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Improving Learning Outcomes for Asia (ILOA) Mechanism

Pakistan Basic Education Sector Assessment: Final Report

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List of Acronyms and Abbreviations

ADB	Asian Development Bank
ADP	Annual Development Plans
AIOU	Allama Iqbal Open University
AJK	Azad Jammu and Kashmir (region)
ASER	Annual Status of Education Report
BEF	Balochistan Education Foundation
CDCS	Country Development Cooperation Strategy
COVID-19	coronavirus disease 2019 (SARS-CoV-2)
CSO	civil society organization
DEE	Directorate of Education Extension
DEPD	Department of Empowerment of Persons with Disabilities
DOE	Department of Education
DRR	disaster risk reduction
E&SE	Elementary and Secondary Education (Department)
ECCE	early childhood care and education
EMIS	education management information system
EMO	Education Management Organization
ERRA	Earthquake Reconstruction and Rehabilitation Authority
ESEF	Elementary and Secondary Education Foundation
ESP	Education Sector Plan
FCDO	United Kingdom's Foreign, Commonwealth and Development Office
GB	Gilgit-Baltistan
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International Cooperation)
GoP	Government of Pakistan
GPE	Global Partnership for Education
ICT	Islamabad Capital Territory
ILOA	USAID Improving Learning Outcomes for Asia
IMF	International Monetary Fund
INGO	international NGO
IPCC	Intergovernmental Panel on Climate Change
IRC	International Rescue Committee
ITA	Idara-e-Taleem-o-Aagahi
JICA	Japan International Cooperation Agency
K–12	kindergarten through grade 12
KESP	Khyber-Pakhtunkhwa Education Sector Programme
KP	Khyber-Pakhtunkhwa (province)
KPRA	Khyber-Pakhtunkhwa Private School Regulation Authority
LEAPS	Learning and Educational Achievement in Punjab Schools
LSS	Long Story Short

MICS	Multiple Indicator Cluster Survey
MoFEPT	Ministry of Federal Education and Professional Training
NFE	nonformal education
NGO	nongovernmental organization
NMD	Newly Merged District
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OTT	over-the-top
PEF	Punjab Education Foundation
PPP	public–private partnership
PREP	Pandemic Response Effective in Pakistan (World Bank project)
PSLM	Pakistan Social and Living Standards Measurement Survey
PSPA	Punjab Social Protection Authority
QAED	Quaid-e-Azam Academy for Educational Development
RTI	RTI International (registered trademark and trade name of Research Triangle Institute)
SBEP	Sindh Basic Education Program
SCMP	Sindh Community Mobilization Program
SDMA	State Disaster Management Authority
SEF	Sindh Education Foundation
SELD	School Education and Literacy Department
SNC	Single National Curriculum
SOP	Standard operating procedures
SOW	Scope of Work
STEAM	science, technology, engineering, arts, and mathematics
TBD	to be determined
UDL	Universal Design for Learning
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children’s Fund
USAID	United States Agency for International Development
USD	United States dollar
WEF	World Economic Forum
WHO	World Health Organization

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Executive Summary

Purpose and Assessment Background

Through the Improving Learning Outcomes for Asia (ILOA) project, the United States Agency for International Development (USAID)/Pakistan engaged RTI International to conduct an assessment of the basic education sector, in two phases. First, the team completed a desk review of available secondary data and relevant publications. Second, a team of researchers collected qualitative data through 84 key informant interviews, group discussions, and school visits in-country. This final report integrates data from both phases to provide an overview of basic education in Pakistan at the federal level and in five provinces and regions: Azad Jammu and Kashmir (AJK), Balochistan, Khyber-Pakhtunkhwa (KP), Punjab, and Sindh.

In addition to an overview of basic education, the assessment probed the following issues:

- **Private schooling** – analysis of the extent and quality of private schooling, including the potential for expanded public–private partnerships (PPPs).
- **Inclusive education** – equity in access to schooling for marginalized and vulnerable populations, especially girls and children with disabilities
- **Flood recovery and climate resilience** – the education system’s recovery from the recent flooding and lessons from those incidents regarding the role that basic education can play in climate change mitigation and adaptation and the longer-term resiliency of the education system

Methodology and Limitations

The desk review collected and presented an overview of available data gleaned from available government policy documents, statistical publications, national and provincial/regional sector analyses and plans, student learning assessment data, and literature produced by a range of different agencies and individuals. Based on that review, a five-person research team of international and local education experts conducted primary data collection at the federal level and in the provinces indicated above between February 13 and March 10, 2023. Interviewees represented federal, provincial, and district-level government, international and local nongovernmental organizations (NGOs), independent academics and researchers, and school personnel including teachers and head teachers.

Data from the interviews offer a qualitative perspective of the on-the-ground challenges and opportunities present in the basic education sector. Interviews with local stakeholders at the district, tehsil, and school level were far fewer than at the provincial and national levels due to limited time, budget, and scope of this activity.

Findings

The findings in this report are structured in three major sections: (1) national level; (2) provincial/regional level; and (3) each of USAID’s focus areas: inclusive education, climate resilience, and private education.

National

As documented in the desk review, the educational challenges across the country are significant. While there has been progress on some key indicators—including increased enrollment, a decreased gender gap, and improved teacher attendance—access to education falls far short of universal, with rural and low socioeconomic status populations, girls, and children with disabilities at the greatest disadvantage. Pakistan has 22.8 million

out-of-school children, or 44% of the school-aged population (Pakistan National Commission on the Rights of Child, 2022).

For children in school, learning outcomes fall below desired levels. According to the 2021 national Annual Status of Education Report (ASER), only 55% of grade 5 children could read a grade 2 level story. In 2020, ASER found that less than 20% of rural students in grade 2 were able to read a story in Urdu or do basic math operations such as division. Learning losses due to the closure of schools during the COVID-19 pandemic likely have compounded the issue (RTI International, 2022).

Pakistan has one of the world's lowest levels of domestic education financing, spending less than 2.8% of its gross domestic product on education—far below the recommended 4% to 6% (Human Rights Watch, 2018b). Underfunding is in part what prevents the system from expanding access rapidly enough to keep pace with population growth (at the 2021 estimated rate of 1.85%). Furthermore, stakeholders interviewed consistently indicated that slow bureaucratic processes, political interference in the management of the sector, lack of accountability, political disruptions, and frequent reshuffling of administrative leadership contribute to inefficient use of the resources that are available.

The Ministry of Federal Education and Professional Training's (MoFEPT's) National Education Policy Framework recognizes four strategic priorities: engaging out-of-school students, promoting uniformity in standards across the country, improving the quality of education, and enhancing skills training. In August 2021, Pakistan launched the Single National Curriculum (SNC) to foster greater uniformity and alignment among curriculum, materials, and the examination system. While the SNC has strengths, both its design and its implementation have attracted significant criticism. Another recent federal initiative is the new Distance Learning Strategy, the draft of which ambitiously outlines learning goals and objectives to be achieved through distance learning modalities. However, the infrastructure, research, data, and governance structures needed for distance education are still in the early phases of development.

Provincial/Regional Overviews

Punjab

Overview: Punjab is Pakistan's largest and most populous province. One quarter of its population is of school age. Punjab has the lowest rate of poverty and the highest Human Development Index measures compared to other provinces. However, districts in South Punjab have the greatest proportion of out-of-school children and highest poverty rates. Partly in response to the inequities between Punjab's north and south, 11 districts in the south were given administrative autonomy in 2021.

Punjab's Education Sector Plan (ESP) focuses on four objectives related to quality, equity and inclusion, improved teaching and learning practices, and strengthened governance. Interviews with School Education Department officials in Punjab noted that getting out-of-school children into school is their top priority, particularly in the poor, rural parts of the province. The Multiple Indicator Cluster Survey (MICS) data in Punjab show 13% of primary school-aged children out of school. Even worse, 21% of students of middle-school age, and 34% and 47% of high and senior high school-aged students, are not enrolled. Children from households in the poorest socioeconomic quintiles are out of school at twice the rate of those from the richest households. Provincial officials cite insufficient infrastructure, teachers, and resources as constraints on expanding access.

Low-quality instruction was cited by many interviewees as a key challenge. The desk review done for this assessment confirmed poor teacher pedagogical skills, lack of proficiency in

English, low levels of teacher motivation, and inadequate teacher professional development as factors contributing to poor quality.

Private Schooling: Punjab officials cited the role of the private sector as necessary to address the challenge of educating the large numbers of out-of-school children. The 2021 ASER report indicated that 23% of enrollment in the province was in private schools. Several types of private schools that cater to lower-income families operate in Punjab. Most notably, PEF enrolls over 2.5 million students in its network of 7,400 schools.

Inclusive Education: Most respondents noted that the province has neither the resources nor the capacity to address the needs of children with disabilities. Other informants pointed to the persistent taboo and stigma around children with disabilities in families and communities. There has been some response from the government, though; the Punjab Social Protection Authority provides conditional cash transfers that have reached over 23,000 children with disabilities. The Punjab Education Foundation (PEF) since 2016 has provided free education to 1,251 children with disabilities. Moreover, The Punjab Government has provided 340,000 scholarships since 2009 to students from extremely disadvantaged backgrounds.

Climate Resilience: Interviewees consistently agreed that better preparation for inevitable climate-related disasters is critical for the education system. The recent extreme flooding severely impacted districts in South Punjab, where schools near riverbanks remained closed for up to two months. Many schools damaged in the flood had yet to be repaired or reconstructed at the time of this study due to lack of funding. In addition to flooding, Punjab officials noted that spells of extreme heat also are disruptive to school, as is air pollution in Lahore.

Khyber-Pakhtunkhwa

Overview: KP had a population of 35.5 million in 2019, of which more than 70% were below the age of 30. Eighty-three percent were residing in rural areas. Among provinces in Pakistan, KP allocates the greatest share of its budget to education (21% in 2019). This investment explains in part why KP has achieved a higher rate of primary net enrollment than other provinces. The need to increase enrollment in middle and secondary school, however, remains a concern. KP's shared border with Afghanistan and proximity to unstable parts of Pakistan mean that large numbers of refugees and internally displaced people migrate into the province.

KP province's ESP has three strategic goals: ensuring access and equity; delivering high-quality and relevant education; and providing effective leadership, management, and governance. The province has taken several positive steps to improve enrollment and reduce the gender gap, e.g., establishing more girls' schools than boys' schools in the past several years. However, a senior official said, "We have never been able to meet our Education Sector Plan targets of constructing 11,000 schools because of repeated disasters, rapidly increasing population, and other challenges like merging of districts." The 2019–20 Pakistan Social and Living Standards Measurement (PSLM) Survey showed that net primary enrollment rates were lowest in the south and in Newly Merged Districts (NMDs). Girls' participation was even lower. Inadequate supply of schools, long distances to school, and poverty constrain access.

Private Schooling: Private schools account for roughly 50% of education supply in KP. The Private School Regulation Authority registers private schools but provides no funds or technical support. In general, interviewees said that the quality of private schools is not better than that of public ones. But stakeholders reported that parents prefer sending their children to private schools in part because of the co-curricular activities those schools offer. The province has set up an Elementary and Secondary Education Foundation (ESEF) to

support private schools and uses a voucher scheme to fund poor children attending private schools.

Inclusive Education: While espousing the concept of inclusion, education officials indicated that only children with minor physical disabilities currently attend mainstream schools. Many schools still lack ramps or other accessibility arrangements. In the absence of special schools, children with disabilities are often kept at home.

Climate Resilience: The 2022 floods partially or fully damaged 1,790 schools in 17 districts of KP. In the north, flash floods even washed away the land on which schools were built. In the absence of any external support, the provincial government has been unable to rehabilitate or rebuild damaged schools. Provincial officials stated that there is no policy or plan in the education sector to deal with continuing education during such emergency situations.

Sindh

Overview: Over 50% of the population of Sindh is concentrated in large urban centers such as Karachi and Hyderabad. In 2019, nearly half of all learners in Sindh had left school by grade 5 (Pakistan Bureau of Statistics, 2020 [PSLM, 2018–19]). Recent data indicated that approximately 44% of school-aged children in Sindh were out of school, the majority in rural areas. The Sindh ESP (2019–2024) identifies several factors contributing to low participation rates: inadequate facilities, unsuitable learning options, poor teaching quality, and an uneven distribution of post-primary schools. Inadequate facilities negatively impact participation and retention, particularly for female students. Almost one third of all schools in the province function without toilets and water. Over half of public primary schools use multigrade teaching. Girls' participation falls well behind, especially in middle and secondary school. Learning outcomes were unacceptably low in 2018–2019, with average scores of less than 30% on the standardized annual examination across all tested subjects in grades 5 and 8.

Interviewees pointed to the overwhelming influence of donors and development partners on policymaking in the education sector. The lack of home-grown solutions and absence of sustainability measures for externally funded ones were identified as major constraints. Interviewees often cited how political influence in education undermines accountability.

Private Schooling: The Sindh government actively supports and encourages private sector involvement in education and has established the legal and policy frameworks for public–private partnerships. Over 40% of enrollment in primary, middle, and secondary education is in private schools. Multiple private providers and public–private arrangements are being tried in Sindh. For example, the Sindh Education Foundation (SEF) supports schools that serve over 800,000 students, primarily in underserved rural areas. The Sindh Government has also formed partnerships with private Education Management Organizations (EMOs) to manage public schools.

Inclusive Education: Children from marginalized communities and those with disabilities in Sindh encounter significant barriers to accessing education. Special-education schools¹ fall under the jurisdiction of the Department of Empowerment of Persons with Disabilities, and this separation hinders coordination and mainstreaming for children with special needs. When queried, respondents deemed regular schools inappropriate for students with special needs, due to insufficient infrastructure, inadequate teacher training, and limited resources.

Climate Resilience: Floods pose a significant challenge in Sindh Province. The School Education and Literacy Department of Sindh estimated that the 2022 flood damaged 19,808

¹ Note that the term “special education” is used by the government and was not the choice of the research team. This terminology is consistent across the provinces/regions of Pakistan.

schools, more than 45% of the total. Of immediate concern is rehabilitating damaged facilities, while medium- to long-term measures focus on developing climate-resilient education infrastructure and reevaluating the effectiveness of prevailing education models in Sindh.

Balochistan

Overview: Balochistan's arid and mountainous geography, low population density, chronic poverty, weak fiscal base, small private sector, and poor institutional and human resource base contribute to its struggles to provide high-quality basic education. Additionally, migration and natural hazards (droughts, floods, and earthquakes) impact the delivery of education services. Approximately 47% of school-aged children are out of school, among whom 59% are girls. The quality of student performance is poor. The 2021 ASER showed 54% of grade 5 students not able to read a story in Urdu and 74% not able to do simple arithmetic. Rural areas face a dearth of adequate school facilities, lack of transportation, and a shortage of deployed teachers. Balochistan also lags behind in internet connectivity. Additionally, Balochistan is home to a substantial number of Afghan refugees and other migrant communities with limited access to schooling.

The Balochistan ESP 2020–2025 prioritizes learning and access and recognizes improved governance, management, research, and data as critical to an effective education system. The plan calls for developing a research-based curriculum framework, reviewing the language policy, and preparing contextually relevant textbooks, among other initiatives. The Secretary of the School Department further added that the government has taken steps to make all primary schools gender-neutral, which has led to a significant increase in girls' enrollment. Efforts are also under way to pay stipends for girls, hire female teachers, establish girls-only schools, and offer separate washrooms for girls within schools.

According to the Directorate of Curriculum and Assessment, the adoption of the SNC in Balochistan poses significant challenges related to teacher training, capacity building, and governance. Importantly, the curriculum is not flexible enough to cater to the needs of multigrade schools, which are widespread in Balochistan.

Private Schooling: Among the provinces studied, private schooling is the least developed in Balochistan, serving only 6% of enrollment (Qadeer et al., 2023). But enrollment in these schools has been growing in recent years. Private schools generally were seen as more efficient and innovative than public schools, and parents were said to prefer them. However, the affordability of private schools remains an issue, particularly in rural areas where poverty levels are highest. The Balochistan Public–Private Partnership Act, 2021, provides a legal framework for accessing new resources and investments for public–private collaboration.

Inclusive Education: The education system is not adequately equipped to accommodate children with disabilities. Respondents cited insufficient screening and identification, lack of teacher training, inadequate classroom resources and infrastructure, inadequate budget, and language barriers. Children with disabilities are less likely to attend school and have higher dropout rates than those without disabilities. Accurate data are needed on disability prevalence rates, types of disabilities, and progress of children with disabilities through the school system.

Climate Resilience: Balochistan is highly vulnerable to the impacts of climate change due to its location and economic insecurity. The 2022 floods caused significant damage to school infrastructure. In all, 1,076 schools were completely damaged and 1,774 partially affected (United Nations Development Programme [UNDP], 2022). The floods led to the displacement of thousands of people, with schools and classrooms repurposed as housing, rendering them unusable for education.

Azad Jammu and Kashmir²

Overview: AJK is governed by the Interim Constitutional Act of 1974 and its definitive status has yet to be determined. It relies on grants from the federal government, leaving its finances susceptible to politically motivated fluctuations. Education has been a top priority for the Government of AJK, with the sector receiving as much as 28% of total recurrent budget. Official data show gross enrollment rates of 98% for boys and 89% for girls, but officials and stakeholders contend that girls' enrollment surpasses that of boys. AJK has separate directorates for male and female education, which may be merged. The Department of Education (DOE) may also merge the lower grades of boys' and girls' schools in certain communities, with gender-segregated education maintained beyond grade 3.

A recent study conducted by Allama Iqbal Open University found that 69% of the AJK population aged 10 years and older were proficient in reading, 71% in writing, and 69% in numeracy. But only 20% met proficiency standards for digital literacy. Like other provinces, AJK has a large percentage of multigrade schools (66% of all public schools).

The AJK Education Policy 2022 prioritizes science, technology, engineering, arts, and mathematics (STEAM) as well as citizenship, leadership, and entrepreneurship education. AJK also prioritizes the use of technology in teaching. For example, AJK has introduced hybrid textbooks for primary grades with QR codes that link to online resources. Whether teachers can access those resources is overlooked. In 2018, AJK implemented a teacher recruitment policy that made a bachelor's degree in education (with honors) and Associate Degree in Education mandatory to apply for teaching positions. Officials reported that the policy has led to the hiring of more qualified teachers with better subject-matter and pedagogical expertise.

Private Schooling: According to a private school system representative, private schools cater to 30% to 40% of enrollment in AJK and are increasing in number at a fast pace. Decreasing enrollment in government schools is attributed to the lack of accountability, poor teacher attitudes, and inadequate liaison with parents. One private school representative added that, unfortunately, the government traditionally perceives private schools as rivals. There is no platform or organization in AJK that periodically and reliably collects and updates private school data.

Inclusive Education: In AJK, the education of children with disabilities is still seen as "special education" and not inclusion. There appears to be a lack of a shared definition and only limited stakeholder awareness of inclusive education. Resource constraints curtail what the province is able to do. Officials lack data on disability prevalence, and they reported that teachers and administrators have never been trained on the educational needs of children with disabilities.

Climate Resilience: AJK is prone to natural disasters such as earthquakes and to climate-related emergencies. The State Disaster Management Authority (SDMA) plays a central role disaster risk reduction and mitigation. The AJK curriculum includes student learning outcomes related to disaster risk reduction and climate change. According to SDMA, the new code for constructing earthquake-resistant schools was widely adhered to despite the fact that doing so caused financial strain, because the population accepted the need to prioritize safety and security.

² Note that AJK was not included in the desk review. USAID asked that it be covered during the in-country portion of the sector assessment.

Focused Areas of Study

Private Schools

Private schools make up 38% of all educational institutions and 44% of the total enrollment in Pakistan (Asian Development Bank [ADB], 2022). Federal and provincial authorities have taken steps to encourage private sector participation in education. Five provincial governments have established provincial education foundations to facilitate PPPs in education that support more than 12,000 Foundation Assisted Schools with three million students. Other successful PPP models include providing vouchers to low-income students to attend private schools and hiring EMOs to run networks of public schools.

All provinces have established directorates to regulate private schools, although they struggle to keep up with the rise in the number and types of private schools. Low-cost private schools offer affordable basic education to lower-income families. They follow the national curriculum and focus on essential literacy and numeracy skills. Individual private schools are generally owned by an entrepreneur from the community. Fees range from [REDACTED] per month per child.³ Both parents and district officials perceived the quality of private schools to be better than that of public schools. Some provincial officials said that private schools are low quality and hire unskilled teachers. However, the Learning and Educational Achievement in Punjab Schools (LEAPS) report (ADB, 2019) revealed that private schools students outperformed their public school counterparts.

Private schools in Pakistan have made limited efforts to provide inclusive education to students from varied socioeconomic backgrounds. Many private schools offer scholarships, fee concessions, and other financial support to students in need. The representative of the Federation of Private Schools in Pakistan argued that the reason for low enrollment of special-needs students is the cost to private schools of teaching these children.

The capacity of provincial directorates responsible for regulating private schools is limited, and better monitoring of student learning outcomes is needed (ADB, 2019). Comprehensive data on student enrollment, performance, and school quality is severely lacking. The diversity in private provision makes it challenging to address the issues that the different types of private schools face. The lack of coordination among government agencies, private schools, and other stakeholders leads to inefficiencies, duplication of efforts, and missed opportunities for collaboration.

Opportunities: The regulatory framework could be strengthened to ensure compliance with national education standards and to promote transparency in private school management. Inspections, output-based monitoring, and transparent reporting systems could contribute to better oversight and accountability in the private sector. Comprehensive teacher training and continuous professional development could help ensure that private schools meet standards for instructional quality. Each province passed the Compulsory Education Act, which obliges private schools to enroll 10% of students from disadvantaged backgrounds per classroom.

Inclusion in the Education Sector

As revealed in the desk review and in the provincial overviews in this report, Pakistan is committed to ensuring access to high-quality instruction for all, while struggling to overcome significant barriers to make this goal a reality. Pakistan seeks to work toward a more inclusive education system by removing barriers to education for “girls and women, the disabled, ethnic/linguistic minorities, migrants, nomads, and many others” (Ministry of

³ Compared to monthly GDP per capita of about [REDACTED]

Education, 2008). Most stakeholders interviewed acknowledged inclusion is not a reality in Pakistan and is far off in the future.

Children with Disabilities: As discussed in each provincial/regional profile, there are myriad constraints to providing high-quality education to children with disabilities. UNICEF's country profile on disability-inclusive education practices in Pakistan (2021) revealed that while policies and legal frameworks exist, coordination, monitoring, and implementation of them is insufficient. Implementation constraints most often cited related to poor infrastructure, lack of resources to respond to the needs of children with disabilities, poor data on people with disabilities, and low capacity throughout the education system to accommodate children with disabilities.

Across the country, educational services for children with disabilities are delivered through Special Education Departments, which have their own budget and their own schools, located mostly in urban centers. At the federal level, special education is handled by the Ministry of Social Welfare, and as one official remarked, "I don't know what they're doing over there." UNICEF (2021) estimated that only 2% of children with disabilities could access special-education programs, while another 2% were attending mainstream schools. It is generally understood that mainstream government schools can accommodate only children with "mild physical disabilities," but the infrastructure to accommodate them is minimal.

The 2017 census was the first attempt to collect data on people with disabilities, but it dramatically underestimated their numbers. The 2023 census has improved how it inquires about people with disabilities, and the ASER uses question sets from the Washington Group on Disability Statistics to attempt to measure prevalence more accurately. Interviewees also reported that continued stigma and taboo within families about disability persist and, therefore, prevalence will likely continue to be underreported. Capacity for viable screening of children for disabilities is very limited. If a disability is identified, to access government support and to enroll in special-education schools, students must obtain a "disability certificate" from the provincial government office. The process often poses logistical, bureaucratic, and financial obstacles to families.

Apart from the few who have undertaken additional pre-service training related to special education, teachers do not know how to adapt the curriculum and individualize instruction for children with disabilities. There is limited, if any knowledge, on inclusive pedagogy (such as Universal Design for Learning [UDL]) across the country.

Girls' Education: Girls' education is an ongoing challenge in terms of both supply and demand. Some stakeholders argued that girls' education has been undervalued and families see no "use" in sending a girl to school, especially in more "tribal" or "patriarchal" areas like KP and Balochistan. Others noted that families withdraw their girls as they enter adolescence, and that child marriage is still a common practice. Some stakeholders pointed out that girls face harassment in school or on the way to school; hence, families keep their girls home to keep them safe. On the supply side, there are simply not enough schools, thus not enough places for girls (or boys), especially in rural areas. The added distance to post-primary schools; safety concerns; and the lack of appropriate water, sanitation, and hygiene facilities are all significant deterrents to girls' enrollment beyond primary. Despite progress over the past 20 years, girls from poor families in rural areas remain the most disadvantaged when it comes to accessing school.

Opportunities: Interviewees offered a range of priorities that could be addressed to improve the delivery of inclusive education services:

- Make all mainstream government schools accessible to children with mild to moderate physical disabilities.

- Focus identification, assessment, and referral services on targeted disability types as a starting point (e.g., blindness or deafness).
- Ensure that budget allocations increase in proportion to the true number of children with disabilities.
- Work locally with communities and families to reduce shame and stigma around disability.

Pakistan needs ongoing, practical action at the most local levels. An immediate opportunity could include mapping and providing support to local civil society organizations (CSOs) that cater to the needs of children with disabilities. Support could also aid provincial and district leaders and CSOs to gather better data on disability prevalence, while also working to overcome the shame and stigma around disability. Mobilizing additional investments in infrastructure upgrades of mainstream government schools would remove barriers for some children, as would introducing adaptations in pedagogy and assessment (e.g., UDL) and supporting provincial governments to allocate additional resources to Special Education Departments so that they can provide adaptive technologies to students and meet the needs of children with more severe physical and intellectual disabilities. Numerous efforts have been designed and implemented at smaller scale to address girls' education, and future investments should draw from these experiences.

Climate Resilience in the Education Sector

With respect to the floods in June–October 2022, the country is still in the “response” phase, rather than recovery. Many schools that were damaged are still unusable, and some are still being used as shelters for displaced populations. In the southern part of KP, South Punjab, and Sindh, people complained about the injustice of overflow from rivers and reservoirs being diverted to poor communities to save the agricultural plots of rich landlords. Many schools are constructed on donated lands that lie in high-risk flood zones. Buildings constructed without taking into account periodic flooding are inevitably damaged. According to district interviewees in KP, planners do not consider disasters and other emergency situations when they are preparing for school construction. People in provinces generally believe that no protection walls, or only weak ones, are built on riverbanks, thereby allowing water to flow into the villages, towns, and agricultural fields. Moreover, no reservoirs store water for times of drought, also common in Pakistan. In some areas in Sindh and Punjab, water stood in fields for several months because of the lack of drainage systems or water-removal arrangements or equipment.

UNICEF has worked to establish temporary learning centers in flood-affected areas, but their funding and reach is limited. Some local NGOs also provided support, but it was limited in scope and time. The government itself does not plan for the continuation of education in flood-affected areas and there are no specific contingency funds in the budget for flood response.

