


2013-2018

Five Years of Education Reforms



SINDH



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Wins, losses and
challenges for
2018-2023



ACKNOWLEDGEMENTS

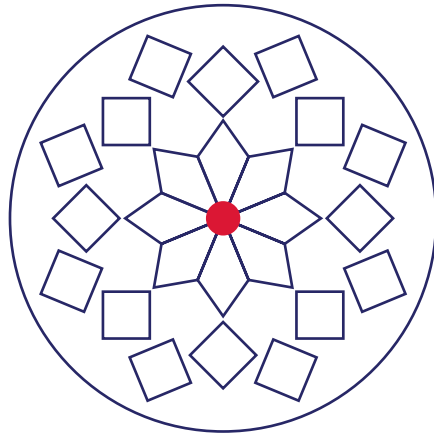
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Five years of
education reform

SINDH

Wins, losses and
challenges for the future

2018-2023

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by
Shehzad Roy
Zohair Zaidi

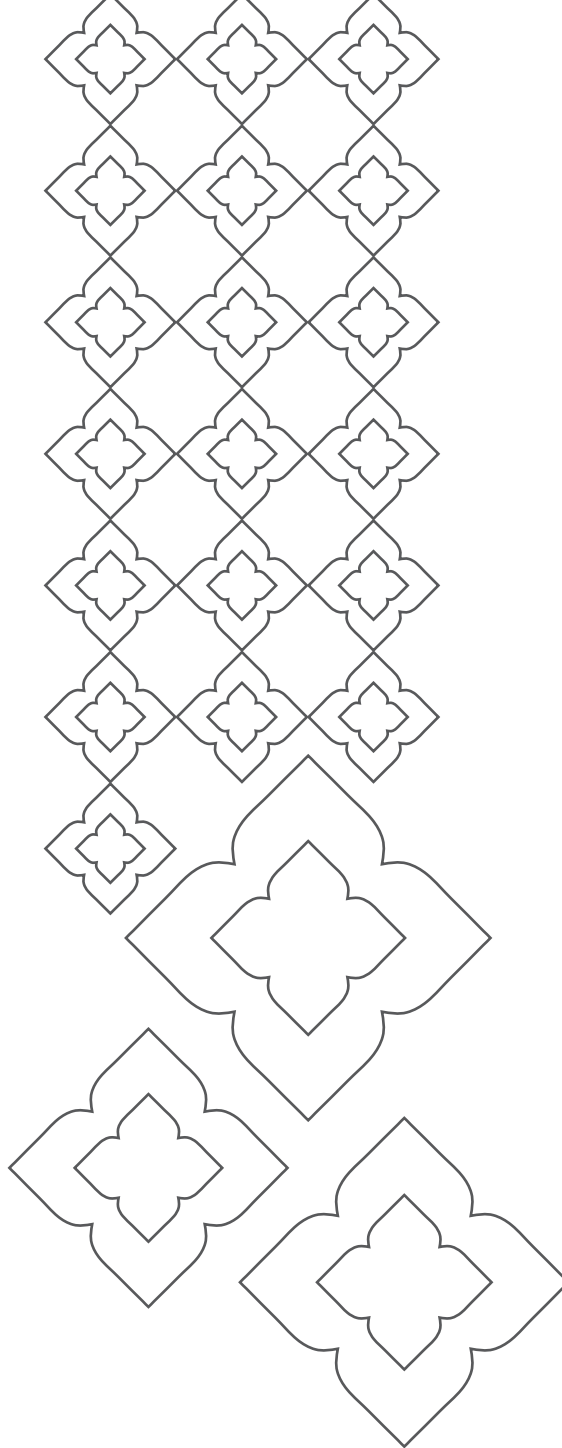


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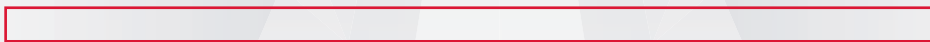
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WHY PROVINCIAL PROFILES, AND WHAT THEY ENTAIL



1.1 Framing the debate in 2018

Pakistan is bracing for its next general elections scheduled to be held later this year. It is quite evident that we are about to enter a phase of progressive increase in both intensity and frequency of political contestation and election rhetoric leading to full throttle election campaigns by all major political parties. This presents a remarkable opportunity for a country about to undergo its second democratic transition of power. It represents democracy taking root in the overarching structure of the state's governance apparatus. The more daunting challenge however is to embed the idea of democracy in how the state, at different levels, responds to the needs and demands of services falling exclusively under its purview as enshrined in the social contract with its citizens – the constitution.

Democracy is inextricably tied to the idea of accountability. It empowers citizens – as clients under the social contract to hold their elected leaders accountable against certain promises, commitments, and demands. The coming election debates in Pakistan will establish the parameters of expectations in the country for the period from 2018 to 2023. What should these expectations be?

Despite significant strides in the right direction, the country's education landscape entails very little that Pakistanis can be proud of. According to the most recent official national statistics, there are 22.6 million children out of school, the majority of whom are girls. This estimate is alarming on its own. However, what is even more worrying is the quality of education that children who are enrolled in school receive. From the very limited data that government produces in terms of learning outcomes, it

is clear that Pakistani children are not being equipped with the cognitive skills they need to succeed individually, for their families, for their communities, for their neighborhoods, cities and villages, and for the country at large. Across the country and across both the private and the public domain, very little learning takes place in Pakistani schools.

The proposition in this document, and the accompanying three documents that will be published for each of the other province is simple. It is reasonable to expect universal enrolment. It is reasonable to expect high quality teaching in government schools. It is reasonable to expect that the products of the Pakistani education system can be empowered to change their own lives, change the lives of their families and communities, and change their country—all for the better. Since education is principally a service delivery area that is the domain of the provinces, these expectations must be framed for each province. This document represents such an effort for the province of Sindh.

1.2 Policy complexity and simple metrics

The provision of education is a political issue, as much as it is a technical one. But how does political contestation influence the quality of education that Pakistani children receive? Politicians influence almost every aspect of education service delivery. They decide how much money is to be allocated to education, they decide what processes are to be followed in hiring teachers, they decide where schools are needed, of what level, and what kind. The decisions politicians take today are not binary: schools are being closed, and merged, new schools are being opened. Some of these

schools are ordinary government schools, some are “superschools”, some are being opened by non-government entities, some by religious organisations, and some by profit-making entities. Schools are being handed over to non-profit organisations because governments cannot seem to fix them, and schools are being shut down where there are not enough students. Yet government itself acknowledges millions of out of school children, millions of dropouts and astoundingly poor learning outcomes.

1.3 Beyond competition between provinces

In this complex environment, simplicity is important but difficult to find. Alif Ailaan’s most recent District Education Rankings (DER) report was published in December 2017. The report’s primary purpose is to provoke debate about the provision of education using widely agreed metrics in infrastructure and education quality. The rankings highlight some long-standing trends in education, including

- The disproportionate provision of primary schools, compared to middle and high schools
- The retention crisis, as manifest in high levels of dropouts between primary and middle schools, informed by the relatively low supply of middle and beyond middle schools
- The imbalance in the supply of schools for boys versus the number of schools for girls at the primary, middle and high school levels
- The DER also generated significant debate among political leaders, and provincial department representatives as they compare the performances of provinces relative to each other.

Channeling the DER, the objective of this document is to provide a deeper understanding of province specific successes, challenges and opportunities in education, and prompt a wider recognition of the disparities within rather than between provinces. This report seeks to identify reforms attempted during the current government’s terms in office, take stock of the overall situation in the province, using province-specific data, which in some cases is not available nationally, but only for specific provinces, highlight the changes needed to take advantage of opportunities created by reforms, and frame an agenda for the future.

1.4 Sindh’s unique challenge

If trends from national discourse on education are indicative of the overarching narrative, the province of Sindh, despite being the second largest province of the country, lags far behind others. However, this narrative neglects the specific challenges in Sindh, and the progress achieved in the province. Part of the reason it is important to see Sindh from a lens customised specifically for it is the kinds of reforms undertaken in the province. Ones that sought to tackle structural inadequacies as opposed to instant service delivery solutions.

This report attempts to engage in a treatment of Sindh given its unique context. We identify challenges and enduring gaps whilst acknowledging meaningful progress that needs to quickly evolve and grow, in order to address the mammoth needs of the province. Providing access to high quality learning for all school age children in Sindh remains a distant dream, but without a map to get there, we will remain lost. Fortunately, the Government of Sindh has been drawing this map since 2013, and the promising results may help convert the dream, into a reality.



Sindh's approach to education reform

2.1 Objective and policy pillars

Sindh education sector plan is the umbrella document that was designed to inform, steer and then oversee the Sindh government's priorities and approach towards the education sector reform in the province. The plan highlights key strategic areas of focus through a five year period for the government to ensure efficacy in delivery by improving:

1. Equity and access
2. Quality of education and learning outcomes
3. Sector governance and accountability
4. Sector financing

The objectives outlined for the Government of Sindh under the education sector plan can be categorised under each of the four policy pillars noted above. Following is a list of objectives that the government set for itself during 5 years from 2014 to 2018:

- Increasing equitable access to quality ECE, primary and secondary education, with the aim of eliminating social exclusion, enhancing transitions, promoting social cohesion, and providing greater opportunities for access, participation and learning to marginalised groups, particularly girls
- Improving the quality of learning outcomes through strengthening the teaching/ learning process: combining formative and summative assessment for the development of self-reliant individuals capable of analytical thinking and self-learning; improving the quality of teachers through merit-based selection and recruitment;

improved accountability, and establishing a competency based constructivist system of educational professional development

- Strengthening governance and service delivery by improving the functioning capacity from the school-community level up to district and provincial level – special priority given to strengthening district level management. This will include: agreed school standards; IT enabled evidence for accountability at all levels of trained management, aligned to education devolution; school consolidation policy and school based budgets and management; and strong public partnerships
- Enhancing the equity of resource allocation and improving the fiscal sustainability and effectiveness of educational expenditure, thereby fostering transparency and accountability in the use of public resources

2.2 Four themes feeding into the overarching goal

The plan lays out an exhaustive list of objectives that ensure access to quality education for all children in Sindh. Four policy pillars and associated objective, as identified in the education sector plan, can be viewed through four themes around education that ought to be used as instruments to adequately capture the expanse of the education landscape.

