

Development Priorities in Punjab and KP:

A Critical Analysis

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Abstract

Education is regarded as pivotal for transforming human capital and sustainable economic development. SDG-4 and Article 25-A of the 1973 Constitution put a binding constraint on the government to accord centrality to education. This research paper delves into exploring the critical pathways between development priorities demonstrated through public spending and the resultant impacts and outcomes in the school education sector of Punjab and KP. The scope of the study is limited to the timeframe of 2018–2022 and relies on triangulation of data of both qualitative and quantitative nature using a mixed-methods approach. The study alludes to interesting findings ranging from policy inadequacy to a skewed spending matrix projecting a predominant share of non-development expenditure. While overall spending has increased over the course of time, the overwhelming focus has been on infrastructural components, which paradoxically has not even led to resolving the chronic issues of access to education. The study, while acknowledging that there is no standard blueprint signifying an ideal sectoral mix, recommends an evidence-based and more nuanced approach with a greater focus on the qualitative aspects through soft interventions like teacher training, robust assessment framework and improved governance at the school level.

Keywords: *Annual Development Program, Annual Status of Education, Khyber Pakthwonkhawan, Literacy, Punjab, School Education.*

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1. Introduction

Development is an intricate and contested concept with perspectives ranging from narrow and broad contextualization (Thomas, 2004). Over the course of the 20th century, the paradigm of development has transformed from structural transformation, GDP growth and per-capita benchmarks to notions of human development and sustainable development goals. The patterns of development spending of a state provide insight into the sectoral priorities and determine the relative outcomes for economic growth and human development (Omdero, 2019). There is no blueprint signifying standard sectoral mix for development. However, it depends upon the unique context, need assessment and fiscal space of a country, which determines the development outlay. Variations in scope and priorities of government spending impact the growth patterns of a country (Christie & Rioja, 2017). A brief analysis of the development priorities of developed countries reveals a strategic focus on social sectors like education in the development programs, which is translated into high scores on HDI (United Nations Development Program [UNDP], 2022). In contrast, a cursory analysis of development programs demonstrates skewed sectoral allocations in the development matrix of Punjab and KP, leading to unfavorable outcomes for sustainable human development. There is no index or log frame for the ideal sectoral mix of development priorities. However, in many developing countries like Pakistan, development spending is not dictated by evidence but rather by considerations of political economy and short-term goals. This constrains the government from performing well on key development indicators and attaining sustainable human development. Public investment in the education sector works through both instrumental and conceptual pathways. At the conceptual level, the provision of education being a fundamental right is an end in itself, whereas the instrumental pathway relates better levels of education to the quality of human capital, which is critical for economic growth and sustainable development.

1.1. Research Question

Education is regarded as a transformational tool that is pivotal for sustainable human development and economic growth (Hanushek & Woessmann, 2008). Access to quality education is a key determinant for countries trying to break into the upper-middle-income bracket (Runde et al., 2017). As per HDI, evidenced through indicators of education, health and social protection, Pakistan is ranked 161 and bracketed in the low human development category with an HDI score of 0.544 (UNDP, 2022). Pakistan is ranked 125th out of 163 countries on the SDG index and is lagging behind significantly in the achievement of SDG 4 related to inclusive quality education (Sachs et al., 2022). More than half of school-going children do not attain foundational learning despite having spent at least 4 years in school (ASER, 2022). The development priorities of a government are evidenced through the sectoral mix of its budgetary outlay. The provinces of Punjab and KP are critical in the



development matrix of Pakistan. However, the education benchmarks are not encouraging, with multifarious challenges demonstrated through declining access indicators, poor learning outcomes, and misplaced public spending. The aforementioned scenario raises serious concern over the development priorities of Punjab and KP demonstrated through the budgetary allocations and sectoral mix.

How the development priorities demonstrated through budgetary allocations and the sectoral mix of the school education sector have translated into access and learning outcomes in Punjab and KP during 2018-2022?

2. Literature Review

Many economists and development experts view human capital as an important determinant of economic growth (Aghion & Howitt, 1992; Arrow, 1962). Human capital is primarily based on education, skills, knowledge and health criteria (OECD, 1998). The review of the literature demonstrates a large amount of evidence on the correlation between education and an increase in the rate of economic growth (Hanushek & Woessmann, 2008). Education generates positive outcomes through individual, societal and national pathways. It impacts individual wages and better health decisions, institutional growth at the national level and democratic norms at the societal level (Centre for Global Development, 2006). Nelson & Phelps (1966) allude to an important causal link between education and the diffusion of technology or innovation in a certain country, leading to economic growth. However, there have been contrasting evidence on public expenditure and education outcomes.

Roser & Ortiz-Ospina (2016) use macro data and highlight that public expenditure on education does not substantially elucidate cross-country variations in learning outcomes. This demonstrates the complexity of public expenditure on education wherein outputs are crucially dependent on the input mix. Available evidence depicts that learning outcomes may be more responsive to enhancement in the quality of teachers, than to improvements in class sizes. The study further contends that interventions like better infrastructure and stipends may increase school attendance; however, learning outcomes are more dependent on qualitative academic input. Policy experiments allude to the fact that pre-school investment in demand-side inputs, which is an often-neglected area in developing countries, leads to significant positive impacts on education.