Almost all the interviewees said they consider education to be one of the most important tools that can be used for climate resilience, but most had no clear idea of what exactly should be done. Some stakeholders stated that the existing curriculum and textbooks do have content on climate change that could be improved. In contrast, others suggested the need to understand this subject better before adding anything to the curriculum. Some development partner initiatives are making youth aware of the climate crisis.

Opportunities: Floods, like other climate-induced disasters, are a cross-sectoral issue requiring coordination with government efforts in water management, disaster management, health, and climate change. Other donor agencies expressed enthusiastic support for USAID to play a role in climate resilience, and they noted that the education sector requires significant investment. The Ministry of Climate Change would greatly benefit from focused

capacity building and support. Officials from MoFEPT noted that without the convening power of bi- and multilateral development partners, it is unable to garner the attention needed from other sectors. Greater community engagement in preparing for and responding to disasters would help overcome some of the shortcomings of heretofore ineffective top-down responses.

Education Sector Development: Partner Support

Pakistan has received education funding from numerous international multilateral and bilateral organizations. External funding has been invested in the full range of educational initiatives and interventions across all levels, from early childhood to higher education. The amount of external financing that Pakistan has received since independence, in the billions of United States dollars (USD), has made significant contributions to the education sector, given the historically low levels of domestic financing for education (Pakistan Coalition for Education, 2022).

Recommendations

Utilize a Systems Approach

- For every area of intervention (e.g., inclusive education or climate resilience), the service-delivery chain and the political economy surrounding it should first be mapped to identify strengths and weaknesses within the system. Stakeholders consistently highlighted the need for a systems-focused approach to future investments.
- More efficient management approaches are needed. Governance mechanisms should be designed to shield the education sector from political influence.

Target at the Local Level

- Federal and provincial decision-makers need structured mechanisms that will enable them to heed the voices of local stakeholders. The aim would be to jointly design implementation strategies tailored to overcoming the recurring obstacles to achieving sustained success.
- Systems change is a long-term process. To address the immediate needs of learners, families, and communities, it may be necessary to deploy complementary investments in local government systems, along with direct support to community-based actors.

Implement Localized Public–Private Partnerships

- There is ample opportunity to study and analyze the variety of PPP models being deployed in Pakistan. Each province/region is implementing its own unique set of PPPs which may be key to solving the challenge of out-of-school children in Pakistan.
- Provincial policies and incentives could encourage large networks of private schools to serve the particular disadvantaged populations or areas in their contexts.
- Additional assistance could focus on PPP expansion in poor and rural districts where girls' access to education is also the lowest.

Spearhead Efforts Toward Inclusive Education

- It will be important to partner with other donors to co-sponsor policy actions to amplify impact and make best use of resources. Provincial governments need support to systematically collect data on the prevalence of disabilities; likewise, nongovernmental actors could conduct surveys focused on specific geographic areas or types of disability.

- Provincial and district authorities need assistance to map out strategies for accommodating learners with disabilities over time—starting with what is doable in the short term.
- It will also be important to increase the capacity of mainstream government schools to accommodate children with disabilities, at a level that is feasible and sustainable in each targeted district.

Pave the Road Toward a More Climate-Resilient Education Sector

- Broad investments for climate resilience across the energy, water management, agriculture, health, and education sectors are critical at the national and provincial/regional levels.
- There are successes to draw on—e.g., the relative success of early warning systems, cash distributions to flood-affected communities, post-earthquake school construction codes in AJK, and community-based disaster risk management structures.
- At a minimum, investment in preparedness should be a top priority, in the form of comprehensive school safety plans, contingency budgets and materials for schools, and rehabilitation of infrastructure to be more structurally resilient in the future.

Continue to Focus on Foundational Literacy and Numeracy

- A focus on teaching and learning remains critical, as does helping set clear, measurable benchmarks for proficiency in foundational skill areas.
- Structured pedagogy approaches have been shown to work in Pakistan. Investing in sustainable implementation of such methods in conjunction with the rollout of the SNC could be very beneficial.

1 Introduction and Background

1.1 Purpose and Assessment Background

Through the ILOA project, the USAID/Pakistan mission has utilized the buy-in mechanism for RTI International to conduct a basic education sector assessment. This assessment will inform the development of USAID/Pakistan’s new Country Development Cooperation Strategy (CDCS). As noted in the original Scope of Work (SOW) for the activity (**Annex A**), the sector assessment was conducted in two phases: (1) a desk review of available secondary data and relevant publications, and (2) in-country primary qualitative data collection through key informant interviews, group discussions, and school visits.

This final report integrates data from both phases to give an account of the status of the basic education sector in Pakistan. USAID’s requested lines of inquiry included an overall sector review at the national and provincial/regional levels; private schools’ role in the sector; exploration into inclusive education; and the 2022 flood recovery and climate resilience. This range of topics includes analysis of the following:

- **Private schools**, including analysis of their quality, management, and regulation, and an exploration of the potential for expanded PPPs.
- **Inclusive education**, broadly defined as access to high-quality education for marginalized and vulnerable populations, including children with disabilities, girls, and children in disadvantaged areas or from disadvantaged families.
- **Education and climate resilience**, including exploration of the role that basic education can play in climate change mitigation and adaptation, and the extent to which the system is positioned to develop longer-term resilience.
- **Flood recovery**, encompassing discussion of the education system’s recovery from the recent flooding as a means to identify lessons for building greater resilience throughout the system, and to document the existing practices, plans, and strategies that may or may not be in place to be climate-resilient.

Importantly, while this assessment looks broadly across the country, the scope of this report is not to give a detailed account of each province/region across all educational indicators or areas of potential interest (assessment, materials, pedagogy, etc.). The desk review in the first phase of this assessment explored and referenced available secondary data and literature and provides an overview. This report highlights data collected from interviews with stakeholders from across the sector on their priorities and experiences, points out where this information does or does not align with policy and practice, and addresses USAID’s focus areas mentioned above.

1.2 Methodology

As mentioned, the first phase of this assessment included a desk review conducted by RTI staff, who collected and presented an overview of available sector data and research to USAID. This desk review analyzed available government policy documents, national and provincial/regional sector analyses and plans, student learning assessment data, and literature produced by a range of different agencies and individuals. In each section of the desk review, RTI identified “further lines of inquiry” highlighting questions that emerged from the secondary data to inform the design of the next phase of the assessment: the in-country data collection. The desk review was submitted to USAID in its final version on February 24, 2023.

RTI selected a five-person research team of international and local education experts to conduct the second phase—the primary data collection—across Pakistan from February 13 through March 10, 2023. The team collected data in KP, Sindh, Balochistan, Islamabad

Capital Territory (ICT), Punjab, and AJK. Gilgit-Baltistan (GB) was excluded from data collection due to its geographic inaccessibility.⁴ In advance of the data collection, the research team created a detailed data collection plan with a list of potential interviewees and an interview guide. Both were based on the further lines of inquiry identified in the desk review. The research team developed and refined these tools in consultation with USAID/Pakistan. Interviewees were purposively selected based on their job responsibility and areas of expertise and included representatives of federal, provincial, and district-level governments; international and local NGOs; independent academics/researchers; and school personnel, including teachers and head teachers. The research team allowed for the “snowball effect” in qualitative research whereby, based on recommendations of interviewees, additional individuals with specific expertise were added to the data collection to further clarify questions and fill data gaps. **Annex C** includes a breakdown of the type of individuals interviewed, totaling 84. The interview guide, included as **Annex B**, contained an inventory of potential questions to be asked depending on the background and expertise of the interviewee. For each interview, the research team used the interview guide to frame the discussion. While it was not possible to ask every question during the interviews due to limited time and the interest of the interviewees in sharing their own priorities, the team did seek data which explored priorities, the implementation of policy, and USAID’s three focus areas. While the team was collecting and reflecting on the data, they met regularly to debrief internally and with USAID. These reflections were an opportunity to begin “downloading” what was gathered, reflecting on challenges in the process, and identifying solutions.

1.3 Limitations

It is important to note that this assessment was limited in scope, as discussed above, and not meant to be a comprehensive review of each aspect of the whole education sector by province. Each province has its own education policy, sector analysis and plan, and a range of other publications that focus on different areas of the sector in each locality. And while the research team did their best to compress as many interviews as possible across the selected provinces/regions into a short amount of time, interviews with local stakeholders at the district, tehsil, and school level were far fewer than at the provincial and national levels. This limitation stemmed from the available time, distance, budget, and scope of this activity, but as noted in the Recommendations section, further needs-assessment research at these levels is recommended to inform targeting and specificity of future programming. Further, although for the most part the research team enjoyed good responsiveness and availability of stakeholders for interviews, some individuals were not available or were not able to meet at scheduled times. Finally, all interviewees and research team members brought their own experiences, values, and beliefs, and therefore biases. To address bias in this report, the research team took the following steps:

- asked open ended interview questions, which allowed interviewees to express their own views;
- triangulated findings from qualitative data against secondary data in the desk review, and verified with additional secondary data sources and literature;
- as a research team, openly discussed and queried our initial findings during the data collection and analysis process and interrogated our own biases; and
- invited an external review of the report by individuals from IRC, USAID/Pakistan, and RTI not directly involved in the assessment.

2 Findings

The findings in this report are structured in three major sections: national level, provincial/regional levels, and each of USAID’s focus areas of inclusive education, climate

⁴ AJK was not initially included in phase 1, but USAID requested during data collection that it be included in phase 2.

resilience, and private education. The national-level section (2.1) describes qualitative data collected from federal-level stakeholders and discussions of key priorities that were frequently surfaced by stakeholders across the country. These priorities are included as findings in the national section because of the high frequency of the findings across the country and the stakeholder groups. However, because these were not specific lines of inquiry requested by USAID/Pakistan, the amount of data in each province/region varies and therefore cannot be included as a consistent subsection in each provincial/regional discussion. Section 2.2 provides a breakdown by province/region, including summary-level secondary data to give a “snapshot” of key educational indicators and discussion of priorities and challenges, opportunities, and the three focus areas. Section 2.3 discusses in depth the three focus areas of inclusive education, climate resilience, and private education, as well as incorporating interview data from other donors about their priorities.

2.1 National Level

As noted in the desk review, the challenges for the education sector across Pakistan are significant. While there has been progress in some key indicators, including increased enrollment, decreased gender gap, and improved teacher attendance, significant challenges persist. Enrollment still lags, especially in rural and low socioeconomic status populations, with girls and children with disabilities at the greatest disadvantage. According to Pakistan’s National Commission on the Rights of Child 2022 report, Pakistan has 22.8 million out-of-school children, representing 44% of the total school-aged population. Of these, four out of every five live in rural parts of the country (Faran & Zaidi, 2021), even though only about two thirds of school-aged children reside in rural areas. Within rural contexts, girls make up three out of every five children not in school (Faran & Zaidi, 2021). Long distances to school, associated costs for transport and schooling, and insecurity at or on the way to schools often keep children at home. Inequity is expected to worsen as a result of the 2022 floods, which affected large parts of rural Sindh, Punjab, and Balochistan.

For those children in school, basic measures of foundational literacy and numeracy show that children are not learning. According to the 2021 national ASER data (ASER Pakistan Secretariat, 2022), only 55% of grade 5 children could read a basic story at a grade 2 level. In 2020, ASER found that less than 20% of rural students in grade 2 were able to read a story in Urdu or do division, and learning losses since the COVID-19 pandemic have compounded the issue (Idara-e-Taleem-o-Aagahi [ITA], 2021).⁵

Learning poverty and the high numbers of out-of-school children are key concerns of both the federal and provincial/regional governments. During interviews, it was clear that officials take their constitutional responsibility seriously to provide a high-quality education for all children aged 5–16. Yet, on the supply side, officials noted that they lack resources to build and/or upgrade the number of schools required to meet the demand of a fast growing school-aged population.⁶ Repeated economic distress and downturns hamper budget allocation, and low levels of actual budget expenditure stymie the provision of adequate supply, especially at the post-primary levels of education. The long distances to travel to school and poverty also constrain access to education. Children from low socioeconomic status families are often relied upon for help at home or to earn additional income. On the demand side, children are not enrolled because their families view the school infrastructure or transport options to school to be unsafe or unaffordable, and due to its low quality, they fail to see the benefit of the schooling that is available, in particular for their daughters. About 2 million more girls than boys are out of school in Pakistan—about 12 million total—and

⁵ ASER reported that 40 million children were affected by school closures, which lasted in some areas of the country over a year. Losses were greatest in surveyed areas of Balochistan, followed by Punjab, Sindh and KP, with girls hardest hit and losses greater for those enrolled in government schools than private.

⁶ In 2022, the United Nations Population Fund estimated the population growth rate at 1.9%, double that of the global annual rate of 0.8%. Curbing population growth is a sensitive topic in Pakistan because common family planning methods clash with traditional and religious norms and values. See Shabaneh (2022).

whereas they are more heavily concentrated in Balochistan and KP, the pattern is consistent across Sindh and Punjab. While improvements have been made, this is part of a persistent landscape of gender inequality in Pakistan (Human Rights Watch, 2018a, 2018b) and women's participation in the labor force is extremely low and declining, dropping from 24% in 2016 to 22% in 2021, well below the rates for other countries with similar income levels (World Economic Forum [WEF], 2021). Recent research by the Brookings Institution noted increasing value and aspiration for education among boys and girls alike; however, these aspirations remain unmet by the limited public services available to families (Saleem, 2022).

"While talking to a number of community members, I have realized that the parents don't have any objection to their daughters' education. However, due to poverty they need their support in earning or at home or in the case of distant schools they can't send them alone to schools due to safety reasons. Any support that can meet parents' needs and support girls to reach their schools safely can increase girls' enrollment in schools."

— Interviewee in Punjab

Interviewees also expressed serious concern about the precarious economic situation in which Pakistan currently finds itself and the inevitable impact on the federal and provincial/regional governments' education budgets. Across the provinces/regions, officials noted that current resources are insufficient to get all children into school and provide them with a high-quality education, and the worsening economic situation is a source of concern and growing political instability. The inflation level reached 35% in March 2023, its highest since 1973. As of April 2023, Pakistan was still trying to finalize a \$6.5 billion loan agreement, including an immediate \$1 billion bailout with the International Monetary Fund (IMF) to keep the economy afloat. Disagreements over the country's policies toward debt sustainability have contributed to delays (Khalid, 2023). Pakistan already also has one of the world's lowest levels of domestic financing of education, spending less than 2.8% of its gross domestic product on education—far below the recommended 4% to 6% (Human Rights Watch, 2018b).

Interviewees acknowledged the fact that Pakistan relies heavily on external financing and that the economic situation is unlikely to improve anytime soon. They pointed out that bi- and multilateral donors have spent vast sums on programs meant to improve access, quality, and equity, and although there have been gains, they have not been significant enough to transform any part of the system. It begs the question of whether external financing, as it currently operates, is effective. Interviewees pointed to several key concerns: duplication of efforts resulting from a lack of coordination, development partners pursuing their own priorities rather than the governments', and partners providing funds in an unsustainable way. Lack of sustainable funding was heavily criticized, and interviewees cited examples such as once-off in-service teacher trainings, and data collection and management systems without ongoing administration and maintenance. Interviewees emphasized the need for donors to consider ways to support governments' ongoing budget expenditures and steer away from short-term project approaches.

At the federal level, the MoFEPT's National Education Policy Framework recognizes four strategic priorities: engaging out-of-school students, promoting uniformity in standards across the country, improving the quality of education, and enhancing skills training. In August 2021, Pakistan launched the SNC, which aims to foster greater uniformity and alignment among curriculum, materials, and the examination system. Other federal initiatives include a new Distance Learning Strategy, and efforts to improve quality and standards.

The following sections discuss shared priorities raised at the federal level and echoed at the provincial and district levels by government and nongovernmental stakeholders.

2.1.1 Systems

Since the 18th Amendment to the Constitution passed in April 2010, Pakistan's highly decentralized structure has meant that many decisions regarding education policy are made at the provincial and regional levels. The result is separate planning processes on different timelines with varying approaches and levels of effectiveness and commitment. Although each province/region has its own unique governance structure and policy, plan, and implementation strategy, interviewees across the country consistently noted that challenges related to system management and governance (budget expenditures, teacher management, etc.) are both pervasive and persistent. Critiques were wide-ranging, including the impact of political interference on decision-making, heavy bureaucratic red tape and procedures limiting efficient budget expenditures, limited data generation and use, poor management of the teaching workforce, and disconnect between the various levels of the system, from provincial to district to tehsil or union council.

A range of government and donor initiatives have aimed to improve elements of the system. Many of these have focused heavily on generating and using data for monitoring and accountability to improve outcomes such as teacher attendance and student enrollment, and identifying missing or inadequate facilities.⁷ Others have targeted policy interventions, in an effort to shift government focus to critical areas of need like foundational literacy and teaching quality.⁸ In Punjab, deliberate focus on whole system reform through the Punjab School Reform Roadmap addressed issues of basic service delivery and political will through improving management capacity, teacher capacity, and monitoring and information systems (see Barber & Donnelly, n.d.). Although improvements were made, the ultimate outcome that the education system intends to achieve—improved student learning—has remained elusive, and sustainability of the reform efforts has been mixed (Chaudhry & Tajwar, 2021). The bottom line is that the governance of the system across provinces and regions remains a bottleneck to successfully and efficiently implementing any intervention.

2.1.2 Curriculum

As noted, the adoption of the SNC is one way the MoFEPT is trying to foster greater uniformity in education in terms of curriculum, materials, and examination systems. However, because education is a provincial/regional responsibility, each province/region must legally adopt it. KP, Balochistan, Punjab, and ICT have; Sindh has not. While AJK and GB have adopted it, as regions, they are not guaranteed National Financial Commission awards which allocate funds to implement the SNC and they have yet to receive any federal funding through special requests.

The SNC has its strengths. It presents a well-organized framework informed by current evidence-based practices and research.⁹ The SNC uses learning progressions as a road map for teachers to support students with different levels of skill. Standards and benchmarks identify learning outcomes tied to grade levels and are used to assess the learning outcomes. The SNC's approach to language teaching and learning is somewhat aligned with current best practices (e.g., teaching English as a language and not as a subject). It recognizes the complexity of language teaching and learning in a multilingual country.

⁷ The World Bank's Sindh School Monitoring System, under the Global Partnership for Education (GPE); and the United Kingdom Foreign, Commonwealth and Development Office's (FCDO's) Khyber-Pakhtunkhwa Education Sector Programme (KESP) and Punjab Education Sector Programme, have included significant monitoring and accountability components.

⁸ USAID's Pakistan Reading Project included a significant policy component to ensure reading instruction in the classroom, and its Teacher Education Program worked to overhaul the pre-service requirements for entrance into the teaching profession.

⁹ Such as UNESCO's International Bureau of Education and *Understanding by Design* (Wiggins & McTighe, 2005).

It also has its challenges. The expected learning outcomes, particularly for English in the early grades, are challenging, and the progressions are not always coherent and sequential. The progression grids for mathematics, science, and general knowledge do not provide scaffolds for children who may be learning these subjects in a new language. Having both standards and progressions can help teachers support students; however, the way in which everything is layered in one document for each subject may be too complex for teachers. No mention is made of textbooks for learners with visual impairments. Interviewees in various provinces noted that teachers have not been adequately trained to effectively deliver the curriculum in the classroom. Others expressed concern that the SNC is designed for single-grade classrooms, and across Pakistan, multigrade classrooms make up at least 40% of the total. In Pakistan's more rural and geographically dispersed areas, as in Balochistan, for instance, multigrade classrooms can make up to 80% of the total. Therefore, the SNC is not designed to fit the needs of a large proportion of Pakistan's students, and it exacerbates pre-existing disadvantages for rural and low-income students. Other interviewees critiqued that a disproportionate amount of time in the curriculum is spent on religious subjects. Islamiat is included as a subject from grade 1, and religious minorities, who are often marginalized in Pakistan, receive different textbooks and require different instruction for their religious orientation. Critics argue that this sets up the classroom for further discrimination and segregation of minorities. Others argue that expending time and energy to introduce religious subjects at grade 1 detracts from the acquisition of critical foundational literacy and numeracy skills.

2.1.3 Quality of Teaching and Learning

Learning outcomes across all levels are below acceptable standards for the foundational skills children should be acquiring in school. Data from the 2022 ASER showed very low levels of proficiency among students in grade 3 in reading and math, especially among students in rural districts. The data revealed better rates of basic skill proficiency in grades 5 and 8, but also showed a decline in student performance between 2019 and 2020, perhaps reflective of the impact of the forced closing of schools during the COVID-19 pandemic. ASER data revealed that outcomes are slightly better in private schools, but performance is still well below grade level benchmarks. The World Bank estimates that learning poverty, or being unable to read and understand a short, age-appropriate text by age 10, is 77% in Pakistan, adjusted for out-of-school children (World Bank, 2022b). Most interviewees attributed this result to poor quality of teaching and described the challenges teachers face in the classroom. They noted that most teachers have not been properly trained on how to deliver the SNC in the classroom and that teachers continue to "teach to the test" with little ability to deliver instruction using updated pedagogical techniques. Across provinces/regions, interviewees observed that the institutions responsible for teacher professional development lack the resources and capacity required to provide ongoing, high-quality training services to the teacher workforce. Interviewees also shared that government teachers lack incentive, because promotion is not merit-based and there is little accountability for poor performance. Others noted that teachers do not receive meaningful in-school instructional support from school leaders or district officials.

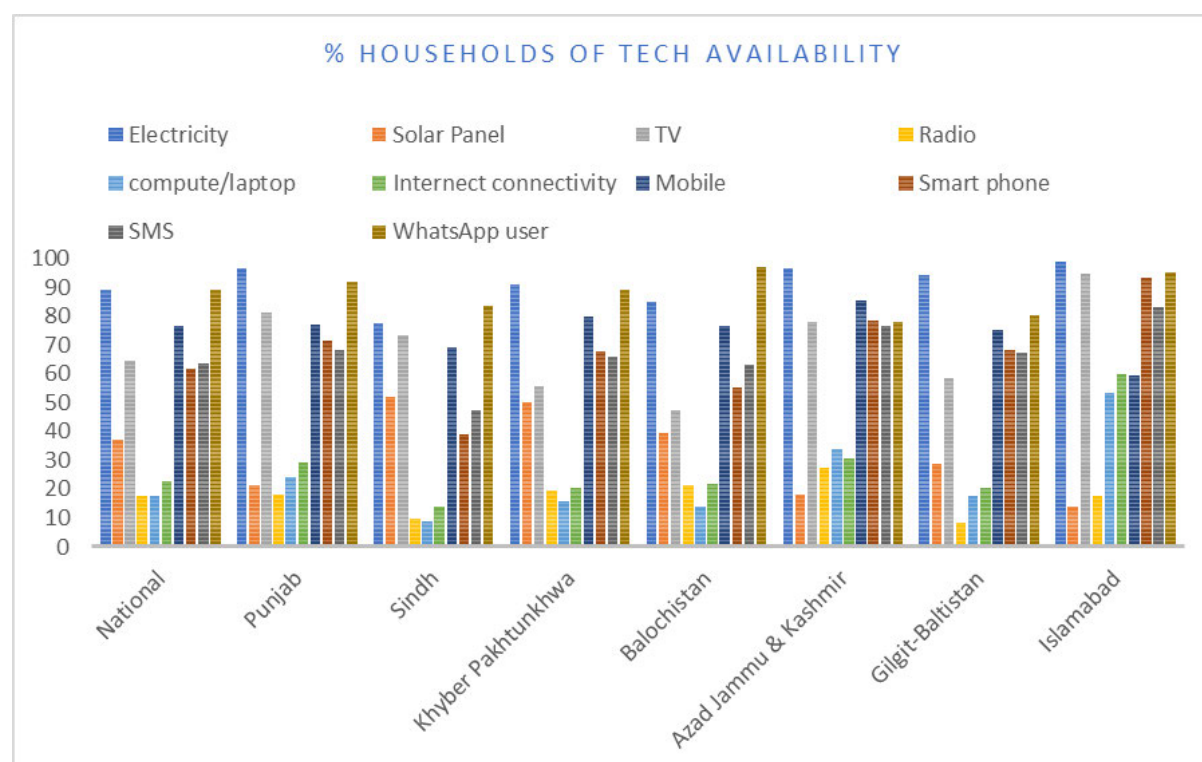
The desk review for this assessment noted similar concerns in the literature about low levels of student achievement driven by inadequate teacher pedagogical skills, lack of proficiency in English, and low levels of teacher motivation, as well as insufficient quality, duration, and organization of teacher professional development to meet the needs of their learners. Teachers teach in difficult contexts: multigrade classrooms, multilingual settings (while having insufficient language skills themselves), high pupil-to-teacher ratios, and a high number of students coming to school from deeply impoverished backgrounds where levels of

malnutrition and stunting are very high; the overall national rate also is alarming, at 40.2%.¹⁰ Readiness to learn and thrive in school, even with the highest quality teaching, is difficult to imagine in such situations. Interviewees all agreed that improved, ongoing support to teachers at the school level is required.

2.1.4 Distance Education

As mentioned above, the MoFEPT is in the process of launching a new Distance Learning Strategy. The current draft, shared with development partners for review in February 2023, is an ambitious document outlining learning goals and objectives to be achieved through distance learning modalities and includes provincial operationalization plans authored by the provincial/regional education departments. Pakistan has witnessed the rapid emergence of EdTech in the past five years, with the COVID-19 pandemic as its most significant catalyst. Likewise, Pakistan's vulnerability to climate-change-induced disasters points to EdTech as a potentially valuable tool to curtail resultant learning disruptions. The MoFEPT also sees EdTech as a valuable tool to address the high numbers of out-of-school children across the country where resources and capacity to supply traditional schools are limited. However, the infrastructure, research, data, and governance structures that form the basis of an operational distance education system are still in the early phases of development on a national scale. The ASER 2021 report measured the reach of technology at the household level, as shown in **Figure 1**.

Figure 1: Percentages of Pakistan households with access to technologies, nationally and by province



Source: ASER Pakistan Secretariat (2022).

Local research (Baloch & Tadasse, 2020; Zubairi et al., 2022) has indicated that in all policies and sector plans across provinces and regions, there is growing consideration of the

¹⁰ The 2018 National Nutrition Survey noted that the national average masks provincial disparities, where 48.3% of children in Balochistan were stunted and 46.6% in KP and GB. Sindh was close behind at 45.5%. See UNICEF (2019b).

use of technology in education, keeping in mind regional/provincial limitations in terms of access and capacities. Indeed, some interviewees in this assessment noted that distance education is the “future” and that brick-and-mortar schools are only one modality of education. Others, due to access and capacity restraints, were more skeptical.

The National Distance Education Strategy draft aims to realize “A resilient education system that uses distance education to expand access to education, improve learning and strengthen the enabling environment to enable education for all” (MoFEPT, 2023a, p. 46). The strategy envisages a road map for distance education that can be used to address the fundamental challenges of the education sector in Pakistan—namely access, quality, resilience, and equity. The draft strategy encompasses technology and strategies for in-school learners and other users in the education system, including parents, teachers, schools, and governments.