1. Better government schools – Despite the tremendous growth in the private school sector across the province and the country, still a significant majority of children (mostly those who cannot afford private education) attend government schools. This makes

government schools the center of any meaningful education reform enabling access to education for the marginalised majority of the country's children

2. Better quality of education – radically improved learning outcomes – The education challenge facing the province as well as the rest of the country is not just confined to the issue of access. Arguably much more complicated task than providing access is that of ensuring education quality. Making sure that children receive the best possible education and are able to retain it in a way that benefits them academically and also in terms of developing cognitive skills for mobility later in life
3. Improved data regimes – Accurate, robust and timely data is a critical component of effective policymaking. Accurate and timely data not only facilitates evidence based policy interventions but also inform policy research that can steer policy making apparatuses in the right direction
4. More budget spent more effectively – Just the scale of the education challenge calls for more resources to be allocated to the sector while ensuring that the money allocated is spent in the best manner possible to extract utmost impact

The subsequent section of the document that highlights some commendable steps taken to reform education provision in Sindh can broadly fall under one or more of these four themes.



What changed for the better in Sindh

As described in the previous section, reforms attempted in Sindh can be categorised into four key thematic areas. The first are efforts to improve government schools. The second are interventions aimed at better learning outcomes and increased quality of education. The third are related to the availability, timeliness, richness and robustness of data related to education. And the fourth and final is the quantum and quality of allocations and spending on education.

Some of the most prominent reforms pursued by the Government of Sindh are aimed at tackling the structure of governance overseeing the delivery of education. While the effort to restructure the framework of service delivery is commendable, the speed with which these reforms take root in the system has to increase significantly in order for the impact to be felt at the school level. This section will briefly outline some key reforms pursued by the government under each of the four themes mentioned above.

3.1 Better government schools

The government of Sindh has undertaken some critical steps in improving the state of government schools by streamlining administrative processes that inhibit such improvements.

3.1.1 School management committees

The first of these steps was recognizing the utility of school management committees (SMCs) across all functional schools at all levels throughout the province. While there is a significant distance yet to be travelled in this

regard, the government has acknowledged the centrality of fora like SMCs with representation from among parents to drive the objective of improving the state and functioning of government schools. Until last year, over 35,000 SMCs across the province received funds worth over Rs.1.2 billion. While this renewed focus on SMCs is commendable, several limitations hamper the effort to put parents and the welfare of their children at the forefront of school-level decision-making. First, decision-makers need to take into account the time lag in disbursement of funds from the relevant offices at provincial headquarters to SMC accounts and how much time the process leaves for SMCs to realistically allocate the funds for interventions that are useful and sustainable. Perhaps even more importantly, whilst the conceptual basis for SMCs as instruments of engaging parents, and expanding the ownership of schools to the communities they serve is sound, in practice there are several administrative, economic and social constraints to parental agency in the affairs of the schools that their children study at.

3.1.2 School specific budgets

Another step to improve the educational experience of children in government schools has been the sustained focus on school specific budgets. School specific budgets are aimed at rationalizing allocation of resources at the school level in terms of finances that can be used to meet school specific needs like furniture, stationary, in-class materials etc. Over Rs. 5 billion have been released under school specific budgets to all primary and secondary schools in Sindh. The establishment of schools as cost centers is critical to education reform, however the process cannot end at higher allocations, or even higher releases alone. The public financial management regime requires substantial work

so that each rupee being spent is made more effective.

3.2 Improved learning outcomes

Two reforms undertaken by the government of Sindh are linked closely to the objective of managing, tracking and improving the quality of teaching and learning among students: merit-based recruitment of teachers, and regular standardised testing of students. In addition, the Sindh Education Foundation represents an important instrument to experiment and pilot reform and to engage non-state actors, including the private for-profit sector in education innovation.

3.2.1 Merit-based recruitment of teachers

For the first time in Sindh, the government introduced mechanisms to recruit teachers based on their performance in standardised tests. Merit-based recruitment is a significant step in the right direction for two key reasons. First, merit-based recruitment of teachers ensures selection on the basis of demonstrated competence judged by their test scores – meaning the students have a better chance of learning. Second, the informal political economy of rent seeking and patronage embedded in the education department through the instrument of political appointment of teachers in the past has been rendered irrelevant and obsolete.

It is worth noting that the Government of Sindh has relied on external service providers including IBA Sukkur, Sindh University, and National Testing Serve to conduct tests based on which teachers have been recruited. This has provided

a layer of ring-fencing between education department officials and the testing process, increasing confidence that the process is not malleable to political intervention. In the last five years, over 30,000 teachers have been recruited on merit by the Sindh education department. This change has the potential to be revolutionary for the education sector in Sindh. This potential is contingent on the follow up actions to this first, important and pioneering change.

3.2.2 Standardised testing of learning levels

One of the most important milestones in education in Sindh has been the establishment of a consistent benchmark for testing learning outcomes for school children. In 2013, the Sindh government began administering the Standardised Achievement Test (SAT). This standardised exam tests student aptitude in language, maths and science at the Grade 5 (class V) and Grade 8 (class VIII) levels. As of early 2018, five annual SAT exams have been conducted in the province providing invaluable insights into learning outcomes. In order to ensure transparency and incorporate technical expertise, the government has procured the design and conduct of the SAT exam externally. This has helped engender confidence in the neutrality and impartiality of the process. More importantly, the SAT tests have exposed the extremely low levels of learning outcomes being produced in the province—and despite bitter criticism and increased scrutiny, the Sindh government has steadfastly continued to consistently conduct the exam, and publish its results transparently. The emerging picture has been instrumental in shaping the postures and approaches of various reformers and agents of change in Sindh, particularly within government. Continued integration of the SAT

results in decision making about how resources are allocated and deployed to improve learning outcomes will be incredibly important to sustaining real education reform in Sindh.

3.2.3 Sindh Education Foundation

Over the last few years, Sindh Education Foundation (SEF) has developed a robust public private partnership program to expand access to quality education for children in Sindh. SEF uses a holistic approach to education that accounts for the quality of the educational experience including school management, quality of teaching, level of learning, and infrastructural provisions. Currently there are over 550,000 students enrolled in over 2,400 SEF schools. These include students not just at pre-primary and primary levels but also at middle, high and higher secondary levels. Each of these students are registered as enrolled by the government under the SEF program.

Partnerships with private sector are based on criteria including infrastructure provision, followed by recruitment of head teachers to manage each school. Head teachers then play a part in recruitment of teachers. Appointed teachers are assessed through subject content tests and the findings are used to tailor specific training manuals. As a means to ensure quality of teaching and learning, teachers and students are assessed through periodic tests against minimum requirements set by SEF.

The program ensures quality is embedded into the system that assesses performance and that is tied to the partnership contract between SEF as the government body and the private sector stakeholders managing individual schools. SEF and other private-public partnership efforts raise questions about the domain of government, questions about procurement processes and

of course, the wider debate about what public services should look like in practice—but SEF also offers a substantial scale of operations that are seemingly more efficient than the mainstream public school system. The best practices from these kinds of models can certainly help inform reform of the mainstream.

3.3 Improved education data and statistics

Four initiatives stand out as significant steps towards introducing data driven governance leading to policy interventions and accountability at the school level.

3.3.1 Biometric verification of teachers

Sindh became the only province in Pakistan to document biometric information of teachers in a centrally managed data center. Biometric verification of teachers at schools has been a revolutionary step in monitoring teachers' attendance and addressing the longstanding issue of politically-appointed ghost teachers.

3.3.2 Human resource management information system

A human resource management information system (HRMIS) unit has been established to document all relevant data on teachers employed by the education department in Sindh. The unit documents the recruitment, and posting of teachers working across all schools in the province. The management information system is another example of data driven

approach to education governance in the province. HRMIS is also an invaluable instrument that can be used to document teacher performances against job descriptions and job deliverables. The system needs to be built further to be more useful in shaping how the government deals with the challenge of linking teacher performance with career growth in the future.

3.3.3 Real time monitoring

A Directorate General for Monitoring and Evaluation was established within the education department to ensure real-time school-based monitoring across the province. The department has hired over 400 monitors equipped with devices that upload data on a range of input indicators across the province. The next step should be to include indicators on learning outcomes and education quality, such as test scores. Such added functionality in the real time monitoring system will ensure a holistic, real-time appraisal that can feed into policy interventions, and decision-making at different levels.

