case study is divided into four sections. An introductory background section and country fact sheet, Chapter 2 discusses the effects of COVID-19 on the education system against four dimensions (see Figure 2 below); Chapter 3 provides a deep dive into the increased use in Pakistan of technology for learning; and Chapter 4 provides an overview of the lessons learned, and provides specific recommendations as to how Pakistan could increase the resilience of the education system to future shocks, to initiate recovery and build a new trajectory to meeting the SDGs.

FIGURE 1 | THREE PHASES OF SCHOOL REOPENING



FIGURE 2 | FOUR DIMENSIONS OF ANALYSIS OF EFFECTS





# 02

## The effect of COVID-19 on the education sector in Pakistan



In response to the COVID-19 pandemic, Pakistan closed its schools on 13 March 2020, affecting over 46 million learners aged 5 to 16.

Pakistan borders India, Afghanistan, Iran and China, and is divided into four provinces. Pakistan has a population of approximately 212 million<sup>31</sup> people, half of whom are under 19 years of age. It has one of the largest education systems in the world.

In 2010, Pakistan amended its constitution to place greater emphasis on education: (i) Article 25A guaranteed the right to free and compulsory education for children aged five to sixteen,<sup>32</sup> and (ii) the 18th Amendment devolved the implementation of education to the provincial level, allowing provinces to adapt both the national curriculum and associated policies which had been set by federal Government.<sup>33</sup>

Schools fall into two broad categories (i) government schools, which are predominantly free and are attended by over 50 per cent of children, and (ii) private schools, which are not overtly regulated by official government bodies and vary in terms of quality and cost. Most middle-class parents opt to send their children to elite private schools, despite such schools representing a small subset of all private schools. There is also a significant madrasah school sub-sector, which has increased over the past decade, especially within rural regions. These religious schools are either run autonomously or are associated with the private madrasah education boards.<sup>34</sup>

In response to the COVID-19 pandemic, Pakistan closed its schools on 13 March 2020, affecting over 46 million learners aged 5 to 16. Schools reopened in September but a second wave of the virus caused schools to close again on 24 November until 15 January 2021.

While closures presented challenges for all in terms of accessing continuous learning, remaining motivated to learn, and gaining the necessary support at home and remotely from teaching staff to learn, nonetheless the following groups were particularly affected:

- **Children from rural communities:** rural communities face greater poverty levels. Most of the rural population live in areas with a high proportion of inhabitants living in multidimensional poverty<sup>35</sup> (54.6 per cent) than their urban counterparts (9.4 per cent).<sup>36</sup> More than half of households in Pakistan rely on agriculture as their primary livelihood.
- **Children in urban and peri-urban slums<sup>37</sup>:** by 2030, the urban population in Pakistan is expected to grow by 90 per cent, and about half of Pakistan's urban residents live in slums.<sup>38</sup>
- **Children with disabilities,** including blind, deaf and children with physical disabilities, many of who were not attending school.
- **Girls:** already facing cultural barriers and high levels of violence, which makes them particularly vulnerable.
- **Afghan refugee children** (registered and unregistered) whose families lack access to formal work and housing.<sup>39</sup>
- **Children from minority groups,** such as in the emerging former Federally Administered Tribal Areas (FATA) districts of Khyber Pakhtunkhwa (KP) where they have suffered displacement, insecurity and conflict.

Over the last ten years, Pakistan has seen substantial economic growth. However, 2019 saw a dip following an upward trend between 2010 and 2018 that culminated in 5.8 per cent growth in 2018.<sup>40</sup> By contrast, in 2019 Pakistan's GDP was \$278.2 billion, but with a growth rate of less than one per cent.<sup>41</sup> Poverty levels have decreased significantly over the past decade<sup>42</sup>; the latest available data (2015) shows that 24.3 per cent of people are living below the national poverty line, which is almost half of the rate in 2006.<sup>43</sup> As a result of COVID-19, there is a significant risk that poverty trends will reverse, with poverty levels increasing to 40 per cent.<sup>44</sup>

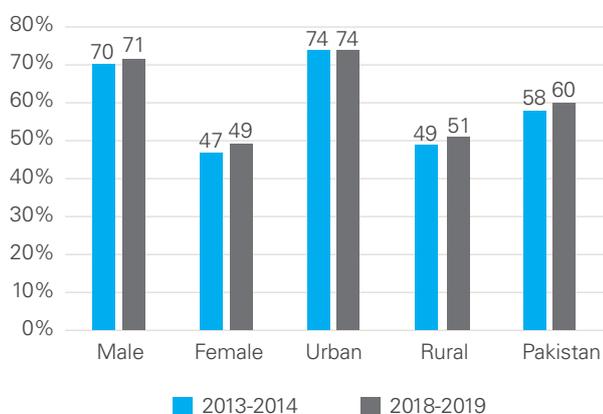
## 2.1 Effects of COVID-19 against the four dimensions

### Access to, and participation in learning

Prior to COVID-19, Pakistan saw some promising education improvements, particularly in terms of primary gross enrolment rates- up from 85 to over 95 per cent by 2019.<sup>45</sup> Major development partners like the World Bank (WB), the UK Foreign, Commonwealth and Development Office (FCDO), European Union (EU), the Global Partnership for Education (GPE), UNICEF, UNESCO and the United States Agency for International Development (USAID) are all investing in education across Pakistan's four provinces. Nonetheless, in the Pakistan Education Statistics report (2016-17), launched by the Academy of Educational Planning and Management (AEPAM), a subsidiary of the federal education ministry, it was highlighted that out of the total 51.53 million children between the age of 5 and 16, as many as 22.84 million – 44 per cent – were out of school, and that this was a slight increase on figures for the previous year.<sup>46 47</sup>

Pakistan has made progress towards improving overall youth literacy rates, with a two per cent gain nationally in the last five years.<sup>48</sup> At 60 per cent, the rates are still far below the Asia-Pacific regional average of 89 per cent,<sup>49</sup> and at a granular level there is evidence of regional and gender disparities in literacy levels – see Figure 3.<sup>50</sup>

FIGURE 3 | LITERACY RATE BY GENDER AND REGION



COVID-19 has significantly increased education challenges:

- Access to the internet and digital devices is a major issue for most of Pakistan's children. As reported by the British Broadcasting Corporation (BBC) in July 2020, home broadband is expensive outside of Pakistan's big cities, smartphone penetration stands at 51 per cent this year, and only one million school-age children have regular access to digital devices and bandwidth, according to the Pakistan Telecommunications Authority.<sup>51</sup>
- In addition, where children do have access to a digital device, girls are less likely than boys to gain such access,<sup>52</sup> and they are, overall, less likely to return to school after closure.<sup>53</sup>
- Teachers have not been trained to manage remote learning.
- Parents are struggling to manage with children at home all day and to understand how to help them access learning.
- The economic impact of COVID-19 presents huge challenges in terms of both educating and retaining pupils. The World Bank recently reported that 'close to a million students may not come back to school as a result of economic hardships experienced by their families' - the largest potential loss of school children to any school system,<sup>54</sup> increasing the already high numbers of out-of-school children.

Evidence from previous school closures has shown that spending time out of school has an adverse effect on children's progress. Research from the Pakistan earthquake modelled the impact of three months of school closures on children in Grade 3 who were near the fault-line and thus impacted by the closure as compared to children elsewhere. The modelling predicted learning loss by Grade 10, returning to collect data among these children four years after the earthquake and extrapolating on this basis. Ultimately, this study found that after 14 weeks of lost learning in Grade 3, by Grade 10 these children had 1.5 years of learning loss as compared to their peers.<sup>55</sup> During the COVID-19 pandemic, children have suffered six initial months of closure, followed by a further two months later in the year, all of which has caused significant disruption to schooling and bodes ill for the future learning of these children. Many children will find that all aspects of their learning will have suffered, despite mitigating measures from the provincial Governments (described in more detail below).

With 75 per cent of children in upper primary already not proficient in reading<sup>56</sup> and net enrolment rates of 77 per cent in primary grades, 49 per cent in middle classes and 31 per cent in secondary Grades 9-12<sup>57 58</sup> pre-COVID-19, this time out of school will have been a further setback in terms of meeting the SDGs. It is also worth noting that the above figures present a broad picture across Pakistan, but there are significant differences in drop-out rates and learning achievement between (and within) provinces, which will be exacerbated by the school closures.

### Safe operations

Over the last 20 years, Pakistan has made significant progress in ensuring children have both safe water at home and a healthy learning environment.

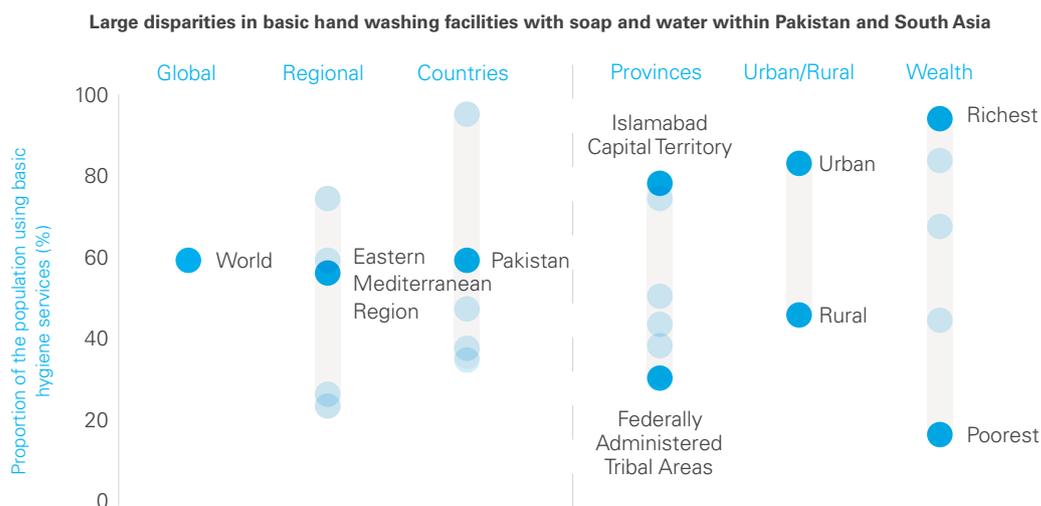
**Household:** At the household level, 60 per cent of the population have access to basic hygiene, which is higher than several other countries in the South Asia region.<sup>59</sup> Ninety-one per cent of households have access to basic drinking water (a significant increase from 2000)<sup>60</sup> and public defecation is reducing – it was just over 10 per cent by 2017, as opposed to over 27 per cent in 2007.<sup>61</sup> Figure 4 highlights that disparities remain between rich/poor and urban/rural populations, and by regions in terms

of access to basic handwashing facilities with soap and water. For those families without access to basic handwashing facilities, they ‘might have lower capacity to implement mitigation strategies to protect themselves from contagion should the infection spread due to poor housing and hygienic conditions (limited access to water, poor sanitation and over-crowding, financial barriers to exercising preventative health measures, etc.).’<sup>62</sup> As can be seen in Figure 4 below these families are most likely to be the rural poor.

**School:** The Pakistan School Safety Framework was created in 2016 to ‘provide policy guidance and to set a standard for the implementation of comprehensive school safety at national, provincial, district and school levels.’<sup>63</sup> There is a lack of information in terms of how provinces have adopted this policy framework to suit local conditions. It is also unclear, under normal circumstances, who is responsible for monitoring school safety. Education officials do not have this as a priority mandate on their school monitoring visits.

Prior to COVID-19, safety conditions and access to a wide range of WASH facilities varied between Government and private schools, with Government schools often being overcrowded, sometimes hard to reach safely on foot<sup>64</sup> and lacking adequate sanitation and electricity.<sup>65</sup>

FIGURE 4 | DISPARITIES IN BASIC HANDWASHING FACILITIES<sup>66</sup>



Population with basic hygiene facilities disaggregated by UNICEF regions, countries and Pakistan States, urban-rural & wealth quintiles (%)

Sources: JMP 2019 and Pakistan DHS 2018

To support provinces with reopening the schools safely, the Federal Government issued its 'Pakistan National Education Response and Resilience Plan' on 4 May 2020.<sup>67</sup> The plan outlines several key areas around safe operations, including, but not limited to:

- Developing and distributing guidance related to school cleaning, sanitation, WASH, infection prevention and control (IPC).
- Developing SOPs for case detection and referrals.
- Constructing additional water and sanitation facilities.

Despite the Federal Government providing guidance, UNICEF reported challenges around funding and the focus remains because of the impact of COVID-19.

- Funding: Money which would normally go towards water, sanitation and hygiene projects is being repurposed to meet the immediate needs of COVID-19.
- Focus: Resources have had to shift from the rural communities to urban contexts, due to the higher COVID-19 health risks in these areas.<sup>68 69</sup>

## Health, well-being and protection

**Nutrition:** Adequate nutrition for children is linked to children's development and learning. In Pakistan, many children suffer chronic malnutrition and approximately 40 per cent of children are stunted<sup>70</sup> which is likely to impact their development and overall learning. According to the World Food Programme school feeding map, during lockdown over 2 million children have missed out on school meals, with 39 per cent of those children being girls.<sup>71</sup> The challenge around ensuring children are receiving proper nutrition is further compounded by the fact that many households have experienced a reduction in income, which has impacted food consumption. A phone survey conducted between June and September 2020 by the Center for Global Development in collaboration with Citizens' Foundation, showed:

- 28 per cent of households surveyed report reducing the number of meals<sup>72</sup>
- 24 per cent of households surveyed report reducing the size of meals<sup>73</sup>

**Health:** Pakistan is managing a challenging healthcare landscape, which COVID-19 now compounds. According to the COVID-19, Pakistan Socio-Economic Impact Assessment, health systems were already under pressure prior to COVID-19, with limited healthcare capacity (approximately 1 hospital bed to 1,608 people, and 1 doctor to 963 people<sup>74</sup>). COVID-19 is putting considerable

pressure on that system. Provinces like KP have given high priority to fixing the healthcare systems during the pandemic. Pakistan has been recognized by the international community, including the World Health Organization, for its response to the pandemic and its ability to keep caseloads relatively low by comparison with that predicted.<sup>75</sup> However, Pakistan experiences some of the highest under-five child mortality rates in the world.<sup>76</sup> Internationally, the rate is 37.7,<sup>77</sup> whereas Pakistan remains at 67.2.<sup>78</sup> A recent study by The Lancet Global Health Journal showed, through modelling different COVID-19 scenarios, that there is a likely chance that COVID-19 will indirectly increase child mortality specifically in low-income and middle-income countries.<sup>79</sup>

Children's health is likely to have suffered in several ways during the pandemic because of the reduction in services such as school feeding and immunization. 17 million children are at risk of missing immunizations,<sup>80</sup> which are essential to ensuring the overall health of a child is met and sustained.