Kirabo Jackson et al. (2016) study the effects of public spending on education and economic outcomes. Their research reveals that enhancement in public spending led to noteworthy improvements in quantifiable school inputs, including reductions in student-to-teacher ratios, increases in teacher salaries, and better retention rates.

On the other spectrum there are some studies that contradict the conventional wisdom of education as a driver of growth and critically view government's role in provision of education. Basu & Bhattarai (2012) argue that greater government spending on inputs such as more teachers and pupils does not substantially impact the learning outcomes and growth. The policy implication of their analysis is that upsurge in public spending on education which is primarily exhausted on teacher salaries without requisite infrastructural framework may not necessarily be advantageous for the country. Based on diverse dataset, Hanushek (2003) persuasively contends that expenditure-driven government policy has negligible impact on the educational attainment of students.

In the contextual setting of Pakistan, Kakar et al. (2022) elaborate on the outcomes in the education sector of Balochistan in post 18th amendment scenario through the lens of political economy by adopting rigorous mixed methods research. The analysis shows that while public spending on education has increased in post 18th amendment phase, the same has not led to corresponding improvements in education and learning outcomes. The researchers attribute the primary cause for this to the disconnect between various elements of the education system and non-alignment with the goal of learning. In contrast, expansion of schools remains a predominant theme, and major public expenditure is exhausted on brick-and-mortar schemes rather than learning improvements. The key driver in this prioritization is the factor of political economy which determines the path of public spending in education based on vested interests rather than rational need.

Afzal et al. (2010) investigated the short and long-run relationship between school education and economic growth in Pakistan, employing time series data on real GDP, inflation and general school enrollment from 1970-71 to 2008-09. The study found a robust relationship between school education and economic growth both in the short and long run. This accentuates the importance of prioritizing public spending towards the education sector, leading to micro-level outcomes of student learning and macro impacts for overall sustainable economic growth.

3. Research Methodology

The analytical dimension of the study requires in-depth analysis involving a case study of the development landscape of Punjab and KP. It would entail recourse to qualitative and quantitative data to identify trend lines and attempt to answer the nuances of the research question. Hence, a mixed methods approach with a primary focus on secondary data sources was adopted to empirically evaluate the development priorities in the school education sector of Punjab and KP. An effort is made to triangulate evidence to study the causal impact of public spending on education and learning outcomes. Respective School education and Planning & Development Departments of both provinces



were consulted for data sets pertaining to budgetary outlay, ADP of provinces with focus on sectoral allocations. Also, the monitoring units and independent studies were consulted to collect access and learning outcomes and indicators data. Moreover, Survey reports like ASER and global development indicators like HDI and SDGs were also analyzed to establish causal links and compare performance against global benchmarks. Semi-structured interviews with provincial secretaries, education officers and teachers were also conducted to delve into the qualitative aspect of study and infer key challenges faced by the education sector.

4. Section I: Contextual and Theoretical Framework

4.1. Contextual Setting

Pakistan is the fifth most populous country in the world, with a burgeoning youth bulge, which acts as a double-edged sword. If the state can provide education and empower its labour force, favorable economic growth and human development outcomes are expected. Otherwise, it can become a great challenge in future. Core education and learning indicators have shown slow progress compared to countries in Pakistan's neighbourhood with similar contexts. International commitments and legal-constitutional framework make the provision of education an enforceable right. The Universal Declaration of Human Rights, 1948 recognizes education as a fundamental human right. Pakistan is also a signatory of UN SDGs, and one of the core SDG-4 relates to inclusive quality education and lifelong learning. Achievement of SDG-4 and allied indicators is critically dependent on access to quality education in Pakistan. Article 25-A of the Constitution of Pakistan also makes it mandatory for the state to ensure compulsory and free education for children aged 5 to 16. School education is pivotal to stimulating social, emotional and cognitive development and empowering children to contribute to national development. In the post-18th amendment scenario, the subject of education has been shifted to provinces, and the responsibility to foster learning outcomes and improve human capital substantially depends on provincial governments now. A study by Manzoor et al. (2017) demonstrates that the quality of education is one of the primary factors for parents in preferring a private school over a public sector school. In this context, this study aims to analyze the situation in the two major provinces of Punjab and KP to study the effect of government spending on education and learning outcomes.

4.2. Theoretical Framework

Education sector finance is a socio-political decision-making process whereby public revenues and other resources are allocated to finance education and lifelong learning (UNESCO, 2023). The study explores the causal pathway through which development priorities evidenced through public spending in the education sector translate into education and learning outcomes in the provinces of Punjab and KP.

The study benefits from the theoretical lens of the Public Investment Management Assessment (PIMA) framework to assess the planning and sustainability of public investment in the education sectors and highlight gaps in the current sectoral mix and spending patterns. PIMA assesses infrastructure governance practices for countries at key stages of the public investment cycle, including planning sustainable investments and allocating investments to the right sectors and schemes (IMF Infrastructure Governance, n.d.). The qualitative aspect of governance, staff capacity and qualitative outcomes is also included in the framework to reflect the soft interventions necessary for gauging learning outcomes generated by public investment.

Public Expenditure and Financial Accountability (PEFA) provides a framework for assessing the weaknesses and strengths of public financial management (PFM) using quantitative performance indicators (PEFA, n.d.). It can help in configuring the efficacy of public expenditure in education. The PFM Act 2022 of Punjab and PFM Act 2022 of KP provide for key thematic areas of PEFA including medium-term fiscal framework, performance-based output budgeting and KPIs for each sector to assess outcomes of public spending. The PFM Act of Punjab mandates PEFA assessments at least once in four years. However, since the Acts have been promulgated recently, future implementation will determine its efficacy.