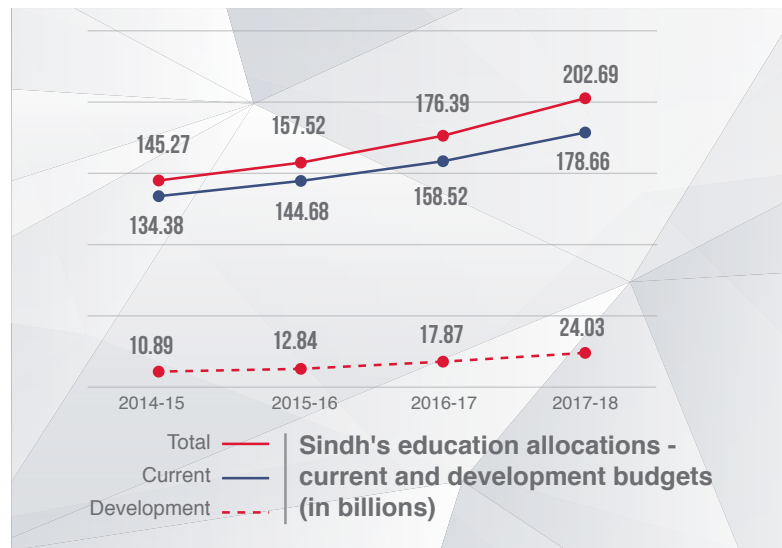
3.3.4 Management cadre

Traditionally, there used to be no distinction between the teaching cadre and district management cadre in the province. One critical reform pursued by the government was to make the two cadres distinct.

The change in the system brought about as a result of this reform means that head teachers are not promoted to the management cadre automatically. Instead, half the management cadre is now formed by entrants from the civil services and remaining half by those promoted from the teaching cadre. It also means that teachers who are promoted to the management cadre cannot be demoted back to the teaching cadre. This ensures streamlined roles for both cadres with set criteria against which promotions are authorised.

3.4 Increased and improved funding of education

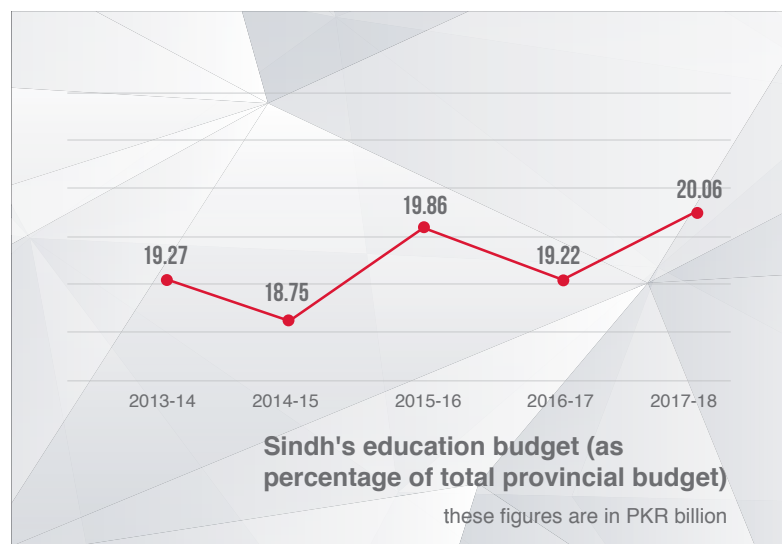
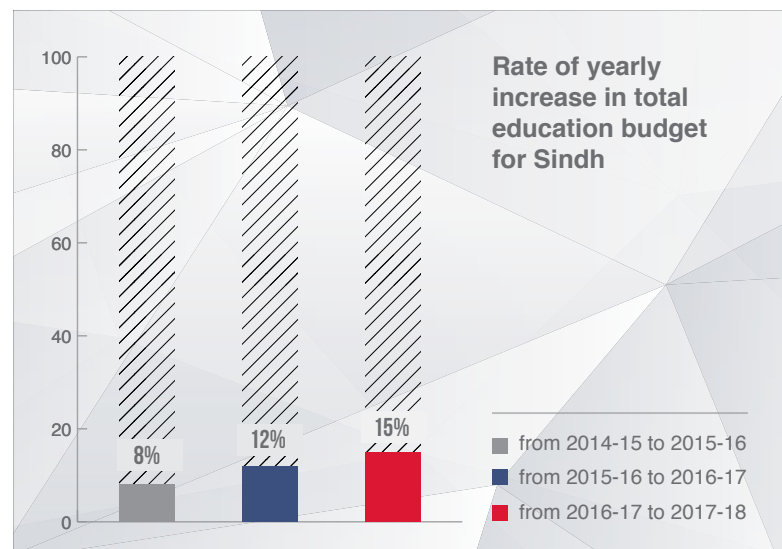
Total education budget in Sindh has increased from Rs. 145 billion in 2014-15 to Rs. 202 billion in 2017-18. This represents a significant increase of 39 percent over four years.

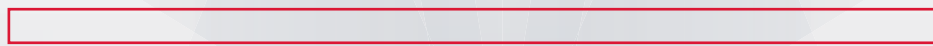


The rate of increase in the budget has steadily increased on a yearly basis.

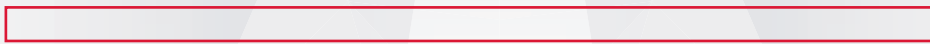
3.4.1 Adherence to the 20% of budget commitment

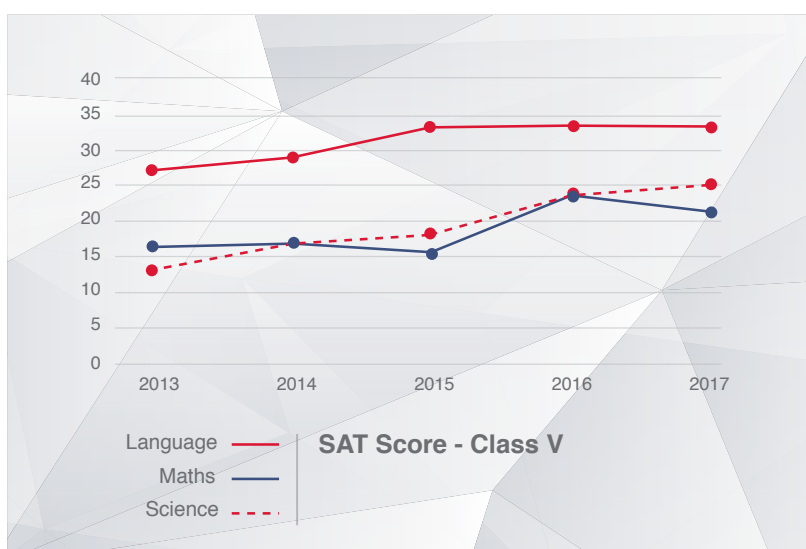
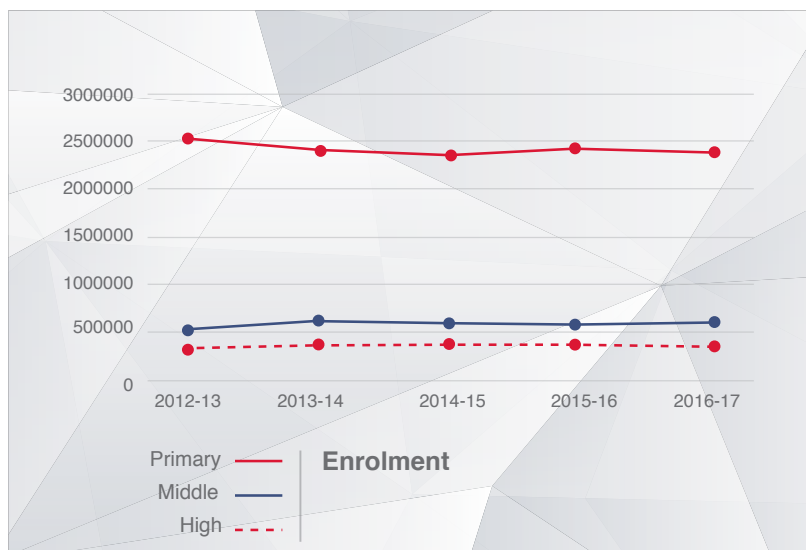
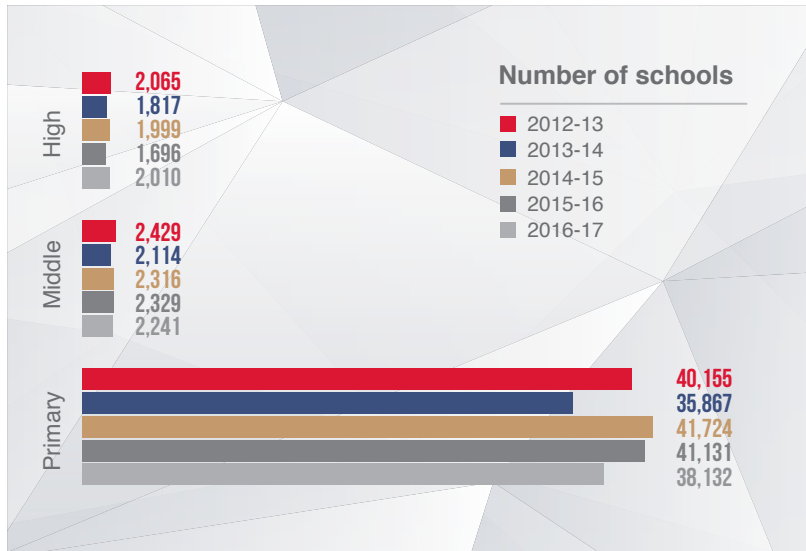
Sindh, like all other provinces in Pakistan, is committed to spending at least 20% of its total budget on education. Below is the annual performance of Sindh, in terms of allocations, with respect to this commitment. The government has underlined its commitment to spend 20 percent of its budget on education in the 2017-18 budget. The next step would be to ensure adequate spending of this allocation going forward.