In the last ten years, many countries regionally have experienced a slight decline in HIV rates. In contrast, Pakistan has experienced a sharp rise, with new cases specifically amongst young people 15-24. According to the 2020 Global Aids Report, issues around low coverage for needle-syringe programmes as well as inadequate therapy services around opioid substitution have been two of the leading challenges in Pakistan. While the report points to the potential devastation that COVID-19 could have on people living with HIV as services are disrupted, an emergency antiretroviral therapy has been made available to reduce the impact on services provided. Additionally, the Pakistan Association of People Living with HIV (APLHIV) has provided education around COVID-19 for people living with HIV, as well as monitoring stocks of treatment to ensure there are sufficient supplies.

Girls in Pakistan were particularly vulnerable during COVID-19, potentially affecting their ability to participate in education.

Women who participated in a UNICEF survey, 'Collecting behavioural insights into COVID-19 in Pakistan', reported the following impact of COVID-19 on their lives:

- Women's access to information on COVID-19 was often restricted to receiving news from male members of their households.
- Women and girls were often overburdened at home caring for patients who were too afraid of healthcare centres to seek treatment for their COVID-19-like symptoms.

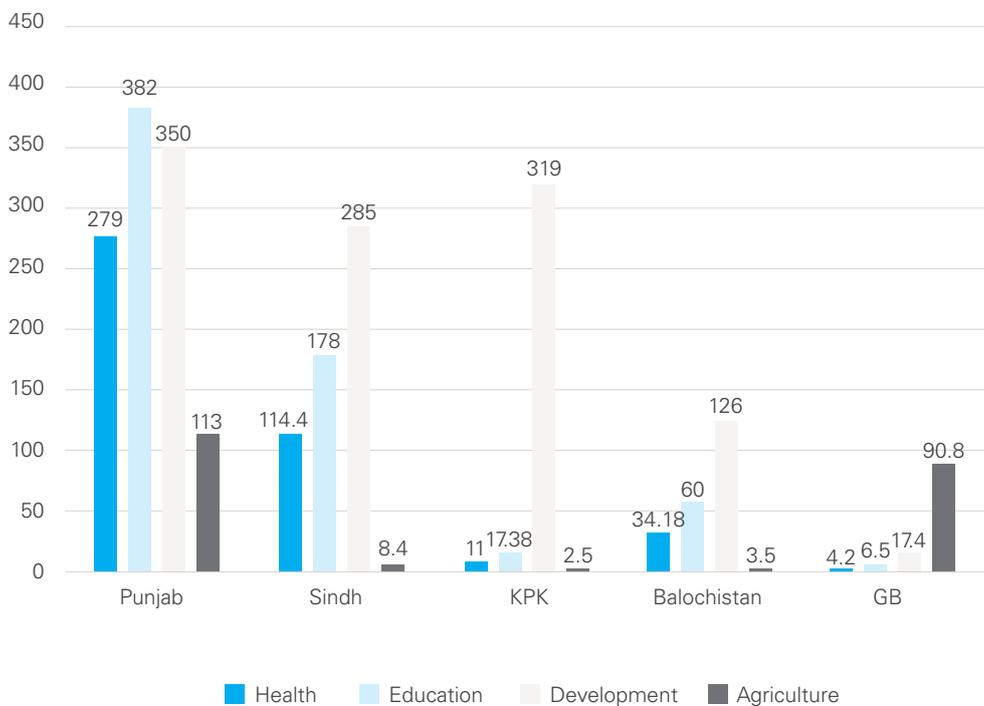
- If recommended precautionary measures were taken in a household to prevent infection, it was often at the behest of women (mothers and daughters) who continually reminded children and elders to wash their hands.
- Women and young girls who tested positive for COVID-19 were often subjected to stigma and suspicion (e.g., how could a woman who spends most of her time at home have got this illness?)
- Mothers often had the added burden of home-schooling children once schools closed, and suffered feelings of inadequacy as a result of attempting to help their children navigate unfamiliar (or unavailable) digital learning platforms.
- It was women who were subjected to documented spikes in domestic violence across the country, often due to the economic and mental stress of living under ‘lockdown’ conditions.<sup>81</sup>

## Finance

Due to COVID-19, the annual GDP growth rate declined from 1.9 per cent in 2019 to -1.5 per cent in 2020.<sup>82</sup>

The national budget for education has significantly increased over the last decade,<sup>83</sup> however it remains a small per centage of the overall budget at approximately three per cent of GDP, below Pakistan’s own target of four per cent.<sup>84</sup> On a positive note, despite the shrinking GDP, the federal Government has increased the education budget from PKR 81.2 billion to PKR 83.3 billion for this year.<sup>85</sup> It is too early to tell what implications COVID-19 will have on the future budget. Two points of note are that, firstly, the Institute of Social and Policy Sciences (I-SAPS) indicates that the national education budget is mainly spent on teacher salaries,<sup>86</sup> and, secondly, that each province’s allocation to education varies significantly,<sup>87</sup> as depicted in Figure 5.

FIGURE 5 | PROVINCIAL BUDGET ALLOCATIONS (2019-2020)<sup>88</sup>



**Households:** The partial lockdown imposed on the country to curb the spread of infection especially affected the service and industrial sectors, as businesses closed, and consumers stopped spending.<sup>89</sup> The Government estimates that there will be '14 million job losses, increasing poverty levels for the first time in two decades'.<sup>90</sup> At the same time as incomes have decreased, households have been faced with additional costs, such as rising food prices, feeding children who are no longer receiving free school meals, medical care, and the need to access devices to enable children's continued learning. Weak growth projections mean that this drop of households into poverty is unlikely to be easily reversed.<sup>91</sup> Research indicates that a significant proportion of household expenditure is focussed on children's education (from Rs12,000- 25,000) per annum.<sup>92</sup> Education spending may become less of a priority for poor families, increasing the likelihood of their children dropping out of school.

The COVID-19 crisis in South Asia suggests that one of the easiest means for South Asian countries to address the resulting challenges is to put in place a package of universal income transfers directed at some of the most vulnerable members of the population, in particular children, older people and persons with disabilities.

An emergency Universal Child Benefit (UCB) would be an important component of this broader package and would ensure that most households across South Asia access a minimum level of income support. The benefits to child well-being, the economy, social cohesion and political stability are likely to be significant, while recovery from the crisis would be much quicker.

**"Analysis across five countries in South Asia indicates that a UCB costing two per cent of GDP over six months would provide the recipient population with an average of between 18-46 per cent of their pre-COVID-19 expenditures, with particularly high benefits for the poorest member of society."<sup>93</sup>**

The arguments for initiating an emergency UCB are not only centred around the benefits for the poorest families in sustaining their survival income, but also aimed at reducing economic collapse and civil unrest, while simultaneously increasing trust in the Government, which, it is thought, could have the longer-term impact of supporting willingness among the population to pay higher taxes. Currently, over 75 per cent of Pakistan's population is living on under \$5.50 a day, which many consider to be the cut off for those in poverty for a middle-income country such as Pakistan. Despite higher spending on initiatives to bolster the economy and health systems during the pandemic, the Government is only allocating approximately 0.3 per cent of GDP to social security for families, covering approximately 10 million households with their Ehsaas

Emergency Cash Programme, over a period of four months. Furthermore, this programme is only an extension of an existing poor relief scheme that targets those in extreme poverty. Therefore, under the circumstances of COVID-19 where a massive proportion of the middle class is at risk, the ability of the programme to respond is limited. There is a significant weakness in such initiatives to adequately identify and target recipients who should now be entitled to relief. Hence, the purpose of UCB is to remove this hurdle and promote grants that are unconditional and universal.

## 2.2 The education sector's response to COVID-19 and moves to mitigate learning loss

### The relationship between federal and provincial levels of Government

The delivery of compulsory education is largely a provincial responsibility, with the federal Government retaining key responsibilities, including ensuring cohesion and the promotion of a set of shared values. Specifically, in the current context, the Ministry of Federal Education and Professional Training authored the Pakistan National Education Response and Resilience Plan for COVID-19 (K-12), the main document underpinning the response to the COVID-19 pandemic at federal and provincial level.

This document, developed in consultation with stakeholders, including donors, is seen as a living document which can take account of the unpredictability of the situation. It provides a framework for the response, presenting a set of options and strategies<sup>94</sup> to be contextualized by each of the provinces.

**"Provinces will need to review and consider these strategies and interventions and select those that are most relevant for their context. Provinces will also need to prioritise the implementation of interventions. Some, such as cleaning and disinfection of schools and stocking schools with appropriate cleaning and sanitation supplies, must be prioritised for immediate implementation. Others, such as evaluating the impact of COVID-19 on the education sector and building on lessons learned, are more appropriate for the medium-term. Many interventions that will need to be implemented immediately will also continue into the medium to longer term depending on the nature of the action and the requirements of response."<sup>95</sup>**



The document has three priorities, to be considered for the short, medium and long term:

- Continuation of learning
- System strengthening and resilience
- Addressing health (physical and psychosocial) hygiene and safety

Suggested priorities for provinces (some of which are described later in this section) are underpinned by four principles for consideration:

- Do no harm
- Strengthen local control
- Ensure continuity of learning for everyone
- Keep sight of medium- and longer-term goals

Responsibility for monitoring the implementation of the plan lies with the provinces. Regular monitoring will enable them to use data to be responsive and adaptive to a changing situation.<sup>96</sup>

A National Command and Operation Centre was set up to 'synergize and articulate unified national effort against COVID-19, and to implement the decisions of a national coordination committee on COVID-19'.<sup>97</sup> Increased collaboration mechanisms between the federal and provincial levels of Government were established.

The federal Government also took a role in providing educational opportunities for all children by extending the reach of distance and online learning platforms. As early as 13 April 2020, the Federal Government, in collaboration with the Ministry of Information and Broadcasting, launched 'Teleschool'. This is aired on the

Pakistan Television Corporation (PTV), a state-owned, terrestrial broadcasting network operating from 8am-6pm, providing one hour of instruction for each age group. Over 300 companies, organizations and people donated their content.<sup>98</sup> These included private sector providers who developed digital programmes under the FCDO-funded ILM<sup>99</sup> ideas programme, (and who now form the ILM alumni association) and have offered their digital programmes and platforms to the Government for free to run on this channel. This digital response is further explored in Chapter 3.

The federal Government also announced (November 2020) a new Memorandum of Understanding (MoU) has been signed between Radio Pakistan and the federal Government to run 'Radio school' operating on FM and AM wave radios, which will further increase the reach of online learning.

## Phase 1: Prior to reopening

### Access to, and participation in, learning

Pakistan has considerable experience dealing with emergencies within challenging circumstances, including natural disasters, internal and external displacement and conflict, but COVID-19 has presented many challenges that have not been faced before. One major challenge has been to try to sustain learning during school closures. In addition to the rapid national-level response outlined above, provinces have also risen to the challenge.

Punjab set up a taskforce involving the School Education Department (SED), the Minister’s Cabinet team, the Programme Monitoring and Implementation Unit (PMIU) and the Punjab Information Technology Bureau (PITB) to devise a rapid response to mitigate learning loss for its 12 million school children. The taskforce analysed the penetration of different technologies. They discovered that:

- TV coverage in the province was widespread: 91.1 per cent urban and 77.1 per cent rural.
- Smart phones were also quite widely used: 76.8 per cent urban and 47.3 per cent rural.
- Internet coverage was much lower: 38.5 per cent urban and 18.1 per cent rural.
- Computer use only: 44.5 per cent urban and 17.2 per cent rural.