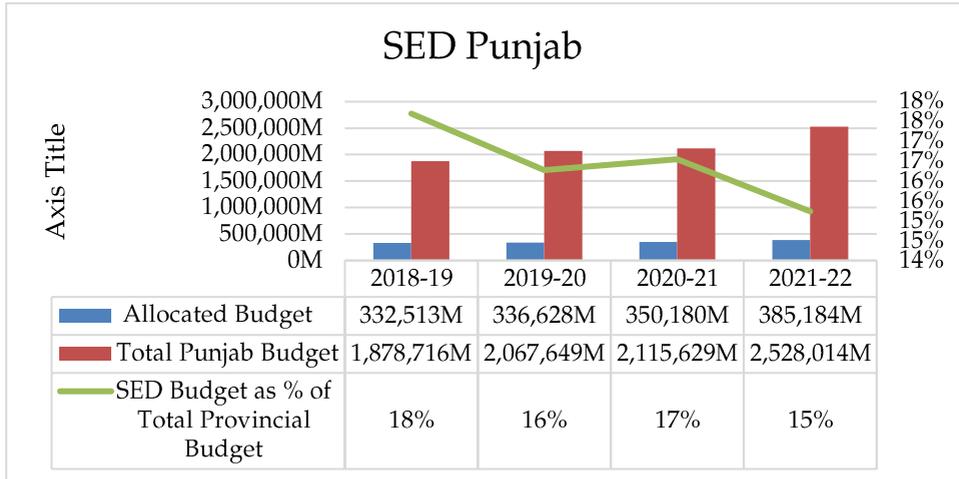
5. Section II: Development Priorities Evidenced Through Public Finance an Analytical Overview

This section shall outline the development priorities of Punjab and KP by analysing the overall budgetary outlay for the school education sector and the sectoral mix of the provincial Annual Development Program (ADP) with a special focus on the development budget of school education. The section will also provide a comparative analysis of the provincial education sector portfolio with global education financing benchmarks, providing a critical mix required for attaining the requisite outcomes in education and student learning.

5.1. Punjab Budget Outlay: School Education Sector

The budget outlay for school education has consistently increased in nominal terms in both development and current expenditure. However, the school education budget as a percentage of the overall provincial budget has been reduced from 2018-2022. Adjusting the data for inflation reveals that per capita allocation has reduced over the course of the study period. Compensation (salaries, pension) accounts for the major increase in public spending in the school education sector.

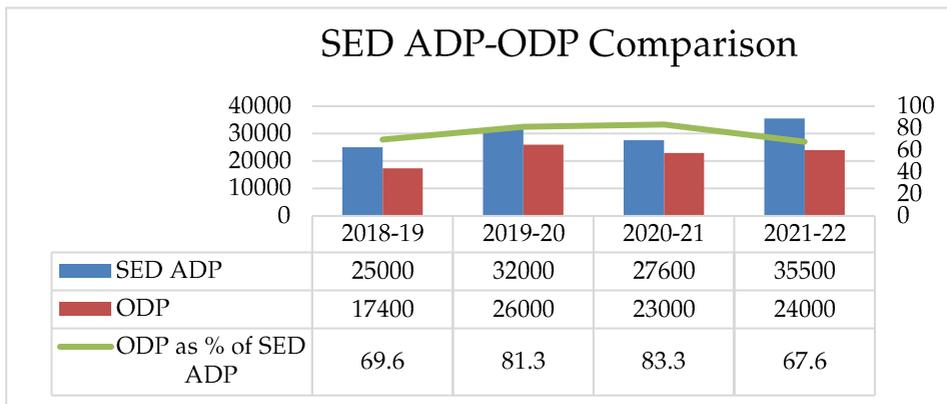
Figure 1.
School Education Budget as % of Total Provincial Budget



Source. School Education Department Punjab, 2023

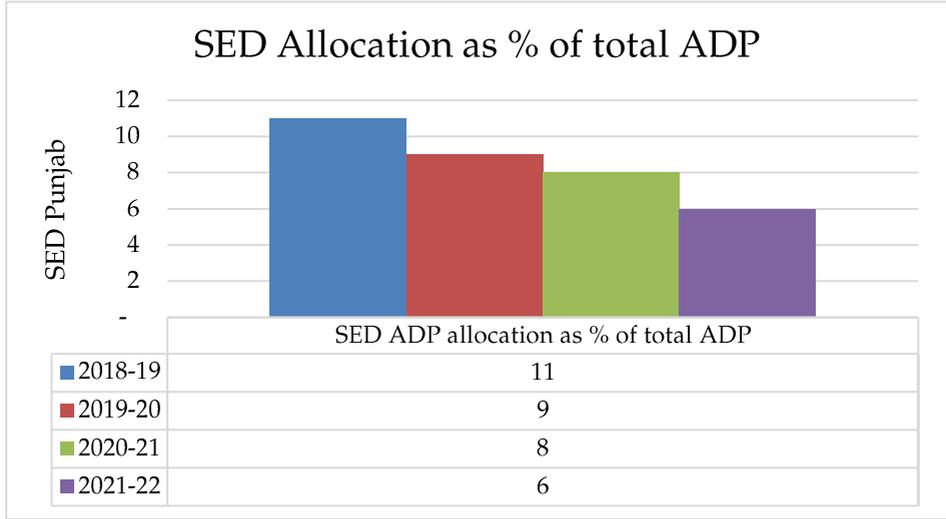
The school education department’s ADP share has consistently declined from 11% in 2018-19 to 6% in 2021-22. This allocation also includes substantial allocation under the Other Development Program (ODP). ODP is not part of core ADP, and there is no PC-I. Moreover, it includes all salary-related, development and operational expenses of PEF, PEIMA and Daanish schools. This balloons the overall figure of ADP and creates an illusion of a decent ADP share for the school education sector. For instance, the total allocation of SED ADP for 2020-21 was 27600 million, which included 23000 million as ODP.