Questions remain whether the system has the understanding and the capacity to absorb new technology and modalities for delivering education. Interviewees noted that earlier initiatives to implement distance education modalities during COVID-19 school closures, such as TeleSchool,¹¹ were limited by basic lack of awareness across the potential user base—meaning that not enough people even knew about the initiative to make use of it. Others shared concerns regarding a lack of understanding of what EdTech is and how it can be used. One interviewee noted, and others shared similar concerns, that it would be extremely difficult for teachers, especially older teachers in more rural areas, to consider using technology in the classroom, if they could access it in the first place. The literature on integrating EdTech into low-resource contexts indicates that these are common challenges with EdTech solutions. Managing expectations while meeting the range of needs and capacities of various actors in the system is a considerable challenge (Kaye, 2021; Miao et al., 2017; Ramanathan & Denny, 2022; Roddis et al., 2021; Zubairi et al., 2022). Finally, the funding for the implementation of this strategy is currently financed entirely by the World Bank. Interviewees noted that there is not yet any government budget for this effort and questioned its sustainability.

Annex D lists the EdTech interventions active across the country as of April 2023, which could offer opportunities for integration into provincial distance education operational plans for adapting/scaling—if they have the awareness and capacity to use it and a budget to sustain it.

2.2 Provincial/Regional Overviews

As also indicated in Section 2.1 above, although the federal government has its own policies and priorities, since the 18th Amendment to the Constitution in 2010, the responsibility for planning and delivering educational services is with the provincial/regional governments. Below, findings from the data collected in each province and region are discussed.

2.2.1 Punjab

Status

Punjab is Pakistan’s largest and most populous province and at least one quarter of its population is of school age. More than half the country’s citizens reside in Punjab, yet it has the lowest rate of poverty and the highest Human Development Index measures compared to other provinces. According to MICS 2022 data, 13% of primary school-aged children were out of school (UNHCR, 2022). At the middle-school level, the percentage of out-of-school children increased to 21%, and at the junior and senior secondary level, it increased to 34% and 47% of children respectively. The gap in out-of-school rates was extremely high

¹¹ In April 2020, MoFEPT launched a terrestrial television channel to broadcast educational content to support continuity of learning during the school closures due to COVID-19. See MoFEPT (2020).

between children from the poorest and richest wealth quintile, with a difference of 27 percentage points, 38 percentage points, 54 percentage points, and 58 percentage points for primary, middle school, junior secondary, and senior secondary levels respectively. In 2021, a separate Secretariat for South Punjab with administrative and financial autonomy—reporting to the Chief Secretary—was created to manage 11 districts: Bahawalpur, Bahawalnagar, Rahim Yar Khan, Khanewal, Layyah, Lodhran, Multan, Muzaffargarh, Dera Ghazi Khan, Rajanpur, and Vehari. These districts have the highest number of out-of-school children and the highest rates of poverty and illiteracy as compared to the rest of Punjab.

Table 1 and **Table 2** below give a snapshot of the status of enrollment, transition, and quality of the education sector in Punjab.

Table 1: Provision of Schooling by Level of Education, Punjab

Indicator	School-Aged Population	Number of Schools	Enrollment	% of Enrollment in Private Sch.
Primary	–	48,062	10,190,999	38
Middle	–	29,432	3,879,556	34
High	–	19,159	2,042,064	26
Higher Secondary	–	2,132	1,207,027	7
Total	27,500,000	98,785	17,319,646	

Notes and sources:

- Number of schools includes public, other public, and private sector. Data source for number of schools is Qadeer et al. (2023).
- Enrollment includes public, other public, and private schools. Data source is Qadeer et al. (2023).
- % of enrollment in private schools is from the desk review (Figure 8).

Table 2: Performance of Provincial Education System, Punjab

Indicator	Male	Female	Total	Source
Primary net enrollment rate	71	69	70	Pakistan Bureau of statistics (2021b)
Middle net enrollment rate	40	41	41	Pakistan Bureau of statistics (2021b)
High net enrollment rate	30	31	30	Pakistan Bureau of statistics (2021b)
Transition rate, primary to middle, 2016–2017	78	80		Qadeer et al. (2023)
Transition rate, middle to high	93	86		Qadeer et al. (2023)
Percentage of grade 2 students who can read at least sentences in Urdu			25.6	ASER Pakistan Secretariat (2022)
Percentage of children aged 5–16 who can read at least sentences in Urdu	54	51		ASER Pakistan Secretariat (2022)

Challenges and Priorities

While Punjab's ESP focuses on three strategic areas spanning across improved teaching and learning practices, improved access, retention, and quality for all children, as well as strengthened governance, interviews with School Education Department officials in Punjab emphasized that getting out-of-school children into school, particularly those in the poor rural

areas which make up most of the province, is their key focus. Government officials noted that insufficient school infrastructure to accommodate all school-aged children is particularly problematic at the upper levels, where there are too few middle and high schools, resulting in lower enrollments and dropout as children progress into higher grades. The PSLM 2019–20 (Pakistan Bureau of Statistics, 2021b) clearly showed that in most of the districts in South Punjab, primary enrollment was much lower than in the northern districts. Interviews confirmed that enrollment in the south lags behind the north because there are not enough schools to accommodate the school-aged population, especially beyond primary school. For example, Rajanpur, which is the lowest-performing district in South Punjab, has only 82 high schools and 13 higher secondary schools to cater to children graduating from 783 primary schools. Like other provinces/regions, interviewees also noted that commuting costs and time to travel to school are deterrents, and fewer schools in accessible areas often result in gender disparities in transition to secondary school for girls, because their families perceive the longer distances traveled to school as insecure and unsafe.

In addition to insufficient infrastructure, officials noted a shortfall of 125,000 teachers. While they now have permission to hire 25,000 teachers to begin to address this shortfall, at the time of writing, hiring was on hold due to ongoing political disruptions that resulted in the dissolution of the Punjab Provincial Assembly in February 2023. Such political disruptions occur regularly in Pakistan and often interrupt public service delivery. And while every government official interviewed complained of inadequate budget, in its 2019 assessment, ADB reported that only 84% of the allocated budget was expended in Punjab. When probed about why actual spending was lower than the maximum available, officials cited frequent disruptions to government; slow, bureaucratic administrative processes related to procurement and construction; and the high rate of turnover of government officials. The Punjab Programme Monitoring and Implementation Unit reported that, on average, the Director is transferred every year. Interviewees also critiqued the teacher recruitment and management processes, claiming it is overly meritocratic and subject to political influence.

To address their priority of out-of-school children, government interviewees shared that they were planning the expansion of the Insaaf Afternoon School Program, which will “upgrade” existing primary or middle schools to middle or high schools, from an initial 577 schools in 22 districts to all districts. This increase in scale will be a step toward boosting retention and preventing dropout. Officials noted that the expansion of this program is their best effort to use existing resources in a cost-effective way. Some nongovernment interviewees, on the other hand, argued that the best an afternoon program could achieve would be improving functional literacy or numeracy, but not attracting children back into school for the longer term because it would not address other factors that keep children out of school, such as poverty and insecurity. In South Punjab, many children work rather than attend school. To address this issue, the education department has opened 260 early morning schools called “Subh-e-Nau” schools, one in each district and two in Multan. Children can attend school in the morning and leave for their work afterward. The Accelerated Learning Program curriculum that the Japan International Cooperation Agency (JICA) developed is used in these schools and has been well received.

“In this region, most of the people are poor who cannot afford sending their children to schools. Such morning schools are a blessing for them. These children otherwise would have never got the opportunity to learn because their parents need them to work to meet the family’s basic livelihood needs.”
—Government official

Private Schools

While the Punjab government also institutes programs such as annual enrollment drives and Zewar-e-Taleem, a conditional cash transfer program to girls enrolled in 16 districts with low literacy rates, officials cited the role of the private sector as necessary to address the challenge of out-of-school children. According to the 2021 ASER report (ASER Pakistan

Secretariat, 2022), 77% of enrollment was in government schools and 23% was in non-state institutions in Punjab. Several types of private school provisions cater to the poor, including Foundation Assisted Schools, Education Voucher Schemes, the New School Program, the Public School Support Program, charity schools, and madrasas. Urban centers also have elite private schools that charge higher fees.

The largest private scheme in Punjab is that of PEF, which described their mandate as being to oversee and ensure the standards of private providers in their network, which total 7,400 schools and an enrollment of 2.5 million children. PEF officials described these private schools as a “gap filler” to reach the out-of-school children in the poorest areas of the province. They highlighted the incentives that private school operators have to meet minimum standards ensured by PEF (in contrast to the government) so that they do not go out of business. Interestingly, the same perceptions about both public and private schools were shared by the different stakeholder groups. Both expressed concerns about the infrastructure, safety, and quality of schools in each other’s remit, but PEF noted that families generally perceive that the quality is higher in private than public schools. ASER data corroborated this perception; in 2019 in Punjab, children enrolled in private schools performed better than their government counterparts, with 73% of grade 5 children in a private school able to read at least a story in Urdu as compared to 66% of those enrolled in government schools. It is important to note, though, that ASER assessments are benchmarked at a grade 2 level, so the performance of these schools was still well below grade level. Yet, interviewees posited that teachers, because they can be fired from their jobs at private schools, are “better” because they are held accountable.¹² Interviewees also noted that parents, if they are able, can play a more active role because their feedback may be able to enact change in the school, given that they are the customer or client. For private schools that charge even nominal fees, it is widely acknowledged that parents are willing to pay for closer, accessible schools and a perceived higher quality of education.

Inclusive Education

As with other provinces, Punjab has its own Special Education Department that governs separate special-education¹³ schools for children with disabilities, and a Punjab Special Education Policy (2019–2029), developed with support from Cambridge Education. As part of GPE’s Zewar-e-Taleem program, the School Education Department has initiated the process to formulate the country’s first Inclusive Education Strategy for Punjab, in partnership with UNICEF, to find ways to better integrate children into mainstream schools. Additional efforts to reach people and children with disabilities include those initiated through a separate body, the Punjab Social Protection Authority (PSPA), established in 2015 to implement a range of services for the poor. Because issues of poverty, gender, and disability are layered, PSPA provides conditional cash transfers for disability (“khidmat”) card holders and manages the Zewar-e-Taleem fund, referenced earlier, for post-primary education of girls. By 2017, PSPA had reached over 23,000 children with disabilities aged 5–15 years and had successfully enrolled 1,500 in special-education schools. Private schools also address children with disabilities, although to a lesser extent. PEF launched a Punjab Inclusive Education Project, funded by FCDO, in seven districts and by 2016, they had provided free education services to 1,251 children with disabilities in 194 PEF schools. Additionally, an Inclusive Voucher Program was initiated in PEF partner schools in seven districts of the province from 2015–16 to 2017–18 for identification and screening, provision of assistive devices, teacher training, and installation of enabling infrastructure for children with disabilities.

¹² Critics of private schools argued that teachers in private schools were better at “teaching to the test,” or else they would be fired.

¹³ Recall that the term “special education” is used by the government and was not the choice of the research team. This terminology is consistent across the provinces/regions of Pakistan.

Nonetheless, the pursuit of an “inclusive education” in Punjab is nascent. Most respondents noted that there are neither the resources nor the capacity to address the needs of children with disabilities through the Special Education Department, much less to integrate them into government schools. Although some government schools have constructed accommodations for children with physical disabilities, the accommodations have limitations (e.g., there may be a ramp, but not a disability-friendly restroom) and there are simply too few schools to meet the needs. Others pointed to persistent taboo and stigma around children with disabilities in families and communities, and a sense of “what’s the point” of sending a child with a disability to school, especially when there are other siblings to prioritize, if they see no practical future for them in society outside the home.

Climate Resilience

Interviewees agreed that being better prepared for upcoming climate disasters is critical and the education system has an important role to play. Interviewees noted that access to school worsens during recurring floods every year. The recent floods in the 2022 monsoon fully or partially damaged more than 100 schools in the most deprived districts of Rajanpur and Dera Ghazi Khan. As the time of writing, the provincial government had not been able to rehabilitate all the damaged schools due to lack of funding and limited external support. Children either were coming to partially damaged buildings or were sitting in the open air to continue their education. Interviewees also mentioned that extreme heat spells across Punjab are disruptive to schooling, as is the issue of air pollution and smoke in Lahore.

The interviewees shared a variety of ideas about what role the education sector should play in climate resilience. Some referenced school and community-based campaigns for a “clean and green Pakistan” and school-based drives for community planting of trees and clean-up initiatives. Some shared that schools are sometimes used for special seminars to discuss something that is climate related and relevant to the community, such as agricultural cycles or rainfall. Others noted that climate change must be integrated into the curriculum more meaningfully (i.e., using examples of climate-related issues in textbooks or learning materials) and that teachers should be trained to teach on these issues directly. The South Punjab School Education Department (n.d.) has published a “Green Book”¹⁴ on climate change for grade 7 children and it is now being taught in the classroom. This resource is part of the South Punjab government’s effort to integrate climate change education into the classroom.

Several interviewees suggested, however, that climate resilience is not just about education on climate change as a standalone topic, or embedded in specific topics such as science, biology, or geography, but is more about a mindset shift. This shift both treats climate change with urgency and emphasizes that students should be prepared to be problem solvers and critical thinkers through the education system, which all interviewees collectively acknowledged that they are not. Climate resilience was articulated by a few interviewees as a “life skill,” looking at how students critically engage with the environment around them. They warned that unless this was somehow “on the test,” it is not being taught.

Teaching and Learning

Interviewees from a range of stakeholder groups described the quality of teaching and learning in government schools in Punjab, and in Pakistan more broadly, as poor. They noted the emphasis on teachers teaching and students learning only what is needed to pass the test, with little attention to other dimensions of learning. Interviewees noted that teachers have not been properly trained on the SNC and are unprepared to deliver it in the classroom. The desk review for this assessment noted similar concerns about low levels of student achievement driven by inadequate teacher pedagogical skills, lack of proficiency in English,

¹⁴ <https://thechildrengreenbook.net/>.

and low levels of teacher motivation, as well as insufficient quality, duration, and organization of teacher professional development to meet the needs of their learners. These needs are diverse, including high pupil-to-teacher ratios, multigrade and multilingual settings, poor and disadvantaged learners, and those with special needs.

Interviewees noted significant hurdles to teacher quality and motivation which are embedded in the governance structure. Although teacher recruitment has improved in recent years as a result of upgrades to the minimum qualifications as well as recruitment testing, once teachers are in the workforce, their continuous professional development is limited; typically, they receive only ad hoc in-service trainings. There is also little incentive built into the promotion system; teachers are promoted based not on merit or professional development, but on number of years of service, with age as a secondary factor. Despite efforts to reform this situation in 2010, interviewees noted that promotions are still implemented based on seniority, and they alluded to the role of political influence in the process. District-level government officials shared that teachers' hiring/firing should be delegated to the district. Given that teachers are hired and fired centrally, district-level officials lack authority over teacher management decisions. Multiple district- and school-level officials also noted that teachers' involvement in activities other than education—such as elections, the census, protests, polio vaccinations, and other campaigns—also limits them from focusing more on their teaching.

Further, teachers do a compulsory general civil service training only once every 10 years, when they are up for standard promotions. Interviewees noted that while the Quaid-e-Azam Academy for Educational Development (QAED) provides a range of trainings, none of them is compulsory and often head teachers send the same teachers to receive training repeatedly. ADB (2019) supported this observation in their assessment that training and professional development had been sporadic and of poor quality, and even when teachers received several rounds of donor-funded in-service training, it did not significantly alter classroom practice or students' learning outcomes.

When interviewed, officials from QAED also noted that their capacity to deliver high-quality training to a workforce of around 400,000 teachers is extremely limited. While some interviewees criticized the quality of the trainings provided by QAED, others noted that even if the trainings were top quality, teachers' ability to change their instruction in the classroom would still be limited because the system does not support them. Interviewees noted that teachers receive little to no instructional support from their district authorities. Even though District Education Officers and assistant education officers have the responsibility to visit schools twice a month, their remit is to collect administrative data on the functioning and infrastructure of the school, not on the quality of instruction and learning in the classroom.

Opportunities

Considering the scope of the problem of out-of-school children in Punjab, there is potential to support the expansion of ongoing schemes such as vouchers or the morning and afternoon programs, but further research into the impact and sustainability of these schemes, to determine which were most effective, would be required first. In South Punjab, government officials noted that discussions had taken place about adjusting the school year to better align with cultivation and harvest times in rural, agricultural areas. Exploring such flexible solutions with policymakers for the education system to meet families' needs and reduce the barriers to education is another promising idea. And although interviewees talked little about nonformal education (NFE) and focused instead on public and private provision, NFE offers solutions to accelerate learning or provide opportunities in rural communities where schools do not reach. JICA has invested heavily in NFE across Pakistan, and in Punjab, UNICEF is assisting with the expansion of accelerated learning opportunities for girls. NFE and PPP expansions offer additional promise, particularly at the secondary level in rural, poor districts

where the numbers of out-of-school children are the highest. Additional market research to explore the most innovative and sustainable localized mechanisms for expanding NFE and PPPs while reducing or eliminating costs to families should inform the approach.

The momentum is picking up toward more inclusive education practices in Punjab. Coordinating with GPE and UNICEF to operationalize the Inclusive Education Strategy offers an excellent opportunity to impact the development of this key area, in close coordination with other donor partners to avoid duplication of efforts. Offering operational support to this strategy also would open an opportunity to apply the right pressure on the Government of Punjab to incorporate ongoing expenditures on inclusive education into annual budgets.

Systematic reforms around climate change and resilience in the education sector are needed in Pakistan at the federal and provincial levels. As a first step, Punjab should coordinate with national efforts through the Ministry of Climate Change, MoFEPT, and donors to incorporate any policy changes into their own provincial-level policies. South Punjab's first efforts at integrating climate change education into the grade 7 curriculum are notable and the first of their kind in Pakistan and should therefore be studied, both to explore the quality of the content for use in other provinces/regions, and to determine the effectiveness of adding climate change to the curriculum.

2.2.1 Khyber-Pakhtunkhwa

Status

KP is the third largest province by population. As per the 2017 census, KP had a population of more than 35 million, including NMDs, which made up around 17% of the total population of the country. KP has experienced a higher annual population growth rate (2.89%) compared to Punjab (2.13%) and Sindh (2.41%). A unique demographic feature of KP is the forced or voluntary migration of its population over the past four decades. KP hosts 1.4 million registered and 1 million unregistered Afghan refugees, and in the NMDs there has been internal displacement due to ongoing insecurity and military operations, reaching a peak of 1.9 million internally displaced persons in 2014.

Before 2018, the NMDs were known as Federally Administered Tribal Areas. They were managed by the federal government and by seven tribal agencies—Bajaur, Mohmand, Khyber, Orakzai, Kurram, North Waziristan, and South Waziristan—which are now districts. At the time of the 2017 census, NMDs had a total population of around 5 million and the highest average household size of 8.6, compared to 7.83 in the other districts in KP, which was the second highest household size in the country. However, few social indicators have been measured yet for these merged districts, which has resulted in not having a clear picture of this region. On the whole, the NMD districts historically have been considered deprived.

Table 3 and **Table 4** give a snapshot of the status of enrollment, transition, and quality of the education sector in KP, including NMDs.

Table 3: Provision of Schooling by Level of Education, KP

Indicator	School-Aged Population	Number of Schools	Enrollment	% of Enrollment in Private Sch.
Primary	—	28,777	4,047,786	24
Middle	—	6,573	1,539,703	24
High	—	5,794	726,258	23
Higher Secondary	—	2,138	398,100	12
Total	10,850,000	43,282	6,711,847	

Notes and sources:

- Number of schools includes public, other public, and private sector. Data source for number of schools is Qadeer et al. (2023).
- Enrollment includes public, other public, and private schools. Data source is Qadeer et al. (2023).
- % of enrollment in private schools is from the desk review (Figure 8). Desk review does not mention source.

Table 4: Performance of Provincial Education System, KP

Indicator	Male	Female	Total	Source
Primary net enrollment rate	72	56	65	Pakistan Bureau of Statistics (2021b)
Middle net enrollment rate	45	29	38	Pakistan Bureau of Statistics (2021b)
High net enrollment rate	31	18	25	Pakistan Bureau of Statistics (2021b)
Transition rate, primary to middle	90	85		Qadeer et al. (2023)
Transition rate, middle to high	92	88		Qadeer et al. (2023)
Percentage of grade 2 students who can read at least sentences in Urdu/Pashto			17.8	ASER Pakistan Secretariat (2022)
Percentage of children aged 5–16 who can read at least sentences in Urdu/Pashto	45	37		ASER Pakistan Secretariat (2022)

KP has yet to draft its own provincial education policy; KP's provincial ESP and related frameworks are guided by the National Education Policy 2009, National Education Policy Framework 2018, and Sustainable Development Agenda 2030. To meet the Article 25 obligations of the Constitution, the province enacted a Free Compulsory Primary and Secondary Education Act in 2017 which, along with the ESP and Education Reform Blueprint 2018–23, provides strategic guidelines for all education reforms and decisions at the provincial and district levels.

Challenges and Priorities

KP's Education Reform Blueprint 2018–23 is an aspirational document that outlines the provincial reform priorities, including quality and access in pre-primary, primary, and secondary education; PPPs; education management; citizen participation and ownership; special initiatives for tribal districts; and programs that include EdTech solutions. KP's ESP provides a comprehensive policy guidance on dealing with the challenges related to access, quality, and education governance. KP's 2020/2021 – 2024/2025 ESP focuses on three thematic areas: access retention and equality, quality and relevance, education governance, and management. KP has taken several positive steps to improve enrollment and reduce the gender gap in education by strengthening their monitoring efforts, training teachers, and establishing more girls' schools than boys' schools in the past several years. However, one interviewee noted that "We have never been able to meet our Education Sector Plan targets because of the repeated disasters and rapidly increasing population and other challenges like merging of NMDs. The moment we finish constructing our target schools, more population is added or the previous schools get damaged due to floods or earthquakes."

The 2019–20 PSLM data (Pakistan Bureau of Statistics, 2021b) for KP showed that the primary enrollment status in some of its settled districts was better than in the southern

districts and the NMDs. Net enrollment was below 75% in most areas. In the south and NMDs, 30% or fewer of primary school age children were enrolled. Due to lack of reliable population data in KP, estimating out-of-school children is a challenge, especially in NMDs. But according to the KP Annual Household Survey for Assessment of out-of-school children 2018–2019, 2.1 million children aged 5–16 were out of school in the province, including 66% of girls. Of the total, 56% were in the 10–16 age group—in other words, many older children were not attending secondary schools.

The KP government has tried some innovative initiatives to address out-of-school children. To overcome the gender disparity in the number of out-of-school children, they have started adding more girls' schools than boys' schools in their Annual Development Plans (ADPs) and are providing some transport for students in NMDs in partnership with the private sector and local NGOs. To increase enrollment for communities that have limited resources and are grappling with poverty, the government initiated a stipend program called the Education Voucher Scheme for private schools where government schools did not exist or were distant. Under this scheme, the Education Foundation gave the private schools [REDACTED] for each primary and secondary grade student to allow them to continue their education. In addition, they gave [REDACTED] to each student for purchasing a uniform and stationery. As of early 2023, this program had benefited more than 600 private schools to educate 50,000 students, with 50% of that number being girls. However, this program was derailed by misuse of funds. Referring to the government's innovative approaches, one interviewee said, "The KP government in these few years remained really good at taking new initiatives but many of them got closed after some time, mainly because of not having a proper sustainability plan and not learning from the mistakes. As soon as they face any issues, they close the initiatives instead of conducting any study or research to learn from it."

Unavailability of funds needed to construct the required number of schools and slow procurement and building processes are also major constraints on the province's ability to expand access. One interviewee said, "If we look at the number of schools we need and compare it with the time needed to construct them, we will be able to achieve the school construction goal in 200 years." According to estimates of the KP planning department, there are 6.3 million out-of-school children in the province (1.6 million in NMDs). The government needs more than 11,000 schools to enroll all these children, and according to their calculations, they will need [REDACTED] to construct primary schools and [REDACTED] to construct secondary schools. Currently, for their 33,000 schools their annual recurring cost is [REDACTED]. To meet these targets, the government needs the required finances which, as per the ESP, have always remained insufficient due to gaps between the actual estimates and the allocations made, based on the annual provincial budget projections. Table 5 shows the projected gaps, as identified by the ESP.

Table 5: Education Budget Gaps in KP (billions of Rs.)

Description	2020-21	2021-22	2022-23	2023-24	2024-25
Budget as per Outlook	[REDACTED]				
ESP Cost					
Financing Gap					

The province had been bridging these gaps through federal grants for the merged districts and donor funding. As far as budget spending is concerned, KP has shown significant improvement in the past few years, especially because of the efforts made by the FCDO-funded KESP, which brought it to the level of 98% to 99% spending. However, according to information shared by the planning department, they still sometimes face issues related to the release of funding. Until 2017, the KP education department was able to get all the funds

allocated for the education department. After that, due to lack of follow-up and weak monitoring of budget spending, the entire budget was no longer released as allocated for the fiscal year.

Nonformal education is being managed by ESEF, which maintains 4,000 nonformal schools established in the rural and far-flung hilly areas where there are no public or private schools. More than 200,000 children are studying in these schools, including 160,000 girls. In some areas they initiated PPPs to allow educated youth, both girls and boys, to open their own private schools where there were no other schools within one kilometer radius in the plains regions, and within a half kilometer in the hilly areas. ESEF paid a per student stipend to these schools to cover their expenses. According to ESEF, by using this model, they not only were educating children in the remote areas of KP but also were creating work and entrepreneurial opportunities for the youth. However, due to some corruption cases, the accountability department closed this project instead of rectifying the issues and refining this model.

To monitor the attendance of teachers and students, ESEF is using an android phone-based management system, which according to them is the first such initiative for NFE in Pakistan. Because many girls drop out after grade 5, this android system allows the department to track these girls and help them continue their education. To further extend their program, especially for girls who cannot access schools, they have developed offline video lessons that can also be reached online or via television, called Participator Online Home Learning. However, due to lack of funding, they have not been able to put it into practice. They also have not been receiving funds to run their community-based nonformal schools and are at risk of having to close them. The World Health Organization (WHO) is supporting 400 nonformal schools owned by ESEF, but the foundation also needs additional support to run the remaining schools properly.

Private Schools

The privately owned schools in KP make up around 50% of enrollment in KP and are managed by the Khyber-Pakhtunkhwa Private School Regulation Authority (KPRA). KPRA is responsible only for private school registration but provides no funds or technical support to them. Generally, in KP, as in the other provinces, parents prefer sending their children to private schools. However, according to all the interviewees, in general, their quality of education is not necessarily better than that of public schools. The only reason they identified for preferring private schools was the co-curricular activities, as well as some marketing tactics that attract parents.

In 2018, the Elementary and Secondary Education (E&SE) Department developed its Public–Private Strategy, followed by establishing a separate PPP department. The province has studied both the national and international models on PPP in education to benefit from them—including USAID’s EMO model in Sindh, SEF, PEF, Citizen’s Foundation, and the Agha Khan Development Network. As mentioned above, through its own ESEF, KP has initiated an Education Voucher Scheme to support the most underprivileged children in KP through private schools. However, to look at the broader scope of using PPP, the province recently initiated a feasibility study, which will result in developing a needs-based PPP program to bridge the resource gap in KP’s education sector.