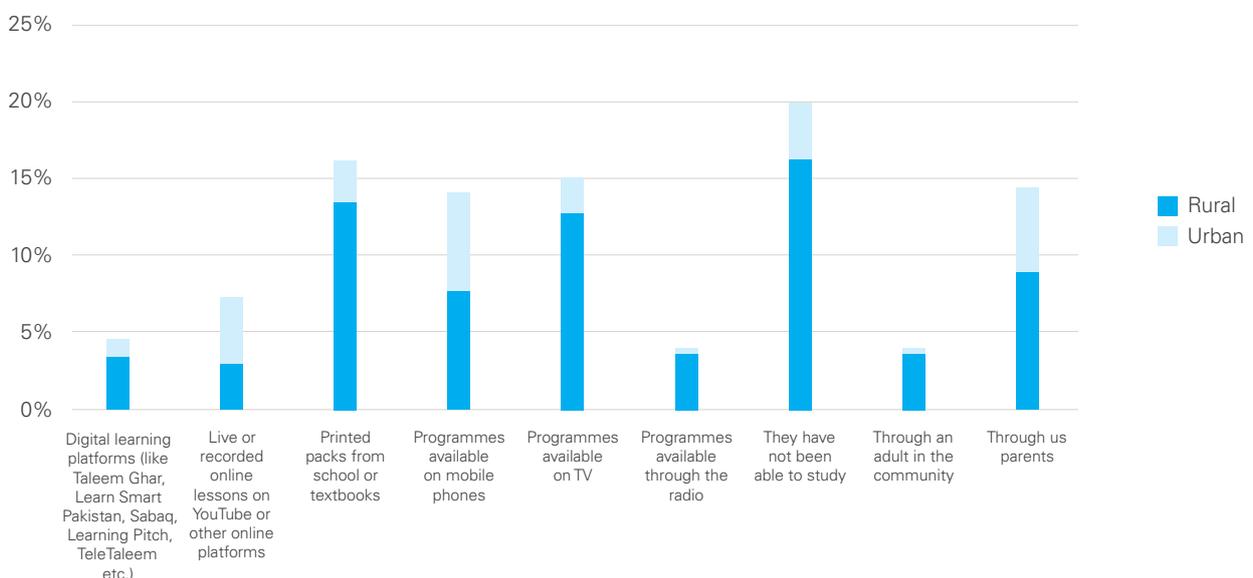
Punjab decided to follow China and the Republic of Korea, where TV channels supporting education have been long established, and set up a TV channel and related website and mobile application. Punjab’s PITB had been running an e-learning programme for eight years and had material readily available. They were able to mobilize a team of animators and content handlers to map content against learning outcomes, prioritizing maths and science in both Urdu and English. Taleem Ghar was launched on 1 April 2020 on three digital modalities (TV, an app and YouTube). It was encouraging to find that via TV the content reached 70 per cent of the school-going population, the app experienced 55,000 individual uploads and YouTube garnered over 8.8 million views.<sup>100</sup>

Sindh also launched two new initiatives<sup>101</sup>: Digital Learning Classroom in collaboration with Microsoft; and Mera Sabaq (My lesson), with the support of the Sabaq foundation. This initiative was offered in English, Urdu, and covers the Sindhi curriculum for Kindergarten to Grade 5.<sup>102</sup>

In KP the Education Department (with ASI assistance) devised a revised academic calendar for a truncated academic year, provided worksheets and homework assignments for students, developed a digital portal and dubbed instructional videos (aligned with Student Learning Outcomes (SLOs) in Pashto. They also undertook a diagnostic assessment (sample and schools-based) to finetune teachers’ professional development.

While there has been justifiable praise for the speed with which initiatives were introduced, concern about equity issues have been flagged by most stakeholders nationally. The reality is that, while a range of learning modalities were used to reach children, a significant number of children were not able to access education while schools were closed. Figure 6 shows that many parents felt that their children were learning through programmes available on TV and mobile phones, but a significant portion of parents (in particular from rural areas) also responded that their children were not able to study.

FIGURE 6 | SURVEY QUESTION ‘HOW HAVE YOUR CHILDREN BEEN LEARNING WHILE YOUR SCHOOLS HAVE BEEN CLOSED?’<sup>183</sup>



The Government has an explicit digital policy to extend network coverage throughout the country. However, there is no doubt that the pandemic will have increased levels of inequality within the country, and more needs to be done to mitigate this. There have been efforts by a range of education providers and non-governmental organizations (NGOs) to reach the most marginalized. Organizations, including and led by UNICEF, have provided worksheets and materials to help bridge the divide and from 15 August 2020 UNICEF and operational partners have been supporting over 7.5 million children through alternative learning opportunities.<sup>103</sup>

Organizations supporting children with disabilities have also taken action. For example, there are over 1 million deaf children in Pakistan, but only five per cent attend school. The Family Education Services Foundation (FESP) has bridged the gap through its Deaf Reach Programme. In pre-pandemic times, it provided pick-and-drop transport to schools, healthy lunches, books, sign language classes, etc. While schools were closed, FESP provided monthly food baskets to families of deaf children, and stayed in touch with parents. They have retained all their teachers and gave them online training in sign language and teaching skills. In partnership with The Citizens Foundation (TCF) through Illm ka Aagan and Sino Kahari, FESP developed telecasts on PTV's 'Teleschool' channel, which is making content available to the deaf so they can learn alongside their hearing peers.

The Government has extensive plans to improve its digital response by providing children from poor households with tablets and devices to create internet hotspots. The Federal Government is also negotiating with the telecom companies to provide low-cost internet access across all provinces, but this will take time.

It is widely recognized that, given the speed in which countries have had to respond to the pandemic and set systems in place, little attention was given initially to monitoring access, quality, reach and actual learning taking place. What does not appear to be happening yet is an amalgamation of various data systems to reach out and collect specific data to determine exactly who is not receiving learning and which particular vulnerable groups need better targeting. The use of the appropriate languages for learning is also an issue which needs more attention. Some provinces are addressing this issue, but little evidence exists on this issue. While some provinces like Punjab have made efforts in this direction by working on an EMIS system, nationally more attention needs to turn to monitoring – is the education at the right level? Are individual children of different abilities learning?

Punjab has a new assessment system in place, which has replaced the examinations at Grades 5 and 8, which should highlight the levels of learning.

There are two interesting small-scale monitoring initiatives in Pakistan worth mentioning, which the EdTech Hub cited as examples of good practice.

**Teach for Pakistan** (TFP) wanted to understand the impact of school closures on their 2,500 learners. However, many of their schools did not hold learner contact details. TFP, therefore, used local networks to get in touch with learners' parents. They made announcements in mosques and gathered information through local shopkeepers and were able to reach 1,800 of their learners. They then conducted a pre-internet phone survey to investigate learning, access to devices and levels of interest and discovered that 60 per cent of their learners could be reached through the parents' and neighbours' or community phones. A distance-education programme was subsequently rolled out using WhatsApp, short message service (SMS), memory sticks and paper-based resources. Teachers fill in their monitoring records on trackers recording what they have done to share with their coaches. Coaches have regular calls with teachers. Learners submit work through a paper-based system or WhatsApp. This process has led to several adjustments. Paper-based and printed materials now complement WhatsApp teaching. Teachers have also started conducting both plenary and individual learner calls.

**Idara-e-Taleem-o-Aagah** (FCDO-funded programme which started in 2018 to provide education for marginalized girls in Southern Punjab). In April 2020, in response to the pandemic, this programme shifted to distance learning. The new programme was developed through an initial phone survey. Enumerators reported their findings through a software system which was collected, aggregated and presented centrally in a dashboard, based on Microsoft Power BI tools. This initial survey led to a mixed-modality methodology-WhatsApp, SMS, memory stick and paper-based resources. The results of the fortnightly learning assessments, conducted by the project, showed that low-tech solutions, like TV and radio, are most effective in reaching disadvantaged learners, and that teachers from the local communities are most effective in organizing and monitoring remote learning.

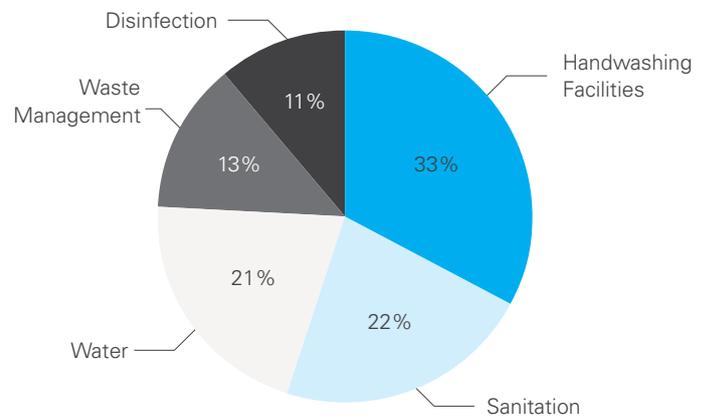
**Safe operations**

**Standard operating procedures:** Provinces have contextualized their standard operating procedures (SOPs) for schools to reopen safely, but there is limited data on how those schools plan to implement the SOPs with limited budgets. Additionally, there is limited evidence as to how schools and education staff have planned for future waves of the virus and future lockdowns.

**WASH:** The provision of water and sufficient opportunities for handwashing to prevent transmission of the virus is key to the safe reopening of schools. Figure 7 highlights the magnitude of the overall WASH need. According to the UNICEF ‘Safe reopening of schools and WASH priorities’ presentation, the total cost of bringing WASH facilities up to standard in the four main provinces is estimated to be a minimum of \$42 million, the detail of which is provided in the Table 2 below.

At the provincial level, there are different plans, identifying actions according to need as depicted in Table 2, taken from internal UNICEF sources.<sup>104</sup>

**FIGURE 7 | PERCENTAGE COSTS OF THE COMPONENTS OF THE WASH PROGRAMME<sup>105</sup>**



**TABLE 2 | PROVINCIAL PLANS – SNAPSHOT OF SAFE REOPENING OF SCHOOLS AND WASH PRIORITIES**

BALUCHISTAN	KHYBER PAKHTUNKHWA	PUNJAB	SINDH
<ul style="list-style-type: none"> <li>• Technical assessment in schools ongoing</li> <li>• Humanitarian Programme Document signed off to support WASH in 90 schools from Rapid Response (RR) (\$200k) + 19 schools in Super-High-Risk Union Councils<sup>106</sup> under the Integrated Service Delivery (ISD) programme<sup>107</sup></li> <li>• Training for school teachers on WASH/ infection prevention and control (IPC) ongoing</li> <li>• Advocating to utilize the Parent Teacher Council (PTC) fund for disinfectant supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Reallocation of RR (\$83K) to support 40-45 schools</li> <li>• Request donors to allow exchange saving (\$128k) to use in 115 schools</li> <li>• Advocating to urban utilities/local government to relocate communal handwashing stations close to schools</li> <li>• Quick dispatch of soap and sanitizer to schools in need</li> <li>• Engaging Public Health Engineering Department (PHED) to coordinate with the Department of Education (DoE)</li> </ul>	<ul style="list-style-type: none"> <li>• Support to 50 schools under the Accelerating Sanitation and Water for All (ASWA) funding (\$177K)</li> <li>• Plan to reach 450 schools through the Contingency Programme Cooperation Agreement /Long Term Agreement utilizing (\$200,000) the regular WASH in Schools programme</li> <li>• Discussions ongoing to engage with Rotary Pakistan</li> </ul>	<ul style="list-style-type: none"> <li>• Adding activities in programme documents of Health and Nutrition Development Society (HANDS)<sup>108</sup> and Sustainable Agriculture Farmer’s Welfare Organization (SAFWO) to focus on 120 schools in Karachi &amp; Ghotki</li> <li>• Use ongoing Long-term Agreement of HydroPak to provide handwashing stations in 70 schools</li> <li>• Distribution of disinfectant supplies to 120 schools</li> <li>• Lobbying the Department of Education to use the School Management Committee’s fund to procure supplies</li> <li>• Engage Unilever for in-kind support</li> </ul>

**Communications:** Information plays a key role in promoting safety and reducing anxiety. At the national level, several education and health sensitization messages have been sent through SMS as part of a wider communications campaign. Community leaders and religious leaders in mosques have also played an important role in disseminating information. At the local level, there is evidence from UNICEF situation reports that there have been efforts around providing guidance for parents and teachers through alternative channels, such as loudspeaker announcements,<sup>109</sup> in addition to their work providing mobile handwashing stations in key areas where people meet.<sup>110</sup>

The Tiger Force Programme has proven to be an effective new initiative launched by the federal Government with over 900,000 young volunteers conducting hygiene and health awareness campaigns across three provinces,<sup>111</sup> as well as supporting other duties such as the distribution of food.

### Health, well-being and protection

According to the UNICEF's 15 September 2020 Situation Report,<sup>112</sup> a Viamo Community Rapid Assessment showed some worrying COVID-19 economic and social impacts. Due to loss of income:

- 50 per cent of respondents claimed to have sold an asset to make ends meet;
- 16 per cent of respondents admitted to sending their children to work;
- 65 per cent of respondents admitted to having borrowed money; and
- 50 per cent respondents fear they will lose their job in next six months.<sup>113</sup>

These indicators are a clear sign that robust protection systems and financial support mechanisms should be in place at all local levels to support parents and protect children. Communications will also be a key component in this – reaching out to communities and school staff alike – as parents will need to be convinced that the risks to their children of resuming school are outweighed by the advantages for their children of resuming their learning and returning to school.

According to the London School of Economics, a promising three out of four provinces have made significant efforts to identify vulnerable households to support social protection measures,<sup>114</sup> but due to the sheer number of people needing support, and the small amount of budget allocation to social security, a mere estimated 1.3 per cent of government spending,<sup>115</sup> this will be challenging to implement. In addition, Viamo reached out through its survey to a variety of respondents, including students, teachers and parents at different socio-economic and education levels, to establish children's learning needs.

Over 4,000 social workforce professionals across all provinces have been trained in psychosocial first aid.<sup>116</sup> Additionally, according to UNICEF Pakistan situation reports, teachers have also been trained on psychosocial first aid to support students.<sup>117</sup> The use of the polio helpline to respond to COVID-19 is a good example of repurposing and strengthening existing systems. The helpline is regarded as an extremely effective tool for building trust between the population and Government, and has also proven to be a key source of accurate information.<sup>118</sup>

At the national level, Pakistan has created a National Commission for Children, the first in South Asia, as well as the Children's Complaint Office. Under Amendment 18 of the Pakistani constitution, powers and responsibilities to implement child protection services is devolved to the provinces.<sup>119</sup> The devolvement of powers has resulted in a consistency gap, with the absence of a coordinated mechanism to monitor and support children nationally as provinces have taken different steps to address and report on child protection.

COVID-19 has brought to light gaps that exist within the provincial and federal Governments' approach to child protection. It has fast-tracked/re-focused attempts to put in place more robust systems to ensure the safety and welfare of children. For instance, in May 2020, the Government of Punjab highlighted some of the issues within the child protection system, seeking to strengthen it. From now on, NGOs previously not registering data with the Government will be required to register with the Child Protection Welfare Bureau.

It is also worth noting that the national Government has approved the Information and Communications Technology (ICT) Rights of Persons with Disabilities Act 2020, which offers an extensive range of online support for deaf students and their families. In light of this, FESP has been helping procure laptops, using school transport to distribute supplementary worksheets, and ensuring that teachers stay in touch with parents of deaf children.