Key education challenges for Sindh in 2018





Notwithstanding the gains made through reforms thus far, there is a long way to go before the objectives set out in the Sindh Education Sector Plan 2014-18 can be achieved. Since we are already in the year 2018, it is evident that these objectives will not be met within the allocated time period of five years. This underscores the need to build off of reforms enacted during this period to launch a more robust set of actions to achieve the objectives in the coming years. This section will use data from the National Education Management Information System (NEMIS), Standardised Achievement Test (SAT), the Government of Sindh's budget documents, and the District Education Rankings 2017 report to identify some key gaps in the provision of quality education to all children in Sindh.

4.1 Notable trends during the 2013-2018 period

In order to identify the challenges for the future, we first summarise three notable trends in Sindh during the 2013 to 2018 period. First, there has been no discernable improvement in the ratio of middle and high schools

to primary schools. This means that the pipeline of available places for children graduating from Grade 5 (class V) shrinks dramatically—ensuring high dropouts and low retention.

Second, there has been no large increase in enrolment in Sindh. Despite widespread recognition of the crisis of out of school children, enrolment levels stayed largely stable—indicating the limits to the efficacy of government enrolment programmes that are initiated without the adequate long-term planning and care needed to ensure that children that visit a school continue to go back.

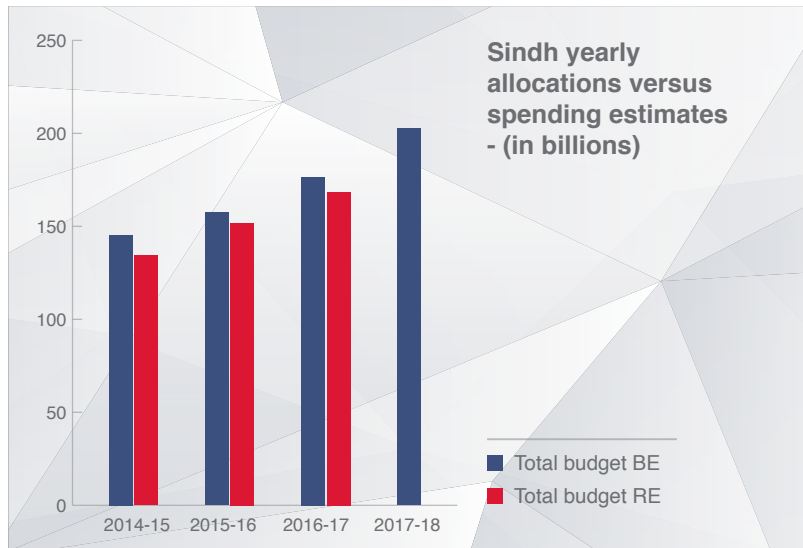
Third, that there has been a slow, but steady and substantial increase in the learning outcomes in Sindh, as evidenced by the SAT results. These results, while indicating an improving overall trajectory, continue to be worryingly low, and are symbolic of a deep and persistent crisis inside classrooms in Sindh, and across the country.

4.2 The challenge of increased and improved funding

As noted above, there has been a commendable increase in provincial education budgets over this period. However, improving the allocations for education in annual budgets is only a part of the fiscal solution required to address the state of public sector schooling in the province. Another, arguably much more difficult task requiring not just political will but robust reconfiguration of the system of public financial management, is ensuring improved and timely spending of the budget allocated for education each year.

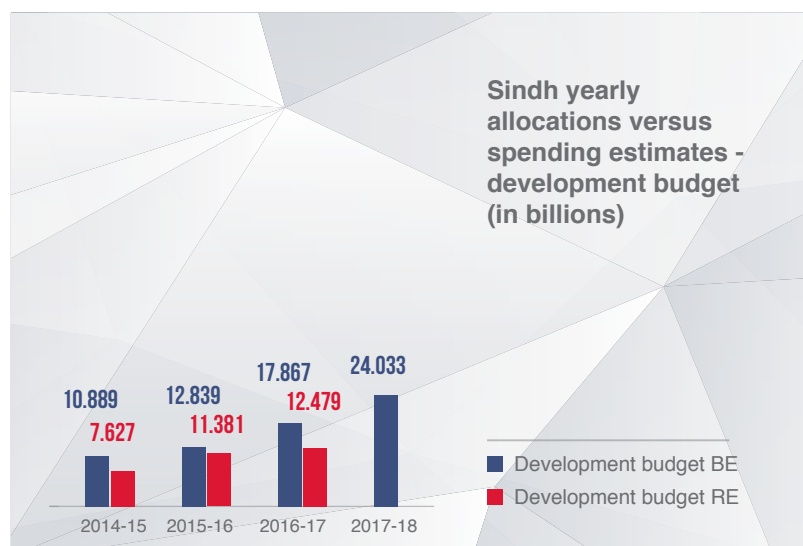
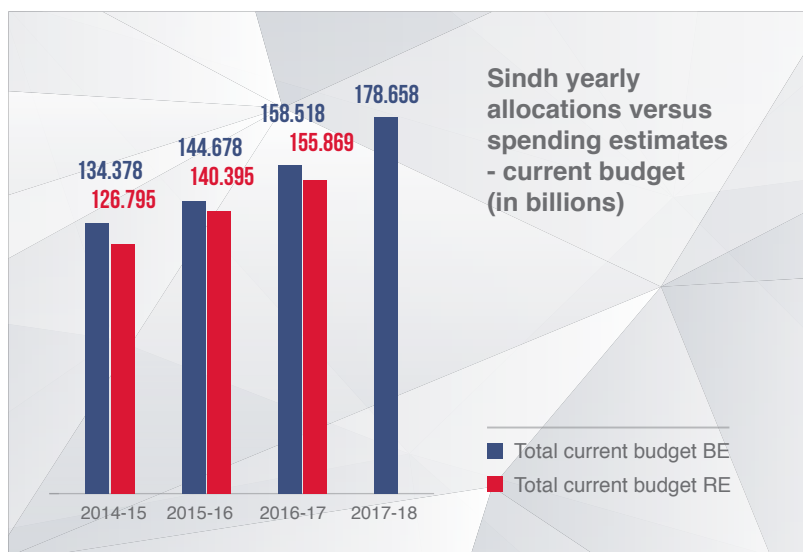
The notable improvement in allocations is not accompanied by similar improvements in spending patterns, though there is variance in how current and development budgets are spent. Budget estimates indicate allocations, whereas we take revised estimates to be indicative of actual spend. These estimates are provided in each year's annual budget statement where the budget estimates show the amount allocated at the start of a year, and revised estimates show the spending estimates for last year against last year's allocations.

Underspends for each year can be seen from the graph below that equates budget estimates and revised estimates (proxy for actual spending) for each year. The revised estimates for the ongoing



financial year of 2017-18 will be provided in the budget document for the year 2018-19.

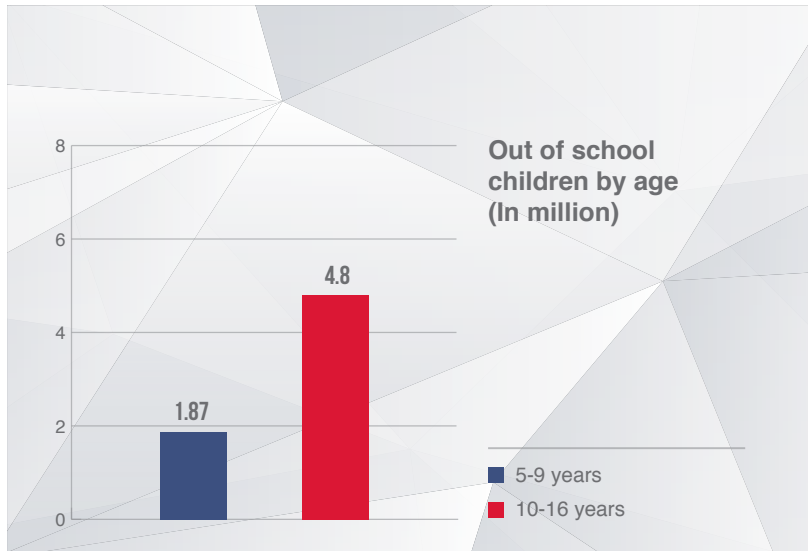
Breaking down the total education budget in Sindh between current and development components shows us that the bulk of underspends for each year are accounted for by the lack of robust spending of development budgets for each year. In order for yearly increase in budgets to deliver envisaged improvements in the quality of education provision, the province of Sindh will have to recalibrate its public financial management system so as to allow for more efficient flow of funds from the province, to the district, to the school level. Improved spending of available allocations represents a major opportunity for education in Sindh.



4.3 The challenge of better government schools

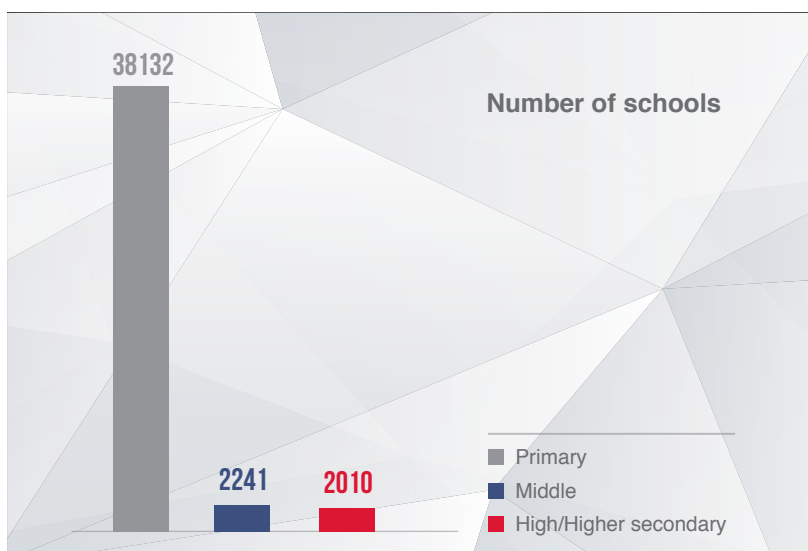
4.3.1 The out of school children (OOSC) crisis

According to Pakistan Education Statistics published in 2016, there a total of 6.67 million out of school in Sindh. Out of these children



1.87 million belong to the primary school going age of 5-9 years old. The remaining 4.8 million children are between the ages of 10-16 years corresponding to middle, high and higher secondary levels.