Figure 2.
Comparison of ADP with Other Development Program (ODP)



Source. Data compiled from ADP of 2018 to 2022

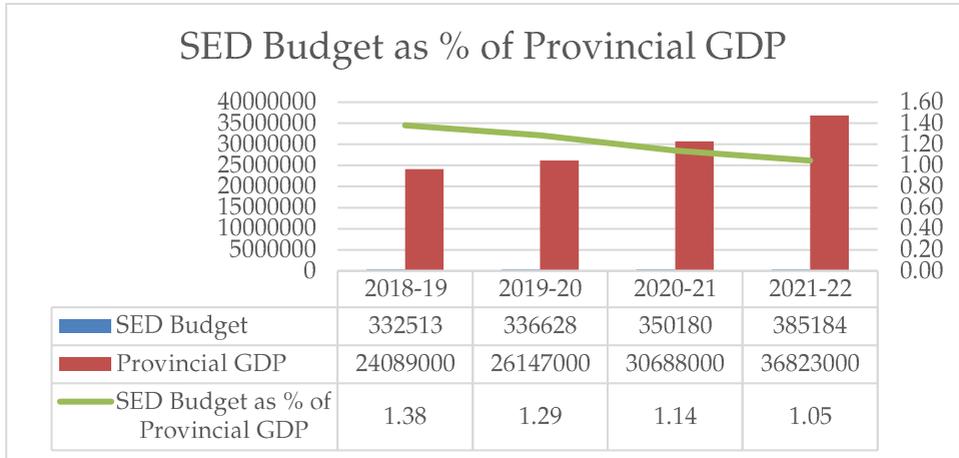
Figure 3.
School Education ADP as % of Provincial ADP



Source. Planning & Development Board Punjab, 2023

The budgetary allocation to school education has reduced as a percentage of provincial GDP from 1.38% in 2018-19 to 1.05% in 2021-22.

Figure 4.
School Education Budget as % of Provincial GDP

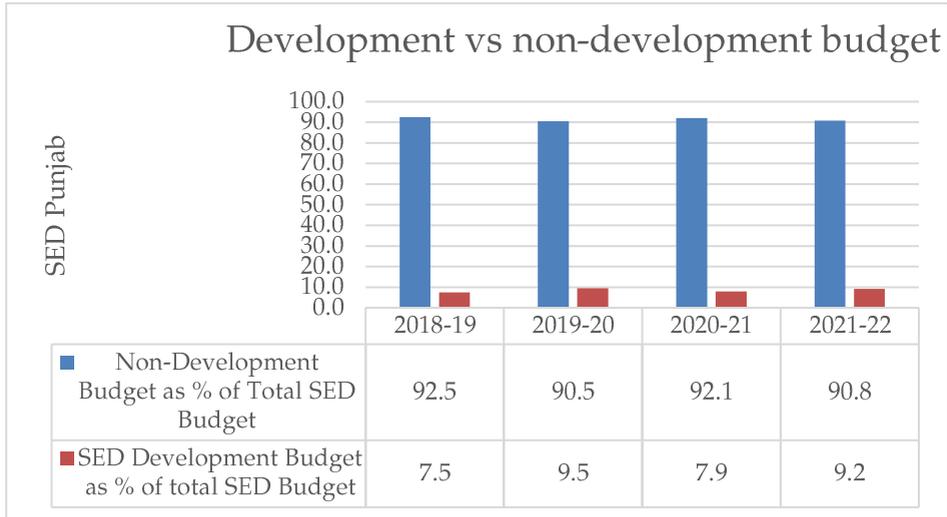


Source. Finance Department Punjab, 2023

Non-development component outstrips the development pie as more than 90% is consistently allocated to the non-development portfolio.