Inclusive Education

Inclusive education is not a comprehensive area of focus in KP. Gender-related matters are managed by the E&SE Department and education for children with disabilities is led by the Social Welfare Department. There are “special-education centers” for children with hearing and visual impairments and students with cognitive and physical disabilities. KP typically has at least one such center in each district, but the government has not succeeded in opening

these centers in six of its districts. As of April 2023, in the existing centers, more than 2,500 students were enrolled. However, as shared by one of the interviewees, in Pakistan there are almost no reliable data on persons with disabilities.

Regarding interviewees' perception of inclusive education, respondents shared that inclusiveness has to be on two fronts—one is that every child has the right to education, and the other is that they should be taught all that they need to learn, including cognitive, social, ethical, and technical skills. However, all the respondents agreed that only children with minor physical disabilities currently attend mainstream schools. The provincial government has decided to make the schools and other places accessible for children with disabilities, but many schools still lack ramps or other necessary arrangements required for accessibility. In discussing the limitations on inclusion, one interviewee from KP offered, "Disability has some taboos attached to it. Parents do not see any benefit in educating their disabled children; therefore, they are kept at home. Although the schools have no restrictions in admitting children with disabilities, there is no such awareness provided to parents or communities in general." Another interviewee said, "Deaf children have more challenges in learning; therefore, they need special schools, because parents do not have the skills to educate them at home, nor have any arrangements been made by the government to inform and train parents about such children." Interviewees noted that because of lack of capacity and accommodation, only children with minor disabilities can attend mainstream schools—not those who have cognitive or other serious physical issues related to sight and hearing. While talking about the admission of transgender children, one interviewee noted that "I feel trans should get educated but I feel that it will be easier for them to stay in school at a younger age because it is hard to recognize them [as being different from other children]. However, after puberty, it is hard to keep them in schools because other children tease them for not having any awareness about transgender."

Officials noted that this sector has always been under resourced and unable to accommodate students from the rural and remote communities. There is no provincial policy that can result in proper planning and budgeting of this sector. KESP too identified that KP needs disability audits and should follow the guidelines to make educational institutions accessible for persons with disabilities. The project identified that due to lack of space, resources, or proper guidelines, the ramps constructed to make some schools accessible were not meeting the standards (FCDO, n.d.).

Climate Resilience

The recent floods partially or fully damaged 1,790 schools in 17 districts of KP. In the north, flash floods even washed away the land on which schools were built, forcing the government to find alternate locations to rebuild these schools. In the absence of any external support, the provincial government has been unable to rehabilitate or rebuild damaged schools. In some cases, children must either learn outside or (in some urban areas) in rented buildings. Provincial officials stated that there is no policy or plan in the education sector to deal with continuing education during such emergency situations. The ESP mentions setting aside education emergency funds but emphasizes having a well-thought-out implementation plan to address both natural and human-made disasters.

"Climate resilience in education or climate change education is new to the education discussion. In Pakistan, a dedicated effort is needed to hash out this subject and see where to focus and how to contextualize it for Pakistan because we are not the major contributors of carbon in the environment." —NGO representative

In KP, all the stakeholders agreed on the importance of teaching climate education. Some of the interviewees shared that they had seen some relevant topics in different subjects already being taught in the schools, such as pollution, recycling, conservation, tree planting, and curtailing the use of plastic, but these lessons could be strengthened to further improve

children’s understanding of climate and environment-related issues. Because climate resilience is a nascent subject in the education discussion, there needs to be a paradigm shift in how education is seen related to climate change and how education can contribute to having resilience in Pakistan.

Teaching and Learning

Not having an adequate number of teachers in schools is an ongoing issue in KP. As of early 2023, more than 80,000¹⁵ vacant positions were crippling the schools and district-level staff. Teachers’ hiring in KP, like in other provinces, is done through the Education Testing and Evaluation Agency, which has helped in hiring better qualified young teachers who are gradually replacing retiring teachers. The newly hired teachers get a one-month post-induction training from the Directorate of Professional Development—a new separate department headed by a Director—with online professional development provided at the end of each month. Teachers’ training and capacity building is no longer the responsibility of the Directorate of Curriculum and Teacher Education. According to the teachers and the government officials both, these capacity-building sessions are helpful, but for other instructional challenges that the teachers face in the classroom, there is no mentoring system or district- or school-level staff who can extend the required help to teachers. The KP government has hired a new cadre of “Education Leaders” who are supposed to provide this technical support to teachers and mentor them in case of any teaching or learning issues they face. However, they have yet to begin their work. Interviewees also noted that they struggle with donor-supported trainings that sometimes do not align with what the department’s needs are and also prove to be burdensome for schools’ staff. KP developed quality standards for teacher educators in 2019, the first province to mandate such standards. These standards, if met for all the donor and government-supported trainings, could bring significant improvements in the quality of teachers’ instruction.

KP officials also identified teachers’ accountability as an issue. One of the interviewees said, “The teachers in KP have no fear of being penalized if they have low performance. Low-performing teachers are usually well connected to political leaders who then cover for them. Unless hiring and firing of teachers are delegated to the district government, the quality of teachers and education cannot be improved.” Further, according to the district-level officials, district staff are not as engaged in the planning of activities and budgets as they should be. Therefore, they believe the actions taken by the provincial government do not match their needs. Even though multiple reforms under the FCDO-funded KESP successfully addressed issues of monitoring and accountability,¹⁶ district-level staff also shared that there are now three parallel systems of monitoring currently in use, wasting resources that could otherwise be spent on the needs of schools, teachers, and students. District staff, school administrators, and teachers have to spend time collecting and communicating data rather than focusing on other work that they are mandated to do. In addition, KP education officials noted that teachers and principals are pulled into non-educational government activities (elections or other campaigns), taking time away from education. While sharing an example, a district official said, “Once I visited a school where some classes had shown very low marks in science. On inquiring, I found that their science teacher was busy in elections that resulted in not having the students’ syllabus completed, which resulted in his students’ low performance.”

The SNC was discussed positively in KP by most of the interviewees, but some said they believe that the contextualization of this curriculum would have made it better. According to one interviewee, “this Single National Curriculum should have just provided us with the

¹⁵ As of this writing, the authors were still trying to confirm this figure with KP government officials.

¹⁶ Some reforms initiated in the KESP that were highlighted as successful included: District Performance Scorecards, Online Action Management System for teacher data, School Quality Management System, School Improvement Framework, and Integrated Education Management Information System (EMIS).

minimum standards, but in reality, it tried to guide us towards having one textbook. How can children in KP understand what a sea looks like in Karachi when they have never even seen it? Many are used to living in mountains and glaciers here, but what is there in the books that is contextualized?" Lack of coordination between the education departments and problems with how the curriculum was rolled out were identified as issues by some interviewees. According to them, what is outlined in the curriculum is not reflected in the teaching and learning materials, especially when it comes to students' cognitive development and learning about values and social behaviors. Similarly, teacher training is disconnected from the curriculum and teachers are not prepared to deliver the curriculum in the classroom.

Opportunities

Better data in KP are needed to have an accurate picture of the scope of the problem of out-of-school children. The ongoing 2023 census should shed new light on the overall picture and provide insights into the impact of the innovative initiatives that KP has taken to improve access to education, particularly for marginalized communities and girls. In the absence of research and evaluation, most of these initiatives could not learn from their experiences and were discontinued. Identifying such initiatives that are impactful would save effort and avoid reinventing the wheel.

Nonformal education is considered by some stakeholders in KP to be a more appropriate means to address the large numbers of out-of-school children. *PPPs* also show promise, and the impact of ongoing programs should be systematically explored. KP's new PPP Implementation Unit could also benefit from technical and operational support. The unit is conducting a feasibility study that will result in identifying PPP opportunities in education, and donors and the private sector could use this feasibility report to identify areas for promoting PPPs. Private sector engagement seems highly important in the context of a province that has never been able to get the financial resources needed to meet its ESP targets. Spending 99% of its allocated education budget shows that the province does not have an issue of underspending; rather, there is a genuine lack of resources to meet the education needs.

Private schools also present a significant opportunity to enroll more children, if properly managed and provided with some financial support. Some of the interviewees suggested scaling up a voucher system, as already tested in KP. One private sector interviewee said, "Having a voucher scheme not only will help the poor families educate their children, but also will support private schools to sustain and create jobs, which is the need of the country." In general, the reasons identified by the participants for low enrollment, particularly for girls, are also directly or indirectly linked with poverty. Education Voucher Schemes will help girls access their right to education even in areas where there are no public schools. Even in public schools, schemes to support children by issuing vouchers for uniforms and stationary could be reconsidered.

The Nowshera district of KP offers an example of a resilient, cross-sectoral response to flooding. *Better water management and preventive actions* taken by the district government lessened the impact of the most recent floods as compared to what the district experienced previously in 2009–10. For better water management and prevention, the district government constructed protection walls, strengthened weaker parts of the riverbank, and evacuated people from the neighboring communities well ahead of the floods.

2.2.2 Sindh

Status

Sindh, the second most populous province in Pakistan, hosts over 50% of its population in urban centers such as Karachi and Hyderabad and enjoys a significant number of schools

and educational institutions (16,171 institution in urban areas and 46,337 in rural, public and private sectors combined).¹⁷ Owing to its large population, the province grapples with numerous challenges in the education sector, particularly in rural areas, where poverty and limited access to education prevail. In 2019, nearly half of all learners in Sindh were leaving school by grade 5 (Pakistan Bureau of Statistics, 2020), and 47% of the population experienced multiple forms of deprivation (Sindh Bureau of Statistics, 2021 [MICS 2018–19]). **Table 6** and **Table 7** illustrate enrollment, transition, and quality in Sindh.

Table 6: Provision of Schooling by Level of Education, Sindh

Indicator	School-Aged Population	Number of Schools	Enrollment	% of Enrollment in Private Sch.
Primary	–	48,697	4,275,822	40
Middle	–	6,844	1,327,245	43
High	–	5,660	737,477	42
Higher secondary	–	745	469,479	12
Total	10,600,000	61,946	6,810,023	

Notes and sources:

- Number of schools includes public, other public, and private sector. Data source for number of schools is Qadeer et al. (2023).
- Enrollment includes public, other public, and private schools. Data source is Qadeer et al. (2023).
- % of enrollment in private schools is from the desk review (Figure 8). Desk review does not mention source.

Table 7: Performance of Provincial Education System, Sindh

Indicator	Male	Female	Total	Source
Primary net enrollment rate	60	49	55	Pakistan Bureau of Statistics (2021b)
Middle net enrollment rate	35	29	32	Pakistan Bureau of Statistics (2021b)
High net enrollment rate	24	20	22	Pakistan Bureau of Statistics (2021b)
Transition rate, primary to middle	72	66		Qadeer et al. (2023)
Transition rate, middle to high	100	99		Qadeer et al. (2023)
Percentage of grade 2 students who can read at least sentences in Urdu/Sindhi			10.5	ASER Pakistan Secretariat (2022)
Percentage of children aged 5–16 who can read at least sentences in Urdu/Sindhi	31	24		ASER Pakistan Secretariat (2022)

Sindh's ESP (2019–2024) (SELD, Government of Sindh, n.d.) establishes three objectives: ensuring inclusive and equitable access to high-quality education, guaranteeing effective learning outcomes, and enhancing effective governance within the education sector. The

¹⁷ As per the 2017 census, Sindh Urban had 24.83 million people and Sindh Rural had 23.02 million, with an annual growth rate of 2.74% for urban and 2.07% for rural.

plan emphasizes equity, learning, and capacity development, prioritizing girls and children with minor learning and intellectual disabilities.

Challenges and Priorities

The School Education and Literacy Department (SELD) of Sindh prioritizes addressing the needs of out-of-school children and enhancing education outcomes in the province. Recent data indicated that approximately 44% of school-aged children (over 6 million individuals) in Sindh were out of school, among which 58% resided in rural areas and 42% in urban areas (Faran & Zaidi, 2023). The ESP identifies several factors contributing to the low participation of students, including inadequate facilities, unsuitable learning options, poor teaching quality, and an uneven distribution of post-primary schools. School infrastructure has been a persistent issue in Sindh, with both the unavailability of basic amenities and the uneven distribution of different school levels posing challenges. Missing facilities such as water, toilets, boundary walls, and electricity negatively impact student participation and retention, particularly for female students. Almost one third of all schools in the province function without toilets and water, and over half of the schools, most of which are primary schools, have only one teacher, necessitating multigrade teaching in public institutions. Interviewees noted these as factors affecting enrollment and dropout.

Regarding the differences between urban and rural areas, interviewees noted that urban schools are overcrowded, but no expansion of the schools' infrastructure has taken place due to the high cost of available land. Furthermore, district-level interviewees noted that the provincial government does not consult them in choosing school locations, leading to school construction in inappropriate locations. Another constraint is the overwhelming influence of donors and development partners on policymaking, as noted by almost all interviewees. They emphasized the need for local policy and planning. Additionally, lack of appropriate sustainability measures for externally funded interventions was seen as a significant constraint.

Private Schools

The private sector plays a vital role in Sindh's education sector, with a multitude of private schools and institutions operating across the province. The Directorate of Regulations and Inspection of Educational Institutes in Sindh oversees these private schools, ensuring compliance with set standards. The Government of Sindh also supports the private sector through the SEF, established by an Act in 1992. SEF assists over 800,000 students, primarily in underserved rural areas, through programs like Foundation Assisted Schools. The Sindh government has introduced EMO reforms to outsource the management of government schools to private organizations, with the aim of improving the quality and access of education. The PPP Pilot Program was launched with the technical support of the Sindh Community Mobilization Program, and 106 reconstructed schools and select nearby group schools were handed over to private sector organizations. The EMO reform is governed by the Sindh PPP Act 2010 and the Sindh Public Procurement Rules 2010, with support from entities such as the PPP Policy Board and the PPP Unit in the Finance Department. The Public–Private Partnership Support Facility was established as a company under the Companies Act, 2017, to manage the finances of PPP projects and improve transparency. The PPP model, supported by a strong legal and policy framework, offers a promising approach to enhancing education in Pakistan.

One interviewee noted that private schools attract higher enrollment due to effective school management and teachers' accountability to parents. The perception of better-quality education offered by English-medium schools and the preference for the Cambridge examination system also contribute to the appeal of more elite private institutions. Private school interviewees said they believe that the extensive expansion of private sector schools

in Sindh's urban areas could be replicated in rural regions if the government were to provide attractive incentives, such as education subsidies.

During discussions with provincial- and field-level officials, it became evident that the government actively supports and encourages the private sector's involvement in education. One interviewee mentioned that this approach offers a cost-effective solution for students and another suggested that providing subsidies to the private sector could facilitate the expansion of private schools to low-income areas, helping enroll out-of-school children from economically disadvantaged backgrounds.

Inclusive Education

Inclusion in education remains a challenge in Sindh, with children from marginalized communities and those with disabilities encountering significant barriers to accessing education. "Special education schools" fall under the jurisdiction of the Department of Empowerment of Persons with Disabilities (DEPD), and this separation creates structural issues regarding coordination and mainstreaming for children with special needs. Sindh has 66 special-needs schools (Special Needs, 2021). Mainstream schools are unable to accommodate children with disabilities because teachers are not trained and lack tools to identify them. School infrastructure also restricts the ability of children with disabilities to receive education in mainstream schools. The government has implemented various programs to enhance inclusion, such as the establishment of the "Sindh Persons with Disability Protection Authority" under the DEPDP Act 2018, which will be functionalized under the new ADPs. An interviewee stated that a database management system would be put in place, likely improving data availability in this subsector, which currently suffers from poor data about prevalence.

Most of the interview respondents demonstrated a solid understanding of the concept of inclusion and its various forms, suggesting successful dissemination and awareness of the idea. However, in terms of policy, inclusion was seen as a relevant matter only by DEPDP and senior-level officials within the SELD. Furthermore, in the context of integrating children with disabilities into conventional public sector schools, interviewees deemed these schools inappropriate for special-needs students due to insufficient infrastructure, inadequate teacher training, limited resources, and unsuitable environments. This opinion was particularly strong concerning children with cognitive disabilities, while a slightly higher level of acceptance was noted for children with physical disabilities.

Private sector stakeholders approached the education of children with disabilities from a business perspective, emphasizing the importance of specialized teachers and skill sets to address their unique needs. An interviewee suggested adding an extra classroom and a teacher to general schools to accommodate these students. However, given the budget constraints, insufficient infrastructure, and limited human resources, DEPDP did not consider this proposal to be a practical solution.

Climate Resilience

Floods pose a significant challenge in Sindh; the province is vulnerable to annual monsoon rains and periodic river flooding. The province experienced severe floods in 2010, 2011–12, and most recently in 2022, which damaged more than 45% of the school infrastructure. An in-depth damage assessment by SELD estimated that 19,808 schools in Sindh were damaged (45% of the total 44,219 schools), affecting the enrollment of over 2.3 million children. The estimated reconstruction and upgrading cost for the damaged schools (fully: 7,503 and partially: 12,305) amounts to \$1.97 billion (Planning and Development Department, Government of Sindh, 2022).

The government's preferred short-term measure is to rehabilitate damaged education facilities, while medium- to long-term measures focus on developing climate-resilient education infrastructure and reevaluating the effectiveness of prevailing education models in Sindh. In response to the disruption of education during the 2022 floods, SELD provided temporary learning centers with the help of UNICEF in more than 900 locations, according to the SELD Reform Support Unit. While encouraging, this figure represents a minimal response when weighed against the total number of 19,808 damaged schools.

The COVID-19 pandemic and the subsequent floods in 2022 greatly impacted the education sector in Sindh Province, causing significant disruptions in learning. Despite efforts to mitigate these disruptions through distance learning, the lack of preparation, coupled with limited access to electricity and internet connections in households, hindered its effective implementation. SELD faced constraints in implementing measures to mitigate learning loss due to a lack of advance preparation.

On the other hand, PPPs and private school operators demonstrated better resilience in managing the challenges posed by the floods. In particular, PPPs and EMOs were able to save furniture and fixtures in their schools, while schools under the SEF faced less damage due to better location choices. Based on interviews with SEF officials, these differences highlight the importance of effective management and accountability in mitigating the impact of such disasters on the education sector.

Teaching and Learning

Literacy in Sindh has remained largely stagnant over the past decade, with a significant rural–urban divide and disparity in male–female literacy rates. The Economic Survey of Pakistan 2020–21 reported Sindh's literacy rate at 62% (defined at 10 years of age and above), but rural Sindh's literacy rate was 43%, while urban Sindh had a 78% literacy rate. In rural areas, three out of every four women were illiterate. Interviewees noted a serious lack of technical human resource capacity to improve the quality of teaching and learning. They felt that teachers are unprepared to meet the needs of their learners and that textbook writers chosen are not trained, which compromises the quality of textbooks, resulting in them not being aligned with the curriculum.¹⁸

To bolster education quality in Sindh, the ESP highlights teacher recruitment, teacher training, continuous professional development, improved curricula and materials, and early grade reading and math assessments. To enhance system governance and management, the plan proposes a functional assessment of all directorates and offices, capacity building for district and taluka education officers, and better communication and community engagement. Yet, a recurring theme in the interviews was the significant political influence on the education system, which undermines accountability. District education officials expressed their concerns about political pressure affecting the deployment of teachers. Female teachers often avoid working in remote areas, and, because of political interference in teacher assignments, some schools have closed. The lack of accommodation for teachers, or support for teachers' transport, particularly in remote locations, is also a constraint affecting teachers' availability.

Opportunities

Despite the challenges, government and nongovernment officials identified several opportunities in the education sector in Sindh Province.

Merit-based recruitment. A recent recruitment exercise conducted by SELD has been widely regarded as merit-based by all stakeholders. One professor from Aga Khan University

¹⁸ The SNC has not been adopted in Sindh.

described this initiative as an opportunity for SELD to recruit teachers perhaps predisposed to participate in communities to foster continued learning. The professor suggested that the personnel and career issues of these new teachers should be managed using modern approaches to prevent them from joining teacher unions.

Focus on access to post-primary education. In interviews, all respondents demonstrated an in-depth understanding of the skewed planning in the education sector, with primary level schools comprising over 85% of total schools. This insight provides an opportunity for development partners to focus on increasing access to post-primary education. All respondents emphasized the urgent need to increase access to and the number of facilities for post-primary education to reduce dropout rates and improve retention and transition rates, particularly for girls.

Private sector. Government officials also appreciated the contributions of private sector schooling systems in increasing access to and quality of education. Regarding private schools, there is a strong sense of optimism, despite certain provisions of provincial laws, such as a fixed cap on annual fee increases at 5% compared to the current inflation rate of 30%. Private sector stakeholders are perceived as providing effective accountability models from which the public education system can learn. A private school interviewee suggested that the government should adopt a regulatory system that emphasizes output accountability, rather than focusing solely on inputs, with strong parental involvement.

Public–private partnerships: In Sindh, various types of PPPs have been explored over the past two decades. PPPs are considered a viable solution for the government to address gaps in the education sector and introduce innovative approaches to the challenges that public education faces. Most study respondents saw PPPs as an opportunity for Sindh Province to enhance its education infrastructure and quality of education through collaboration with the private sector, civil society, and citizens. By modernizing social sector PPPs and implementing performance-linked contract models, such as EMOs, Sindh has pioneered partnerships with private entities to access additional resources, expertise, and technology for improved education service delivery. PPPs also create employment opportunities, strengthen accountability, and promote transparency in the education sector. However, it is crucial to ensure that the interests of all stakeholders, including students, teachers, and the public, are safeguarded and that PPPs are managed effectively and efficiently. Field visits indicated that EMO schools were better able to respond to crisis situations. The effective private management of government schools by organizations such as The Citizens Foundation and HANDS has demonstrated success in promoting accountability and safeguarding school infrastructure and resources. During visits to two schools managed by these organizations, the assessment team observed that the schools had been able to preserve their school fixtures and furniture and support their communities during floods. This success can be attributed to their sense of responsibility and accountability as part of their management contract with the government. This successful implementation of private management underscores the significance of accountability in private schools and the absence of accountability in government-run schools.

2.2.3 Balochistan

Status

Balochistan, the largest province in Pakistan, faces significant challenges in the education sector. Balochistan's arid and mountainous geography, low population density, chronic poverty, weak fiscal base, small private sector, and poor institutional and human capacity contribute to its struggles in providing high-quality education. Additionally, migration and natural hazards, such as droughts, floods, and earthquakes, impact the delivery of education services in the province.

According to the Pakistan Alliance for Maths and Science, almost half of all school-aged children in Balochistan are out of school, with only 60% of boys and 40% of girls attending primary school (Faran & Zaidi, 2021). The province's vast geography and limited infrastructure present challenges to providing access to education. The province has one of the lowest net enrollment rates in the country at 45% (PSLM, 2019–20—Pakistan Bureau of Statistics, 2021b). Moreover, the quality of education in Balochistan is low, with an estimated 54% of students not being able to read a story in Urdu in grade 5, and 74% of students being unable to perform simple arithmetic in grade 5 (ASER Pakistan Secretariat, 2022). Balochistan has a significant number of children who are out of school. **Table 8** and **Table 9** illustrate enrollment, transition, and quality in Balochistan.

Table 8: Provision of Schooling by Level of Education, Balochistan

Indicator	School-Aged Population	Number of Schools	Enrollment	% of Enrollment in Private Sch.
Primary	—	12,627	691,309	18
Middle	—	1,777	200,881	19
High	—	1,456	96,745	17
Higher Secondary	—	168	79,290	7
Total	2,100,000	16,028	1,068,225	

Notes and sources:

- Number of schools includes public, other public, and private sector. Data source for number of schools is Qadeer et al. (2023).
- Enrollment includes public, other public, and private schools. Data source is Qadeer et al. (2023).
- % of enrollment in private schools is from the desk review (Figure 8). Desk review does not mention source.

Table 9: Performance of Provincial Education System, Balochistan

Indicator	Male	Female	Total	Source
Primary net enrollment rate	65	45	56	Pakistan Bureau of Statistics (2021b)
Middle net enrollment rate	31	20	26	Pakistan Bureau of Statistics (2021b)
High net enrollment rate	18	9	14	Pakistan Bureau of Statistics (2021b)
Transition rate, primary to middle	78	76		Qadeer et al. (2023)
Transition rate, middle to high	82	83		Qadeer et al. (2023)
Percentage of grade 2 students who can read at least sentences in Urdu			16.3	ASER Pakistan Secretariat (2022)
Percentage of children age 5–16 who can read at least sentences in Urdu	40	29		ASER Pakistan Secretariat (2022)

The Balochistan ESP 2020–2025 is a comprehensive plan aimed at addressing the education needs of the province. The plan covers both school education and technical and vocational education and training and places the child at the forefront of reforms. The plan emphasizes the need for schools to be inclusive and disability-friendly, catering to the diverse needs of students, especially girls. It also includes provisions for admitting Afghan

refugees (including those undocumented), marginalized groups, and learners with special needs, ensuring that no one is left behind in the pursuit of education. The plan prioritizes learning and access plus participation as the two key policy focuses, and recognizes improved governance and management framework, and better research and data, as critical factors for ensuring an efficient and effective education system. In addition, the plan acknowledges standards, capacity, gender inclusiveness, and partnerships with external actors as cross-cutting areas. The major recommendations for school education include addressing the learning crisis through a child-centered approach, enhancing teacher performance, and addressing child welfare. The plan calls for the development of a research-based curriculum framework, a review of the school language policy, and the preparation of contextually relevant textbooks, among other initiatives.

Challenges and Priorities

Despite the efforts made to improve the education sector in Balochistan and the existence of a high-quality plan, there are still numerous constraints that hinder progress. In interviews conducted with various stakeholders, the lack of adequate human capacity emerged as one of the most significant obstacles to improving the status of education in the province. A government interviewee referred to the ESP as a major achievement but conceded that it was developed with significant input from the development partners, resulting in the unlikelihood that the plans and policies will ever be converted into practical actions and results. Several provincial-level interviewees attributed the lack of follow-through to a capacity gap in the districts, but district and school interviewees claimed that the plans made at the provincial level are unrealistic and do not take into account their on-the-ground realities. District-level interviewees also noted that political influence and trade union pressure are rampant.

Other interviewees cited the unavailability of the budget and the separation of the budget into different categories as major constraints to the education system. The total education budget is almost ██████████ and development partner contributions come to almost ██████████ annually. Most of the government budget is consumed by salaries. The external financing therefore helps cover initiatives such as teacher training, EMIS, student assessment, and other reforms. The government's allocation to non-salary and development budgets is limited. An officer from the Provincial Institute of Teacher Education indicated that compared to the Punjab academy for teacher training, which receives 99% of its funding from the provincial budget, the Provincial Institute in Balochistan receives 90% of its budget from donors.