## Community participation

In a diverse country as Pakistan, community participation is essential for effective implementation of policies and guidelines, etc., ensuring their relevance and usefulness to the community. As indicated in UNICEF's Situation Reports for COVID-19,<sup>120</sup> religious leaders in Pakistan have played an important role throughout the pandemic due to their influence on communities:

**"To promote the risk perception of the COVID-19, emphasise the importance of handwashing, use of mask and physical distancing as well as convincing other religious leaders on risk perception."**<sup>121</sup>

The Tiger Force of young volunteers provides a channel where community needs can be channelled upwards. The 'My Home, My School' initiative provides support to both students and parents by providing online instructional videos for students as well as support for parents through WhatsApp groups. Through this initiative, over 375 WhatsApp groups have been created, with almost 14,000 group members. Interestingly, the WhatsApp groups were initially started to support and coordinate school-related matters between teachers, parents and community members, but have evolved substantially over the course of the pandemic.<sup>122</sup>

## Finance

There has been a wide range of funding through global agencies such as the World Bank and UN agencies, bilateral development agencies such as FCDO and USAID, humanitarian international non-governmental organizations (INGOs)/NGOs and funds such as the Malala Fund, to help address immediate COVID-19 needs and fill the education funding gaps.<sup>123</sup> For instance, through GPE, the World Bank provided a \$20 million grant to support Pakistan in its COVID-19 education response. The GPE COVID-19 Response, Recovery and Resilience in Education Project (RRREP) Project<sup>124</sup> focuses on three main areas (refer to Table 3):

- Component 1: Focus on immediate emergency response activities to ensure education continuity
- Component 2: Improve government's implementation for effective recovery of education services
- Component 3: Resilience, Monitoring & Evaluation

The application highlighted that the provinces would receive the majority of the funding, with a portion of the funds going to the national response (see Table 3). The project will work closely with development partners active in the Local Education Groups (LEGs) such as FCDO, UNICEF and Japan International Cooperation Agency (JICA), and use the technical expertise from National Education Development Partners Group<sup>125</sup> (NEDPG) whose members

include JICA, UNESCO, USAID and FCDO. Nonetheless, in the latest of UNICEF Pakistan's Situation Reports for November 2020, a funding gap of almost 60 per cent was still reported in terms of response to COVID-19 (across all sectors), which highlights the uphill challenge still facing the government and its partners.

**TABLE 3 | INDICATIVE PROJECT COSTS BY COMPONENT (IN USD MILLIONS)<sup>126</sup>**

COMPONENT	TOTAL AMOUNT	FEDERAL	PROVINCES
Component 1: Response	8.0	1.0	7.0
Component 2: Recovery	10.0	0.5	9.5
Component 3: Resilience, M&E	1.85	0.5	1.35
<b>Total</b>	<b>19.85</b>	<b>2.0</b>	<b>17.85</b>

In addition, there has also been a broad range of initiatives to reduce the overall negative economic impact of COVID-19 on Pakistan's economy. Such initiatives include, but are not limited to:

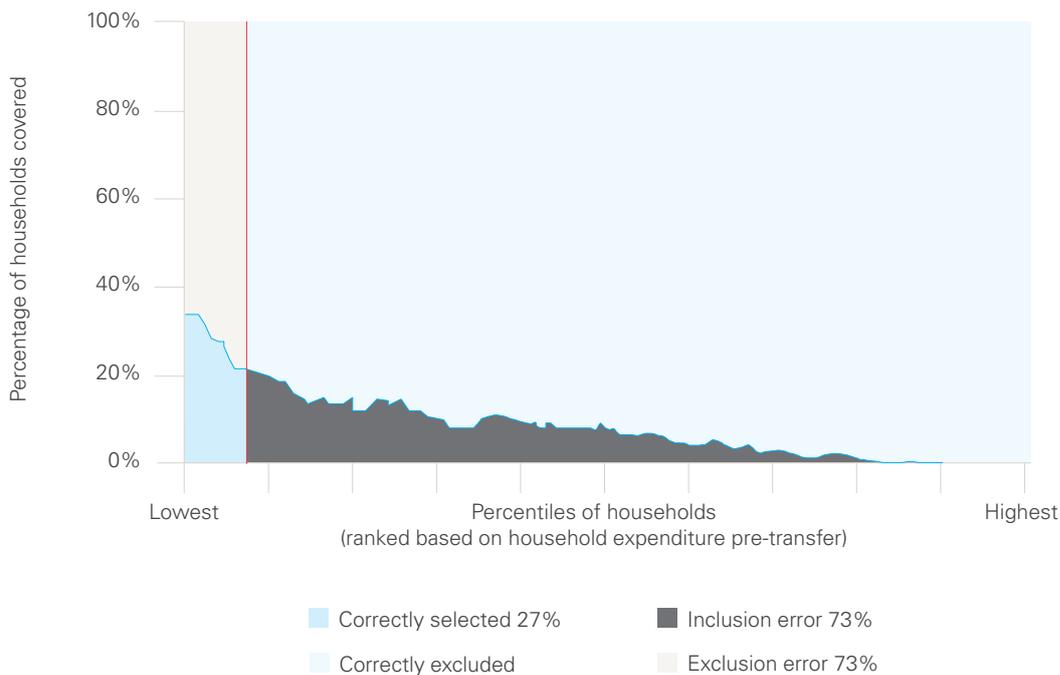
- **Fiscal stimulus package:** The Government of Pakistan has approved the fiscal stimulus package of Rs. 1.2 trillion and Supplementary Grant of Rs. 100 billion for the 'Residual/Emergency Relief Fund' to mitigate the effect of COVID-19 for the impacted population' (30 March 2020).<sup>127</sup>
- **Repurposing funds:** The Asian Development Bank (ADB) has repurposed \$50 million from Pakistan's National Disaster Risk Management Fund (NDRMF) to support the Government of Pakistan's preventive and response efforts to fight the COVID-19 outbreak in the country' (10 April 2020).<sup>128</sup>
- **Loans:** The Economic Coordination Committee (ECC) allowed an exemption from re-lending of funds for Pakistan National Emergency Preparedness and Response Plan for COVID-19 to cover the country's requirements for 12 months through emergency operations. To administer the programme, the ADB shall provide a loan of \$100 million, with an additional \$5 million from the Government of Norway as a grant administered by ADB' (23 September 2020).<sup>129</sup>
- A wide range of **tax breaks**.<sup>130</sup>
- **Disbursement of additional funding:** In mid-April 2020, the International Monetary Fund (IMF) made a disbursement of \$1.386 billion under the Rapid Financing Instrument.<sup>131</sup>

Additional funding that specifically aims to support the poor and most vulnerable was also made available. In June 2020, a \$500 million budget support loan for COVID-19 was provided by ADB. Part of which was to help deliver social protection programmes to the poor and vulnerable.<sup>132</sup> Existing social protection schemes, such as the Benazir Bhutto Income Support Programme (BISP), have also been extended, essentially being taken over by the Ehsaas Emergency Support Scheme, which has been expanded to over 10 million families. Other measures which will hopefully minimize/reduce various risks and vulnerabilities of children include:

- The provision of cash grants to 3 million daily wagers at PKR 175,000 per worker per month for three months
- Food offered at subsidized rates;
- Gas and electricity instalments spread out over three months;
- The strengthening of public hospital capacity;
- Enhancing targets of wheat production to inject cash stimuli into the rural economy;
- The provision of a one-off cash assistance payment of PKR 2000 to identified refugees who have experienced a significant loss of income due to COVID-19.<sup>133</sup>

A key challenge remains around effective targeting, which has been highlighted in a UNICEF Regional Office for South Asia Working Paper as highly inaccurate – ‘targeted poor relief – such as Pakistan’s BISP... – is offered to those living in extreme poverty. The majority of middle-income families...are, by design, excluded from accessing social security. There are some universal schemes, such as the old age pensions of Nepal and Maldives, but they are very much the exception. The reality is that, if a fiscal stimulus is provided through the region’s poor relief schemes, the majority of those affected by the COVID-19 crisis will be excluded.’<sup>134</sup> Ehsaas relies upon data from Pakistan’s National Socio-Economic Register (NSER), which is from 2009, and which is outdated in relation to the current COVID-19 situation. As highlighted in Figure 8, therefore, the exclusion error, at 73 per cent on Pakistan’s BISP, is very high.

**FIGURE 8 | TARGETING EFFECTIVENESS OF A SELECTION OF POOR RELIEF SCHEMES IN SOUTH ASIA [PAKISTAN EXAMPLE] <sup>135</sup>**



While the Pakistan Government has increased the level of funds available to fight the pandemic, there are questions as to whether the long-term fiscal envelope is sufficient to ameliorate the devastating impact on the education system that the pandemic has brought.<sup>136</sup> This has serious implications for whether Pakistan will be able to meet its commitment to SDG4. The proposal that Pakistan consider introducing an emergency Universal Child Benefit system could ameliorate economic impacts created by the pandemic. Additionally, as highlighted in Chapter 4 ‘Recommendations’, each province will need to revisit their Education Sector Plan to ensure that they integrate within existing plans a strategy for ensuring continuity of learning whether schools are open or closed, as well as ensuring there is a budget line for future emergencies.

## Phase 2: Part of the reopening process

The federal Government took the decision to reopen schools in September 2020 across the country, based on the decreasing number of COVID-19 cases. Initially they instructed the provinces to reopen for Grades 9-12 on

15 September, grades 4-8 on 2 September and primary on 30 September. There were minor delays in the reopening, but all students were effectively allowed to return to school by 1 October – although, of course, the actual rate of return is a different matter. Since then, the school reopening process has stalled, and as from November schools closed and are expected to remain closed until 10 January 2021.

To prepare for the reopening of schools, the provinces each created SOPs developed from the Pakistan National Education Response and Resilience Plan for COVID-19 and influenced by the ‘Global Framework on Reopening Schools’ issued by UNESCO, UNICEF, the World Bank and the World Food Programme in April 2020. These SOPs are to support decision making around the reopening of schools and to help people prepare for different aspects of reopening schools. At this stage, the provincial SOPs were only concerned with the immediate reopening of schools, not the longer-term planning for building back better and resilience. All plans tended to be action-oriented, laying out clear instructions for education authorities and schools.

Table 4 below shows the key points of the SOPs for three provinces: Gilgit Baltistan, KP and Punjab.

TABLE 4 | REOPENING PLANS BY PROVINCE<sup>137</sup>

PROVINCE	WASH	SAFE OPERATIONS	HEALTH AND WELL-BEING	LEARNING
<b>Gilgit Baltistan</b> <sup>138</sup>	<ul style="list-style-type: none"> <li>Increasing the availability of water for schools with no supply</li> <li>Increasing the number of handwashing facilities</li> </ul>	<ul style="list-style-type: none"> <li>Introducing detailed guidelines for social distancing, both inside and outside classrooms</li> <li>Consideration of options for reopening, e.g., different grades on different days, shift systems, reopening only for specific grades</li> <li>Identifying additional learning space</li> </ul>	<ul style="list-style-type: none"> <li>Linking with the nearest health unit</li> <li>Health screening at the school entrance</li> <li>Introducing rules for face coverings</li> <li>Introducing procedures for cases in the community</li> <li>Disseminating guidelines and referral procedures for mental health and psychosocial support</li> </ul>	Developing: <ul style="list-style-type: none"> <li>plans for remediation</li> <li>flexible calendars</li> <li>formative assessment</li> <li>plans for teacher training and support</li> </ul>
<b>KP</b> <sup>139</sup>	<ul style="list-style-type: none"> <li>Ensuring that all schools have water, cleaning, soap and disinfecting supplies</li> <li>Teacher training on WASH guidelines</li> </ul>	<ul style="list-style-type: none"> <li>Orientating teachers on preventative measure for safe reopening</li> <li>Providing instructions for keeping schools healthy and infection free, and on social distancing</li> <li>Decontaminating of schools</li> </ul>	<ul style="list-style-type: none"> <li>Training teachers on school sanitation and hygiene education and mental health and psychosocial support</li> </ul>	<ul style="list-style-type: none"> <li>Providing step-by-step instructions for assessment and accelerated learning</li> <li>Training teachers in distance learning approaches</li> <li>Developing blended learning</li> </ul>
<b>Punjab</b> <sup>140</sup>	<ul style="list-style-type: none"> <li>Setting up handwashing stations</li> </ul>	<ul style="list-style-type: none"> <li>Making mandatory the wearing of masks</li> <li>Conducting regular temperature screening and handwashing with demonstrations</li> <li>Providing sanitizers</li> <li>Disinfection spraying before schools open</li> <li>Cancelling break or sports activities</li> <li>Staggering classrooms</li> <li>Collaborating with Health Departments</li> </ul>	<ul style="list-style-type: none"> <li>Conducting an SMS campaign to maintain enrolment and provide updates</li> <li>Activating school councils to increase awareness</li> <li>Carrying out an information campaign showing clean schools and debunking myths</li> <li>Encouraging students to convey information to families</li> </ul>	<ul style="list-style-type: none"> <li>Orienting teachers on accelerated learning programmes</li> <li>Introducing accelerated learning programmes</li> <li>Providing remedial support for English, maths and science</li> <li>Introducing a mix of synchronous and asynchronous learning media</li> <li>Following up on homework.</li> </ul>

While the measures proposed for safe reopening are similar, each province has taken a very different approach to planning for the reopening of schools.

Gilgit Baltistan lays out a series of questions and options for education authorities to discuss before taking decisions. They also include a comprehensive set of templates, with step-by-step guidance for managing different situations, each aimed at a different audience, e.g., school cleaners, parents and children, school management and teachers. The document includes plans for monitoring compliance.

KP's SOPs were aimed at the education authorities, schools and teachers. It presented data to show where the challenges lay in terms of WASH provision and social distancing. It grouped actions under four components:

- Preparation by education management at secretariat/directorate and district levels.
- Preparation by directorate/institute responsible for the curriculum and teacher training.
- Preventive measures at the school level.
- Supervision and monitoring.

This document also contained policy areas for consideration by the political leadership and senior management, such as phased reopening.