Figure 5.
Development vs Non-development Budget of School Education

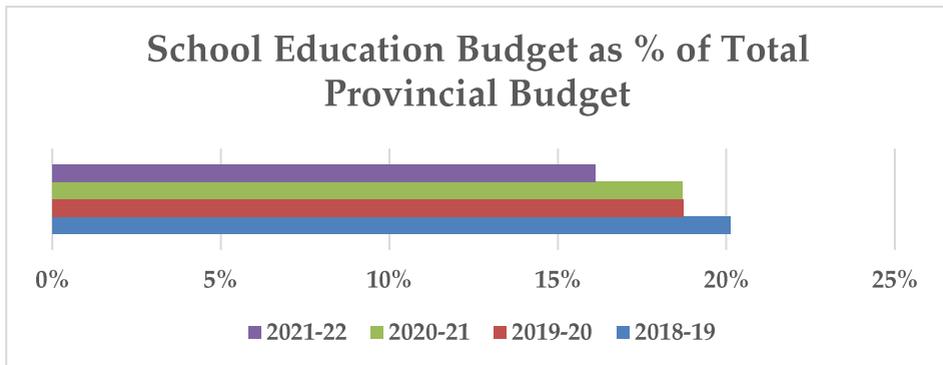


Source. School Education Department Punjab, 2023

5.2. KP Budget Outlay: Elementary and Secondary Education Sector

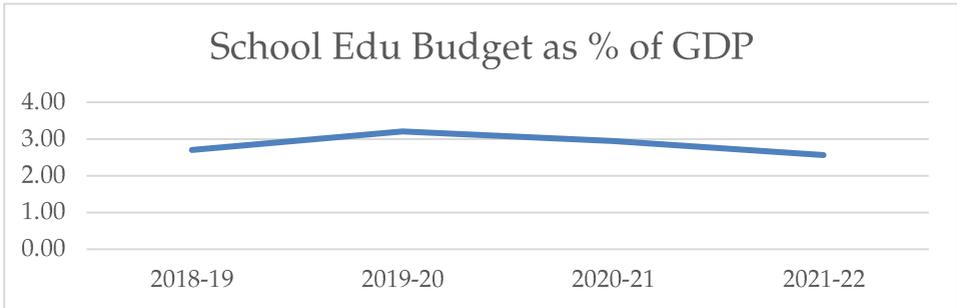
The school education budget has reduced from 20% in 2018-19 to 16% in 2021-22. Similarly, KP allocates around 2% of its GDP to the school education sector.

Figure 6.
School education budget as % of the total provincial budget



Source. Finance Department KP, 2023

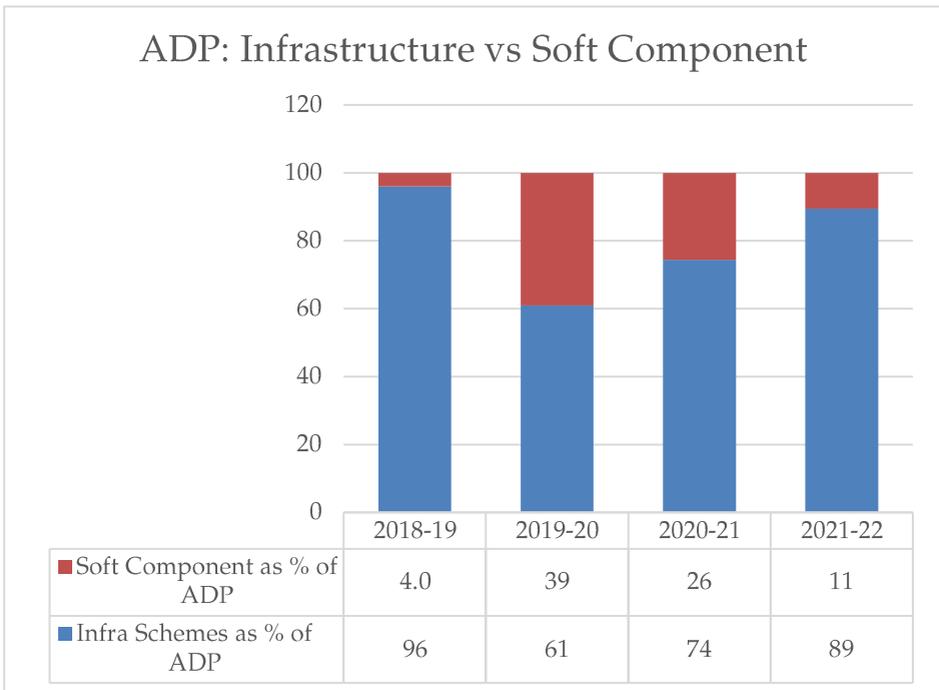
Figure 7.
School education budget as a percentage of GDP



Source. Finance Department KP, 2023

Allocations for infrastructural schemes dominate allocations for soft interventions like capacity building of teachers, textbooks, ICT tools and stipends.

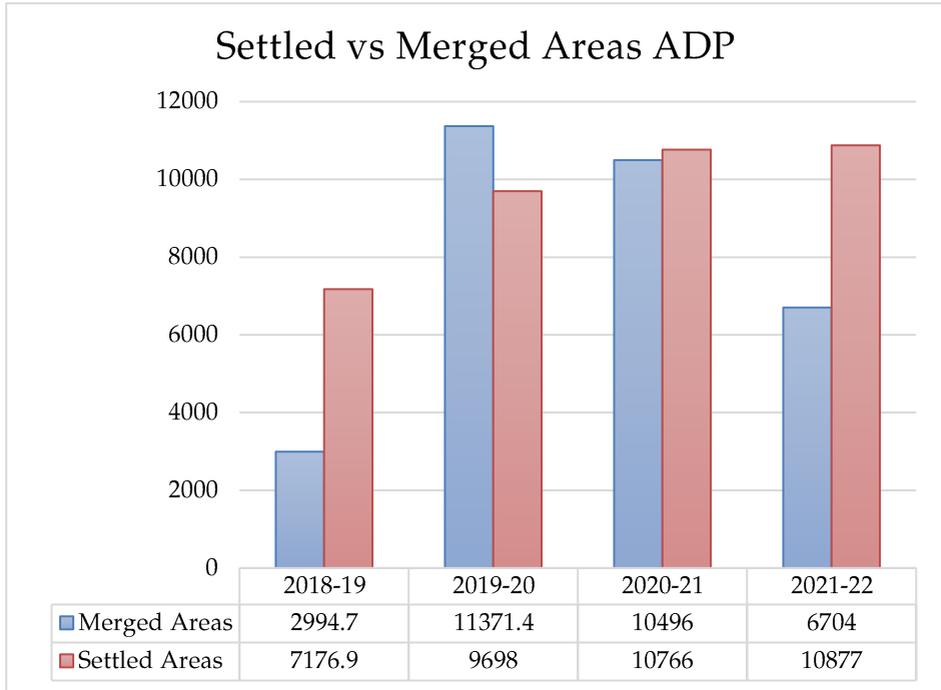
Figure 8.
Infrastructure vs soft component in ADP