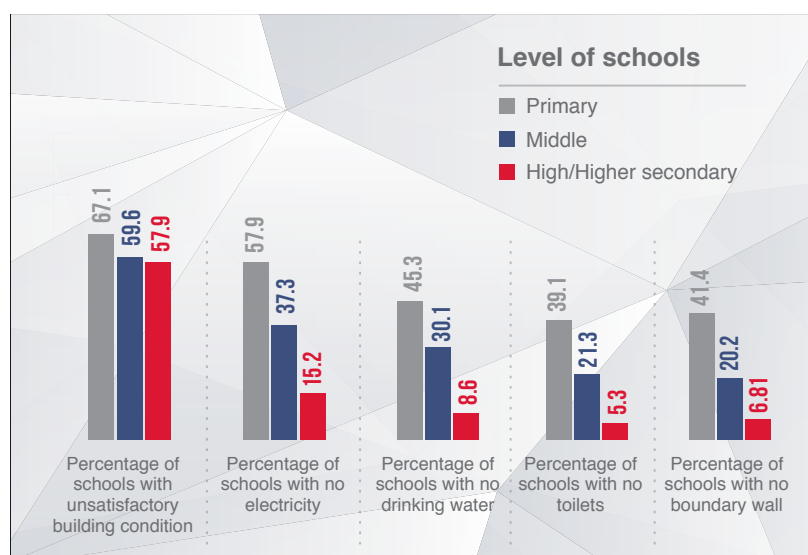
This implies that the most significant challenge in terms of ensuring maximum enrolment is the availability of schools at beyond primary level. However, unfortunately there is a massive imbalance between the provision of primary schools and those beyond the primary level. The graph below shows number of school at primary, middle and high/higher secondary level according to NEMIS 2016-17. Perhaps some of the difference is mitigated by



private schools, but the Sindh government has no consolidated record of private schools, and does not include private schools in its annual census of education for the provincial education management information system (EMIS).

4.3.2 The state of school facilities (or infrastructure)

According to NEMIS data for the year 2016-17, many schools in the province face significant infrastructural challenges. The lack of the most basic facilities in schools at primary, middle and high level, indicate the breadth of the challenge in ensuring access to quality education for children of the province. Tackling the issue of school facilities or infrastructure leads to obvious issues of operations and maintenance of those facilities at a predictable and effective frequency. Such systems require robust plans to address the fundamental gaps in school facilities or infrastructure. Furthermore, it requires a framework of accountability be embedded in the system to help identify levels of responsibility for government at various tiers, as well as rewards and punishments for those who deliver or fail to deliver their responsibilities.



4.3.3 The crisis of retention and of girls' education

Retention of students from primary to above primary levels is one of the most significant challenges that needs to be addressed.

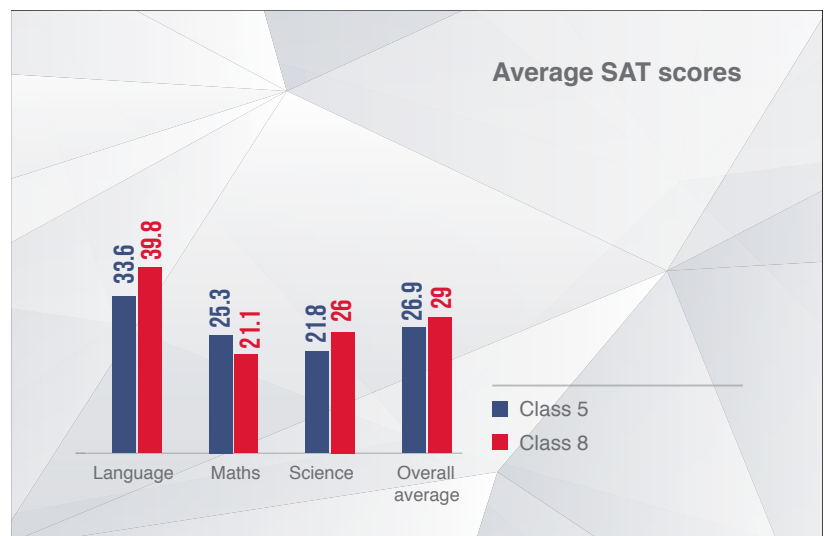
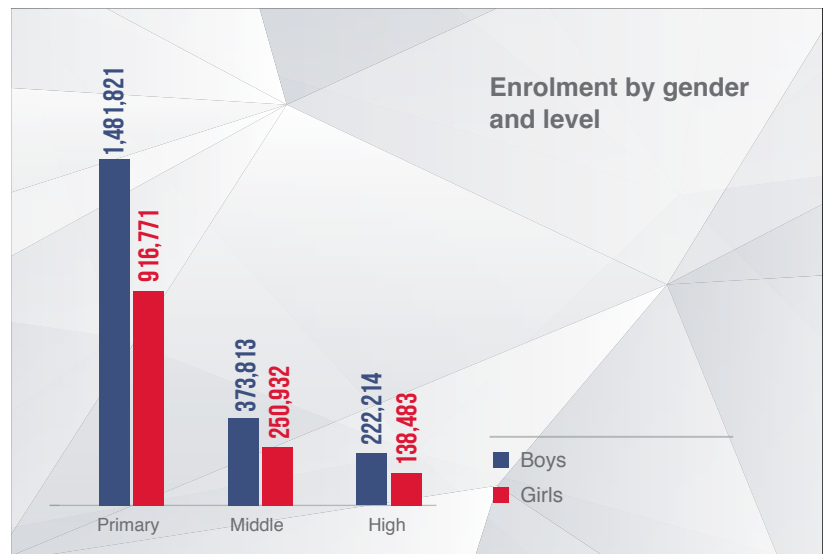
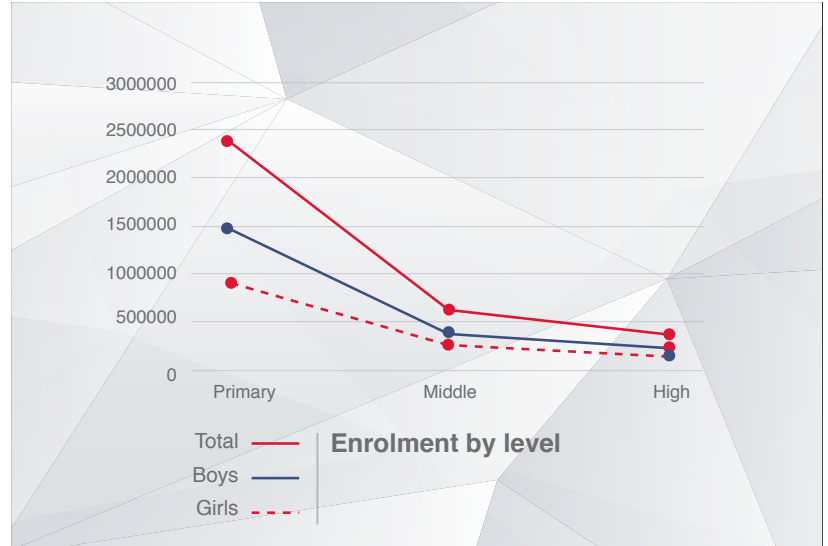
As is evident from the graph below, there is a remarkable drop in enrolment numbers between primary and middle and high levels. Total high school enrolment in Sindh is a mere 15 percent of total primary school enrolment. This implies that on average of every one hundred students that are enrolled in primary school, only 15 end up in high schools.

Access to education in Sindh is not only limited by the dramatic imbalance in primary versus above-primary level schools, but also in terms of gender. Ensuring equity in access to education is an important objective outlined in Sindh education sector program. However, there is a clear difference in enrolment numbers for boys and girls at all levels of schooling.

4.4 The challenge of improved learning outcomes

4.4.1 Poor SAT scores

Findings from the most recent SAT exams expose a worrying picture. Learning outcomes among students across the province are low. Average scores for language, maths and science are well below 50 percent at both the Grade 5 (class V) and the Grade 8 (class VIII) levels. Scores in maths and science are especially poor (both under 30 percent at both grade levels).



4.4.2 Passive and outdated matric and intermediate boards

Beyond the primary and middle school levels, there are exams results from the standardised board exams for Grade 10 (matric) and Grade 12 (Intermediate). There are five matric and intermediate boards in the province operated by the government. Matric and intermediate assessments represent two critical dimensions in students' academic journeys. Firstly, the assessment scores represent the culmination of school education – the output. At the same time, assessment scores indicate the input of talent being fed into the higher education system. Viewed from both angles, matric and intermediate board assessments are a critical component of the system. The quality of assessment need to be improved dramatically to ensure robust tracking and management of talent. A very basic analysis of examination questions for various matric and intermediate boards for different years reveal several flaws, including:

- Syntax and grammatical errors in how questions are framed does not allow students to get what it is meant to ask
- Exclusive focus on rote memorisation as opposed to gauging how well the students have internalised concepts
- Inaccuracies within the questions
- These issues need to be resolved on an urgent basis in order to ensure the robustness of the assessments carried out by matric and intermediate boards feeding talent into tertiary institutions of higher education.