Balochistan is also home to a substantial number of Afghan refugees and other migrant communities with limited access to education. The province's vast geography and inadequate infrastructure pose significant challenges in providing education access to these communities. The disparity in education access between urban and rural areas in Balochistan is stark. Although urban areas can claim better educational infrastructure, more teachers, and higher enrollment rates, rural areas face a dearth of adequate school facilities, lack of transportation, and a shortage of deployed teachers, resulting in low enrollment rates, particularly among girls. As per the ESP, the net enrollment rates decline with increasing levels of education and the rural female population is the worst affected. Balochistan also lags behind in internet connectivity, thereby hindering alternate methods of distance education, and exacerbating the learning losses during crises such as the COVID-19 pandemic.

Another major constraint on the system is inadequate school infrastructure. Overwhelmingly, schools are either single-teacher schools, single-classroom schools, or both. Almost all schools lack facilities designed to meet the needs of children with disabilities. The ESP notes that only 18% of schools are post-primary and only 42% of all schools are for girls. The state

of schools in rural areas of Balochistan is a major concern, with many of them suffering from a lack of basic infrastructure and amenities. These schools are often characterized by inadequate classrooms, insufficient furniture, nonfunctional toilets, insufficient boundary walls, and a lack of electricity. These inadequacies, coupled with the remote and scattered nature of many rural villages in the province, create a significant challenge for students seeking access to education. Girls, in particular, face numerous barriers to attending school, including cultural norms that discourage them from traveling long distances outside their communities and security concerns that make families reluctant to send their daughters to schools far from home. These barriers can lead to high dropout rates among girls, perpetuating the cycle of poverty and illiteracy in rural areas.

Balochistan is also passing through a low-grade level of insurgency (Kakar, 2022). Even though none of the people interviewed mentioned the conflict as a constraint, discussion of this issue was made conspicuous by its absence.¹⁹

Private Schools

The private education sector in Balochistan makes up almost 6% of total education institutions (Qadeer et al., 2023) and 16% of enrollment (Faran & Zaidi, 2021). During key informant interviews, an interviewee emphasized that the government needs to partner with private organizations to upgrade educational infrastructure and provide temporary learning centers during emergencies. However, access remains a challenge for many children, especially in remote and rural areas. To address this issue, another suggestion was that the government should consider offering incentives to encourage private sector expansion in underserved regions. These incentives could include tax breaks, land grants, or subsidies to private institutions willing to establish schools in remote areas. Additionally, increased collaboration between public and private sectors could lead to knowledge sharing, capacity building, and improved quality of education across the province. The Government of Balochistan recently passed the Balochistan Public–Private Partnership Act, 2021 (Balochistan Provincial Assembly Secretariat, 2021) to provide a legal framework for expanding reforms and initiatives in priority sectors, and to unlock new resources and investments. Strengthening PPPs is therefore a clear way forward in fostering innovation in teaching methods, curricula, and educational technology, ultimately benefiting students in Balochistan and enhancing their educational outcomes.

Balochistan’s Private Educational Institutions Registration and Regulation Authority regulates private sector schools, and their numbers have been growing in recent years due to the quality of education they offer. In the interviews conducted, private schools generally were seen as more efficient and innovative than public schools, and many parents were said to prefer them for their children’s education. However, some of the interviewees noted that the private school preference of the parents was more a matter of perception, because the Balochistan Examination and Assessment Commission consistently produces learning-outcome results that show that private schools do not perform better than public schools.

The private sector has also contributed to improving education infrastructure in the province. However, the affordability of private schools remains an issue for many families in Balochistan, particularly in rural areas, where poverty levels are higher. Additionally, as just noted above, the quality of education provided by some private schools has been called into question, and there is a need for more stringent regulation to ensure that all schools, public and private, provide quality education. According to data from the Balochistan Education Foundation (BEF), the total enrollment in 1,230 registered private schools stands at 327,000. BEF’s Community Schools intervention has contributed to an increase of approximately 7%

¹⁹ One of the research team members visited two rural districts in Balochistan, and immediately after the visit, seven officers of law enforcement agencies lost their lives in a suicide attack in the same area.

in the provincial enrollment figures. Furthermore, the enrollment of girls in BEF Community Schools represents 8% of the total enrollment of girls at the primary level in the province.

Inclusive Education

According to district government interviewees, Balochistan's school system welcomes students from low-income households, girls, and religious minorities (Hindu). However, the education system is not adequately equipped to accommodate children with disabilities, with insufficient screening and identification, lack of teacher training, inadequate classroom resources and infrastructure, inadequate budget, and language barriers. Children with disabilities are less likely to attend school and have higher dropout rates than their peers without disabilities. Efforts are needed to obtain accurate data on disability prevalence rates, concentrations of types of disabilities, and progress of children with disabilities through the school system. Mainstream government schools are generally unequipped in infrastructure and in financial and human resources and capacity to integrate students with disabilities.

Interviewees also noted that the government has taken steps to make all primary schools co-educational, which has led to a significant increase in girls' enrollment. This initiative addresses existing gender disparities and helps promote equal educational opportunities for all students. Efforts are also under way to provide stipends for girls, hire female teachers, provide girls-only schools, and offer separate washrooms for girls within schools.

Climate Resilience

Balochistan is highly vulnerable to the impacts of climate change due to its location and economic insecurity. In 2022, monsoon floods caused significant damage to school infrastructure, with an estimated cost of ██████████ in the province alone. In all, 1,076 schools were completely destroyed and 1,774 partially affected (UNDP, 2022). The floods led to the displacement of thousands of people, with schools and classrooms repurposed as housing, rendering them unusable for education. Immediate responses to the floods focused on resumption of learning through alternative or temporary learning spaces, benefiting 20,000 children; and school dewatering, cleaning, and disinfection, benefiting 62,000 children (United Nations [UN] OCHA, 2023). However, the impact of floods on the education sector in Balochistan remains a significant challenge, with a long list of unfulfilled needs to address ongoing learning disruption and loss (BEF, 2022).

Interviewees noted that disaster awareness is limited, and that the government makes little to no effort to involve communities, teachers, and students in disaster awareness activities. In the short term, efforts are needed to strengthen disaster preparedness and response and to improve equitable and inclusive access to education for all children and adolescents. The post-flood situation presents an exceptional opportunity to reach and reintegrate out-of-school children, adolescents, and especially girls through accessible, alternative, and flexible learning. In the long term, strategies will focus on the repair and reconstruction of educational institutions and the resilience of the education system. The GoP's "Building Back Better" Resilience Recovery, Rehabilitation, and Reconstruction Framework should guide the reconstruction and upgrading of schools.

Teaching and Learning

The disconnect between policy and the field-level reality is evident in the adoption of the SNC. According to provincial and district government interviewees, the adoption of the SNC in Balochistan involves significant challenges, particularly related to teacher training, capacity building, and governance issues. Interviewees noted that the curriculum is not flexible enough to cater to the needs of multigrade schools and multilingual learners. Many communities in Balochistan do not speak Urdu, and while the ESP refers to the development of a provincial language policy and curriculum framework, the recommended tailoring has

not yet been done, even though the SNC has been adopted in the meantime. The Textbook Board of Balochistan still has approved just two language books—for Urdu and English—for the early grades, but teachers noted that introducing English language in the early grades is challenging because primary school teachers are not capable of teaching using the English books. Another interviewee raised the same point made in other provincial discussions, that the SNC is designed for single-grade classrooms, but over 80% of schools in Balochistan are multigrade, making it nearly impossible to improve the quality of education using the SNC. Other major constraints cited were the unavailability of teachers, particularly female teachers, in rural areas; and a lack of training and teaching materials available to the teachers who are in the system.

Interviewees also referred to widespread malnutrition prevailing in the province. One respondent indicated that most of the government school students come from poorer households and that the education system cannot raise the quality of their learning without first tackling the learning challenges caused by malnourishment.

Opportunities

System thinking. A common reform thread sensed in several interviews was an emphasis on system thinking. Provincial government interviewees emphasized that future donor interventions should strive to help improve the system rather than focusing on one micro area of reform only. A representative from civil society also stressed that long-term, sustainable programs, rather than short-term projects, should be the priority of the government and development partners. The confluence of several development partners to help implement the sector plan was also highlighted in the interviews.

Cluster policy. The cluster policy of the School Education Department, Balochistan, was admired by provincial and district interviewees alike. Under the policy, high schools develop a cluster of feeder schools. The headmaster, headmistress, or principal of the high school is responsible for procuring and supplying essential items for the feeder schools. The Department provides non-salary funds to the high school under two budgetary codes, one for the high school and the other for the feeder school. These non-salary budget heads are then further divided into (1) education and learning-related expenses, (2) furniture, (3) parent–teacher association and school management committee, and (4) science and sports. This model could be explored for further development.

Openness towards private sector. The interviews revealed a general openness to and appreciation for the private sector’s contributions to enhancing access to education. Provincial as well as district-level interviewees stated that government offices cooperate with private sector schools and participate in various activities with them as well. The Balochistan Examination and Assessment Commission, however, was quoted by the provincial authorities as proof that private sector education is not better than public school education. However, the district officials reasoned that better performance in public schools can be attributed largely to the rampant cheating that takes place in Commission exams. Regardless of this controversy, respondents were appreciative of the role of the private sector and indicated that its expansion would be welcome.

Public–private partnerships. The Balochistan government has taken a promising step forward by passing the Balochistan Public–Private Partnership Act of 2021, which aligns with similar Acts in the other provinces. The government has also established a Public–Private Partnership Board, a PPP Authority, and a PPP Unit, indicating a strong commitment to the development of PPPs. Education has been identified as a priority sector for PPPs, and interest is growing among the private sector to work with the government in this regard. Despite some challenges, such as questions about the political will and capacity to pursue PPP reforms in the sector, the government has shown a willingness to learn and grow by

visiting Sindh to observe successful models of EMO reforms. Thus, the Balochistan education system has a unique opportunity to benefit from the expertise and resources of the private sector, leading to improved access and quality of education for all students.

2.2.4 Azad Jammu and Kashmir

Status

AJK's governance is distinct from that of Pakistan's other provinces and regions. AJK is governed by the Interim Constitutional Act of 1974, although its definitive status has yet to be determined. It has its own president, legislature, Supreme Court, flag, and national anthem. AJK is not eligible for the National Financial Commission Award (i.e., the federal taxable income pool), relying instead on grants from the federal government. This often means that limited data are available on AJK, and it leaves the region's finances susceptible to politically motivated fluctuations in available resources. Nevertheless, education has been a top priority for the Government of AJK, with the sector receiving as much as 28% of total recurrent budget allocations (E&SE Department, 2013).

A recent study conducted at the national level by Allama Iqbal Open University in collaboration with JICA examined the literacy, numeracy, and digital literacy skills of people aged 10 years and older. In AJK, 69% of the population aged 10 years and older were proficient in reading and 71% in writing; 69% were proficient in numeracy (Mahmood et al., 2022). **Table 10** and **Table 11** present the status of enrollment, transition, and quality of the education sector in AJK.

Table 10: Provision of Schooling by Level of Education, AJK

Indicator	School-Aged Population	Number of Schools	Enrollment	% of Enrollment in Private Sch.
Primary	–	5,124	275,206	33%
Middle	–	1,929	291,243	62%
High	–	1,620	337,507	54%
Higher Secondary	–	702	73,890	64%
Total	1,176,567	9,375	977,846	51%

Notes and sources:

- Number of schools includes public, other public, and private sector. Data source for the number of schools: MoFEPT (2021).
- Enrollment includes public and private schools. Data source: AJK Bureau of Statistics, Planning and Development Department (2021).
- School-aged population (primary, ages 5–9; middle, ages 10–12; high, ages 13–14; and higher secondary, ages 15–16). Data source: AJK Bureau of Statistics, Planning and Development Department (2021).

Table 11: Performance of AJK Education System, AJK

Indicator	Male	Female	Total	Source
Primary net enrollment rate	78	79	79	AJK Bureau of Statistics, Planning and Development Department (2021)
Middle net enrollment rate	55	52	54	AJK Bureau of Statistics, Planning and Development Department (2021)
High net enrollment rate	43	42	43	AJK Bureau of Statistics, Planning and Development Department (2021)
Transition rate, primary to middle	87	80		Qadeer et al. (2023)

Indicator	Male	Female	Total	Source
Transition rate, middle to high	86	80		Qadeer et al. (2023)
Percentage of grade 2 students who can read at least sentences in Urdu			36.5	ASER Pakistan Secretariat (2022)
Percentage of children aged 5–16 who can read at least sentences in Urdu	65	64		ASER Pakistan Secretariat (2022)

Recently, the AJK government approved the AJK Education Policy 2023–2040, although it has yet to be officially gazetted and therefore is awaiting implementation. The policy has defined the vision of the Government of AJK and also set a direction for priorities and plans to be materialized over the next couple of years. Chapters on STEAM education, math education, and citizenship, leadership, and entrepreneurship education were added to the education policy in an update for 2021–2030. The addition of these chapters signifies the priority and interest of the incumbent Government of AJK in these themes. Interviewees noted their interest in development partners aligning their investments with the government's priorities for these areas.

“AJK has a very limited agriculture and industry-based economy; its prosperity relies on its human resources, so we need to invest much more in education, especially science, math, arts, and technology, to polish our human resources.”
—Government official

Challenges and Priorities

There are around 6,000 government schools in AJK (AJK Bureau of Statistics, Planning and Development Department, 2021), but thousands more are needed and thousands of existing ones are in disrepair. According to a government interviewee, unfortunately, due to the lack of an integrated and updated EMIS in AJK, more than 1,500 public schools that were damaged/destroyed by the 2005 earthquake were omitted from reconstruction and rehabilitation plans. This oversight suggests that every fourth public school in AJK has inadequate facilities or is operating under a temporary arrangement or shelter even after 18 years. The AJK government is still exploring options to secure funds to reconstruct these schools. Because AJK witnesses a harsh winter season with heavy rains and snowfall, these makeshift schools become inoperable, thus limiting students' access.

Interviewees also reported that AJK has an additional 350 dysfunctional schools; making these schools viable is one of the DOE's foremost priorities. The DOE has solicited the services of private educational operators and other organizations following the PPP model being implemented by the Government of Punjab through the PEF and the Government of Sindh through the SEF. One of the AJK government officials who is involved in overseeing this process said that they had advanced to the point of selecting partners, but that the process had been put on hold due to litigation. Private school operator interviewees noted that the process was cumbersome, involving numerous documentation and procedural requirements, which may discourage potential private partners that do not have the resources or time available to see the partnership through to maturation.

AJK reported 216,000 out-of-school children based on data collected through a survey supported by the Benazir Income Support Program (*Academia Magazine*, n.d.). However, AJK DOE representatives in their interviews were unable to confirm the gender-disaggregated numbers. The education policy 2023–2040 also prioritizes nonformal schooling and distance education to reach out-of-school children. The DOE has solicited proposals from local organizations to assist the DOE in reaching out-of-school children, but these efforts have stalled due to litigation by one of the bidders. While interviewees noted that the DOE is doing all it can to move the process forward, such commonplace issues result in skepticism toward development of private sector partners.

Rationalizing the placement of primary schools to better match available resources to needs and consolidating a gender-based Directorate of Public Instruction are other top priorities of the Government of AJK. Unique among Pakistan provinces/regions, AJK has a separate directorate of schools for boys' and girls' education, called the Directorate of Public Instruction (Male/Female). Interviewees shared that in line with the new education policy, the DOE is working on a plan to merge the lower grades of boys' and girls' schools that are operating side-by-side in the same communities. Gender-segregated education will continue beyond grade 3.²⁰ They further added that in the new education policy, the Government of AJK has aspired to merge the male and female directorates into a single primary and secondary directorate of schools. The intent is to reduce redundancy in management structures, leading to more efficient use of resources. Other senior officials and members of the reforms committee contended that there would be some resistance to this plan from teachers' unions and communities. Transparency and communication will play crucial roles in proactively addressing stakeholders' concerns and making this reform viable. Further, the rationalization exercise will require adequate resources and expertise, because it will warrant completing an in-depth survey of the system and developing a viable plan with strong and wide political buy-in. Interviewees from the DOE shared that they lack confidence in securing both at the same time.

Interviewees noted that after the 2017 18th Amendment to the Constitution, AJK was "left on its own." Unlike the provinces, the federal government retained control over AJK's funds, and AJK also receives little support from international development partners. The resource constraints in AJK are therefore significant. On the other hand, an interviewee explained that of the meager resources they receive for education for AJK, 90% of these funds are allocated to salaries or recurring costs, with little left for enhancing teachers' capacities, or improving the quality of education through new initiatives or innovations. These financial limitations have far-reaching implications for the AJK education system as a whole in terms of its performance, planning, and service delivery. Indeed, interviewees noted that the Directorate of Education Extension, which is responsible for the continuous teacher professional development of 35,000 teachers, has an allocation of only [REDACTED] for teacher continuous professional development activities for the budget year, which is insufficient for a workforce of this size.

Relevant and timely data in AJK are also lacking. Interviewees noted that the EMIS is too outdated to generate data that can be used for policymaking, planning, and decision-making. The lack of data is a limitation and a source of many of the educational challenges that the government is struggling with; and without corresponding analyses and recommendations, they find it difficult to devise informed policies and plans. Further, no platform or organization collects and updates private school data. Whatever information is being reported for private schools is based on estimates collected inconsistently through various sources. To regulate private schools, the AJK government has an inadequate system in place. At the state level, only one person acts as an ex-officio member for private schools; at the district level, the District Education Officers support this office. This responsibility is assigned to these officials in addition to their other core responsibilities. During their key informant interviews, both the government official and the private school system representative expressed dissatisfaction with such a system because it is not helpful for either stakeholder.

²⁰ This gender desegregation plan is not yet in formal notified policy, but it was shared by government interviewees that it is part of their approved education policy and the implementation plan will follow after the notification of the policy.

Private Schools

Private schools, despite their lack of regulation, play a vital role in assisting the AJK government in fulfilling its constitutional responsibilities and honoring national and international commitments to ensuring access to and quality of education for all. A private school system representative stated that private schools account for 30% to 40% of enrollment in AJK. However, the AJK data on private schools illustrated in the earlier section showed that private schools enroll 51% percent of kindergarten through grade 12 (K–12) enrollment in AJK. It is widely acknowledged that the number of private schools is increasing at a fast pace and that enrollment in government schools is decreasing. An interviewee stated that private schools in AJK may, in fact, have more enrollment than government schools in primary grades.

“Many families just migrate to big cities and towns to provide quality education to kids, so our schools in remote areas, in a way, help those families not to migrate, and this is one of the factors that should be considered while [officials are] assessing contributions made by the private schools.”
—Representative of private school foundation

However, private education providers’ voices are missing from the education policy formulation and decision-making process. Private school representatives expressed their concerns that the government and its development partners often fail to consider the role of private schools. One representative added that, unfortunately, the government traditionally perceives private schools as rivals.

Inclusive Education

The AJK Education Policy 2023–2040 has a chapter on inclusive education, but it is limited to bringing “special-education centers,” as they are called in AJK, into the fold of the DOE; they are currently being managed by the Social Welfare Department. Other aspects of inclusive education, such as accommodating gender and ethnic/religious minorities, are not addressed. Interviewees reported that authorities, political leaders, and the community lack knowledge and comprehension of inclusive education. In AJK, the education of children with disabilities is still seen as “special education” and not inclusion. Interviewees also added that in AJK, no authentic and reliable data are available on children with disabilities, which limits the government and its development partners from appropriately addressing those needs.

“Vocational teachers are teaching regular classes. This should not occur because (a) they are not engaged for this purpose and (b) they lack the necessary knowledge and skill set. Yet, sadly, they are doing this. If they do not, the center would be unable to continue teaching beyond the primary grades, which has implications for these children.”
—Government official

Inclusive education is severely neglected in AJK in terms of capacity, resources, and shared definitions and attitudes. Interviewees disclosed that barely any government teachers and administrators have ever been trained in how to meet the educational needs of children with special needs and disabilities. Resource constraints also curtail what the AJK is able to do beyond limited special-education offerings. Following the recent major earthquakes, AJK installed wheelchair-accessible ramps in schools, but only from ground level to the first classroom level. AJK has two special education and rehabilitation centers, located in Muzaffarabad and Rawalakot. Nevertheless, again, these centers are

heavily underresourced. Although policy actions indicate that the DOE has prioritized taking over special education and rehabilitation centers and the directorate from the Social Welfare Department, interviewees perceived a lack of vision and understanding for taking over this responsibility and said that system readiness seems lacking overall.

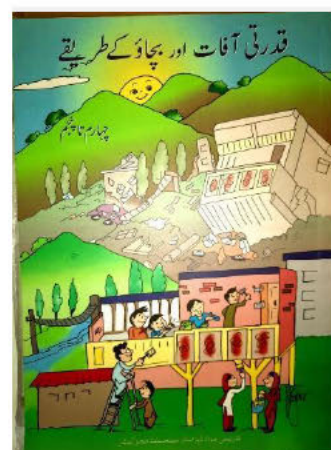
Climate Resilience

AJK is prone to natural disasters, including earthquakes, flash floods, and heavy landslides. SDMA plays a leading role in devising and implementing policies, plans, and strategies for disaster risk reduction (DRR) and mitigation in AJK. SDMA has command centers at the

state, divisional, and district levels that include the AJK DOE. In AJK, SDMA has also introduced standard operating procedures (SOPs) for monitoring and responding to emergencies.

AJK commemorates the 2005 earthquake every year on October 8 and organizes activities during that week to raise awareness and educate the population about emergencies. Schools perform various programs on DRR, preparedness, and mitigation, and are expected to conduct emergency drills. With assistance from JICA, the DOE created student and teacher orientation materials and handouts on what to do at the school in case of disaster.

To construct climate-resilient infrastructure after the 2005 earthquake, the Earthquake Reconstruction and Rehabilitation Authority (ERRA) introduced a new building construction code for the AJK and other affected parts of Pakistan. According to an SDMA representative, in the beginning, the ERRA construction codes were widely adhered to even though doing so caused financial strain. Nonetheless, these codes have been followed. Interviewees from a private school foundation elaborated on their system's procedures for constructing a school's infrastructure. He said that they have a checklist and a team made up of members from different departments tasked with ensuring that the requirements and standards of all departments are met. According to the head of the civil engineering department of the private school foundation, their team visits a proposed construction site and conducts a comprehensive evaluation that includes safety, security, learner accessibility, and much more. In addition to their checklist that incorporates ERRA's construction code, they also adhere to the construction guidelines of the Pakistan Engineering Council.



Teaching material on disaster management for grades 4 and 5, developed by the Government of AJK in collaboration with JICA and AJK Rural Support Programme

Teaching and Learning

Lacking capacity and funds, AJK has not been able to organize any orientation sessions on the rollout of the SNC. Interviewees shared that teachers have expressed confusion over how they are meant to use the SNC in their classrooms.

Others noted that primary teachers in AJK have insufficient English language skills needed to deliver the SNC in the science and math subjects. This issue points to a chronic challenge with the policy formulation process in Pakistan, where teachers are insufficiently consulted or their feedback is not integrated in the policy formulation process, ultimately resulting in their failure to deliver on policy. As noted in the findings for other provinces, the SNC is designed for single-grade teaching, yet there are 4,000 schools in AJK (66% of all government schools) with multigrade teaching.

"For the implementation of SNC, AJK made a separate request through the proper channel to the federal government, but no response was ever received."
—Government official

Opportunities

Policy implementation support. To realize the action plans set in the education policy 2023–2040, the AJK DOE will soon be developing a policy implementation strategy and monitoring plan. This critical juncture offers opportunities for all relevant stakeholders from the public, private, and other sectors to proactively engage with the DOE. As indicated earlier in this section, the AJK DOE also lacks the institutional capacity to develop and work on long-term, scalable, and sustainable policies and plans. The department does not have a policy and reform directorate and there is no institutional capacity for research to inform policies and plans. According to a government official, decision-makers and policymakers prefer to

complete tasks or plans that require little deliberation, but due to lack of technical capacity, the chances of instituting a rigorous process are slim. Currently, a planning cell within the DOE—although it has limited resources—caters to ad hoc requests from the political and bureaucratic leaders of the Government of AJK. Technical assistance would be highly impactful to support a low-capacity DOE, especially in the design and delivery of their plan to rationalize school distribution to make the best possible use of available resources to address out-of-school children.

Investing in the system’s continuous professional development. The Directorate of Education Extension (DEE) manages in-service teacher professional development programs for government teachers. The DOE, with technical support from the USAID-funded Pakistan Reading Project in 2016, prepared and approved a plan for transforming the DEE. The approved plan aimed to rationalize both in-service and pre-service training and would elevate the status of DEE to a Teacher Academy, or a full-fledged affiliated unit of the DOE and the lead institute for the professional development of teachers and educational leaders in AJK. The plan also aspired to designate all Government Colleges for Elementary Teachers as hubs for in-service teacher professional development. However, AJK has yet to put this plan into operation, owing to a lack of financial and material resources. The new education policy also defined this as one of the top policy action plans. This persistence determines how important this reform is to the AJK DOE.

“The AJK department is still pursuing political leadership for establishing a state-of-the-art Teacher Training Academy. The challenge is resources. Building is not an issue—resources like technology equipment, furniture, and the capacity of the professionals and experts posted in the academy would be needed.” —Government official

AJK also aspires to develop PPPs in three areas: *dysfunctional schools, out-of-school children, and early childhood care and education (ECCE)*. The first two areas were discussed in detail in the subsections above; they should provide opportunities for support and scale-up. In 2018, AJK also implemented an ECCE initiative in selected high schools and higher secondary schools,²¹ but due to capacity constraints, AJK sought support from private schools to train these ECCE teachers. The head of DEE does recognize that private schools have better capacity in early childhood education. She shared that ECCE teachers from government schools were trained in collaborating with a private school system. The conversation with government officials led to the conclusion that PPPs have huge potential to make the ECCE initiative work and to produce the expected outcomes.

Climate-resilient school construction. In Pakistan, very few organizations working in the education sector have established and followed such a rigorous approach to school construction. AJK’s methods could be a model for other provinces that have been affected by earthquakes.

Finally, the AJK Education Policy 2023–2040 has underscored the integration of technology into teaching and learning. AJK, under the Pandemic Response Effective in Pakistan (PREP)²² project funded by the World Bank and managed by MoFEPT, will establish 100 smart classrooms in the year 2023 (MoFEPT, 2023b). In addition, AJK contributed to the National Distance Education Strategy devised by

“We know the population is growing fast while resources are not increasing in proportion to the population—so the use of technology would be key to managing resource constraints.” —Government official

²¹ Data on secondary education are sometimes divided between high and higher secondary, designations which are equivalent to lower and upper secondary grades elsewhere.

²² For more about PREP, see the World Bank web page <https://projects.worldbank.org/en/projects-operations/project-detail/P173796>.

MoFEPT and it intends to formulate an AJK-specific distance education strategy.

Interviewees stated that they believe online education can assist them in reaching teachers and students who are hard to reach through other means. But designing and implementing tech-enabled at-scale interventions will have to deal with a number of challenges, because AJK lacks needed prerequisites such as infrastructure, capacity, affordability, policies, provisions, and partnerships. Thus, an opportunity would be to first conduct a system technology-readiness assessment to inform the design of their interventions (AJK Bureau of Statistics, 2021; Department of Elementary and Secondary Education, AJK, 2021; E&SE Department, AJK, 2013; Fullan & Miles, 1992; Mahmood et al., 2022; MoFEPT, 2023b; *The Nation*, 2023; *The News International*, 2023).