Source. Planning & Development Department, KP, 2023



Figure 9.
Settled vs merged areas ADP



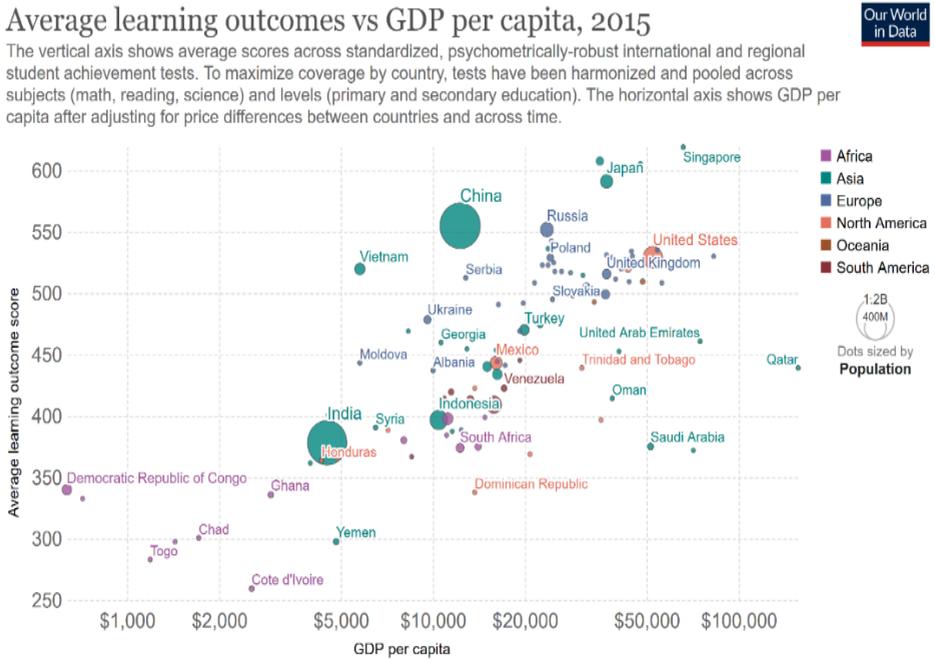
Source. Planning & Development Department, KP, 2023

5.3. Comparative Analysis with Global Education Financing Benchmarks

International benchmarks recommend that governments allocate at least 15% of public expenditure and 4% of their GDP on education (GPE, 2019). According to the Education 2030 Framework for Action, governments must allocate at least 15% to 20% of public expenditure to education (UNESCO, 2016). In 2018-19, the share of education spending in the total budget in low-income countries was around 15 per cent (World Bank, 2021).

The spending on education as a percentage of public expenditure in Punjab and KP is not far from the international community's global financing benchmarks for achieving SDG 04. However, in GDP terms, the allocation falls below the desired levels. Moreover, when we dissect the financing patterns, the major share is allocated to non-development expenditure and development finance is predominantly directed towards brick-and-mortar schemes. In the case of Punjab, a major development component is directed towards ODP, which is not part of the core ADP and distorts the development profile.

Figure 10.
Average learning outcomes vs GDP per capita across the world



6. Section III: Findings

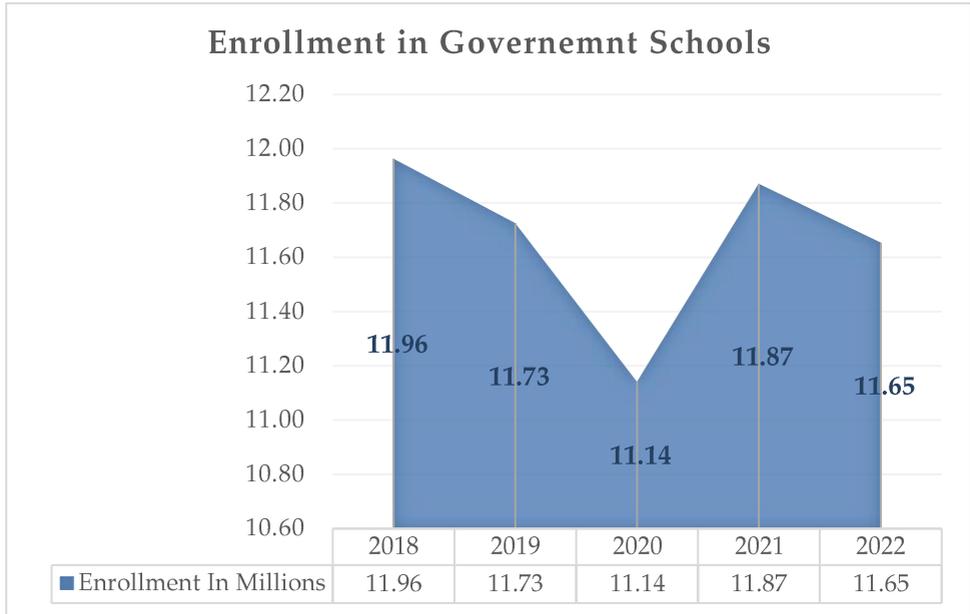
6.1. Education Outcomes Through Dual Pathway of Access and Learning