4.4.3 A crisis of teaching

Accountability of agents hired as employees of the system is carried out in a linear fashion

in the private sector. Parents who pay fees to have their children educated act as principals overseeing how well a teacher is performing, how often they attend school, how well the headmaster is managing the affairs of the schools etc. One of the major criticisms of government schooling by notable neoliberal economists is that government systems do not allow for any such effective accountability mechanism. The Sindh government has taken a significant step in the right direction by initiating a human resource management information system that not only details relevant information for each teacher in each school, but also for the first time in history contains finalised and streamlined job descriptions of teachers. The challenge now is to effectively utilise this resource to implement a process of effective accountability of teachers against their agreed job descriptions.

For any education system to afford its students with the maximum opportunities to learn and excel, teachers are the most critical stakeholders. The system of accountability will come into effect only if teachers are adequately incentivised and disincentivised for good and bad performance. Like in any other profession where employees are expected to work their way up the ladder based on their performance, teachers in the public sector need to be managed within a framework that rewards good performance with career development.

A key issue that must be tackled to produce a meritocracy within the teaching profession is whether teachers' promotions should be based on seniority alone. The archaic manner of promoting teachers based solely on their years of service sucks the the motivation out from among teachers who are recruited on merit and are looking for ways to climb the hierarchical ladder based on their good performance. Another consequence of the current promotion

structure is that almost invariably, the most “junior” teachers are allocated to lower classes and as they become “senior” with years, they are moved to higher classes. Any substantial improvements to the system of education, and to the quality of education imparted, requires teachers to be provided with more opportunities to grow based on their performance. Another important aspect of this component is ensuring that teachers are equipped with both subject specific skills as well as pedagogical standards. In order for the system to have a sustainable supply of skilled talent, the government needs to undertake some very foundational reforms to the teacher training centers across the province. These centers should act as nurseries that pump fresh talent into the system, and for that to happen the government will have to allocate technical and financial resources required to upgrade these facilities as per the modern standards.

4.4.4 The challenge of content

Along with assessments and teachers, the content that is taught to students in schools is a critical component of quality. It is important to note that there is a clear distinction between curriculum and content. In Pakistan, conversations among non-governmental policy circles are often focused on curriculum. It should be noted that the curriculum is defined by basic standards and guidelines. The more pressing challenge for policymakers, and one that can be addressed on immediate footing is that of content. Content essentially means what the textbooks taught in school entail.

One issue that needs urgent attention is ascertaining whether the content published in textbooks does justice to existing curriculum standards and guidelines. The textbooks published by the government should be

invaluable instruments at the service of teachers whose responsibility it is to make students learn and understand different topics for different subject as per the curriculum standards. There is extensive literature from around the world that highlights how the content in textbooks should be framed and the basic criterion it should follow.

The first step in improving the quality of content taught to children is to issue contracts for textbooks on a competitive basis overseen by a technical committee formed by the government. This will be a critical first step towards allowing children and teachers in Sindh the access to modern and sophisticated instruments of learning that they deserve.

4.5 Wide intra-provincial disparities

Among the key challenges faced by all provinces in Pakistan is that of coherence, consistency and integration across the various districts in the province. Intra-provincial or inter-district differences are substantial and they have the potential to reinforce sociopolitical grievances and other problems of both real and perceived distributional justice across the province. The devolution of education to the provinces under the 18th amendment was meant to ensure the provinces are autonomous in making financial and administrative decisions. It was also meant as a requisite structural shift for effective management of education at the district level by “empowered” provincial headquarters. This should have led to provincial machineries ensuring an adequate focus in the districts that required them most. Quality education provision is among the most important equalizer in any society and hence it is critical for the government of Sindh to examine the trends where some

districts lag behind others across different indicators. It is imperative that the provinces have the intent, the plans and the resources to address these gaps. The following sub-sections provide rankings of districts in Sindh across a range of different metrics.

4.5.1 Primary school infrastructure score index

Alif Ailaan's District Education Rankings 2017 contain four indices for districts from all over the country. The primary school infrastructure index ranked all districts in the country based on cumulative scores on availability of satisfactory building, drinking water, electricity, boundary walls and toilets in schools. For this index, the top most ranked district from Sindh was Karachi East that was ranked at 62 in the national rankings. The table below shows all districts from Sindh with provincial Sindh specific ranks and also national ranks for reference.

Provincial Rank	National Rank	District	Province/Territory	School Infrastructure Score	Availability				Building Condition Satisfactory
					Electricity	Water	Toilet	Boundary Wall	
1	62	Karachi East	Sindh	77.5	85.8	77.27	86.36	85.8	52.27
2	64	Karachi South	Sindh	73.85	76.28	66.99	84.29	87.82	53.85
3	65	Karachi Central	Sindh	73.33	73.83	77.69	72.45	82.92	59.78
4	66	Larkana	Sindh	71.54	67.38	81.29	77.96	85.41	45.64
5	68	Karachi West	Sindh	70.4	61.17	67.4	80.22	92.31	50.92
6	69	Hyderabad	Sindh	68.68	68.87	64.79	82.11	84.08	43.52
7	70	Karachi Korangi	Sindh	67.7	70.98	68.39	74.14	91.67	33.33
8	71	Matari	Sindh	67.09	75.36	75.36	73.92	76.01	34.81
9	72	Jamshoro	Sindh	65.71	61.69	60.55	75	83.28	48.05
10	73	Naushahro Feroze	Sindh	63.4	66.7	87.64	65.95	61.37	35.34
11	74	Tando Allahyar	Sindh	63.09	62.35	53.97	72.06	80.29	46.76
12	75	Khairpur	Sindh	61.87	62.85	82.67	69.49	60.52	33.82
13	77	Shaheed Benazirabad	Sindh	58.59	55.81	69.63	58.58	68.32	40.63
14	78	Kambar Shahdad Kot	Sindh	56.57	59.48	55.64	69.54	66.57	31.62
15	79	Sukkur	Sindh	56.4	57.55	70.2	69.23	66.99	18.01
16	82	Dadu	Sindh	52.94	48.54	52.89	62.66	65.63	34.96

Provincial Rank	National Rank	District	Province/Territory	School Infrastructure Score	Availability				Building Condition Satisfactory
					Electricity	Water	Toilet	Boundary Wall	
17	83	Ghotki	Sindh	52.61	45.65	67.6	61.17	57.08	31.55
18	84	Shikarpur	Sindh	51.36	39.31	68.53	59.06	73.12	16.8
19	86	Karachi Malir	Sindh	50.64	35.67	46.19	61.03	77.73	32.58
20	90	Sanghar	Sindh	44.81	25.2	54.92	58.68	56.11	29.14
21	91	Mirpur Khas	Sindh	44.35	36.73	43.47	62.5	45.8	33.24
22	93	Tando Muhammad Khan	Sindh	43.77	24.52	50.96	57.04	60.02	26.33
23	94	Jacobabad	Sindh	43.24	46.72	51.91	46.41	45.65	25.5
24	96	Badin	Sindh	41.35	27.65	42.42	52.88	47.77	36.05
25	97	Umer Kot	Sindh	39.58	19.29	31.96	65.02	55.86	25.76
26	101	Kashmor	Sindh	36.71	25.71	57.04	41.53	39.72	19.54
27	110	Thatta	Sindh	32.97	14.48	18.91	59.5	42.59	29.37
28	112	Tharparkar	Sindh	32.73	14.75	19.25	51.09	42.97	35.58
29	143	Sujawal	Sindh	21.84	9.58	17.81	32.34	27.69	21.78

Top five districts of Sindh include four from Karachi, and Larkana, followed by Hyderabad at number 6. Umerkot, Kashmor, Thatta, Tharparkar and Sujawal are ranked at the bottom.

4.5.2 Middle school infrastructure score index

DER 2017 also include an index for middle school infrastructure using the availability of the same indicators in middle schools to calculate district scores. The table below ranks all districts of Sindh in addition to providing a column for national ranks for each district for reference.