Punjab's guidelines, aimed at schools and teachers, were clear about the actions to be taken and included an analysis of how other countries had approached school reopening. Risks and challenges were identified but there was no mention of monitoring. However, we were informed that random monitoring via the SED delivery system was taking place at the district administration levels.

It is not yet clear how compliant the schools have been with the reopening procedures. Some early reports suggested that many schools were not operating according to guidelines. The importance of provinces having mechanisms in place for the regular monitoring of their schools was highlighted in the DAWN newspaper, which reported that Sindh's Education Minister found that many of the schools visited were not following SOPs, when they were reopened on 15 January 2021. He ordered them to close again for ten days to put the necessary mechanisms in place.<sup>141</sup>



# 03

## Thematic deep dive: The increased use of technology for learning in Pakistan



COVID-19 has demonstrated how Government and the private Education Technology (EdTech) sector can combine their efforts and innovate quickly.

In this chapter, we focus more deeply on one aspect of Pakistan's approach to the pandemic, namely its effort to improve connectivity and access to remote learning using technology. The Pakistan Government is planning to invest heavily in digital development, to ensure the population is prepared for the future, as people under 30 make up 64 per cent of the population.<sup>142</sup> While the digital gap will take time to address, COVID-19 could be a catalyst for the federal and provincial Governments to 'build back better' and ensure that Pakistan is ready for any further emergencies and possible school closures. That said, the risks associated with too much emphasis on education technology are also explored, in case digitalization is seen as the panacea and not as one of many tools for supporting teachers and students.

COVID-19 has demonstrated how Government and the private Education Technology (EdTech) sector can combine their efforts and innovate quickly. Technology by itself does not enable children to learn, and, indeed, in the context of Pakistan where many schools still do not have adequate WASH facilities and much needs to be done to tackle the out-of-school numbers, the introduction of technology may still need to be a much lower priority. However, when used well, with teachers integrating technology into their pedagogy and assessment techniques, digital content can motivate and stimulate learning in very innovative ways, children can access a huge range of resources and concepts that they would otherwise never experience, and ultimately education technology can support the independence of learners, which is an essential life-skill and a pre-requisite for distance learning.

It is clear, now that Pakistan is experiencing a second wave of COVID-19 and scientists are predicting a possible third wave next year, that the pandemic will be around for some time to come, despite the availability of vaccines globally from December 2020. Therefore, it is not surprising that EdTech has fallen under the spotlight, when there has been over-reliance on remote learning as the only remaining option, considering restrictions. It is crucial to plan now for both repeated periods of remote learning, when technology replaces face-to-face teaching and learning, as well as for a future of blended learning. To do this successfully, there will need to be far more emphasis on developing teachers' knowledge, skills, familiarity and understanding of which modalities work best, when and with whom. This is explored further in Chapter 4. Different approaches are needed for different ages groups, and will need to be developed based on an assessment of the impact of interventions already introduced. All of this must be done in the context of wider needs analysis and strategy, however, to avoid missing the bigger picture of what is happening in the system as a whole – what are the priority issues (for example, WASH, out-of-school-children, quality of learning, etc.), and how does EdTech 'fit' within that. The large disparities and inequities that have been noted in Chapter 2 require specific targeting and intervention, and in the case of EdTech, more innovative approaches are needed to ensure that children facing a multitude of barriers to accessing education are considered.

In the remainder of this chapter, we outline the current challenges in improving digital readiness in Pakistan, and the activities and priorities receiving attention to overcome those barriers.

### 3.1 The issue and challenges

Through interviews and desk-based research, it became clear that the two main challenges facing the public and private EdTech space in Pakistan were connectivity and access. These issues lie outside the power of the education system to resolve alone. However, the Education system does need to give urgent attention to using the available data for future planning, training its teachers to prepare for a different education landscape in future, and creating an enabling environment at each level of the system, but critically at the school and community level. There is also political recognition of the need to re-address country-wide inequity, which COVID-19 has brought to the foreground. To carry out this mandate, a nationwide mapping exercise will need to be put in place to track the reach of school connectivity.

#### Connectivity and access to internet

A change of policy focus is needed. Some parts of the country lack access to internet and there are also surrounding security issues to address. Indeed, in 2018, only 71 per cent of the population<sup>143</sup> had access to electricity at all, which, for the purposes of powering digital devices needed to access internet and online content, but also other forms of remote learning delivery (TV and radio),

is a prerequisite. Although the overall quality of the internet is improving significantly in Pakistan with faster mobile upload and download speeds, slower speeds and weaker connectivity is still characteristic in most rural areas, and to redress electricity connection would require a huge investment in infrastructure development well beyond the remit of the education sector. Certainly, these access issues are likely to impact the rate at which children gain access to digital learning options, and to exacerbate equity issues surrounding learning.

According to a UNICEF report 'How many children and young people have internet access at home?' globally only 33 per cent of children and young people have internet access at home.<sup>144</sup> The situation is roughly the same in South Asia, with Pakistan being below average for the sub-region (Figure 9).

While 74 per cent of the population of Pakistan have access to a 3G network, only 21 per cent of them subscribe to internet services.<sup>145</sup> This could be because Internet coverage is patchy, weak or non-existent. It may also be because the cost of internet subscription is too high. Additionally, new investment tends to be in urban locations, even though the majority of the population live in rural settings.<sup>146</sup> This is consistent with the teachers' perspective (Figure 10 below) that not being able to access technology was one of the biggest barriers to rural students' learning.

FIGURE 9 | MOBILE INTERNET PENETRATION (PER CENT)<sup>147</sup>

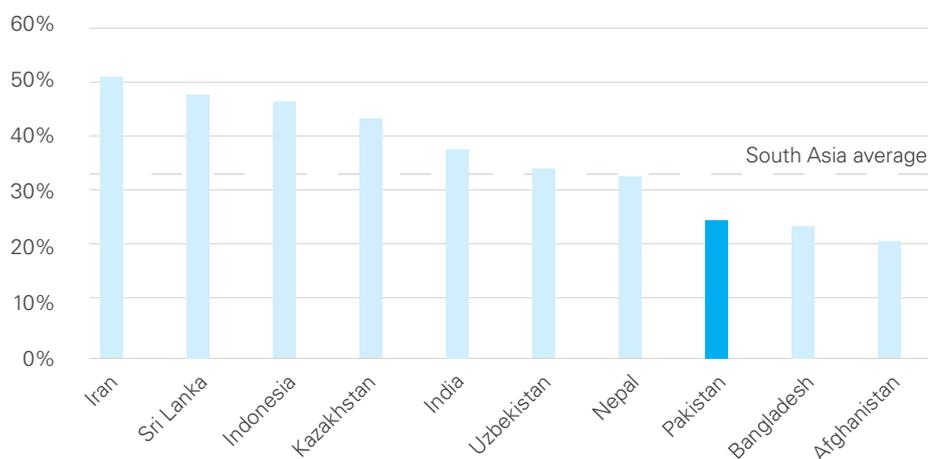
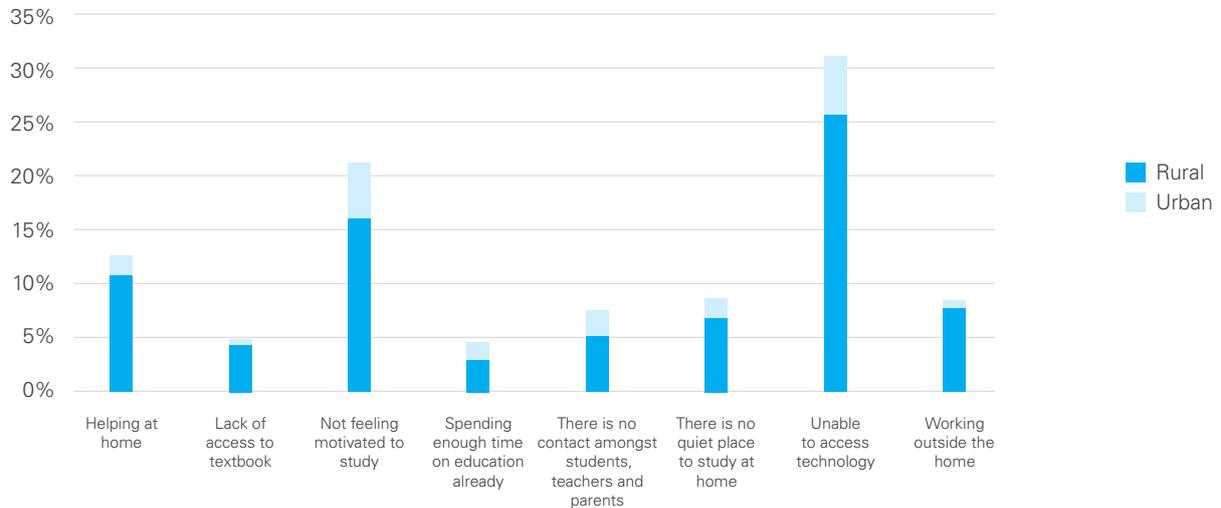


FIGURE 10 | QUESTION FOR TEACHERS ‘CHOOSE ONE MAIN REASON WHY STUDENTS MAY NOT BE SPENDING MORE TIME ON EDUCATION DURING THIS TIME WHILE SCHOOLS ARE CLOSED’<sup>148</sup>



According to the Inclusive Internet Index, which looks at over 100 countries across the world, Pakistan came 86th for availability, 57th for affordability, 71st for relevance of content and local language use and 64th for readiness.<sup>149</sup>

**"Pakistan falls into the last quartile of index countries overall, and it ranks 24th out of 26 Asian countries. Notable among its weaknesses are by far the largest gender gaps in the index, in both mobile and internet access. Low levels of digital literacy and relatively poor network quality are major impediments to Internet inclusion."**<sup>150</sup>

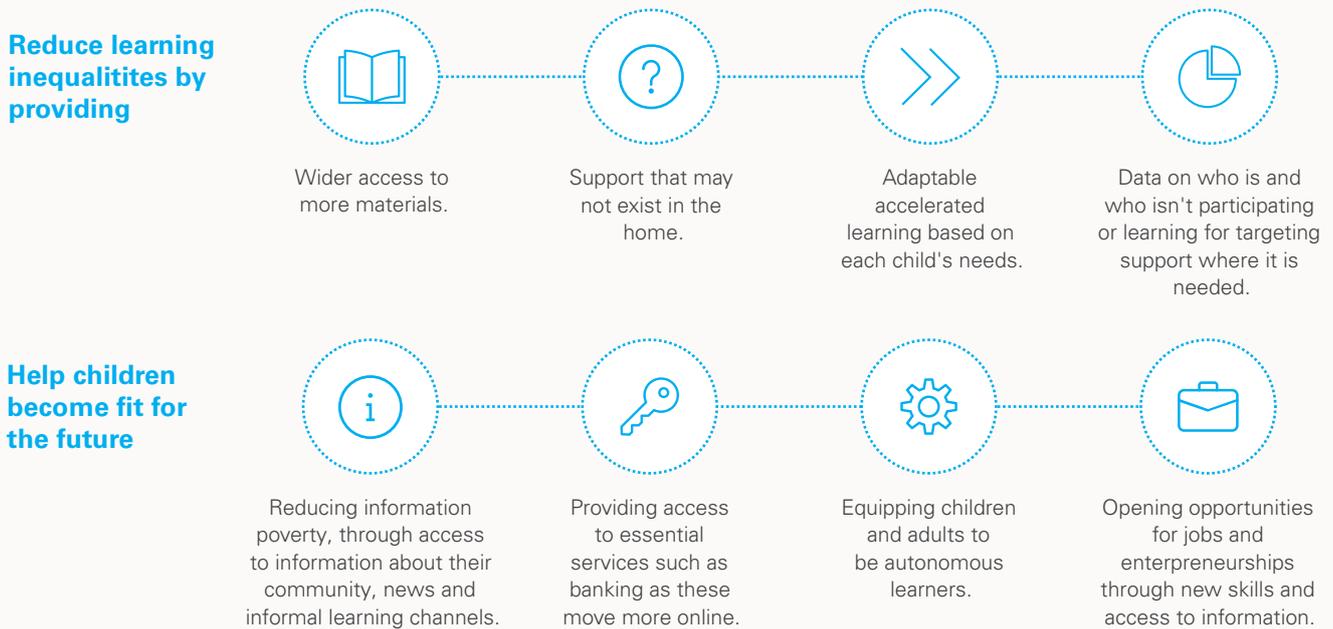
Looking in more detail at the index, some highlights are included in Table 5.

In summary, there are significant inequities and disparities, notably between those living in rural and urban areas, and also in terms of gender, which collectively constitute a digital divide. The only alternative for those without any level of connectivity at the moment, are low-tech, paper-based options, and these are prone to extreme levels of disruption during school closures. This means that any approach to remote learning that is taken in Pakistan’s education system needs to strengthen a multitude of avenues for sharing content, including paper-based/print, as well as through teacher communication on phones and social media, and the use of the internet and digital platforms. A one-size-fits-all approach cannot work in a context where children nationally have access to such different types of content and methods for learning.

TABLE 5 | HIGHLIGHTS FROM INCLUSIVE INTERNET INDEX PAKISTAN<sup>151</sup>

<b>Usage &amp; Affordability</b>	Only 21 per cent of households access the internet. Smartphone device cost is expensive.
<b>Infrastructure</b>	Network coverage of 2, 3 and 4G have improved, with 89 per cent of the population having access to 2G and 74 per cent to 3G. There are Wi-Fi hotspots, but these tend to be in large city centres. 90 per cent of urban households have electricity compared to 69 per cent of rural households.
<b>Digital Literacy</b>	Currently ranked at 2 out of 3 which means that the Government has a plan or strategy to address digital literacy for students, which includes training for teachers.
<b>Trust and Safety</b>	Pakistan has data protection laws and there are legal or financial penalties in place for firms that do not follow the law. Overall, trust in online privacy has declined, where trust in Government websites, NGO websites and apps, and trust in information from social media has increased
<b>Gender and Inclusion</b>	The Government of Pakistan has an action plan to provide digital skills for women. There are already smaller-scale projects supporting girls in ICT. Pakistan needs to develop comprehensive female e-inclusion plan. While the Government does have a plan to promote access among women, the gender gap is substantial for both mobile phone and internet access, and there needs to be more affirmative action. Pakistan scored a high 2 out of 3 regarding the Government e-inclusion strategy recognising that the Government does have a plan for mainly three groups: youth, low-income people and people with disabilities.