6.1.1. Access Indicators: Punjab

Van Pelt and Emes (2015) emphasize that an analysis of public-school spending is inadequate without considering enrolment. Comparative analysis of key indicators related to access to education reveals that public school enrollment in Punjab has reduced during the study period (2018-2022). The gross enrollment in public schools of Punjab stood at 11.96 million in 2018, which reduced to 11.65 million in 2022. The gender dimension demonstrated a positive trend as the ratio of girl students to boys improved from 0.95 in 2018 to 1.03 in 2022. Though the dip in gross enrollment can be attributed to exogenous factors such as COVID-19, unprecedented floods and the country's worsening economic situation, it still highlights serious issues in the development priorities of the province.



Figure 11.
Enrollment in Government Schools



Source. PMIU-PESRP, 2023

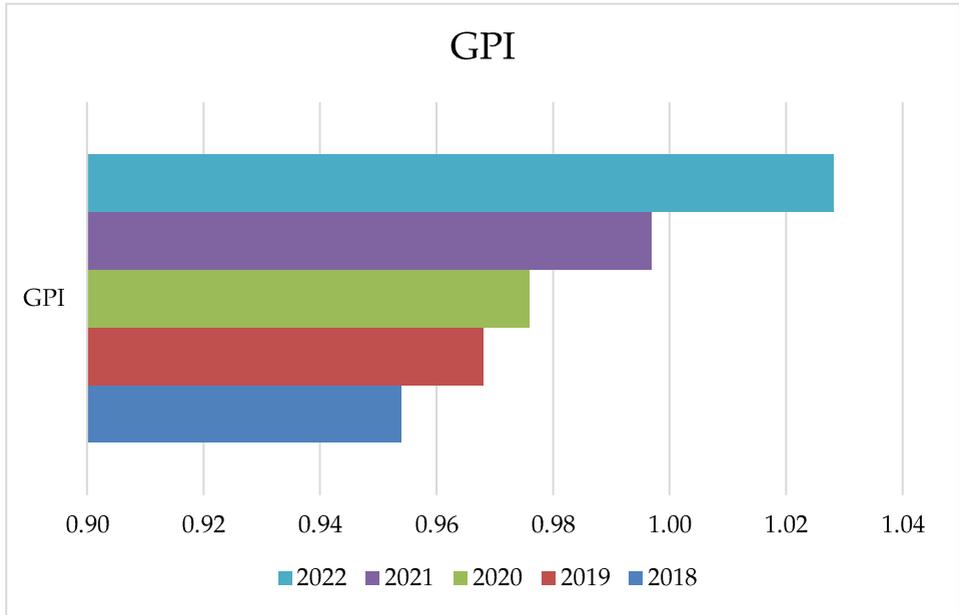
Out-of-school children (OOSC) are another important yardstick to gauge the performance of the government in addressing core access issues. OOSC in the Punjab have increased substantially from 5.43 million in 2018 to 7.30 million in 2022.

Table 1.
Out of School Children (in millions)

Year	Public Schools Enrollment	Population (5-16)	Other than Public Schools Enrollment	OOSC
2018	11.96	32.64	15.24	5.43
2019	11.73	33.29	15.53	6.04
2020	11.14	33.96	15.81	7.00
2021	11.87	34.64	16.10	6.67
2022	11.65	35.33	16.38	7.30

Source. PMIU-PESRP, 2023

Figure 12.
Gender Parity



Source. PMIU-PESRP, 2023

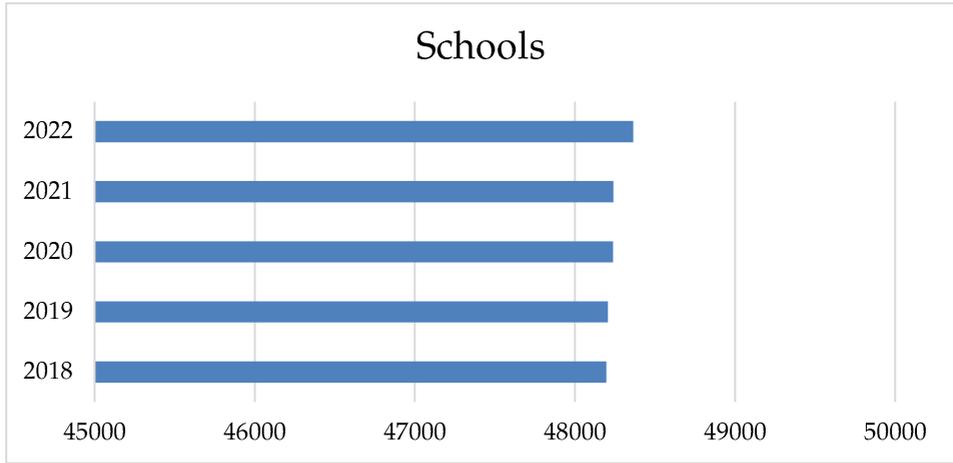
Dropout rates are also a core indicator of the systemic resilience of the public-school education framework. Dropout rates are especially alarming in secondary schools, which have hovered around 50%. Similarly, the dropout rates for primary schools ranged from 23% in 2018 to 26 % in 2022.