Provincial Rank	National Rank	District	Province/Territory	School Infrastructure Score	Availability				Building Condition Satisfactory
					Electricity	Water	Toilet	Boundary Wall	
1	57	Karachi South	Sindh	86.49	89.19	89.19	91.89	93.24	68.92
2	61	Karachi East	Sindh	83.75	87.5	81.25	96.88	96.88	56.25
3	62	Hyderabad	Sindh	81.58	88.16	84.21	96.05	97.37	42.11
4	63	Karachi West	Sindh	80.98	78.05	80.49	90.24	95.12	60.98
5	64	Karachi Central	Sindh	80.79	81.19	86.14	87.13	93.07	56.44
6	67	Sukkur	Sindh	77.32	85.37	87.8	93.9	89.02	30.49

Provincial Rank	National Rank	District	Province/Territory	School Infrastructure Score	Availability				Building Condition Satisfactory
					Electricity	Water	Toilet	Boundary Wall	
7	69	Karachi Korangi	Sindh	74.72	75.47	73.58	88.68	96.23	39.62
8	70	Shaheed Benazirabad	Sindh	74.11	72.87	83.72	80.62	87.6	45.74
9	71	Naushahro Feroze	Sindh	74.1	80.77	90.38	80.77	81.41	37.18
10	72	Larkana	Sindh	73.44	70.31	82.81	75	87.5	51.56
11	73	Khairpur	Sindh	73.41	79.12	94.51	86.81	78.57	28.02
12	74	Kambar Shahdad Kot	Sindh	72.67	80	75	90	80	38.33
13	75	Tando Allahyar	Sindh	71.16	72.09	67.44	79.07	79.07	58.14
14	77	Matari	Sindh	70	70	80	75	65	60
15	78	Ghotki	Sindh	69.89	68.82	86.02	77.42	75.27	41.94
16	79	Karachi Malir	Sindh	69.73	60.81	60.81	81.08	91.89	54.05
17	82	Dadu	Sindh	65.96	61.4	68.42	82.46	78.95	38.6
18	83	Jamshoro	Sindh	65.81	70.97	58.06	77.42	77.42	45.16
19	86	Tando Muhammad Khan	Sindh	64.12	55.88	55.88	79.41	79.41	50
20	91	Sanghar	Sindh	62.43	50.47	63.55	71.96	87.85	38.32
21	96	Mirpur Khas	Sindh	59.4	50	64	77	65	41
22	104	Shikarpur	Sindh	56.23	49.06	69.81	64.15	73.58	24.53
23	107	Jacobabad	Sindh	55.94	62.32	56.52	65.22	68.12	27.54
24	108	Badin	Sindh	55.25	49.5	57.43	66.34	63.37	39.6
25	110	Kashmor	Sindh	54.81	42.59	62.96	70.37	68.52	29.63
26	120	Thatta	Sindh	49.52	33.33	26.19	73.81	73.81	40.48
27	128	Tharparkar	Sindh	45.45	23	30.99	69.48	70.42	33.33
28	131	Umer Kot	Sindh	43.71	28.57	47.14	58.57	60	24.29
29	148	Sujawal	Sindh	34.67	13.33	13.33	50	66.67	30

Like primary school infrastructure rankings, middle school ranking show a similar trend with top five districts dominated by four from Karachi. Hyderabad is ranked at number 3 with Sukkur slotted at number 6. Bottom five districts include Kashmore, Thatta, Tharparkar, Umerkot and Sujawal.

4.5.3 Education score index

The Education score index included in the district education rankings 2017 was comprised of measures for learning score, retention score and gender parity score. The learning score was calculated using findings from ASER 2016 report, whereas retention scores was calculated using the proportion of middle school enrolment as a proportion of primary school enrolment and high school enrolment as a proportion of middle school enrolment for each district. The gender parity score was calculated by taking out the proportion of girls and boys enrolment and retention between levels for girls and boys. The table below shows the scores and ranks for districts from Sindh. Unfortunately, data from ASER was not available for 5 districts because of which they have not been assigned ranks. The table does however contain retention and gender parity scores for each of the 5 districts as well.

Provincial Rank	National Rank	District	Province/Region	Education Score	Learning Score	Retention Score	Gender Parity Score
1	14	Karachi West	Sindh	71.86	86.17	48.22	81.2
2	15	Karachi Malir	Sindh	71.84	71.02	56.66	87.84
3	59	Hyderabad	Sindh	60.28	41.18	50.8	88.85
4	79	Naushahro Feroze	Sindh	55.55	62.92	39.6	64.13
5	80	Matari	Sindh	55.42	59.23	48.99	58.05
6	82	Ghotki	Sindh	53.65	45.48	45.8	69.68
7	83	Kashmor	Sindh	53.55	56.23	37.73	66.69
8	84	Sukkur	Sindh	53.46	39.91	42.26	78.21
9	85	Mirpur Khas	Sindh	53.44	48.48	44.19	67.64
10	87	Larkana	Sindh	52.73	34.81	44.58	78.79
11	88	Jamshoro	Sindh	52.69	42.96	39.39	75.72
12	92	Tando Allahyar	Sindh	51.77	43.33	42.38	69.6
13	94	Kambar Shahdad Kot	Sindh	51.6	42.06	37.4	75.33
14	96	Thatta	Sindh	50.95	50.05	34.9	67.9
15	104	Khairpur	Sindh	49.74	31.86	44.1	73.27
16	106	Dadu	Sindh	49.02	38.41	36.93	71.72

Provincial Rank	National Rank	District	Province/Region	Education Score	Learning Score	Retention Score	Gender Parity Score
17	107	Shikarpur	Sindh	48.72	38.13	39.68	68.34
18	115	Tando Muhammad Khan	Sindh	47.14	46.36	31.14	63.92
19	119	Sanghar	Sindh	45.5	25.26	43.69	67.54
20	123	Jacobabad	Sindh	45.03	33.26	34.2	67.63
21	124	Badin	Sindh	44.99	30.61	34.43	69.93
22	125	Shaheed Benazirabad	Sindh	44.95	19.64	41.36	73.84
23	128	Umer Kot	Sindh	44.14	22.82	38.98	70.62
24	139	Sujawal	Sindh	34.44	19.54	27.71	56.07
	-	Karachi Central	Sindh	45.84	-	60.35	77.15
	-	Karachi East	Sindh	45.1	-	56.77	78.54
	-	Karachi Korangi	Sindh	44.58	-	65.23	68.49
	-	Karachi South	Sindh	39.68	-	46.34	72.7
	-	Tharparkar	Sindh	29.99	-	25.9	64.08

Top 5 districts for the education index are Karachi West, Karachi Malir, Hyderabad, Naushaero Feroze and Matiari. Jacobabad, Badin, Shaheed Benazirabad, Umerkot, and Sujawal are the bottom five districts.

4.5.4 Beyond primary readiness score index

The beyond primary readiness index of the DER 2017 is meant to capture the imbalance between primary and above primary schools available to students as well as the infrastructural health of above primary middle schools in each district.

Provincial Rank	National Rank	District	Province/Region	Beyond primary readiness score	Above-primary to primary ratio	School Infrastructure Score
1	16	Karachi Central	Sindh	73.87	66.94	80.79
2	21	Karachi East	Sindh	71.14	58.52	83.75
3	24	Karachi South	Sindh	69.53	52.56	86.49

Provincial Rank	National Rank	District	Province/Region	Beyond primary readiness score	Above-primary to primary ratio	School Infrastructure Score
4	46	Karachi Korangi	Sindh	61.21	47.7	74.72
5	60	Karachi West	Sindh	57.34	33.7	80.98
6	76	Hyderabad	Sindh	51.92	22.25	81.58
7	80	Karachi Malir	Sindh	48.47	27.22	69.73
8	81	Sukkur	Sindh	46.45	15.58	77.32
9	84	Larkana	Sindh	43.43	13.42	73.44
10	86	Naushahro Feroze	Sindh	42.76	11.42	74.1
11	87	Shaheed Benazirabad	Sindh	42.37	10.64	74.11
12	88	Khairpur	Sindh	42.17	10.92	73.41
13	92	Tando Allahyar	Sindh	41.46	11.76	71.16
14	96	Kambar Shahdad Kot	Sindh	40.53	8.39	72.67
15	100	Jamshoro	Sindh	39.23	12.66	65.81
16	101	Matiari	Sindh	39.04	8.08	70
17	103	Ghotki	Sindh	38.70	7.5	69.89
18	109	Dadu	Sindh	37.21	8.46	65.96
19	115	Tando Muhammad Khan	Sindh	36.00	7.89	64.12
20	121	Mirpur Khas	Sindh	34.95	10.51	59.4
21	123	Sanghar	Sindh	34.63	6.83	62.43
22	125	Shikarpur	Sindh	34.17	12.12	56.23
23	130	Jacobabad	Sindh	32.44	8.93	55.94
24	131	Kashmor	Sindh	31.52	8.23	54.81
25	135	Badin	Sindh	30.72	6.19	55.25
26	143	Thatta	Sindh	28.4	7.28	49.52
27	146	Tharparkar	Sindh	26.81	8.18	45.45
28	149	Umer Kot	Sindh	25.59	7.47	43.71
29	155	Sujawal	Sindh	19.35	4.04	34.67

All top five districts are from Karachi with Hyderabad slotted at number 6. The bottom five districts include Badin, Thatta, Tharparkar, Umerkot and Sujawal.

4.5.5 Student learning levels by District – Findings from SAT

The most recent standardised achievement test report was published by the government in 2017. As mentioned above, SAT measures learning outcomes for three subjects – Language, Maths and Science among students of class 5 and 8. The tables below rank all districts in Sindh for student achievement on each of the three subjects for class 5 and 8.