FIGURE 11 | WHY DOES CONNECTIVITY AND ACCESS TO TECHNOLOGY MATTER FOR CHILDREN?



Evidence from the Inclusive Internet Index indicates that the Government has done a commendable job to ensure that policies are in place, but implementation, monitoring and accountability need more systematic attention across all provinces. Clear tracking and monitoring mechanisms are needed so that the Government can establish both whether their efforts have been cost effective and the degree to which children are learning, if at all.

So, why does a digital divide matter for children? Figure 11 summarizes the key reasons why reducing this divide is important: to reduce learning inequalities and create equitable opportunities for all children to become self-reliant.

In the information age, it is essential to minimize the risk of 'information poverty'<sup>152</sup> as this limits a child's prospects and opportunities.<sup>153</sup> Not only has the internet become a main channel to search for information, but digital literacy skills are recognized as essential skills for the 21st century. Without digital literacy, access to jobs will be limited for those already disadvantaged. As Government and the private sector move essential services online, it is equally essential that children and young adults have access to those services to ensure that further inequalities are not realized due to the lack of access to a device, internet and digital skills.

A recent World Bank report notes that, even in a best-case scenario, learning will be lost for every single child during school closures and this will be far worse for those who were unable to access or engage with learning.<sup>154</sup> At the most extreme end of the spectrum, where children are too far away from school, or it is not safe to attend, such as in an active war zone, remote learning can allow children to access learning content.<sup>155</sup> Research shows that certain software, when designed and introduced correctly, can support accelerated learning as it can adapt to the child's needs,<sup>156</sup> and this includes all children. This is also noted in the UNICEF Children in a Digital World Report, 'Digitalisation allows children with disabilities to connect with friends and make decisions for themselves'.<sup>157</sup> But we know also that learners will need mediation and support through parents, elder siblings, teachers and/or community leaders if this learning is to be worthwhile. This is what we mean by an enabling environment.

## Enabling environment for EdTech policy and implementation

Effective and equitable systems are key to ensuring that children can gain the knowledge and skills required to enable safe, comfortable and productive futures. Such systems are dependent on an enabling environment that supports effective learning through a relevant and appropriate curriculum and the efforts of continuously developing, skilled teachers. Research provides robust evidence that technology alone will not improve learning outcomes.

In 2018, the Government of Pakistan launched its first digital policy, 'Digital Pakistan'.<sup>158</sup> In relation to education, the policy aims to create a digital ecosystem with infrastructure and institutional frameworks. It also aims to close the gaps that exist due to issues around gender, location, disability and other social marginalization, through specific programmes and the targeted expansion of broadband connectivity to disadvantaged groups. Certainly, the use of technology in education does have the opportunity to rebalance inequities, such as language. The policy includes introducing and encouraging the use of technology in education settings, including primary schools. COVID-19 means that this policy and its implementation needs to be accelerated now.

To implement this policy, teachers need to be clear about what to teach and how to best utilize EdTech to do this. A new curriculum was launched in 2017<sup>159</sup>, but aside from a reference to ensuring textbooks are digital, there is very little reference to digital competencies for students and teachers. Digital skills are also yet to be fully embedded into initial teacher training. There are some small-scale examples of in-service capacity-building programmes for teachers on blended approaches to teaching and learning. One of these is the successful *azz Smart School (JSS) Programme*<sup>160</sup> which trained over 900 teachers along with 25,000 middle school girls to promote the use of technology for teaching and learning.<sup>161</sup>

Similarly, the changes in the way teachers facilitate learning need to be reflected in how teachers are observed and assessed, as the current system in some contexts puts more emphasis on teaching 'by the book' rather than encouraging a wider use of EdTech. Research also shows that the parents' behaviour and attitude impact on the students' engagement with technology.<sup>162</sup> Community engagement with technology isn't currently addressed by the policy but does need factoring in.

Over the years, there have been some recognizable EdTech success stories as outlined in Table 6.

TABLE 6 | EDTECH SUCCESS STORIES PRE-COVID-19

SABAQ <sup>163</sup> : IMPROVING LEARNING THROUGH MUSE	AZCORP ENTERTAINMENT <sup>164</sup> : LEARNING THROUGH STORYTELLING
<p>The EdTech company Sabaq is best known for its flagship learning app, 'MUSE', which aims to improve student engagement and outcomes for maths, Urdu, science and English.</p>	<p>Claims to 'live and breathe within the space of edutainment' with a vision to create a 'relatable universe of heroes and villains that come alive through thought-provoking stories, that prompt dialogue, instil critical thinking, evoke social consciousness, and compel positive local action by its readers'.<sup>165</sup></p>
<p><b>What is it?</b></p> <ul style="list-style-type: none"> <li>• Aimed at pre-primary and primary-level students and their teachers.</li> <li>• Students- learning content ranging from animated videos to interactive exercises and tests.</li> <li>• Teachers- teacher training and suggested learning plans.</li> </ul>	<p><b>What is it?</b></p> <ul style="list-style-type: none"> <li>• Creates engaging learning content through storytelling using graphical comic books, audio series, and short documentaries.</li> <li>• AzCorp works with schools to provide short training on how to use storytelling pieces.</li> <li>• Aimed at students aged 5 to 12.</li> </ul>
<p><b>Successes</b></p> <ul style="list-style-type: none"> <li>• Winner of the Global Education Supplies and Solutions (GESS) Education Awards in 2020.</li> <li>• 252, 233 students reached.</li> <li>• Over 1,000 schools served across Pakistan.</li> </ul>	<p><b>Successes</b></p> <ul style="list-style-type: none"> <li>• Over 1,300 schools and 50 youth centers served.</li> <li>• 7 university partnerships.</li> <li>• 184,000 students reached.</li> </ul>

Pakistan has recognized a digital future is essential, and to realize this, partnerships with digital content providers, digital platform providers, device manufacturers, and telecommunication companies will be essential. Initiatives like Giga,<sup>166</sup> which aims to connect every school to the internet, shows access to all can be achieved when a tailored approach is adopted.<sup>167</sup> This UNICEF-led programme partners with governments and industry to:

- Map connectivity demand and identify gaps;
- Advise on the best technical solutions for school connectivity and for appropriate infrastructure to support future digital development needs;
- Build affordable and sustainable country-specific models for finance and delivery; and
- Empower countries to take initiatives to scale through needs assessments, forming connections (in partnership with the Digital Public Goods Alliance<sup>168</sup>) and support to deploy digital solutions.

## 3.2 The EdTech response

From the beginning of the COVID-19 pandemic, the EdTech sector acted quickly, with many private companies looking at ways to repurpose products and offer services for free. The Government also worked quickly to collaborate with partners, including reducing normal administrative processes for these relationships. These two factors enabled the Government to move swiftly to get effective products produced and distributed, both at federal and provincial levels. It is unclear what review of the quality of this provision has taken place and if plans are in hand to improve existing programmes and their impact. A good example of Government and private sector collaboration is the federal Government Teleschool initiative, which had over three hundred companies, organizations and people donate their content.<sup>169</sup> Microsoft Pakistan also supported the Government in their EdTech response to COVID-19 (Table 7).

TABLE 7 | EXAMPLES OF EDTECH PARTNERSHIPS

### Microsoft Pakistan<sup>170</sup>

- **What happened?** Microsoft has several initiatives, but this snapshot focuses on the support for K12 and the use of Microsoft Teams as a Learning Management System in Sindh Province.
  - » Accessibility and inclusion were recognized as a key challenge. Microsoft addressed this challenge quite openly and fed back to telecoms around how they could improve accessibility. As an immediate response, Microsoft built code into Microsoft Teams to allow the platform to adapt to the learner's internet speed as well as options to engage with content offline.
- **Did they train teachers?** Teachers were trained with Microsoft, ensuring that teachers knew how to use the platform before using it with students. Additionally, training on Early Childhood Care and Education (ECCE) National Curriculum was provided. So far, Microsoft has provided training to approximately 10,000 teachers/subject teachers.<sup>171</sup>
- **Why is this best practice?** Microsoft Pakistan is just one example of a successful partnership within the private-public space. It has developed a holistic education framework and roadmap to their digital approach. Localizing content, engaging with key stakeholders and ensuring that teachers are trained in platforms are key elements to their approach. Microsoft recognized accessibility and inclusion as key challenges, but the digital roadmap clarifies how this pilot and current programme can feed into longer-term goals.

### Learning Passport

- The Learning Passport is an example of how EdTech partnerships have been used effectively in other parts of the world, which could be considered applicable to Pakistan.
- An initiative originally between UNICEF, Microsoft and the University of Cambridge, it is a learning platform 'designed to provide education for displaced and refugee children through a digital remote learning platform'.<sup>172</sup> Due to COVID-19, this initiative was accelerated and implemented in places like Timor-Leste.<sup>173</sup> While the Learning Passport is not yet being used in Pakistan, some lessons have been learned<sup>174</sup> which can be applied to other learning platforms.

## 3.3 Analyzing the response in Pakistan to the COVID-19 pandemic

Evidence suggests that the education response to COVID-19 has been purposeful and reactive. However, there is no available evidence that long-term planning is now underway. Communicating a long-term vision could reduce systemwide uncertainty and anxieties about issues like class progression and examinations. Attention also needs to focus particularly on addressing, among other things, important language challenges to see if the availability in more local languages would increase reach and impact.

The EdTech response to COVID-19 in Pakistan has raised some key issues that, if addressed, would significantly enhance the reach and quality of the learning response.

- **A national/provincial coordination of the EdTech approach and content:** The devolved education powers make it difficult, but not impossible, to have a coordinated approach to EdTech. Lack of a coordinated approach means a lack of alignment, accountability and governance. Lesson sharing across provinces could drive equitable improvement.
  - **National coordination would also lead to a common approach to ensuring the most marginalized are not left out:** There are several EdTech companies which focus on specific marginalized groups in Pakistan, but without a coherent overarching framework and continuity plan marginalized groups risk being isolated and are dependent on ad hoc levels of interest and investment.
  - **The rapid curation of content and products** resulted in standalone good quality products. However, as one government official put it, there were many 'small pockets of innovation which came out of the response such as the use of YouTube channels, WhatsApp etc, but they were not cohesive efforts'.<sup>175</sup> Private companies also recognized this disconnect saying 'the problem is without the interactivity, assessment and teacher participation, the product is not able to maintain itself'.<sup>176</sup>
  - **Learning should be driving EdTech, (not the other way around):** While the national curriculum framework does include the integration of ICT in teaching and learning, it is not clear how this is implemented provincially as there does not appear to be a framework that supports continuity in the digital approach. This has resulted in EdTech companies approaching Government to use their product. While this has been extremely useful during the initial COVID-19 response, there is now the need for those responsible for curriculum and training to drive discussions with EdTech partners, based on the need of schools and learners on which solution would be most appropriate to drive learning outcomes. While there are many very useful start-ups and EdTech companies in Pakistan, they often can't or don't, and perhaps shouldn't take their products to scale. Their solutions will need to be taken forward in partnership with the Government, so that scalability is factored into design from its inception, and so that the Government has appropriate regulatory oversight of the work of such partners in achieving the crucial public good of education for all.
  - **Insufficient involvement of students, teachers and parents:** Little training appears to have been offered to teachers and parents around engaging with the new content and platforms, and the digital readiness of students and teachers to take up online content has not been fully assessed and supported. It seems the capacity to use devices and access the internet has been largely taken for granted, whereas, in fact, in many communities, especially those poorest and most disadvantaged, individuals may never have had the opportunity to interact with a smartphone, a tablet or a computer. Furthermore, people who are illiterate and uneducated today, live completely outside of modernity, technology and the digital world. Providing such populations with internet access and devices simply will not be enough, and capacity development efforts will need to start at the very beginning and be considered in planning and costing. In addition, even for teachers and parents with some familiarity with digital functions and content, teachers and parents nonetheless need support in their key roles, or risk a lack of understanding and frustration.
- Also underpinning these issues are wider risks to any EdTech response that need to be factored in when planning, and certainly should be part of a wider strategy when Pakistan moves beyond its reactive, emergency mode of operation. These include the risk of:
- Diverting essential resources from schools in terms of basic infrastructure.
  - Private sector providers short-circuiting the school system and become a global provider of a 'fast food' type of global education that is not underpinned by evidence and sound pedagogy.
  - Loss of cultural capital as global providers enter into the digital space.
- To mitigate for such risks, the Government must continue to play a strong role in planning the roll-out of EdTech and regulating and overseeing partnerships to deliver it. Curriculum developers and teachers must be key actors in generating and delivering educational content.

## The World Bank's five core principles

The World Bank in a recent report 'Reimagining Human Connections; Technology and Innovation in Education at the World Bank'<sup>177</sup> presents five principles (see Figure 12) to support education systems when looking to invest in EdTech.

It is recommended that the Government uses this principle framework to underpin their EdTech strategy moving forward – producing a clear needs and risks assessment at the outset. In particular, a strong EdTech strategy at the federal level could help guide the provinces and avoid some of the main pitfalls of proceeding in an

uncoordinated and disconnected manner – not least the risk that many different private sector providers are engaged without a strong vision for what is needed to fulfil learner needs. EdTech needs to be a core part of Government planning and regulation, as opposed to an add-on, short-term approach to an emergency. A coordinated approach could also avoid the risk that education becomes overtaken by disparate and profit-driven agendas, so that planning and oversight remains a provincial responsibility that is undertaken through consultation. Finally, the specific endeavour to improve equity can only be led by the Government and is best captured in a clear federal strategy, to ensure that cross-sectoral consultations around funding and infrastructure remain high on the agenda.