2.3 Private Schools

2.3.1 Status

The private sector in Pakistan plays a crucial role in educating millions of students. As of 2022, private schools made up 38% of all educational institutions and 44.3% of the total enrollment (ADB, 2022). With provincial governments' efforts to engage in PPPs, the private sector has been encouraged to participate in the education system more actively to address the serious issue of out-of-school children in Pakistan.

Interviews with private sector representatives, along with other analyses, suggested that among the benefits of private sector education are that service providers are incentive-driven, and thus more creative and agile; and they can swiftly adjust to changes in market demands and circumstances, given that the market functions reasonably well. Private sector education service providers have many comparative advantages, such as geographic, cultural, and social proximity to local students and communities; easy access to the local labor market; and more functional accountability mechanisms, given the demand for private education services (ADB, 2022).

Private schools in Pakistan can be classified into several categories, such as elite private schools, mid-tier private schools, and low-cost private schools. In addition, each province has its own unique structures. Elite private schools cater to the affluent class, with state-of-the-art facilities, highly qualified teachers, and high tuition fees. These schools often follow international curricula, such as the International Baccalaureate or the British Curriculum. Mid-tier private schools are moderately priced and attract middle-class families. These schools usually follow the national curriculum, but some may also offer international curricula. Low-cost private schools cater to lower-income families, providing basic education at an affordable cost. These schools predominantly follow the national curriculum and focus on providing essential literacy and numeracy skills.

During the field visits and interactions with the district officials, respondents mentioned several times that private schools have a significant presence in the rural districts of Pakistan, at least in the taluka headquarters of the district. In rural Pakistan, private schools are generally owned by a local entrepreneur of the same community and fees range from [REDACTED] per month. In general, parents and district officials perceived the quality of these private schools to be better than that of public schools.

By contrast, some provincial officials explicitly criticized the private schools for offering low-quality services and hiring unskilled teachers. Yet private schools in Pakistan have demonstrated higher performance levels than public schools, according to evidence from multiple studies. For example, the LEAPS report revealed that students from private schools outperformed their public school counterparts in all subjects, attributable primarily to the increased effort put forth by their teachers (ADB, 2019). In fact, the study concluded that public school students would need an additional 1.5 to 2.5 years of schooling to catch up to private school students' performance levels in grade 3. The ASER annual reports also consistently found that private school students performed better than their public school

counterparts (ADB, 2019). Even students attending low-cost private schools achieved higher basic learning levels than those in public schools, albeit with a narrower difference.

Private schools in Pakistan have made efforts to provide inclusive education to students from different socioeconomic backgrounds. Many private schools offer scholarships, fee concessions, and other financial support to students in need. These efforts aim to bridge the gaps between students from different economic strata and to make high-quality education accessible to all. However, there is still a long way to go in ensuring that private schools are genuinely inclusive and accessible to all students, regardless of their economic status or physical disabilities.

It is also essential to address gender disparities in education and encourage the enrollment and retention of female students. The representative of the Federation of Private Schools in Pakistan argued that the reason for low enrollment of students with special needs is the cost of teaching these children. This individual explained that private schools would need to employ a qualified and skilled teacher for these children, plus a separate, dedicated classroom, and that parents generally could not afford the correspondingly high fees. According to the representative, only through government subsidies would private schools be able to accommodate children with disabilities.

All provinces/regions have established directorates to register and regulate private sector schools, although these directorates are stretched thin because of the rapid rise in the number and types of private institutions they must oversee.

2.3.2 Public–Private Partnerships

The governments of Pakistan (federal and provincial) have taken several steps to encourage the private sector's participation in education. The National Education Policy 1992 first introduced the concept of PPPs in the education sector, which was further emphasized in the Education Sector Reforms 2001–2004 and the National Education Policy 2009. The provincial governments have established provincial education foundations to facilitate PPPs in education. Thus, there are five education foundations in Pakistan: the National Education Foundation and four provincial ones. These foundations have established partnerships that support more than 12,000 institutions and almost 3 million students enrolled in Foundation Assisted Schools. The foundations also regulate private schools within their networks, to ensure compliance with quality standards and the national curriculum.

These partnerships have allowed the government to leverage the private sector's expertise and resources to improve the quality of education and increase access to schooling for underprivileged communities. Some of the successful PPP models include the Foundation Assisted Schools program, which focuses on improving the quality of education in low-cost private schools; the voucher scheme, which provides vouchers to students from low-income families to attend private schools; and EMOs. (A case study on EMOs appears at the end of this subsection.)

2.3.3 Constraints

The subsections above describe several challenges that private schools in Pakistan face, such as self-regulation to ensure the quality of education; high tuition fees, which make private education inaccessible for many families; and disparities in access to education based on gender, socioeconomic status, and geographical location.

The capacity of the provincial directorates responsible for regulating private schools is also limited, and better monitoring of students' learning outcomes is needed (ADB, 2019). Another significant constraint in the private education sector is the lack of comprehensive and up-to-date data on student enrollment, performance, and school quality. The scarcity of accurate and current data hampers the ability of policymakers and stakeholders to make informed decisions, identify areas of improvement, and effectively allocate resources. For

instance, MoFEPT continues to rely on private sector data from the National Education Census conducted in 2005, which is almost two decades old (Ministry of Education, 2006). These outdated data are extrapolated to the present time, leading to potential inaccuracies in understanding the current state of private education.

Despite the 2010 18th Amendment to the Constitution of Pakistan, which devolved significant powers to provincial governments, provinces have not taken adequate steps to conduct comprehensive surveys of their own. This shortcoming has further contributed to the lack of reliable data on private schools at the provincial level. The diversity of the private school populations served also makes it difficult for policymakers and stakeholders to thoroughly understand the issues of different types of private schools, which in turn hinders their ability to design relevant policies and interventions. It will be crucial for both federal and provincial governments to invest in collecting accurate, timely, and comprehensive data on all aspects of private education, including student enrollment, performance, and school quality.

An additional issue is the lack of coordination among government agencies, private schools, and other education stakeholders. The consequences are inefficiencies, duplication of effort, and missed opportunities for collaboration. Improved coordination could ensure that resources are used effectively, and that the private education sector can contribute to the overall development of the country's education system.

2.3.4 Opportunities

Opportunities to improve the private education sector in Pakistan will involve addressing current challenges and capitalizing on successful practices. By working together, the government and private sector could make a significant impact on the education landscape. Some specific suggestions follow.

Regulatory framework. Strengthening the regulatory framework would ensure compliance with national education standards and promote transparency in private school management.

Capacity of directorates. By improving the capacity of provincial directorates and introducing more efficient monitoring systems, the government could ensure that private schools deliver high-quality education to students.

Monitoring and reporting. Regular inspections, output-based monitoring, and transparent reporting systems would contribute to better oversight and accountability in the private sector. On a related note, improving the monitoring systems of the provincial directorates of private schools would significantly enhance data collection for tailored and effective programming for out-of-school children, both locally and regionally.

Instructional quality. Improving the quality of teaching in private schools will be crucial for enhancing students' learning outcomes. Investing in comprehensive teacher training programs and continuous professional development could help bridge the gap between private and public school performance. Additionally, focusing on pedagogical techniques, subject-matter expertise, and innovative teaching methods could contribute to better student engagement and learning.

Financial aid. Expanding scholarship programs and financial support mechanisms will be essential to making private education more affordable and accessible for students from low-income families. Interviewees noted that by offering targeted scholarships, fee concessions, and other forms of support, private schools could ensure that students from diverse backgrounds have access to quality education. Additionally, the government could explore PPPs that subsidize private education for underprivileged students, thereby promoting inclusivity and social mobility.

Access and inclusion. The cross-subsidization model, mentioned in various pieces of provincial legislation following the Compulsory Education Act, could be leveraged to improve

access to education for disadvantaged students. Each province, in response to the change in the Constitution of Pakistan (Article 25-A), passed the Compulsory Education Act, which obliges private schools to enroll 10% of students from disadvantaged backgrounds per classroom or to provide vouchers for the same. This provision presents an opportunity for the government and the private sector to collaborate and ensure that all children have access to education, regardless of their economic status. The same legislation should encourage private schools to adopt inclusive education practices, ensuring access to education for students with disabilities and addressing gender disparities. The government could work with private institutions to develop policies and strategies that promote inclusivity, as well as to install necessary infrastructure.

Enhancing Education in Pakistan Through Public–Private Partnerships (PPPs): A Case Study from Sindh Province

In Pakistan, the education sector faces challenges such as inadequate infrastructure, poor quality of education, and limited access for many students. To address these issues, the Sindh Education and Literacy Department (SELD) initiated a PPP reform under the Sindh Basic Education Program (SBEP), which is supported by a [REDACTED] USAID grant for the reconstruction of flood-affected schools. This case study highlights the role of Education Management Organizations (EMOs) in improving the quality and access of education in Pakistan through PPPs.

EMOs and PPPs in the education sector: The SBEP launched the PPP Pilot Program with technical support from the Sindh Community Mobilization Program (SCMP), a USAID-managed component of SBEP. SCMP assisted SELD in establishing a PPP Node, preparing legal opinions, developing feasibility reports for the reform program, developing the private sector market for EMO reform, assisting the government with PPP contract procedures and coordination, etc. The EMO Policy Framework was officially introduced in March 2015.

Under this reform, management of 106 reconstructed schools and selected other nearby schools is to be outsourced to private sector organizations experienced in public or private education. As of April 2023, 81 reconstructed schools and 90 nearby group schools had been handed over to 10 different organizations. Concession agreements are signed between the SELD and the EMOs, stipulating that the EMOs must achieve certain key performance indicators assessed by independent experts. Independent auditors oversee the financial aspects of the concession agreements, and funds are distributed through escrow accounts linked to Viability Gap Fund budget lines within the provincial budgets. The government's PPP Support Facility (see below) now funds some of the concession agreements and is expected to gradually finance all of them.

Legal and policy framework: The EMO reform is governed by the Sindh PPP Act 2010 and the Sindh Public Procurement Rules 2010. The government has established several entities to support the implementation of PPP projects, including the PPP Policy Board, the PPP Unit in the Finance Department, and PPP Nodes in various line departments, such as SELD.

The Government of Sindh recently established the PPP Support Facility as a company under the Companies Act, 2017. The aims of the Facility are to manage the finances of PPP projects, enhance corporate governance, promote transparency, and improve the delivery of public infrastructure and social services by achieving better value and risk management.

Conclusion: This case study demonstrates how PPPs and EMOs have contributed to improving the quality and access of education in Pakistan. By leveraging the expertise of private sector organizations and fostering collaboration between public and private entities, the Government of Sindh has made strides in addressing the challenges faced by

the education sector. The PPP model, supported by a robust legal and policy framework, offers a promising approach to enhancing education in Pakistan and other developing countries facing similar challenges.

2.4 Inclusion in the Education Sector

2.4.1 Status

As discussed extensively in the desk review, Pakistan has progressed in its commitment toward free access to quality instruction for all, while struggling to overcome significant barriers to make this commitment a reality. Pakistan considers inclusive education to be the way of the future, with the goal of inclusive education being to remove barriers to education for all those excluded: “girls and women, the disabled, ethnic/linguistic minorities, migrants, nomads, and many others” (Ministry of Education, 2008, p. 30). At both the national and provincial levels, Pakistan has taken important strides in embracing the goals articulated by the United Nations Convention on the Rights of Persons with Disabilities (UN Department of Economic and Social Affairs, 2022). Important work remains, however, in realizing these goals for girls, children with disabilities, and children from other groups that historically have been marginalized.

During primary data collection, interviewees were asked about their view of inclusion in the education sector. Although responses varied, particularly across the different types of stakeholders, most acknowledged clearly that an inclusive education sector is not a reality in Pakistan and is far off into the future. As discussed in the desk review, the concept of inclusive education is not well defined across the various policies and strategies, and determinations of which vulnerable groups need assistance are vague. Most respondents from the government sector, when asked about inclusion, pointed to two different groups: girls and children with disabilities, or “special education.” A handful of others referenced education for Pakistan’s transgender populations. Mostly, only those individuals specializing in inclusion or minority issues articulated inclusion more broadly to include other marginalized minority groups, such as refugees, internally displaced persons, and ethnic/linguistic or religious minorities, all of whom face significant discrimination and poorer educational outcomes in Pakistan. As children progress through the system and issues of sexuality arise during adolescence, any and all discussion about being lesbian, gay, or bisexual is taboo. Being transgender is more accepted as an issue of biology (e.g., intersex or hermaphroditism) rather than one of gender identity or choice, and therefore deliberations are more open.

To some extent, this pattern meshes with national and local policy, in that specific policies and special programs across the provinces/regions are tailored to girls and children with disabilities, national-level policies pave the way for inclusion of transgender, and national and provincial-level debates and conversations have taken place about improving outcomes for these groups. Fewer protections are in place for other minority groups, and homosexuality is officially illegal. Not many respondents raised these concerns. Due to the nature of the responses about inclusion from our stakeholders, the following sections focus mainly on children with disabilities and girls’ education.

2.4.2 Constraints

Children with Disabilities

As discussed in each provincial/regional profile, there are myriad constraints to providing a high-quality education to all children with disabilities. UNICEF’s Country Profile on Disability-Inclusive Education Practices in Pakistan (2021) provides an excellent mapping of the policy and legislation framework at the various levels and different administrative bodies across the country. This mapping demonstrates a pattern that also emerged in the interviews—that

while policies exist and stakeholders could refer to them, the required government coordination, monitoring, and implementation of said policies are insufficient. Government and nongovernment stakeholders alike pointed to challenges existing in the system, all of which are significant: poor infrastructure and resource gaps to respond to specific needs of children with disabilities, poor data on the true extent of this population, and low capacity in the system at all levels for how to respond to children with disabilities.

Although the research team did not collect precise budget data for each province/region, all respondents noted that to do anything more than what they were currently doing in inclusive education, they would need additional budget allocation from their province/region. Across the country, educational services for children with disabilities are delivered through special-education departments that have their own budget and their own schools, located mostly in urban centers at the district level; they are administratively separate from provincial departments of education. This arrangement in itself reflects a limited understanding of inclusive education services. UNICEF (2021) estimated that only 2% of children with disabilities could access special-education programs, while another 2% were attending mainstream schools. Interviewees noted that little coordination occurs between the special education and “mainstream” departments, and this coordination usually is operationalized only by mainstream schools referring students to the special-education schools when they cannot accommodate them. It is generally understood that mainstream government schools can handle only children with “mild physical disabilities,” but the infrastructure to accommodate them is minimal (i.e., there may be a ramp at the school but only from the ground level to the first classroom level; or the restrooms might not be adapted for children with disabilities). Thus, even children with “mild” disabilities who could, in theory, learn at a mainstream school often cannot do so in actuality, due to insufficient accommodation. The administrative, budgetary, and managerial segregation of responsibility for inclusive education prompts exclusion instead, and further obscures the needs and realities of children with disabilities. This problem is not restricted to the provincial level. At the federal level, special education is handled by the Ministry of Social Welfare, and as one federal education government official remarked, “I don’t know what they’re doing over there.”

There are no generally accepted public data on the prevalence of children and people with disabilities in Pakistan. Although the 2017 census was amended to collect data on people with disabilities (it did not initially, but additional forms were added later after a public outcry), many experts commented that the data collection questions were poorly constructed and generated inaccurate data—a mere 0.48% prevalence rate, whereas international standards indicate the likelihood of a rate somewhere between 10%–16%. A low prevalence rate in the census then translated into a low budget and low prioritization of people with disabilities. The 2023 census, which was still in progress at the time of this writing, was designed to collect data on disability through questions asking about “moving, walking, speaking, or hearing.” The ASER used in Pakistan has incorporated the Washington Group on Disability Statistics’ questions to measure prevalence and educational status of children with disabilities, but this version of the instrument is available only in some provinces/regions (in Sindh and Punjab, they found a combined 15.5% prevalence rate). Similarly, ITA has conducted a range of recent studies on specific aspects of prevalence and types of disability. Even though these examples certainly mark improvements in data availability, interviewees reported that as long as stigma and taboo within communities and families about disability persist, prevalence will continue to be underreported.

Screening and identification, the first points of entry for disability-inclusive services, are also problematic. In some provinces/regions, categorization of disability type is limited to outdated schema (i.e., visual, hearing, physical, intellectual), and screeners identify few children with disabilities according to these or other categories. Additionally, many children go unidentified

“There is no justice for children with disabilities when there is no justice in the system.”
—Disability Rights Activist

due to government schools' lack of capacity to correctly screen and identify the type of disability. If the school does manage to identify a child, the next step—referral to a medical facility for verification—can be onerous and expensive for low-income families. Furthermore, to enroll in special-education schools (as well as to access other government rights owed to people with disabilities), students must obtain a “disability certificate” from the provincial government office. The processes differ somewhat by province/region and are difficult to navigate even for families that understand of the system and have the financial means to undertake the task. To summarize, getting a certificate and enrolling in a special-education school can be a multistep process involving visiting medical facilities and multiple government offices, obtaining stamped or certified government paperwork, and then registering at the provincial and then national levels. For the poorest of the population, the transportation and opportunity costs of this process (and in some provinces, the associated fees) can be prohibitive.

Capacity in the system to deliver disability-inclusive services is nascent. According to a few nongovernmental disability experts who were interviewed, with the exception of the few teachers who have undertaken additional pre-service training for special education, teachers lack the capacity to adapt the curriculum and individualize instruction for children with disabilities. To further complicate matters, assessment systems are “one size fits all.” Few educators across the country know anything about either inclusive pedagogy or UDL, and these principles are not included in any kind of teacher performance standards. The administrative bodies responsible for overseeing special education lack solid monitoring and accountability mechanisms to ensure that learners' needs are met. School infrastructure, assistive technologies, and general resourcing for special-needs schools or for children with disabilities mainstreamed into government schools are insufficient. The provincial/regional analyses uncovered examples of PPPs supporting children with disabilities, but overall, most children with disabilities in Pakistan are left behind; respondents likely were correct when they said that the country's road to inclusive education will be long.

Gender

As noted above, when they were asked about inclusion, interviewees discussed girls' education as an ongoing issue. It is clear from the literature and from the interview data that both the supply and the demand sides contribute to inequities. Some argued that the challenge lies with families and communities—i.e., that traditionally, girls' education has been undervalued and families do not see the “use” in sending a girl to school, especially in more “tribal” or “patriarchal” areas like KP and Balochistan. Families may not see the relevance of education if it does not offer a linear path to participation in the labor force, which is extremely low for women.

Others noted that as girls go through adolescence, families withdraw their girls from school for child marriage, which is a common practice. Some pointed out that schools are not safe places; girls face harassment in school or on the way to school and as a result, families keep their girls home to keep them safe. On the supply side, the respondents were fully aware of the insufficient number of schools to cater to all students, especially in rural areas; combined with demand-side constraints, girls are less likely than boys to access schools. The added distance to post-primary schools; the timing of adolescence; availability of appropriate water, sanitation, hygiene, and menstrual hygiene facilities; and related safety concerns are all significant deterrents to girls.

Of course, poverty and girls' education also intersect. Child marriage of girls reduces a family's economic burden of support and may bring a bride price to the family, and both girls and boys are put to work at young ages to add to household income. According to the World Bank, girls in poor families in Pakistan are 22 percentage points less likely to go to school than girls from families with more economic resources (Baron & Bend, 2023).

Finally, transgender issues have become a touchpoint for inclusion in Pakistan. The country has a National Policy on Transgender Rights, although it had not yet been fully operationalized as of 2023.

2.4.3 Opportunities

Inclusive education in Pakistan is a nascent field and there is ample room for improvement. When asked about priorities to enhance the delivery of inclusive education services, interviewees offered a range of answers:

- Make all mainstream government schools accessible to children with mild to moderate physical disabilities.
- Choose one or two disability types at first, and focus efforts/resources there (e.g., blindness or deafness).
- If better metrics can be obtained, ensure that budget allocations increase proportionally to the true number of children with disabilities.
- Work locally with communities and families to reduce shame and stigma around disability.

Additionally, in March 2019, ITA produced a policy brief with a set of specific recommendations (ITA, 2019). The ILOA research team agrees with these recommendations, and they align with the data collected in this assessment, but they involve the higher policy levels. Pakistan also needs ongoing, practical action on the ground locally, where children with disabilities and girls are not being reached. Changes in policy and planning will take time, and as this assessment revealed, the gap between policy and practice likely will remain for a long while. As such, an immediate opportunity could include mapping and providing support to local CSOs that cater to the needs of children with disabilities and are providing services that the government is not. Further, supporting CSOs that are working to increase awareness and decrease shame and stigma in communities and in families around disability would be valuable to reach children who are hidden away. Generating and utilizing prevalence data also should be prioritized.

Meanwhile, having advisors work with the provincial governments on either developing or operationalizing their local Inclusive Education Strategy would be valuable. Such efforts could increase mainstream government schools' capacity to accommodate children with disabilities, at a level that is feasible and sustainable. Other investments that could reach a significant portion of children with disabilities would be addressing basic infrastructure obstacles that currently prevent children with mild to moderate physical disabilities from attending school; and offering educators training in how to make basic adaptations in pedagogy and assessment (e.g., UDL). Moreover, provincial governments will need to allocate additional resources to special-education departments, which should then provide adaptive technologies to students and meet the needs of children with more severe physical and intellectual disabilities. Finally, no matter which avenue USAID might pursue, it will be critical to leverage the ongoing work of local organizations such as ITA and to coordinate with other donors (such as FCDO and the British Council) to ensure that funding is complementary and not duplicative.

Numerous efforts have been designed and implemented at smaller scale to address the root causes of girls' lagging education. Innovations such as stipends and conditional cash transfers, Education Voucher Schemes, and girls' community schools have shown promise in some provinces, but sustained support is lacking, as is solid evidence about aspects of these programs that work and could be scaled up.

2.5 Climate Resilience in the Education Sector

2.5.1 Status

Recent Response

Give the short time that has elapsed since the floods in June–October 2022, the country is still very much in the “response” phase, rather than recovery. Many schools that were partially or fully damaged are still unusable, and many functional schools are still being used as shelters for displaced populations. In most of the provinces, interviewees shared concerns about the lack of resources required to rehabilitate schools. In the southern part of KP, South Punjab, and Sindh, people complained about injustice and the diversion of rivers and reservoirs’ overflow to poor communities to save the agricultural lands of rich landlords. In the northern part of KP, with its hilly terrain, the flash floods created even more problems by taking away the land underneath the buildings, including schools.

Naturally, a key focus post-flooding is school rehabilitation and reconstruction. Unfortunately, throughout the country, school locations are sometimes chosen based on political and economic influences, meaning that they are constructed on donated lands that are not in use for agricultural purposes—typically because such lands lie in high-risk flood zones. Secondly, when construction firms do not engineer or site school buildings to account for periodic flooding, the schools inevitably are damaged. According to a district-level government officer in KP, “planners do not consider disasters and other emergency situations while planning for the school construction. The local district-level staff are also not consulted for such planning. For better planning, the realities of every district should be kept in mind so that the Annual Development Plans are context specific.” Similarly, another official in KP said, “Our planning office is constructed on the riverbank and at the time of floods, when we should be looking after the schools, we have to run to rescue ourselves. The government needs to plan better for the construction of public buildings, including offices and schools.” Respondents in South Punjab also identified similar problems and showed concern about the building designs for schools and their construction on riverbanks.

In almost all the provinces/regions, government officials and private sector representatives alike noted that the floods, like other climate-induced disasters, are a cross-sectoral issue requiring coordination with government efforts in water management, disaster management, and climate change mitigation. The education department alone cannot take full responsibility because they have no control over the actual causes of floods. Interviewees shared their beliefs about the governments’ lack of preparedness. Based on the interviews, people in provinces generally believe that there are no or only weak protection walls built on riverbanks, which allows high water to flow into the villages, towns, and agricultural fields. Neither are there any flood-control reservoirs that could store the excess water for use in times of drought—which also are very common in Pakistan. They believe that neither water management authorities nor local administrations are actively engaged in these problems. Similarly, the interviewees said that the climate change and disaster management departments could plant more trees and make people aware of actions they could take to avoid disasters or minimize their impact on life and property. In some areas in Sindh and Punjab, floodwaters stood in fields for several months because these lowlands have no drainage or water-removal arrangements or equipment. The interviewees also shared that unfortunately, no significant donor support arrived during these 2022 floods as compared to what they had seen in response to the 2009–2010 floods.

(Lack of) Preparedness for Climate Change

As discussed above, by not incorporating sufficient planning for floods and other climate-induced disasters into the provincial/regional Education Sector Plans and ADPs, affected localities will find it hard to manage them well and minimize damage to life and property. That is, even if the provincial/regional ESPs do refer to education in emergencies, the

departments do not have detailed response plans. Instead, the education departments rely heavily on the district administration and donors such as UNICEF. Yet interviewees also shared that districts do not have education-in-emergencies response plans, either. Indeed, very few interviewees discussed the importance of preparedness in the education sector, which illustrates the lack of attention and planning in this area. Many interviewees pointed to the necessity of preparedness in *other* sectors, like water management, rather than education.

Thus, nearly three years after the floods, disruptions to learning are still ongoing. UNICEF has established temporary learning centers in flood-affected areas, but their funding and reach has been too small. Some local NGOs also provided support, but they are limited in both scope and time. The government itself does not plan for the continuation of education in flood-affected areas and there are no specific contingency funds in the budget for flood response. One of the schoolteachers in KP shared, “After our school got damaged in the floods, we rented a building to shift children and continue their education and paid its rent using the non-salary funds of our school.”

Similarly, in areas where both teachers and children lost their homes and even their crops, psychosocial support is needed. School-level staff shared that no arrangements were made after the floods to psychologically rehabilitate the communities. Except for a few smaller-scale programs deployed occasionally, the education system in general has no content ready for teachers and children to use in times of need. Several interviewees mentioned the need to include psychologists in the education departments who can provide such psychosocial support and help children learn effective skills and behaviors to deal with such shocks. One of the officials in KP shared, “I had heard about hiring psychologists in KP to support schools but am not sure what happened to that plan.” Such examples clearly show the lack of planning for the physical and psychological needs of school communities impacted by recurring disasters. It also confirms the concerns that the district-level officials raised about federal and provincial levels not engaging them in education planning.

Another way to prepare communities for climate change and to make them more resilient is to raise their awareness about what climate change is and how it impacts their lives (Climate Reality Project, 2019). Education is useful in addressing climate change because it can motivate people to adjust their attitudes and behaviors accordingly (UN Climate Action, n.d.). Almost all the interviewees said they considered education to be a very important tool that can be used for climate resilience, but most of them did not have a clear idea of what exactly should be done. They pointed out that not enough climate data are available, and that this shortcoming does not seem to be an urgent concern of the provincial governments. Some commented that they believe that the existing curriculum and textbooks do have some content on climate change that could be improved, but others suggested the need to understand this subject better before adding anything to the curriculum. South Punjab’s education secretariat has taken the initiative to publish a “Green Book” for grade 7 on climate change that includes actions communities can take to mitigate its impact.