Language class 5:

Rank	District	Average Language (Out of 100)
1	Central Karachi	42.2
2	West Karachi	41.45
3	South Karachi	41.27
4	East Karachi	40.87
5	Korangi Karachi	39.94
6	Mirpurkhas	37.69
7	Mitiari	35.38
8	Naushero Feroz	35.08
9	Sujawal	34.74
10	Sanghar	34.63
11	Jamshoro	34
12	Malir Karachi	33.94
13	Tando Mohd Khan	33.82
14	Umerkot	33.42
15	Shaheed Benazirabad	33.36
16	Dadu	32.89
17	Thatta	32.62
18	Badin	32.45
19	Khairpur Mirs	32.45
20	Tando Allah Yar	32.41
21	Tharparkar	31.96

Rank	District	Average Language (Out of 100)
22	Ghotki	30.14
23	Jacobabad	30.1
24	Kambar-Shahdadkot	29.63
25	Hyderabad	29.45
26	Kashmore	29.26
27	Sukkur	26.79
28	Larkana	26.72
29	Shikarpur	25.25

Maths class 5:

Rank	District	Average Maths (Out of 100)
1	Mirpur Khas	33.7
2	Tharparkar	31.76
3	Umerkot	29.99
4	Naushero Feroz	29.94
5	Sujawal	27.9
6	Dadu	27.55
7	Badin	27.4
8	Jamshoro	27.36
9	Mitiari	27.35
10	Sanghar	26.89
11	Shaheed Benazirabad	26.78
12	West Karachi	26.35
13	Ghotki	25.49
14	Thatta	25.21
15	Kashmore	24.7
16	Central Karachi	24.36
17	Tando Allah Yar	24.01
18	Khairpur Mirs	23.95

Rank	District	Average Maths (Out of 100)
19	South Karachi	23.89
20	Tando Mohd Khan	23.7
21	Malir Karachi	23.66
22	East Karachi	23.45
23	Kambar-Shahdadkot	23.12
24	Jacobabad	22.21
25	Korangi Karachi	21.79
26	Larkana	20.59
27	Sukkur	20.53
28	Shikarpur	20.26
29	Hyderabad	18.77

Science class 5:

Rank	District	Average Science (Out of 100)
1	Mirpur Khas	27.29
2	West Karachi	25.78
3	Central Karachi	25.16
4	Umerkot	23.58
5	South Karachi	23.54
6	Jamshoro	23.36
7	Tharparkar	23.36
8	East Karachi	22.82
9	Korangi Karachi	22.78
10	Naushero Feroz	22.49
11	Sujawal	22.43
12	Badin	22.19
13	Malir Karachi	22.16
14	Mitiari	22.07
15	Tando Mohd Khan	21.92

Rank	District	Average Science (Out of 100)
16	Dadu	21.81
17	Thatta	21.41
18	Shaheed Benazirabad	21.2
19	Tando Allah Yar	20.87
20	Sanghar	20.8
21	Khairpur Mirs	20.64
22	Ghotki	20.61
23	Kashmore	19.69
24	Jacobabad	19.51
25	Kambar-Shahdadkot	19.38
26	Sukkur	19.05
27	Hyderabad	18.59
28	Larkana	18.41
29	Shikarpur	18.36

Language class 8:

Rank	District	Average Language (Out of 100)
1	Central Karachi	43.74
2	West Karachi	43.57
3	Korangi Karachi	43.49
4	Jamshoro	42.79
5	Thatta	42.6
6	Khairpur Mirs	42.37
7	East Karachi	41.88
8	Tando Allah Yar	41.68
9	Dadu	41.65
10	Tando Mohd Khan	41.46
11	Mirpur Khas	41.27
12	Sujawal	40.95

Rank	District	Average Language (Out of 100)
13	Badin	40.53
14	Umerkot	40.52
15	Mitiari	40.29
16	Malir Karachi	40.2
17	Shaheed Benazirabad	39.98
18	Tharparkar	39.86
19	Naushero Feroz	39.19
20	Kambar-Shahdadkot	38.6
21	Ghotki	37.91
22	Larkana	37.45
23	Hyderabad	37.11
24	Sanghar	37.11
25	Kashmore	36.68
26	Jacobabad	36.36
27	Sukkur	35.59
28	South Karachi	34.6
29	Shikarpur	34.01

Maths class 8:

Rank	District	Average Maths (Out of 100)
1	Tharparkar	25.73
2	Mirpur Khas	25.48
3	Malir Karachi	24.53
4	West Karachi	23.09
5	Thatta	23.03
6	Umerkot	22.85
7	Tando Allah Yar	22.45
8	Khairpur Mirs	22.36
9	Central Karachi	22.31

Rank	District	Average Maths (Out of 100)
10	Naushero Feroz	21.88
11	Mitiari	21.76
12	Shaheed Benazirabad	21.49
13	Kashmore	21.41
14	Ghotki	21.27
15	Badin	21.22
16	Sujawal	20.6
17	Jacobabad	20.49
18	Korangi Karachi	20.13
19	East Karachi	19.98
20	Dadu	19.85
21	Tando Mohd Khan	19.85
22	Jamshoro	19.37
23	Sanghar	19.3
24	South Karachi	19.05
25	Kambar-Shahdadkot	18.94
26	Hyderabad	18.77
27	Sukkur	18.52
28	Larkana	18.49
29	Shikarpur	17.34

Science class 8:

Rank	District	Average Science (Out of 100)
1	Mirpur Khas	31.29
2	West Karachi	30.32
3	Tharparkar	29.22
4	Central Karachi	29.16
5	Malir Karachi	28.37
6	Tando Allah Yar	28.36

Rank	District	Average Science (Out of 100)
7	Badin	28.09
8	Thatta	27.91
9	Korangi Karachi	27.82
10	Umerkot	27.57
11	Jamshoro	27.48
12	Khairpur Mirs	27.05
13	Sujawal	26.72
14	Tando Mohd Khan	26.7
15	East Karachi	25.88
16	Dadu	25.25
17	Mitiari	25.1
18	Naushero Feroz	24.95
19	Ghotki	24.74
20	Kambar-Shahdadkot	24.74
21	Shaheed Benazirabad	24.64
22	Kashmore	23.98
23	Hyderabad	23.95
24	Sukkur	23.8
25	Jacobabad	23.23
26	Larkana	23.2
27	Sanghar	22.53
28	South Karachi	21.82
29	Shikarpur	21.29

Conclusion

The Government of Sindh has invested in a substantial number of reforms that have been significant in addressing various gaps in education service delivery. These changes deserve to be recognised as important steps forward.

In the immediate short term, a number of actions can help consolidate these gains, and demonstrate the continuing commitment of the provincial authorities to meaningful reform. These include:

- In order to fully capitalise on the hiring of over 1,000 head teachers through the merit-based system, all middle and high schools across Sindh need to be provided with head teachers or principals hired through the same process. This is a swiftly implementable measure that can dramatically change the quality of middle and high schools across the province.
- The Teacher Recruitment Policy approved in 2017 needs to be immediately implemented so that subject specialist teachers for mathematics, sciences, and computer science can be hired immediately, thereby adding to the stock of learning outcomes' potential across the province.
- The School Sudharo, Sindh Sanwaro scheme represents a forward-looking and progressive initiative to jump-start reform at the school level. To ensure success for the plan, it needs to be executed with a more radical commitment to delivery in a short period of time. Having secured the Chief Minister's approval in late 2017, the School

Education & Literacy Department can make a historic contribution to education reform by executing the plan for 4,560 government schools' refurbishment within the current fiscal year.

- As noted in the report above, biometric verification is a commendable step to embed accountability mechanisms into the system. The next and most immediate step forward is to add to this and incorporate a streamlined system to penalise absentee teachers and education managers. The second concern is that monitoring of attendance through the biometric system is linked to Monitoring Officers' visits. This leaves the system open to manipulations much like the old manual system. The visits hence need to be more frequent with monitoring powers delegated to head teachers equipped with authority to impose penalties. Lastly, the biometric monitoring system needs to be dynamic enough to capture official transfers and postings in order to ensure accurate spot-checks and monitoring results.

Despite the steps already taken, and the short term steps we have identified above, official government data about the state of education in Sindh will continue to paint a dismal picture. To tackle them adequately, the following major challenges must be recognised as pivotal.

1. The number of primary schools in Sindh vastly outnumber middle, high and higher secondary schools in the province. This means that there are very limited channels available for students graduating from

- primary schools to continue their post primary education. Data tells us that this could be a critical reason for dismal retention rates between primary and beyond primary levels. The government needs to focus on immediate provision of middle and high schools across the province.
2. Number of out of school children between the ages of 10-16 years is 2.5 times those between the ages of 5-9 years. This represents a major challenge since incorporating children from the former age group into the formal schooling system starting from primary levels is not a viable solution. The government needs to introduce accelerated learning programs that can ensure adequate means for these students to be situated in the formal schooling system.
 3. The increase in education budget needs to be met with commensurate increase in the effectiveness of financial management system in order to ensure adequately absorb increased funding. This calls for a focus on not only a radical year on year improvement in the education budget but also a similar improvement in spending patterns.
 4. Despite significant strides in improving education data regimes, the absence of data on private schools represents a major blind spot for decision-makers. Unless the government comes up with a concrete plan to gather data on private schools, we cannot have a complete picture that provides information on various indicators across the province. The government needs to institute a plan to add private schools to the annual schools' census that it conducts to populate SEMIS/NEMIS for AEPAM, and embed it as a standard component of official government data.
 5. There is a significant imbalance in total boys and girls enrolled in schools at primary, middle, high and higher secondary levels. This calls for a coherent plan that identifies major reasons for this trend.
 6. Despite gradual improvements over the years, learning outcomes as measured by SAT are disappointingly low across the province. Scores on maths and science for students of class 5 have consistently remained under 30 percent over the last five years. In addition to the recruitment of subject specific teachers, the government needs to develop a comprehensive training plan that includes greater focus on content knowledge rather than overwhelming emphasis laid on pedagogical methods.
 7. Tools like HRMIS should streamline the process of accountability for teachers across the province, where teacher performance as measured by student performance is tied to career progression
 8. Districts consistently falling at the bottom of rankings developed using different metrics point towards the need for robust targeting to not only elevate access to quality education in these districts but also address sociopolitical concerns about inequitable progress in the province.
- This eight point agenda represents a starting point for a serious conversation about education reform in Sindh in 2018. A much more detailed set of assessments are required to determine plans of action required to address the various challenges that exist. Alif Ailaan and the authors hope that both the provincial governments and political parties themselves will invest in those assessments so that the period from 2018 to 2023 will represent a period of more meaningful and impactful reforms in education than ever before.