FIGURE 12 | 5 PRINCIPLES TO SUPPORT EDUCATION SYSTEMS LOOKING AT INVESTING IN EDTECH<sup>178</sup>



### 1. ASK WHY

EdTech policies and projects need to be developed with a clear purpose, strategy and vision of the desired educational change.



### 2. DESIGN AND ACT AT SCALE, FOR ALL

The design of EdTech initiatives should be flexible and user-centered, with an emphasis on equity and inclusion, in order to realize scale and sustainability for all.



### 3. EMPOWER TEACHERS

Technology should enhance teacher engagement with students through improved access to content, data and networks, helping teachers better support student learning.



### 4. ENGAGE THE ECOSYSTEM

Education systems should take a whole-of-government and multi-stakeholder approach to engage a broad set of actors to support student learning.



### 5. BE DATA-DRIVEN

Evidence-based decision making within cultures of learning and experimentation, enabled by EdTech, leads to more impactful, responsible and equitable uses of data.



# 04

## Lessons learned & recommendations



Action is required at different tiers of government, but also across different parts and sectors of the Government – both for the immediate, short-term response of getting children back to school and for the longer-term resilience a more integrated system that places the child at the centre and considers all their needs.

For this study, a desk review was conducted, as well as meetings with representatives from federal and provincial Governments, private sector organizations and development partners. Collectively, the information and insights emerging have culminated in the following lessons learned and associated recommendations.

### Learning loss

While Pakistan's efforts to mitigate learning loss have been intense, immediate and ongoing, there are gaps in provision and planning. Specific needs are differentiated across all five culturally and politically diverse provinces, so the plans in response need to be granular and contextualized. As indicated above, evidence in 2005 after the earthquake established that fourteen weeks of school closure led to a compounded loss of 1.5 years of learning for those affected by the earthquake, if no remedial measures were applied. Given that schools in Pakistan were closed in March 2020 and open again in September, and then closed again in November until January 2021, learning loss may be significant, especially if the engagement of parents/communities has been a challenge.

The Government of Pakistan needs to assess the potential impact of different kinds of shocks and pandemics (like COVID-19, natural, famine and conflict, for example) on the education systems and plan to address and mitigate specific impacts. It also needs to determine the education system's readiness to manage education continuity during and after these shocks and emergencies. Such planning could assess the effectiveness, for Pakistan, of certain more promising strategies to mitigate learning loss, such as diagnostics assessments, analysis of results to formulate adapted remedial teaching strategies, and pedagogical approaches such as teaching at the right level (TARL).

### The role of the private sector

The Government would do well to collaborate further with private organizations, and to take leadership in coordinating with such organizations as the overseer of both their inputs to a wider vision for education, as well as to ensure quality and learner-centeredness. This could provide new levels of innovation and strengthen the existing products and engagement of the private sector, as the Government plans and prepares for future 'shocks' to the education system.

Both the federal and provincial levels of Government will need to analyse the impact of the interventions they have put in place but also interrogate the gaps in knowledge and understanding that prevail.

To encourage continuity of learning the central Government also needs to encourage decentralized approaches.

### Revisiting current plans

There is a need to revisit current plans, including the National Rapid Recovery and Implementation plan and the education sector plans for each province, to ensure that future health pandemics are an integrated part of planning, and that robust governance systems are in place to monitor progress. There is an opportunity to rethink the resilience of Pakistan's education sector and to reflect not only what is known, but on what is not known. For example, little is known about the following issues:

- There is no information about the long-term impact of the pandemic.
- There is no information available on learning loss at the system or individual child level.
- There is no coordinated information on how the pandemic and prolonged school closures and isolation will have impacted on the emotional well-being of students and teachers.

It will be necessary to commission research investigation into all these issues, and to combine this with more operational research on what has worked well and not well, or where there has been a gap, in the response to COVID-19. The findings would enable the Government to plan for a more resilient future and put in place a longer-term strategy and implementation plan.

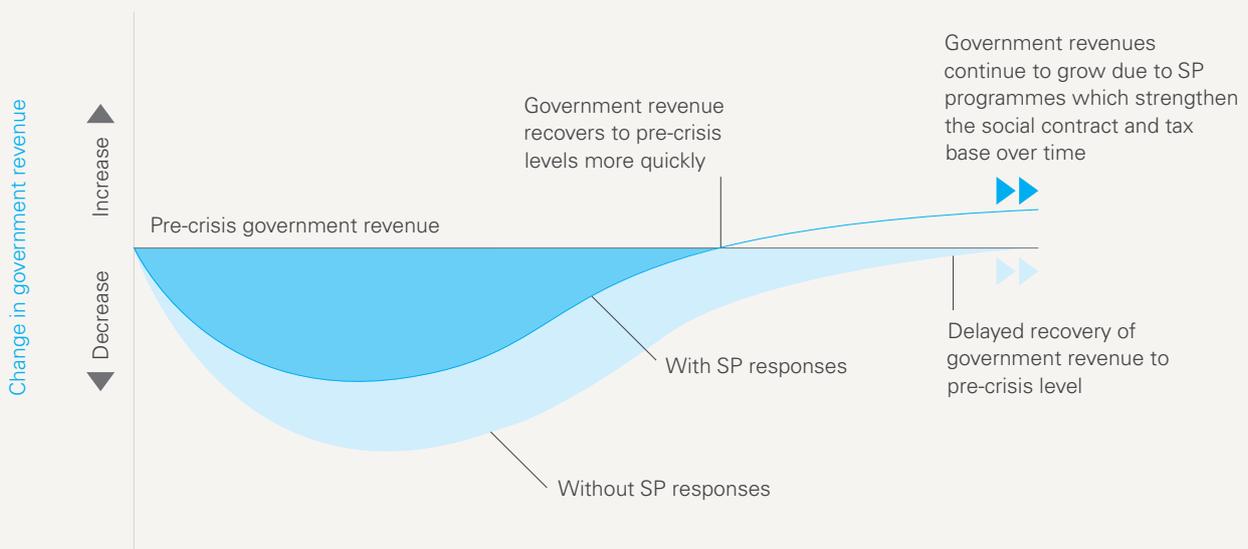
Action is required at different tiers of government, but also across different parts and sectors of the Government – both for the immediate, short-term response of getting children back to school and for the longer-term resilience of a more integrated system that places the child at the centre and considers all their needs.

**At the national/federal level**

It will be essential to strengthen overall governance and communication up and down the delivery chain between national and provincial governments, and to improve coordination between provinces, so that when there are shocks to the system the response is efficiently delivered and is well coordinated within and between provinces.

The COVID-19 crisis is causing havoc across national economies in South Asia with damaging consequences for the well-being of families and children. As suggested in Chapter 2, an emergency Universal Child Benefit (UCB) would be an important component of a broader range of measures and would ensure that the vast majority of households in Pakistan access a minimum level of income support. The benefits to child well-being, the economy, social cohesion and political stability are likely to be significant while recovery from the crisis would be much quicker, as shown in Figure 13 below, where social protection responses enable a quicker recovery to pre-crisis levels and ultimately lead to a higher tax base over time.

**FIGURE 13 | DIAGRAMMATIC REPRESENTATION OF HOW LARGE-SCALE STIMULUS PACKAGES (SP) WOULD SUPPORT ECONOMIES DURING THE COVID-19 CRISIS<sup>179</sup>**



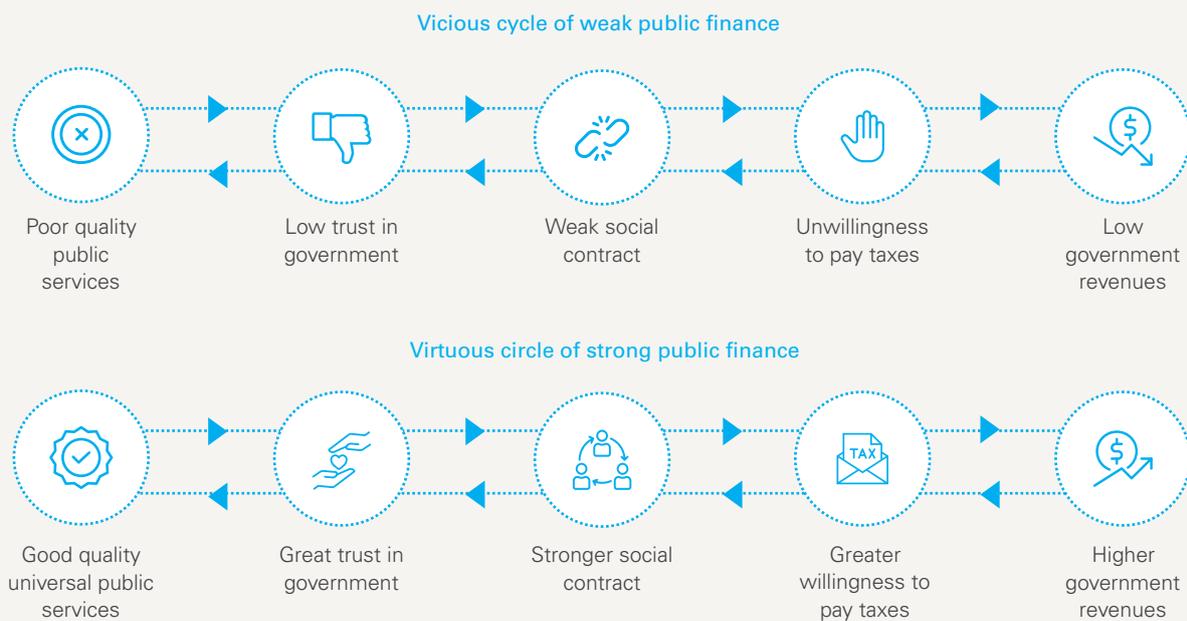
**Inclusion:** COVID-19 has exacerbated existing divides, including the digital divide, between urban/rural and rich/poor populations. However, it has put the spotlight on some of the following important considerations:

- Advice and solutions for learners with special needs, ensure that learning materials and platforms are accessible for children with disabilities, and translated into most common languages/dialect.
- Introduce content in the curriculum to nurture inclusive, socially responsible and resilient citizens.
- Maintain a consistent focus on improving equity (girls in poor and remote areas, children with disabilities) and on quality so that these become key benchmarks, even during an emergency.

## 4.1 Recommendations at the national level

- Pakistan should consider introducing an emergency, Universal Child Benefit (UCB) scheme to ameliorate the economic impact of the pandemic. This would help to transform the vicious cycle of weak public finance, into a virtuous circle of strong public finance, strengthening the social contract between the State and its citizens. The cycles are depicted in Figure 14 below.
- In addition, establishing a UCB would reduce drop-out risks, as the additional revenue to poor households would eliminate the need for the children of the household to contribute to household income and livelihood activities.
- A review of the current curriculum is needed to assess the changes required to ensure that the ideals contained in the 'Digital Pakistan' policy and the curriculum are closely aligned. As part of this process, an education partnership mapping exercise could be conducted to identify gaps which the federal and provincial Governments private partnerships would best support.

FIGURE 14 | WEAK AND STRONG PUBLIC FINANCE



**Social policy virtuous cycle:** Creating a virtuous cycle of enhanced social trust, increased taxes, increased resources for human capital while keeping all players accountable with periodic measurement of multi-dimensional poverty.

- Plans to digitalize Pakistan should include a provincial forward plan indicating when each school in the province will have access to the internet. That will need to involve the provinces undertake a mapping exercise to indicate which schools have electricity, of what reliability, are connected to the internet, and by what kind of connectivity.
- While efforts are being made to mitigate learning loss for those with access to education, much attention is needed for the more than 40 million children<sup>180</sup> with no current access and for whom COVID-19 will have made the possibility of access even more difficult. The digital master plan for the country needs to set a vision and ambition for the country that includes a clear equity focus on marginalized children, guidance for provinces in their engagement with the private sector, risks and mitigation strategies for digitalization, and costing parameters that link to education budgeting and fiscal space. Provincial systems must be ‘joined up’ insofar as working towards an overarching framework that brings together existing evidence and research to determine the most appropriate EdTech initiatives for their context. Such a vision sets the ‘path’ for the whole country to consider its approach to digitalization of education. However, equally, the effort to enhance distance and remote learning capacity will help to show where digital solutions are not possible, at least in the short-and-medium-term, and where alternative approaches – using teacher outreach and communications, printed materials, and community-led responses – may need to be supported. This collective vision, driven by better data on if and how children are accessing education, capacity building needs for teachers and staff at the frontline of rolling out the plans, and planning for the different types of responses required in various circumstances (digital, TV, radio, phone, print, outreach, community-led, etc.) is essential to building up a strong and responsive approach to education under emergencies, shocks and interruptions, but also for a resilient future in ‘normal’ operating times. A huge number of existing guidelines and checklists exist to support in this area, including, for example USAID’s ‘Delivering Distance Learning in Emergencies: A Review of Evidence and Best Practice’<sup>181</sup> report, which provides a comprehensive framework for decision-making, as well as listing platforms available for different digital modalities.