“Climate change can’t be added as a chapter in a textbook. We need to change the curriculum and the pedagogy. People in the villages and cities need to learn about how we change our lifestyles to create more resilience in us. Education doesn’t engage in vegetable farming, animal husbandry, living by the river, etc. Why teach them Islamiat but not teach them how to live within their own environment?” —Interviewee in Punjab

From the donor community, the German aid agency GIZ and the British Council have taken initiatives for climate action for youth together with the higher education institutions, the Ministry of Youth, and the Ministry of Climate Change. Through these initiatives, they are making youth aware of the climate crisis and the role they can play in climate action. They are establishing Green Youth Clubs under their Green Youth Movement program. Youth groups will be trained to innovate and find creative local solutions to the climate issues faced

by their communities (Higher Education Commission, n.d.). Both GIZ and the British Council would like to see climate resilience added to the curriculum in Pakistan. However, they also explained their feeling that it is not a priority of either the government or external funding agencies.

Some youth leaders, as climate activists, have taken up initiatives like “Fridays for Future Pakistan” to run awareness campaigns, but these are small-scale activities and are not supported by the government or other donors. One of the interviewees emphasized the need for success stories and role models related to climate resilience work, such as “Pakistan’s climate change heroes” (Iftkhar, 2022).

2.5.2 Constraints

Because climate education is a nascent area both nationally and internationally, people in both the education and climate/environment sectors share a long list of questions about how to create climate resilience. Good data to inform school targeting and a shared understanding of the issues are lacking, sufficient technical expertise is missing in higher education institutions and other relevant bodies, and appropriate government departments in Pakistan are not coordinating. Interviews with the Ministry of Climate Change found that no platform exists for convening stakeholders from across the country, although one is desperately needed. Climate change and education ministries/departments have shown no signs so far of coordinating their efforts, which keeps these sectors from understanding each other’s needs and potential.

2.5.3 Opportunities

Given the newness of this field, there is ample opportunity to make a significant and much needed impact. Other donors expressed their enthusiastic support for USAID to play a role in promoting climate resilience in Pakistan and noted that the education sector required significant investment in that regard. Moreover, the Ministry of Climate Change would greatly benefit from focused capacity building and efforts to leverage it as a mechanism to meaningfully engage other ministries and partners to develop strategies with operationalized budgets. Officials from the Ministry of Climate Change indicated that without the convening power of bi- and multilateral development partners, they have been unable to garner the attention needed from other government ministries.

To improve preparedness, there should be a focus on mainstreaming DRR in education. This initiative would involve incorporating DRR into the curriculum, teaching and learning materials, and extensive and continuous teacher education and training. USAID could prioritize developing the capacity of education officers across all levels, and engaging and training parent–teacher associations, school management committees, and student councils. (The Inter-Agency Network for Education in Emergencies Minimum Standards include the following domains: access and learning environments, teaching and learning, teachers and other education personnel, and education policy.) Additionally, provincial/regional and district-wide hazard risk maps will need to be updated, and strategic planning on plotting appropriate locations for schools will be critical for the government.

Private sector initiatives such as Fridays for Future Pakistan, Pakistan’s Climate Heroes, and efforts spearheaded by young climate activists also could be meaningful sources of knowledge and learning for the education departments. UNICEF has documented a range of lessons learned from its flood response work on how to make the education sector more prepared, and thus resilient, to future disasters. These concepts specifically include the need to engage affected communities directly in preparedness and response, because top-down approaches have not been effective in improving preparedness. Further, initiatives like “Climate Connection,” funded by the British Council, offer a platform for sharing local expertise across the entire sector; and the British Council’s Global Youth Letter offers an

opportunity for young leaders in Pakistan to unite globally in the cause for climate change (Climate Reality Project, 2019; Fridays for Future Pakistan, n.d.; Higher Education Commission, n.d.; Iftkhar, 2022; Rousell & Cutter-Mackenzie-Knowles, 2020; UN Climate Action, n.d.).

2.6 Education Sector Donor Support

As noted in the desk review, Pakistan has received education funding from a range of donors over the past decades, including multilateral organizations such as the World Bank, Asian Development Bank, UNICEF, and UNESCO; and bilateral entities including USAID, FCDO, the British Council, JICA, the European Commission, the Australian Department of Foreign Affairs and Trade, and GIZ. Funding from these institutions has addressed topics from educational planning and policy, to gathering of data and evidence; and implementation programs have varied from early childhood development and education to basic, secondary, and higher education. Some of these programs have focused on specific areas such as gender, literacy/numeracy, pre-service and in-service teacher professional development, infrastructure, scholarships, research capacity strengthening, institutional capacity development, or post-disaster recovery from the range of climate-induced disasters that Pakistan has experienced.

Interviews with JICA, British Council, FCDO, the World Bank, and GIZ illuminated several current priorities for Pakistan, as described next.

GIZ is investing heavily in Pakistan's response and resilience to climate change. Its aim is to support the entire planning cycle of climate change adaptation measures, from the preparation of climate risk assessments to the piloting of financing approaches and instruments at the local level, focusing on the most vulnerable groups (GIZ, 2022). It is collaborating with the Ministry of Climate Change and a number of higher education institutions to build capacity in that sector for research, thereby developing the next cadre of scientists and public policy specialists to address climate change. GIZ highlighted the need for more donors to work at the federal and provincial levels to galvanize government understanding of and support for climate issues and to encourage cross-sectoral collaboration, including education.

The **British Council** is addressing climate change and education through its Climate Connections program (British Council, n.d.), which gives practical support to the next generation of climate leaders and those affected by climate change. The British Council is also looking to shift its focus on education as part of their cultural relations work toward primary and secondary education as an issue-based approach. They are planning to support both sides of the supply-and-demand equation to boost enrollment and retention, especially for girls in rural areas.

JICA has a strong history of supporting access to education through alternative and nonformal pathways and is refining its focus in education to improve retention for girls through continued support to NFE and to technical and vocational education and training. A new grant was signed in May 2023 to upgrade primary girls' schools into gender-neutral elementary schools in rural areas of Sindh. JICA will also play the role of Grant Agent on GPE's Punjab System Transformation Grant and is currently working with the government to develop the corresponding "Compact" (GPE, 2023). JICA also expressed concern about the poor state of foundational skills in Pakistan and indicated it may look for ways to invest further in this area.

Similarly, the **World Bank** is focusing on foundational skills development to address learning poverty. They are finalizing their new investment case for programming in foundational learning, early childhood education, and girls' education, with access, equity, and quality underpinning all three areas. The World Bank also has supported private schools in Pakistan, intends to continue giving grants to the PEF, and will explore other options. The

World Bank has also reestablished its investments in infrastructure. The impetus to do so was a 2022 Post-Disaster Needs Assessment, which highlighted a lack of minimum standards in infrastructure that significantly contributed to loss after climate disasters. Coordination with the World Bank on their climate-resilient infrastructural investments into schools will be useful for all donors interested in climate resilience.

FCDO has always had a strong focus on girls' education and is continuing its investment through its upcoming procurement called Girls and Out of School Children: Action for Learning, a [REDACTED] program in KP's and Punjab's least-developed districts. The program will aim to get girls and marginalized learners into school and to stay in school, and also will focus on foundational skill development through the teaching and learning process. It also funds the Data and Research in Education program, which was extended through December 2026 to build the education evidence base through improving data quality and timeliness and sharing practices across provinces. FCDO has also been commissioning several pieces of research which will be useful and relevant to the sector, including a study on the scale and impact of learning loss, disaster preparedness, and—through the World Bank—mapping of the low-cost private school sector to get an accurate picture of how big this segment of education provision actually is. They recently released a new policy paper on addressing the climate, environment, and biodiversity crises in and through education (FCDO, 2022). All donor interviewees shared the same concern that donor coordination should be continually improved and more transparent to avoid duplication and maximize all available external resources.

3 Recommendations

Recommendation 1: Use a Systems Approach

There is no shortage of areas where investment and support could help improve the provision of education in Pakistan, even though the equivalent of over a billion aid dollars has been spent in the past two decades to address the challenges to improving education. Although this funding certainly has had an impact in appreciable ways, it has not systematically moved the needle in terms of student outcomes, as evidenced by Pakistan's stubbornly low performance on key education indicators. What should be of concern now is how to assist the education system in ways that enable some of the persistent implementation constraints to be sustainably overcome. Stakeholders interviewed for this sector assessment consistently called for support that would contribute to systems-level changes. In other words, adequate policies and plans are not what is lacking; instead, the capacity to implement those policies is where the system breaks down.

To make a dent in the identified heap of system challenges, at every area of intervention—whether foundational literacy or a new PPP, for example—future investments should start by explicitly defining “systems-level change” and then measuring it before and after it occurs. USAID and/or partners should map the service-delivery chain of implementation to identify strengths and weaknesses within the system. Where there are breakdowns, future initiatives should focus their efforts. Under USAID's All Children Reading–Asia program, the 2022 *System Strengthening Review* (Eyre & Siddiqui, 2022) assembled a detailed analysis and recommendations for how to do this effectively. Political economy analysis can also help unpack breakdowns in the roles and responsibilities of system actors, behaviors such as rent-seeking or patronage, the process of decision-making and influence, impediments to implementation, and driving forces behind reform.

Similarly, more efficient management approaches are needed to cut through bureaucratic processes and procedures. Governance mechanisms should be designed to shield the education sector from political influence, and system mapping should identify and challenge

existing bureaucratic roadblocks, such as obstacles to budget expenditures and the lack of stable leadership. Likewise, stable, long-term financing is needed to build greater resilience in the education system.

Recommendation 2: Emphasize the Local Level

Pakistan has impressive federal and provincial/regional policies, plans, and strategies. Implementing them where it matters most—at the school and classroom levels—is what needs focus now. As noted above, mapping the service-delivery chain for any intervention area would illuminate where the breakdowns happen and what leverage points exist. Interviews indicated frequent breakdowns *among* federal, provincial/regional, and district levels, where policies, strategies, and resources do not align with the realities on the ground.

At the district level, interviews commonly noted that officials do not have the authority they need to make decisions and respond to what is happening in their schools. In turn, schools and teachers are not supported by their district officials in anything beyond administrative “box ticking.” At the upper levels of the system, federal and provincial decision-makers need structured mechanisms that will enable them to heed the voices of local stakeholders to better design implementation strategies that are deliberately tailored to overcoming the recurring obstacles to achieving sustained success.

Systems change is a long-term process. In the meantime, to address the immediate needs of learners, families, and communities, it may be necessary to deploy complementary investments in government systems by directly supporting nongovernmental, community-based actors. Examples could include grants to local CSOs serving the needs of underserved populations, localized campaigns for marginalized groups designed and implemented by community advocacy groups, or programs to develop community champions or mentors for a certain cause. Inspiring individuals and small, focused local initiatives could yield great results, and there is no shortage of them in which to invest. Pakistan is a vibrant and diverse country and truly local, home-grown initiatives could help overcome the persistent challenges to improving education.

Recommendation 3: Implement Localized Public–Private Partnerships

To help address the ongoing crisis of out-of-school children, Pakistan needs to fully embrace the role of the private sector. There is much to learn from ongoing PPPs, and USAID could support initiatives to pilot, learn from, and adapt new ones. In principle, it would be best to start by coordinating with other donors working in this space, to avoid overlap and duplication. Ongoing government partnerships with private providers could draw lessons from successful models (e.g., EMOs in Sindh, voucher programs); and the very large private school networks in Pakistan, such as the Beaconhouse School System (which makes up 38% of Punjab’s private school enrollment), might be leveraged in terms of instituting a mandate to expand into more rural and harder-to-reach areas where enrollment lags. Support for stronger oversight through established PPP departments—to improve coherence between the private and public systems—also could help avoid fragmentation.

Despite the commonalities that exist across the country, PPPs should be provincially/regionally tailored. In other words, several models could be tailored to meet unique governance structures and needs. Different, stable, and long-term modalities for financing will likely be needed (e.g., state bank loans to private schools with reduced interest rates), and other sectors that employ creative financing mechanisms may offer best practices that could be applied to education. To improve both equity for the poor and the status of girls’ education, Pakistan should focus on PPP expansion at the post-primary levels, targeting the poorest, rural districts where girls’ access to education is also the lowest.

Recommendation 4: Spearhead Efforts Toward Inclusive Education

Inclusive education is a nascent, under resourced field in Pakistan, and capacity across the country is low. First, USAID would need to coordinate with other donors that are already investing in this area, to avoid duplication and maximize all available external resources. In partnership with other donors, USAID could consult the sector on the current status of ITA's recommendations for policy dialogue (ITA, 2019) and prioritize the most potentially impactful areas of investment and support. Additionally, USAID could co-sponsor policy actions with other funders to amplify their impact, make best use of resources, and continue investing in additional data gathering and assessments to more accurately understand disability prevalence in Pakistan.

Meanwhile, advisors could work with the provincial/regional governments on either developing or operationalizing their local Inclusive Education Strategy. They could assist provincial/regional and district authorities to map out progressive strategies for accommodating children with disabilities over time—starting with what is doable and working toward an increasingly inclusive education system. Finally, they could help provinces develop operating plans and realistic budgets.

New assistance could focus on increasing the capacity and accessibility of mainstream government schools to accommodate children with disabilities, at whatever level would be feasible and sustainable for each district. Additional high-impact investments could cover basic infrastructure upgrades for mainstream government schools that currently exclude even children with mild to moderate physical disabilities; and training for educators on basic adaptations in pedagogy and assessment (e.g., UDL). Provincial governments could use support to allocate additional resources to special-education departments for procuring adaptive technologies and issuing them to students (e.g., hearing aids, braille books) and for meeting the needs of children with more severe physical or intellectual disabilities.

Recommendation 5: Pave the Road to a More Climate-Resilient Education Sector

Like inclusive education, climate resilience is a budding field in Pakistan, but it is even more “emergent” because there is little shared understanding, responsibility, or cross-sectoral coordination on the issue. The Ministry of Climate Change is a team of 10 people with a small budget and limited convening power. The education sector is only one piece in this larger puzzle, and a singular focus on the role of the education sector would be too narrow at this point. Broader Agency-level investments into the cross-sectoral policy actions required for climate resilience across energy, water management, agriculture, health, *and education* will be critical at the national and provincial/regional levels. In short, education has been an overlooked and underfunded part of the climate response across sectors.

At the same time that national and provincial/regional level policy actions to become more climate resilient are under way, USAID will need to identify the *top priority* for action within the education sector. First, the Agency could learn from successes in the recent flood response, which included the relative success of early warning systems, cash distributions to flood-affected communities, and community-based disaster risk management structures, such as that established by the Aga Khan Development Network. UNICEF identified *preparedness* as the top priority. There should be continued focus on mainstreaming DRR in education—including curriculum, teaching and learning materials, and extensive and continuous teacher education and training. Education officers across all levels will need capacity development, and the engagement and training of parent–teacher associations, school management committees, and student councils should also be prioritized. Additionally, provincial/regional and district-wide hazard risk maps will need to be updated, and strategic planning on situating schools will be critical for the government. UNICEF has

developed comprehensive school safety plans that could benefit from implementation support. USAID could target high-risk districts and schools first, coordinating closely with UNICEF on all planning and implementation.

Finally, as noted above, affected local communities deserve close collaboration. USAID would need to consult them on how they are affected and identify some practical, locally developed solutions to the issues. While action at the top level is required to enact change in terms of climate resilience, local communities are best placed to identify their own needs and appropriate solutions.

Recommendation 6: Continue to Focus on Foundational Literacy and Numeracy

Learning poverty in Pakistan is so extreme that a focus on teaching and learning remains critical. First, USAID could learn from evaluations of what has not worked on previous programs, coordinate with other donors operating in this space, and continue investing in what is known to work—such as scripted lessons focused on foundational skills development; tailored support to teachers; and clear, measurable, and achievable benchmarks tracked at the classroom level.

Interviews in this assessment indicated significant weaknesses at three key points: (1) the role of district-level authorities to support schools and teachers, (2) the role of head teachers to support teachers' instruction in the classroom, and (3) the system of continuous professional development to upgrade teachers' skills. Any intervention in these areas would require a systems-strengthening approach (see Recommendation 1) and should be tailored at the provincial/regional and district levels.

Annex A: Scope of Work



Improving Learning Outcomes for Asia-- ILOA Scope of Work

Pakistan Education Sector and Flood Response Assessment

Original Submission Date: November 22, 2022
Revised: December 14, 2022
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7200AA22N00008
COR: [REDACTED]

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Activity Information

Activity Name:	Pakistan Education Sector and Flood Response Assessment
Activity Start Date and End Date:	01/10/2022 – 04/28/2023
Funding Source (Specify USAID/Washington or the USAID Mission):	USAID/Pakistan
Leads at USAID Mission, if applicable:	██████████ Project Management Specialist
Contract Number:	7200AA22N00008
Activity Leads:	██
Geographic Coverage (cities and or countries):	Islamabad (ICT), Sindh, Balochistan, Punjab, Khyber-Pakhtunkhwa

1. Introduction and Background

To inform the development of its new CDCS, USAID/Pakistan is assessing the basic education sector in Pakistan and its recovery from the devastating floods of 2022. This Scope of Work (SOW) lays out a plan to assist USAID with its need for research and evidence to inform the CDCS. In collaboration with the USAID/Pakistan team, RTI will deploy a team of international and local experts to conduct desk review and in-country data collection, analysis, and assessment to conduct a national level basic education sector assessment through the dual lenses of inclusion and climate resilience, including provincial/regional level recommendations, and a flood recovery case study for understanding how best to support the long-term resilience and inclusiveness of the education sector. The overall activity will be managed by [REDACTED], ILOA Deputy Program Director, and in-country data collection will be led by [REDACTED], ILOA Senior Technical Advisor. They will assemble an in-country team of two Pakistani education expert consultants as well as home office expertise in secondary data analysis and technical review/quality assurance. The team will collaborate closely and work in conjunction with designated USAID/Pakistan program and technical staff to complete the assessment.

The assessment will take a phased approach. First, the RTI team will begin secondary data review and analysis of the extant literature and data including sources from USAID, other donors like ADB and the World Bank, Government of Pakistan (GoP, including provincial level EMIS data), and other available research. The team will meet with USAID/Pakistan Activity Lead Hafeez Samo on a weekly basis to discuss initial findings between December 2022 and January 2023. These initial findings will then inform the design for in-country data collection which will take place from late January and continue for up to 5 weeks, as needed. Throughout the data collection process in-country, the ILOA team will continue to communicate regularly with USAID/Pakistan, maintaining a collaborating, learning, and adapting approach to collection and interpretation of relevant information.

The assessment team will provide USAID/Pakistan with a series of deliverables in a variety of formats deemed of most use to USAID/Pakistan. We will coordinate with our ILOA communications partner Long Story Short on creating digestible, tailored communications materials for the range of target audiences. These will be finalized by the end of April. If requested by USAID/Pakistan, ILOA can provide additional support through an SOW modification to support integration of assessment findings into CDCS design by June 2023, and/or follow-on activities based on the recommendations in the assessment. This SOW delineates the tasks the team will carry out in preparation for, during and immediately following the time in-country.

2. Detailed Work Plan

The purpose of this assessment is to provide an overview and detailed account of the status of the Basic Education Sector (pre-primary, primary and secondary) in Pakistan through the dual lenses of inclusion and climate resilience to inform the development of USAID/Pakistan's new CDCS. This will include in-depth analysis of the status of the following subsectors:

- **Inclusive Education, broadly defined as access to quality education for marginalized and vulnerable populations, including** children with disabilities, girls, children in disadvantaged areas or from disadvantaged families.
- **Education and Climate Resilience**, to include exploration of the role basic education can play in climate change mitigation and adaptation and the extent to which the system is positioned to develop longer-term resilient capacity.

- **Flood Recovery**, a case study of the education system's recovery from the recent flood (at the provincial, district and local levels) as the means to identify lessons for building greater resilience throughout the system, and to document the existing practices, plans and strategies that may or may not be in place to be climate resilient.

Methodologies

This assessment will rely heavily on secondary sources (existing documents, studies, reports, GoP data, etc.) which will be supplemented through firsthand stakeholder interviews and field visits to selected project sites, schools, and/or other formal or nonformal educational or training institutions.

The methodology will first include secondary data analysis, and then primary data collection through interviews with a purposefully selected sample of key GoP counterparts in the Ministry of Education, provincial offices of education, and other potentially relevant government bodies, as well as selected development partners, local and international NGOs, consortia or umbrella organizations of civil society or nongovernmental actors, local researchers and/or research institutes, and private education providers. Visits to a few district education offices, primary and secondary schools, as well as a university or teacher training institution will also add firsthand, though certainly not representative, information regarding the status of the sector (adding insight from the points of view of actors at different levels of and vantage points within the system).

The research questions will evolve and develop through desk review and ongoing discussion with USAID/Pakistan, but may include and/or address the following:

1. **Inclusive Education.** What is the status of education in Pakistan in terms of access, quality of service delivery, and learning outcomes, especially in pre-primary and primary education? To what extent do service provision, service quality and educational outcomes vary and or exhibit any inequities across various populations or geographic areas – i.e., in terms of rurality, provincial or other geographic differences, language or ethnic groups, socioeconomic status, gender, inclusion of children with disabilities, and conflict- or crisis-affected areas? What are the ongoing key barriers to girls' education/schooling? What are the barriers to education for students with special needs? And, after mapping the existing/recent interventions implemented to address these inequities, how can USAID support the Government of Pakistan (GoP) to improve its performance in gender equity and special needs education?
2. **Climate Resilience.** What capacities and assets (i.e., policies, structures, budgets, data-systems, etc.) exist in the Pakistani education system that create opportunities for USAID education programming? To what extent does climate change affect education service delivery, learning outcomes and infrastructure planning? What, if any, basic education programming is currently being implemented in Pakistan to promote climate resilience? What does the system need to develop to foster better climate resilience overall?
 - a. As part of the assessment of Climate Resilience, we will conduct a **flood recovery case study**, exploring how the floods have impacted access, quality and continuity of basic education in the affected areas of Sindh, Balochistan, South Punjab, and select districts of KP and how the education systems at the local, regional and provincial levels have been able to address to those impacts. We will also explore the longer-term recovery of earthquake affected areas of AJK to look for lessons learned from other environmental disasters in Pakistan.
 - b. How have the flood-affected areas responded to the crisis, and what accounts for the differences? Is there any evidence that they may respond similarly in other natural disasters or conflicts?

- c. To what extent has education addressed exposure or sensitivity to natural hazards? How could it in the future?
 - d. Within the school system, which groups are most affected by natural disasters (e.g., the 2022 floods)? Are women, girls, children/people with disabilities, and other marginalized groups affected differently? Does the education system response to natural disasters account for the ways different populations may be disproportionately impacted?
 - e. What is the two-way interaction between the risks associated with different disruptions to schooling and the education sector, particularly at the school and community level?
 - f. What resilience capacities exist at the individual, school, community and system level that positively influence education access, safety and learning?
 - g. What are the sources of social cohesion, cooperation and resilience in the education system, in particular at the level of communities, schools, teachers and learners?
3. Through the above lenses of inclusive education and climate resilience, what is the current status of:
- a. **Curriculum** – To what extent are students learning key elements of climate resilience and/or disaster risk reduction through the curriculum? Do they have the basic skills to enhance resilience and improve capacity to respond to disasters? What specific skills are students developing, what deficiencies may exist in their education in relation to the requirements for continued schooling or entering the labor force? Does the curriculum exclude certain groups of the population? Does it meet the needs of girls, children with disabilities, and those marginalized or disadvantaged for any reason?
 - b. **Teacher Professional Development** – What is the status of the teaching profession (in terms of quality, level of pay, credentialing, licensure, and accreditation of teachers, professionalism of teachers, demand for/supply of teachers)? How is the teaching profession impacted by climate-related disruptions to the education system? Are teachers prepared to meet the full range of needs of their students under normal conditions as well as when schooling is disrupted? Are they able to support the resilience of the communities, families and learners they serve? Are they adequately supported by the system to do so, and what system supports are in place to help them develop these skills?
 - c. **Assessment** – To what extent does the existing assessment framework measure foundational skills, knowledge, and domains for pre-primary children and core skills (math and reading) for primary students? To what extent does the assessment framework identify early when students are falling behind or need additional support? To what extent are assessments adapted to the needs of learners with disabilities? To what extent does the assessment framework effectively measure the knowledge and skills needed to progress through different levels of education and be climate resilient?
 - d. **EdTech** – How is education technology being leveraged and utilized to support teaching and learning in basic education? How can EdTech be a source of inclusion and not exclusion in Pakistan? How can EdTech be leveraged to support climate resilience? What opportunities and challenges could be further explored to enable the GoP to improve the use of education technology?
4. What is the **current landscape of actors and stakeholders** in the education sector and what are the many areas of focus for their existing programming and funding? This will include information on the current programming, recent past efforts, and future investment strategies and plans of the GoP as well as major non-state actors (local NGOs, CSOs, and international NGOs) and development partners (bilateral and multilateral agencies).

5. What, if any, are the **current gaps** in donor support for education and what are the priority areas in which USAID could potentially have the most impact in Pakistan with the anticipated levels of basic education funding?
6. What is the relationship of the education sector with other **key sectors** (health, democracy and governance, economic growth)? How can programs funded by the United States Government work synergistically for improved outcomes in education?
7. What are the **risks, uncertainties, or potential constraints** to effective provision of USAID support in any of the subsectors?

Specific Tasks

As mentioned in the introduction, the sector assessment technical team will take a phased approach and begin Phase 1: data review and planning prior to travel to Pakistan; Phase 2: in-country data collection for up to five weeks; and Phase 3: data analysis and completion of appropriate assessment deliverables. The work to be accomplished during each of these phases is described below.

Phase 1: Secondary data review prior to travel to Pakistan & virtual planning:

- Meet weekly with USAID/Pakistan to jointly monitor progress in data collection and analysis and reflect on the implications of emerging findings for the sector review
- Gather all relevant documents and datasets and conduct analysis
- Draft a literature/desk review
- Extract from relevant documents information pertinent to the main issues to be addressed in each of the methodologies described above
- Based on the findings of the secondary data analysis, develop with USAID/Pakistan the in-country data collection plan, stipulating provinces and districts to be visited and specific individuals for interview
- Develop interview guides/questionnaires to support field interviews with key stakeholders
- Conduct virtual research team meetings to orient on research questions, methodologies, and instruments
- Agree with USAID/Pakistan on approach to collaboration between the technical team and Mission staff as well as on specific roles to be played by Mission colleagues during the in-country period of the assessment
- Agree on list of stakeholders with whom to meet and develop a schedule for those meetings during in-country data collection

Phase 2: In-country Data Collection

As noted, we propose to develop the in-country data collection plan in response to the findings of the secondary data review. For the purposes of this SOW, we include the below tentative plan as a placeholder. The team proposes to stagger visits to Islamabad (covering federal and ICT levels), Punjab (Lahore and Southern Punjab for case study), Sindh (Karachi and sampled districts for case study), Balochistan (Quetta, and sampled districts for case study), and/or KP (Peshawar, and sampled districts for case study). We omitted the Newly Merged Districts of KP and AJK for security reasons and Gilgit-Baltistan due to the difficulty of traveling to reach the region during the winter season and obtaining No-Objection Certificates.

	Week 1²³ (Feb 6)	Week 2 (Feb 13)	Week 3 (Feb 20)	Week 4 (Feb 27)	Week 5²⁴ (Mar 6)
██████	Islamabad, Karachi	Karachi, Lahore	Lahore, ISB		
████	Islamabad, Karachi	Karachi, Lahore	Lahore, ISB		
Consultant	Islamabad, Sindh	S. Punjab	Quetta, Balochistan	KP	ISB
Consultant	Islamabad, Sindh	S. Punjab	Balochistan	KP	ISB

Week One

- Face to face assessment team meetings on roles, responsibilities, and expectations
- Security briefing with Embassy Regional Security Officer
- In-brief with USAID/Pakistan and review of assessment approach, methodologies and schedule of meetings and assigned roles and responsibilities for Mission staff participating in the assessment
- Meetings with selected Ministry of Education counterparts, including those responsible for pre-primary, primary, lower secondary and secondary education, as well as those responsible for curriculum, materials, and teacher professional development
- Meetings with officials in charge of pre-service teacher professional development
- Meetings with bodies overseeing and/or representing private/non-state education providers
- Meetings with development partners and principal NGO actors active in the education, youth and education in crisis sectors
- Visit one primary school in ICT

Weeks Two— Five

- Location-specific security briefings, daily updates of situational change
- Meetings with selected provincial and district-level education officials including Secretaries of Education and sub-departments
- Visit flood-affected schools
- Interviews with School Heads and lead teachers
- Focus Group Discussions with affected teachers, parents, and students (as possible)
- Meetings with provincial development partners, and principal NGO actors active in the education, and humanitarian response sectors
- Weekly consultations with USAID/Pakistan
- Team time to debrief, write up notes, and begin organizing information (0.5-1 day per week)
- Regional Travel

Phase 3: Data Analysis and Reporting following return from Pakistan

- Ongoing weekly consultations with USAID/Pakistan
- Input into USAID/Pakistan CDCS planning by early March 2023 (in whatever form requested by USAID)

²³ Pending receipt of visas to travel to Pakistan. If visas are not received in time, local consultants will begin data collection as scheduled and ████████ will come to Pakistan later in February/early March to conclude data collection in the capital cities.

²⁴ Week 5 will be determined based on status of data collection.

- A dissemination strategy outlining the deliverable products that would best serve the various needs and target audiences identified by USAID/Pakistan
- Draft assessment deliverables submitted to USAID/Pakistan for comments
- Final assessment deliverables

3. Duration and Time Frame

The activity will begin officially Wednesday, January 10, 2023, and conclude following the finalization of the final deliverables which we anticipate being Friday, April 28, 2023.

4. Deliverables

On ILOA, we have partnered with communications firm Long Story Short (LSS) to help develop tailored, graphic, and digestible communications materials for activities. In conjunction with USAID/Pakistan and LSS, based on the initial findings and recommendations of the assessment, we will develop assessment deliverables which stand the greatest chance of being *utilized* by both key internal and external stakeholders including the USAID/Pakistan Mission, GoP officials, other donors, etc. For the purposes of this SOW, we use the term “assessment deliverables” to encompass what this might include.

- Input into USAID/Pakistan CDCS planning by early March 2023 (in whatever form requested by USAID)
- Draft assessment deliverables submitted to USAID/Pakistan for comments
- Final assessment deliverables

5. Activity Checklist and Relevant Indicators

Prior to finalization of the SOW the following checklist must be completed:

	Yes	No	n/a
Has the Mission requested an in-brief/inception meeting?	X	☐	☐
Has the Mission requested an out-brief meeting?	X	☐	☐
Will translation of the final report be required?	☐	X	☐
Will the terms of the Branding Implementation Plan-Marking Plan need to be negotiated/revised?	☐	X	☐
Will 508 compliance be required for any deliverables? If so, which ones?.....Not applicable	☐	☐	X
Has the Mission indicated any specific protocols for government engagement or meetings that RTI should be aware of?	X	☐	☐

Relevant Indicators to be determined (TBD) upon finalization of ILOA Performance Monitoring Plan

6. Staffing with Roles, Responsibilities, and Levels of Effort

Personnel	Responsibilities	Level of Effort (days)
██████████ RTI	██████████ will serve as RTI's activity manager for and conduct data collection and analysis for the first two weeks of the field study. She will provide oversight for all other components and co-draft the assessment deliverables.	40
██████████ RTI	██████████ will serve as the senior technical lead for the basic education sector assessment. He will travel to Pakistan and lead on drafting the assessment deliverables.	30
Consultant	The local experts are Pakistan-based. They will identify and organize meetings, conduct data collection and analysis, and assessment deliverables drafting.	80
TBD, Local Logistics Consultants	2-3 local consultants will assist with administrative and logistical support, as well as data collection needs as identified by the research team. This may include (but is not limited to) logistics and operations, scheduling, and note taking.	60
TBD, Local Interpreters	Three provincial interpreters will accompany the team for the duration of weeks 2-5 of field study.	TBD
RTI Home Office Support and Quality Assurance		
TBD, RTI	TBD is an education analyst and will conduct desk research and draft the literature review.	10
██████████ RTI	██████████ is RTI's inclusive education expert and will conduct secondary data analysis, co-develop evaluation plan, data collection tools, and contribute to primary data analysis and assessment deliverables writing to ensure gender and inclusion lens	15
Consultant	TBD will serve as research expert, and provide climate resilience/flood response expertise and will conduct secondary data analysis, co-develop evaluation plan, data collection tools, and contribute to primary data analysis and assessment deliverables writing to ensure climate resilience lens	15
Implementing Partner	TBD will manage consultant's subcontracts under this activity and coordinate with RTI and USAID for oversight, review, and management of all aspects of the subcontract.	8
██████████ RTI	██████████ is ILOA's Research and Evaluation Sr. Technical Advisor, will review evaluation plan and assessment deliverables for quality assurance	3
██████████ ILOA Project Director, RTI	Coordination with USAID and Activity Manager, review and management of final deliverables	3
██████████ ILOA Operations Director, RTI	Management of all financial invoicing and reporting	3
██████████ ILOA Project Associate, RTI	Project coordination and operations support.	3
Editor, RTI	Final editing and formatting of deliverables.	5

Additional:

Do you need:		
Translation	No. of pages	TBD
Interpretation	No. of days	TBD, up to 40 (2 x 20 days)
Other large costs we need to include?		Airfare, Security , Hotel, Ground Transportation

7. Timeline of Tasks and Proposed Travel

Tasks	Wk 1 Dec 19	Wk 2 Dec 26	Wk 3 Jan 2	Wk 4 Jan 9	Wk 5 Jan 16	Wk 6 Jan 23	Wk 7 Jan 30	Wk 8 Feb 6	Wk 9 Feb 13	Wk 10 Feb 20	Wk 11 Feb 27	Wk 12 Mar 6	Wk 13 Mar 13	Wk 14 Mar 20	Wk 15 Mar 27	Wk 16 Apr 3	Wk 17 Apr 10	Wk 18 Apr 17	Wk 19 Apr 24
Draft and finalize SOW	X																		
Gather and review all relevant documents	X	X	X	X	X	X													
Conduct desk review/secondary data analysis		X	X	X	X	X													
Develop in-country primary data collection and travel plan						X	X												
Develop interview guides/questionnaires to support USAID/Pakistan field interviews with key stakeholders						X	X												
Agree with USAID/Pakistan on approach to collaboration between the technical team and Mission staff as well as on specific roles to be played by Mission colleagues during the in-country period of the assessment	X	X	X	X															
Agree on list of stakeholders with whom to meet and develop a schedule for those meetings during the in-country portions of the work plan				X	X	X													
Logistics planning/support						X	X												
Pre-departure meeting						X	X												
Fieldwork								X	X	X	X	X							

Tasks	Wk 1 Dec 19	Wk 2 Dec 26	Wk 3 Jan 2	Wk 4 Jan 9	Wk 5 Jan 16	Wk 6 Jan 23	Wk 7 Jan 30	Wk 8 Feb 6	Wk 9 Feb 13	Wk 10 Feb 20	Wk 11 Feb 27	Wk 12 Mar 6	Wk 13 Mar 13	Wk 14 Mar 20	Wk 15 Mar 27	Wk 16 Apr 3	Wk 17 Apr 10	Wk 18 Apr 17	Wk 19 Apr 24
Conduct analysis of interview and site visit results										X	X	X	X	X					
Feedback to USAID with findings/recs for CDCS planning												X	X						
Draft assessment deliverables with LSS													X	X	X				
With USAID for comment															X	X			
Finalize assessment deliverables with LSS																	X	X	X

Annex B: Interview Question Inventory

Pakistan Basic Education Sector Assessment – Interview Script

Note: Not all questions will be asked to all respondents based on their position and experience. Additional clarification questions may be added as well as questions to explore additional lines of inquiry as they arise.

Hello, my name is _____ and I am here to learn more the current state of the education sector. This conversation will help us in developing our new strategy and humanitarian response in line with National Action Plan of the Government of Pakistan to support the children of Pakistan. Thank you for taking the time to talk with me today. This interview should take about 45 minutes of your time, which we greatly appreciate.

- Your name will NOT be mentioned anywhere related to this interview / or associated documents.
- Your participation is very important, but you do not have to participate if you do not wish to.
- If you agree to participate, I will ask you some questions.
- We will be taking notes and recording the audio from this interview.
- We believe there is no risk to you in participating in this need identification.
- You will not personally benefit from participating in this interview, but we believe the need identification could potentially improve how education stakeholders respond to crises.
- Are you willing to participate? Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right. Can we get started?

Participant provided consent: ☐ YES ☐ NO

Initial Question	Additional Questions
Sector Overview	
How long have you been working in this function or position?	
Can you please tell me a bit about the state of education in your area? What are its greatest strengths? What are your biggest challenges?	Why?
As we were reviewing the information published by the government from your area, we noticed that... <i>[insert regional challenge]</i> . Can you help me understand this? Why do you think it is happening?	
What are the current government regulations and policies for NGOs/international nongovernmental organizations (INGOs) working within area?	
How is the above aligned with the National Action Plan of the Government of Pakistan?	
What differences do you notice in the delivery of education services in urban areas versus rural ones?	What is hindering the delivery of service to rural areas? What do you think can be done to improve this? Are there certain groups in rural or urban areas which suffer the most? If so, why?
How are provincial/district-level budgets allocated to schools?	Do the schools in greatest need receive the funding they need? If no, why not?
Tell me about the process to implement the Single National Curriculum in the classroom. What have been the successes? What are the biggest challenges? Are teachers adequately prepared to implement the curriculum?	Does the curriculum address the needs of students with special needs? Does the curriculum address issues related to children's social and emotional learning? Does the curriculum address issues of climate change and/or risk reduction?

Initial Question	Additional Questions
Are there adequate teaching and learning materials for teachers to use which are adapted to the curriculum? What are the gaps?	
In addition to having the inputs necessary to deliver the curriculum, do teachers have the pedagogical skills necessary to help students learn? What are the gaps?	Have teachers received any training or orientation related to the new Single National Curriculum?
Speaking of teachers, tell me a bit about the state of teacher professional development in your area. Is there sufficient supply of teachers? If not, what are the nature of any shortages in teacher supply (subject areas, areas of specialization, geographic areas, ...)? How are teachers deployed?	Who (what level in the system) makes decisions regarding where a teacher is deployed? How are female teachers deployed, specifically? Are there enough female teachers in rural areas, specifically? Why or why not? Sector plans in some provinces mention political interference as an issue related to teacher management. Is this a problem here? What do you think can be done about it?
At the school level, how are teachers supported to improve their teaching? Do they receive coaching or mentoring from anyone? Do they have peer-support groups? Other professional development opportunities?	Role of head teachers? District or tehsil level officers? (Curriculum support, quality assurance functions, etc.?)
What do you think are the students' greatest needs that are not being met?	Why? What do you think could be done to improve this situation?
We've noted that there has been a large amount of external funding to education sector over the years from various development partners and governments. Yet, education is still struggling in many ways. Why do you think this is?	
Please share best practices for NGOs/INGOs working in collaboration with government in this province/district.	
What are the most common challenges or conditions in the communities of the district or region?	In terms of: Safety and Security Humanitarian Access Collaborations with Provincial, Districts and line departments
How NGOs/INGOs expedite humanitarian response and long-term sustainable development projects within this province/district.	
Please share names of NGOs/INGOs working in this province/district.	
Inclusion	
We've also noticed that girls' participation rates in schooling have continued to lag behind boys'. Why do you think this is? And what do you think can be done?	Are there social or cultural factors that affect schooling for girls? What are these? How do you think this can be overcome?
What are other populations of learners that may be marginalized in [this province/district]. What is being done to promote access and learning for these marginalized learners?	What are the main constraints to better serving marginalized learners? Where have you seen success in providing access and achieving improved outcomes for these populations?
We've noticed that there are a number of disability policies and legislations to include persons with disabilities in society and schools in Pakistan. But we've also understood that there are gaps in how children with disability are accessing and completing school. Do you see this happening? If so, why do you think this is?	Is there a lack of capacity for inclusive education? What are parents/caregivers' role? Are there social or cultural factors that affect schooling for children with disabilities? How do you think this can be overcome?
How do you define inclusion? What efforts have been made to communicate with schools, communities and parents about what inclusion means?	
How well do the provinces, districts, and tehsil level offices coordinate and function together on issues of equity and inclusion? What does this look like?	What are the barriers to better coordination?

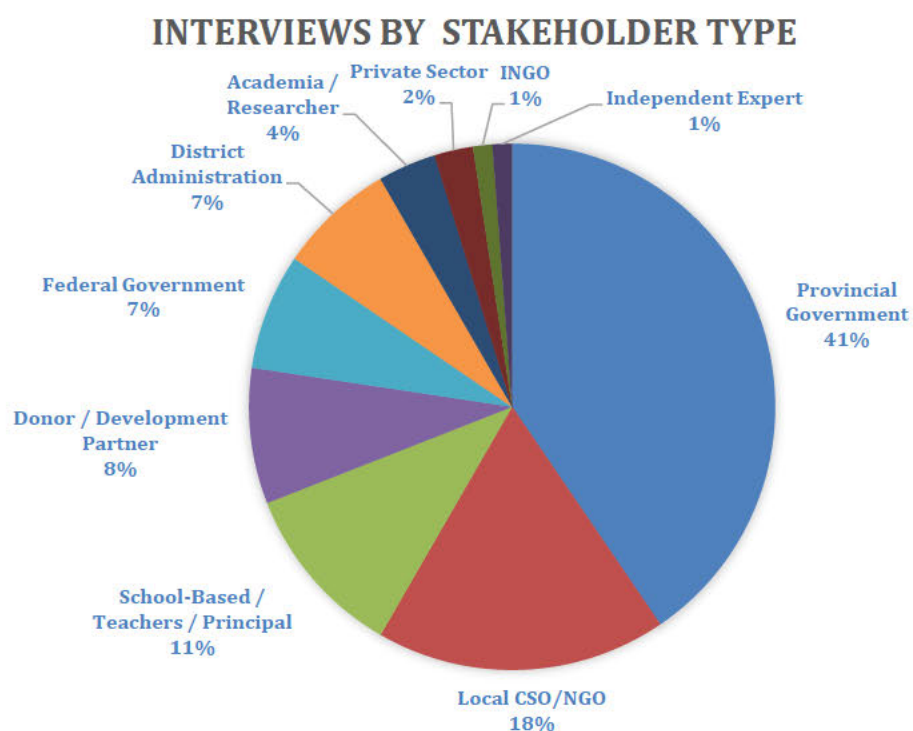
Initial Question	Additional Questions
How well do other government departments like health and social welfare coordinate to meet the educational needs of students with disabilities?	What keeps them from coordinating better? Which departments lead this effort?
How are learners with disabilities identified? Can you describe this process for me?	Are there service providers who provide early detection/intervention and who are they? Does it reach all families? If not, how can it be extended to reach everyone? How are parents/caregivers engaged in this process?
Once identified, how are students with disabilities monitored?	Do the provinces and districts have data across the same indicators for children with disabilities? (Enrollment, completion, dropout, learning outcomes through appropriate measures, by gender)
It seems that there are special schools which cater to children with disabilities, but these are separate from the main government schools. Why is this? Are there opportunities to integrate them?	Are schools accessible to children with disabilities? What keeps schools from being more integrated? And if you had to guess, what percentage of the total number of disabled children are attending school?
How are teachers trained on special education? Do all teachers receive some training related to special education or inclusion?	In pre-service and/or in-service? If not, why not? What are the main constraints to providing that kind of training?
Are student learning assessments adapted for children with disabilities? What about teaching and learning materials?	If not, why not? Where does the roadblock lie? (<i>probe: system capacity to develop, distribute, support the use of them</i>)
Are you familiar with “Universal Design for Learning” principles? What does it mean to you? Do the administrators and/or schools implement any of these?	
Do students receive any kind of specialized support for their own disability? (individualized education plans? Therapies? Tutoring/remediation?) If not, what needs to happen to improve services?	Do some disability types receive better services than others? (e.g., “visible” disabilities like physical limitations, deafness or blindness, vs. “invisible” like cognitive impairments?)
In your opinion, is the government Inclusion system in its current state capable and ready to respond to communities-related inclusion issues?	
Flood Response	
What have been the impacts of the recent floods on schooling in your area?	How has this affected the most vulnerable? Girls, children with disabilities?
Have children been able to keep learning in the midst of the flood response? Why or why not?	Were any distance learning modalities implemented? If yes, what were they? How successful do you think those modalities were in reaching all learners? If not, why not?
How have teachers been affected by the floods? Have they been able to keep teaching? Have teachers received any kind of psychosocial support training?	What would be the greatest support to teachers in such disasters? How can they be better prepared for future disasters?
Has the recent flooding, following on the heels of the pandemic, led to any teachers leaving the profession in this [province/district/locality]?	If yes, has that effected one level of education or specialized area of teaching more than another?
In your area, has any funding been provided for schools to prepare for disasters? If yes, what was the funding used for? If no, why was there no funding? What happened?	Were disaster risk reduction programs implemented?
In your area, has any funding been provided for schools for to respond to the most recent floods? If yes, who provided the	What was done during closures, reopening?

Initial Question	Additional Questions
funding and what was it used for? If no, why not? What happened?	
How were/are boys and girls impacted differently during school closures?	
Was/is there any extra support for children from marginalized situations/families?	What form did this support take?
Have children returned to school? If not, who has not returned and why?	
What do you think should be done differently next time?	
Is there any government provision / exemptions exists for flood response for the humanitarian sector?	What is/are the provision / exemptions and please share government current SOPs to timely deal with such emergency / flood
Please share names of potential existing local actors / NGOs and INGOs for flood response	Who we can partnership with / or as the Donor for the flood response?
Climate Resilience	
Pakistan is not new to natural disasters and the government and external donors have tried to make the education system less prone to disaster. In your view and in light of the recent floods, have these efforts been successful? Why/why not?	Gaps/barriers/challenges?
Does the Single National Curriculum contain any content about climate change? If yes, what is it?	Do teachers know how to teach this in the classroom? What are their challenges?
Besides the curriculum, have teachers received any other training in either disaster risk reduction or climate change? If yes, please describe. If not, why not?	Has the government provided the training, or is it a separate NGO or other provider? Do teachers have materials for teaching this?
Have any counseling or other services been provided to teachers, students or families to help them cope with the psychosocial stress resulting from recent crises?	If yes, what kind of services and provided by whom? If not, why do you think they weren't?
How well educated are the parents/caregivers about risk reduction to disasters and climate change?	Do they see the value in keeping their children in school when natural disasters strike? What about girls – are they staying in school as much as the boys? Why/why not?
How do you think the education system can equip learners with the knowledge and skills to adapt to climate change?	Can students learn about climate change in their schools? Integrate climate themes into basic literacy and numeracy skill development? Can they engage in activities to address climate change (i.e., community clean ups, school repairs, "green clubs") with their community?
What do you think needs to change in your area for schools to become more focused on climate change?	(i.e., funding, government support/policy, curriculum, community awareness, etc.)
Is there any government provision / exemptions exists for climate resilience for the humanitarian sector?	What is/are the provision / exemptions and please share government current SOPs to timely deal with projects related to Climate Resilience
Please share names of potential existing local actors / NGOs and INGOs in term of Climate Resilience	Who we can partnership with / or as the Donor for the flood response?
Private Schools	
Private schools account for over 40% of total enrollment in Pakistan. And even given increasing financial costs, enrollment has increased by 10% since 2008. Why do you think this is?	
What relationship does your office have with private schools and private school providers in this [province/district/locality]? Is any public funding or support of any kind provided to private schools in this [province/district/locality]?	How would you like to see the relationship between the public and private sectors in education evolve?
Do the governmental education authorities in this area oversee private schools in any way?	Do they provide accreditation? Do they conduct any quality assurance? Do they

Initial Question	Additional Questions
	monitor learning outcomes in private schools?
What are the factors that lead families from poorer and rural areas to send their children to private school?	Are parents motivated to send boys and girls equally?
Do you see a difference in how private schools are managed and run than public schools? What are they? And how do the management practices of different types of private schools differ?	
Do low-cost private schools address children with disabilities?	If yes, how are they doing so? And how does that differ from government? If not, why not?
Do you think there are any opportunities for expansion of low-cost private schools to underserved communities?	What do you think is needed to have private schools better serve otherwise disadvantaged or marginalized areas?

Annex C: Interviewees by Stakeholder Type

Stakeholder Type	Number of Interviews
Provincial Government	34
Local Civil Society Organization / Nongovernmental Organization CSO/NGO	15
School-Based / Teachers / Principal	9
Donor / Development Partner	7
Federal Government	6
District Administration	6
Academia / Researcher	3
Private Sector	2
INGO	1
Independent Expert	1
Grand Total	84



Annex D: List of EdTech Interventions

Intervention	Description and benefits	Geographical scope
EdTech Hub's work	Alignment with MoFEPT's existing plans and programs	Scale
Establishing Digital and Innovative Wing at MoFEPT	This new wing will implement the National Digital and Innovation in Education Strategy and oversee change management for technology and innovation enterprises for Federal Directorate of Education, AJK, GB, and the entire country of Pakistan via remote learning infrastructure.	National
Teacher Training Institute Reframing	MoFEPT aspires to engage the private sector to develop the next-generation teacher training capacity of the College of Education, Islamabad.	ICT
Blended Learning Project	In 2020, MoFEPT rolled out a blended learning pilot project in 80 schools of the Federal Directorate of Education in Islamabad.	ICT
STEAM Education Initiative is funded by Malala Fund	MoFEPT and Malala Fund joined hands at the beginning of 2022 to promote science education in government high schools, especially for girls. In the next five to seven years, the project intends to improve all 13,000 public high schools.	ICT. Learning will be adapted and scaled up to other provinces and regions.
Targeted Instruction in Pakistan (Islamabad Capital Territory)	In collaboration with MoFEPT and the E&SE Department of KP, the Centre for Economic Research in Pakistan, and Harvard University are implementing this project in ICT and KP. The intervention is financed by the World Bank, and a portion of the study is funded by EdTech Hub. The intervention seeks to increase fundamental literacy in the selected schools by utilizing technology.	KP and ICT
Smart-Classroom Project	The project deploys blended learning in 400 classrooms at primary, middle and higher levels in GB, AJK and ICT. It builds on blended learning pilots by adding more in-person teacher training, developing video / online teacher training courses, and conducting research and monitoring.	ICT, AJK, and GB

Intervention	Description and benefits	Geographical scope
School on Wheels by Tech Valley and Google	10–12 fully equipped mobile schools for multigrade primary teaching were prepared and handed over to provinces for use with flood response and out-of-school children.	ICT, Sindh, and Balochistan
Chromebook by Google	The intervention established a Google Workspace System in partnership with Google for Education in all public schools (Federal Directorate of Education) in ICT to incorporate Google Workspace for Education, use Google tools for distance learning, and create digital infrastructure in schools.	ICT
Learning Passport	UNICEF, in partnership with Microsoft, is piloting Learning Passport in a selected number of schools in Karachi and Hyderabad.	Sindh
Procurement of digital teaching and learning content from private EdTech service providers, including Pakistan Telecommunication Company Ltd.	MoFEPT has a plan to procure digital content for students and teachers from EdTech companies for its various tech-enabled initiatives that include TeleSchool, RadioSchool, a learning management system, six over-the-top (OTT) channels (i.e., media service offered directly to viewers via the internet), and smart-classroom initiatives. MoFEPT also intends to make these resources available to provinces for customization and use.	National
Virtual Teacher Training Initiative	Via an interactive website (connected with the E-Taleem portal), numerous learning courses and content will be available from various trainers and educators to teachers across Pakistan. Teachers may be issued digital certificates for the corresponding training upon completion of the courses and associated evaluations.	National
TeleSchool, RadioSchool (Pakistan Telecommunication Company Ltd. TeleSchool OTT App)	Under the World Bank's PREP project, MoFEPT—in collaboration with the Ministry of Information Broadcasting—already launched TeleSchool and RadioSchool during the school closures caused by the COVID-19 pandemic. In addition, MoFEPT has a plan	National

Intervention	Description and benefits	Geographical scope
	to launch an educational app with six OTT channels and a content library that children across Pakistan can utilize to learn for free.	
Establishing a Center of Excellence for Distance Education	The Ministry has partnered with Allama Iqbal Open University (AIOU) to broadcast K–12 digital programming. To satisfy the MoFEPT’s goal for distance education, AIOU must strengthen its facilities, including upgrading studios; acquiring broadcasting, recording, and post-production equipment; and enhancing the ability of AIOU staff to operate these channels.	National
UNICEF’s Country Engagement Strategy for Pakistan’s EdTech Ecosystem	UNICEF envisions that the EdTech landscape could make education more inclusive, accessible, and equitable and improve the learning quality for all children, particularly the most marginalized. This plan outlines UNICEF’s aim to contribute to this objective by assisting governments in enhancing the EdTech landscape and its enabling environment. Steps will involve using technology to expand access to and the quality of education for all children and adolescents in Pakistan, with a particular emphasis on the most disadvantaged and vulnerable.	National
E-Learning	E-Learning is an umbrella initiative under which the School Education Department of Punjab collaborates with the Punjab Information Technology Board on a number of EdTech solutions. The solutions include but are not limited to introducing learning management systems for teachers and students; developing and deploying learning apps for teachers and students; and digitizing teacher training content, student learning content, and e-monitoring tools.	Punjab
Digital School Program (Education Above All, Taleemaba, JICA)	The Digital School Program in Pakistan aims to develop a digitally enabled learning model to support out-of-school	National

Intervention	Description and benefits	Geographical scope
	adolescent learners to move toward certification. Initially, the program will focus on the middle grades (grades 6–8) in nonformal education centers. The program also aspires to broadcast primary and middle-grade content over dedicated government channels.	

Annex E: Bibliography

Note: This bibliography combines sources cited in both the desk review and the final report.

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