## 4.2 Recommendations at the provincial level

- There will be short- and longer-term planning needs. Most immediate and urgent will be ensuring the level of compliance to regulations put in place to ensure children will be safe in schools when they reopen. These standards will also need monitoring and consistent review, or adjustment. Given water, sanitation, infrastructure and connectivity gaps, this a huge challenge for Pakistan where there are not the fiscal reserves to invest heavily in education.
- Provinces will need to train teachers in blended learning approaches, which will be essential, to support future resilience against ‘shocks’ to the system, but also because in the long term this is good practice pedagogically. Ultimately, low-tech solutions may be the immediate priority, given the needs and available resources – prioritization where there is potential to reach a majority of the most at-need children is required. A digital agenda may require more incremental and secondary attention considering the equity challenges presented and will also rely heavily on private sector engagement to bolster capacity.
- Key partnerships with both the private sector and NGOs and INGOs, should be mapped out to consider how these can support and enable teachers and systems.
- When schools reopen, carry out formative assessments to establish learning levels and potential loss and roll out bridging programmes to overcome prevalent gaps and accelerate learning.
  - » Each province will need to revisit their Education Sector Plan (ESP) and ensure that they integrate within existing strategies for ensuring continuity of learning when schools are open and when they are shut. The ESP will also need to develop its distance learning strategy to enable both a short-term, immediate response to getting content out to all children via appropriate modalities, and a medium-to-long-term approach to EdTech that curates online content, aligns it with the curriculum, ensures content across a range of appropriate languages, and which delivers engaging material that ensures motivational learning, with equity at the core. Each ESP will also need to include a comprehensive assessment and evaluation plan to include remote and blended learning. Each plan should identify and support the integration of previously out-of-school children, ensure that alternative teaching and learning modalities put in place in response to the

pandemic are accessible to children with disabilities, children of minority ethnic languages and any other disadvantaged student populations.

- » Each province will need to introduce an emergency line in annual budgets and, in the event of an emergency, allocate substantially from this pot to the most marginalized areas.
- During an emergency, despite the challenges of doing so, each province will need to be fully ready to ramp up the collection of data and reporting against key indicators, to enable better national, provincial and district-level decision-making. Each province should adapt their existing monitoring system reform plans, present within all ESPs, to respond to the new identified needs in terms of real-time monitoring. The new priorities include: monitoring daily attendance in schools systematically to standardize school- and local-level response to absenteeism and reduce drop-outs, school compliance with safe SOPs in terms of WASH and IPC as well as monitoring progress of infrastructure development, adapting EMIS systems to collect additional information about WASH and electricity and internet connectivity (more than yes/no), monitoring learning outcomes regularly to measure learning loss and devise remedial strategies, monitoring teacher trainings on blended teaching and learning as well as digital skills (and any other capacity development decided at provincial levels).
- Teachers are key to building back better after the pandemic. They will require specific support, while preparations are made to reopen schools, additional support for what should be happening during the reopening phases, and finally support and training to be organized as a longer-term capacity development plan.

### Provinces need to develop a comprehensive teacher development strategy.

This would include:

- Consultation, agreement on the management of school reopening.
  - » Involve teachers and unions in decision-making.
  - » Agree on a prioritized sequence of trainings.
- Design and roll-out trainings on health and mental health and psychosocial support, infection prevention and control and water, sanitation and hygiene SOPs in schools.
  - » What teachers, school staff, learners need to know about COVID-19.
  - » SOPs in school: school hygiene, handwashing, any measures related to social distancing.
  - » Detecting mental health and psychosocial support (MHPSS) needs and cases and referral mechanisms.
- Addressing misinformation, stigmatization and discrimination.
- Changes in the organization of teaching and learning
  - » Revised school calendar and exam schedules
  - » Revised syllabus/curriculum focused on key learning outcomes.
  - » Organizational changes- staggered start, shifts, groupings.
  - » Identify alternative learning modalities relevant to the context where the teachers are serving: trainings have to be adapted to the local context.
- During reopening, the focus should be on safety first, and preparing teachers for the shift in pedagogies to compensate for learning loss and catch up:
  - » Focus on IPC and WASH, including monitoring and reporting the health of students.
  - » Conduct teacher health risk assessments.
  - » Support teachers in their communication with parents and communities.
  - » Encouraging all children to exercise their right to come to school.
  - » Support teachers with, and train them in, initial diagnostic assessment: analysis of results and learning gaps with focus on foundational skills in primary, linked to age-related behaviour and cognitive capacity.
  - » Support teachers to develop remediation strategies based on assessment results.
  - » Training on specific support to girls, children with disabilities, linguistic minorities, children of migrants, refugees or internally-displaced children, as relevant locally.
- After schools have reopened and safety protocols in schools are well standardized, the priority for capacity development will shift to more longer-term training needs in order to mitigate long-term learning loss and increased learning outcomes as the key objective:
  - » Scale-up teacher training in blended learning.
  - » Preparation for potential re-closures.
  - » Continuous assessment, monitoring of learning outcomes, and adapting remedial teaching strategies.
  - » Develop the capacity of teachers in digital skills, online teaching and learning approaches to leverage the potential of technology for learning.
  - » Support alternative parallel learning systems for out-of-school children and future disruptions, as relevant according to context: the type of alternative model will depend on what modality can be used to reach the maximum number of children at the teaching location.

- » Support the development of peer-to-peer support mechanisms: identify teacher mentors, site moderators, and content reviewers so that all teachers can access relevant and contextual support and content – from experts within their own profession, from lesson plans to garner activities to engage children, and from teaching materials to sample test questions. Online teacher support and exchange platforms are the future: they can increase the immediate applicability of trainings and have a better chance of translating into actual changes in teaching practices in the classroom, physical or virtual.
- » Training of teachers in self-care.

## 4.3 Recommendations at the district level and below

- Real-time regular monitoring of a manageable number of selected key indicators, defined by concerned decision-makers/implementers – mainly focusing on school-level compliance with key SOPs, including on infrastructure, especially for WASH, but also, in light of digital futures, for electricity and connectivity – will need to be in place in each district and findings aggregated and reported regularly upward to provinces to enable targeted planning. This must be planned in such a way as to match with capacity at the district level for such monitoring i.e., to be regular but light-touch enough to sustain and provide useful feedback loops upward to provinces.
- Each school development plan will need to refer to the SOPs to ensure that children are safe and protected from the impact of the pandemic and have contingency plans for providing continuity of learning when schools have to be closed. Ideally understanding and awareness of SOPs need to become not only the function of school principals, but embedded with the culture of the school, the management by all staff, and the oversight of school-based management committees and communities.

## 4.4 Conclusion

The purpose of this study was:

- To assess and estimate the various impacts of the COVID-19 pandemic on the education sector and stakeholders (children, adolescents, teachers, parents, education officials etc.); and
- To identify examples of promising responses and strategies in education and associated social sectors, which can be shared with other countries.

The effects of the pandemic have served to highlight a number of challenges for Pakistan's education sector, including huge disparities and inequities in access and quality of education. There are particular challenges for households, as well as schools, in gaining access to online and other media platforms for distance education delivery (as the only way to deliver learning given restrictions on movement) this includes, low capacity among teachers who have not been trained to deliver remote and digital education and may also lack the infrastructure to do so. Other challenges include, a lack of infrastructure in schools to provide safe environments that meet with the new standard operating procedures for COVID-19, large gaps in data and evaluation to monitor the progress of actions and policies initiated as a result of the pandemic, and sometimes weak coherence between provincial and federal Government responses that undermines a robust response to the pandemic. In the deep dive into the technological response of Pakistan, it has also been possible to show that, while there is policy in place – the 'Digital Pakistan' agenda – so far there is little scaffolding around this in the form of aligned curriculum content and training, access to the internet (and electricity) and devices, guidance for engaging with private sector providers, and monitoring of the policy implementation and its impacts. Therefore, the gap between ambition and reality remains huge, not least due to the combined challenges of large numbers of children already out of school prior to the pandemic, now potentially set to increase as a result of the pandemic, but also because a vast majority of the population, and schools, have no access to the internet.

The recommendations aim to propose actions for redressing these challenges for a more equitable and resilient education system going forward. Although a major component of that is the digitalization of schools and teaching, there is also the need to emphasize the wider characteristics of the education system, its needs, and the limitations of EdTech as the sole response to that. There are risks that essential resources are diverted from



priorities such as basic WASH at schools, or redressing the numbers of out-of-school children, which puts emphasis on the need for careful consideration of how 'Digital Pakistan' fits within the overall education system, and how technology becomes a tool for addressing blockages and problems, not an end in and of itself. Given the huge number of schools and students still unable to access digital media, it is not enough to focus only on building up infrastructure to redress this, but is important to go back to the constraints and needs, and to test where EdTech is the best solution. Therefore, this study has focused both on the elaboration of actions for 'Digital Pakistan', but also essential needs surrounding economic decline (for which a Universal Child Benefit is proposed), safety in schools (for which immediate redress of poor WASH facilities across all schools is needed), and data gaps (for which monitoring systems need to be strengthened at all levels, especially to track indicators related to the effects of the pandemic as a matter of urgency). Furthermore, while initiatives to deliver remote learning during the pandemic, such as Teleschool, are evident, it is unknown as of now how much 'learning loss' has been experienced by children, and what efforts the system needs to respond with to redress the problem – the focus on WASH and EdTech in schools might be solutions for improving Pakistan's quality of education and resilience in the face of shocks, but all such approaches must connect back to evidence of what is already happening for children – what have they experienced during the pandemic, how many are returning to schools when they reopen, and what barriers to learning they are facing, etc.

Despite these challenges, as one of the largest education systems in the world, and with over 40 million children<sup>182</sup> out of school when the COVID-19 pandemic led to school closures, it is very encouraging that the Government of Pakistan responded quickly. The Government introduced a significant range of measures to aid its learners through this unprecedented pandemic, with ministries collaborating to put in place impressive measures to reduce the risk of catching/spreading COVID-19, and to support its pupils. The focus first on continuity of learning and then the safe reopening of schools has led to a number of important milestones, including the establishment of the 'Taleem Ghar' and Teleschool programme to enable distance learning, and the roll-out of new standard operating procedures for schools to cater to their students' safely. These examples of success are elaborated in this study and useful lessons for future responses.

The pandemic response has highlighted how the Pakistan governance model would benefit from an enhanced communication system that would ensure that federal policies are consistently interpreted and implemented and lessons from the provinces feed back into policy and practice. If Pakistan invests now in strengthening its resilience to shocks of this nature and develops a long-term recovery and remediation plan, it could put the country back on a clear trajectory to meeting the SDGs.

# Annex: List of consultations and questions

GROUP	DATE	LOCATION AND LANGUAGE
<b>Saadia Adnan,</b> Director Academics at Federal Directorate of Education	1 October 2020	Zoom. English
<b>Questions</b> <ul style="list-style-type: none"> <li>• How long have you been associated with the education sector and what motivates you to remain part of the system?</li> <li>• During the current pandemic, what are the key initiatives supported federally to ensure learning continuity in Pakistan?</li> <li>• In the past couple of years, what are the greatest achievements within the education sector of Pakistan?</li> <li>• Does the curriculum revision include digital skills integration within the curriculum?</li> <li>• Are there any public-private partnerships made in the education sector during COVID-19, which has played a significant role in ensuring learning continuity?</li> <li>• Could you share some of the key challenges faced by the Ministry of professional and technical training in terms of implementation of their programmes ongoing interventions?</li> <li>• Regarding access to children to remote/distance learning, how will the federal Government address the challenge?</li> <li>• Can you explain a bit around the process of public/private partnership engagement within the education space? I.e., if a private company wants to partake in a partnership, what are the steps to gain that partnership?</li> </ul>		
GROUP	DATE	LOCATION AND LANGUAGE
Members from ILM Association	2 October 2020	Zoom. English.
<b>Questions</b> <ul style="list-style-type: none"> <li>• How has your company adapted to COVID-19? How did this take place?</li> <li>• Are you planning on supporting children/substitute learning?</li> <li>• Where do you feel the private sector adds the greatest value?</li> <li>• During COVID-19, have you noticed a shift in mindset around ensuring digital skills?</li> <li>• What are the plans for long-term education solutions?</li> </ul>		
GROUP	DATE	LOCATION AND LANGUAGE
Aasiya Khurram Agha, Technical Adviser, Education Minister's Office	5 October 2020	Zoom. English.
Rubina Nadeem UNICEF Education Specialist in Punjab		
<b>Question</b> <ul style="list-style-type: none"> <li>• Is there a plan to develop remediation strategies to compensate for learning loss? How do you plan to test learning levels now that schools have reopened? How will teachers be trained on remedial strategies?</li> <li>• How is the Government planning for future lockdowns?</li> <li>• Post COVID-19, does the Government plan to integrate digital skills within the curriculum?</li> <li>• What training/support has been provided to teachers to adapt to new technologies? How have parents and students been supported?</li> <li>• Is there a possibility that other tools like projectors can be provided to teachers who don't have laptops, etc.?</li> <li>• Thinking about COVID-19 and the areas which the private sector has supported the education space, what areas do you think are essential?</li> <li>• Post-COVID-19, what role could private partners play within the education space?</li> <li>• If you were to go to the private sector within the education space, are there any other areas which you think the private sector could support the Government with?</li> <li>• Do you know of any partnerships that focus on accessibility? I.e., like cheap phones?</li> <li>• Anything else you would like to add or comment on?</li> </ul>		

GROUP	DATE	LOCATION AND LANGUAGE
Microsoft Pakistan		
Jibran Jamshad, Country Education Lead for Pakistan	6 October 2020	Zoom. English.
Lilian Nganda, Senior Communications Manager		

**Question**

- How has Microsoft been involved with education prior to COVID-19?
- What are the current initiatives you are currently running?
- Can you describe initiatives, which COVID-19 has either accelerated or has been introduced?
- To what extent has Microsoft addressed the challenge of accessibility?
- What are the offline options for teachers?
- What research around teacher master programme/remote learning and what has been the feedback from the training?
- To what extent can you monitor student's engagement?
- We understand that there are different phases of the project, can you walk us through the vision, post COVID-19?
- Has there been any plan or interventions to work with religious seminaries or madrasas?
- How do you ensure that the product is contextualized for Pakistan's needs/ what is the process of contextualization?
- What would you say are the biggest challenges that private companies will face working within the education sector? Do you have any recommendations for effective public/ private partnerships within the education space?



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# Pakistan Case Study

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on the Education Sector in Asia

This report reviews the impacts of and responses to COVID-19 on education in Pakistan, provides reflections on lessons learned so far in Pakistan's COVID-19 response, and analyzes capacity gaps for recovery. It explores successful elements of the Government response, issues and challenges faced, and strategies adopted to continue students' learning during school closure. It also looks to the future, in building back better and increasing the resilience of the education system to future shocks.

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