Table 2.
Dropout rates across public schools

Level	2018	2019	2020	2021	2022
Primary (Class1 to Class5)	23	26	16	21	26
Elementary (Class 1 to Class 8)	42	40	35	30	31
Secondary (Class1 to Class 10)	52	48	41	43	51

Source. PMIU-PESRP, 2023

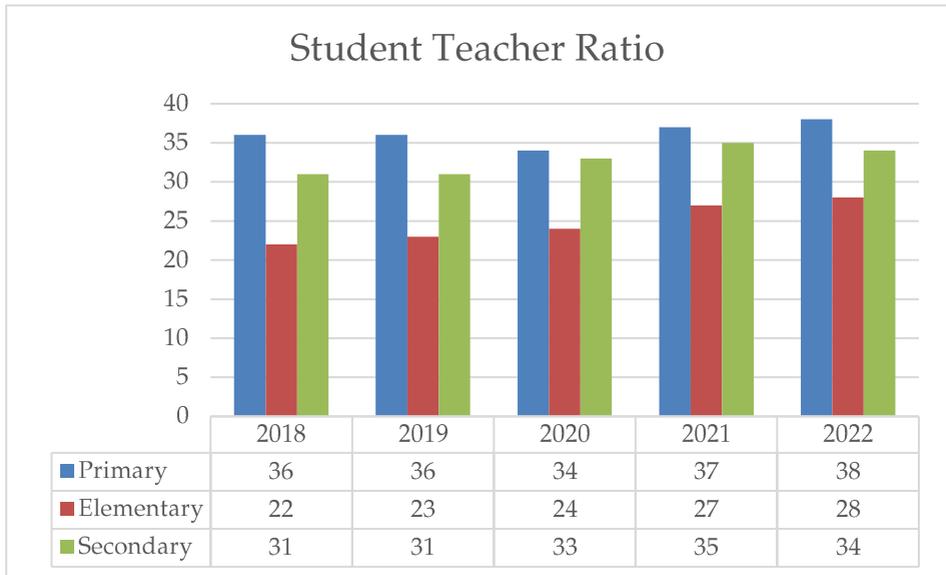
Figure 13.
Total Public Schools



Source. PMIU-PESRP, 2023

The global benchmark for student-teacher ratio (STR) hovers around 1:18, whereas STR in Punjab at various grades ranged from 1:22 to 1:38.

Figure 14.
Student-teacher ratio at various levels



Source. PMIU-PESRP, 2023

6.2. Learning Indicators: Punjab

While access to education is important, the ultimate goal is to impart relevant skills, build the knowledge base and improve qualitative learning outcomes. Improvement in years of schooling without corresponding learning enhancement is a waste of resources and allocative efficiency and an injustice to students who join schools in order to learn (Handa, 2017). Reliable empirical data is available pertaining to access indicators, including several schools, classrooms, enrolled students, teachers and out-of-school children. However, qualitative indicators pertaining to student learning outcomes are more intricate to measure and lack broad-based empirical evidence. Literacy and Numeracy drive aims to measure students' learning outcomes through a tablet-based test wherein students of grade 3 are randomly selected and accessed in the subject domains of Math's, English and Urdu. The overall scores show a declining trend, with the percentage of correct answers reducing from 85.9% in 2018 to 65.1% in 2022.

Table 3.
Literacy & Numeracy Drive (LND Test)

Year	Urdu	Math	English	Overall
2018	87.7	88.0	82.0	85.9
2019	82.1	84.2	75.0	80.4
2020	85.5	81.4	71.5	79.4
2021	65.7	61.1	55.5	60.8
2022	71.4	65.1	58.7	65.1

Source. PMIU-PESRP, 2023

The robust citizen-led Annual Status of Education Reports (ASER) can corroborate the same evidence. ASER assessment tools cover student learning in reading, arithmetic, English and general knowledge.



Table 4.
Class-wise percentage of children who can read Urdu

Class	Nothing	Story
1	38.3	3.3
2	14.4	13.2
3	10.8	22.2
4	4.8	50.3
5	0.0	68.4
6	0.0	71.9
7	0.0	72.3
8	0.0	87.2
9	0.0	91.6
10	0.0	93.4

Source. Data for Punjab taken from ASER 2021

Punjab Examination Commission (PEC) is entrusted with assessments and examinations at the school level in Punjab. From 2021 a robust tool of Large-Scale Assessments (LSA) across public schools in Punjab has been introduced. A stark difference exists between the earlier traditional exams and new large-scale and school-based assessments.

Table 5.
Pass Percentage PEC Exams 5th and 8th Grade

Grade	2018	2019	2020
5	86.59	88.37	0.00
8	86.62	87.68	87.33

Source. PEC, 2023

Table 6.
Large Scale Assessment Results 2022

Respondents	Subjects	Grade 5 (Mean % Score)		Grade 8 (Mean % Score)	
		Girls	Boys	Female	Male
Students	English	73	70	65	64
	Math	76	76	64	64
	Science	70	68	66	66
	Urdu	73	70	76	75

Respondents	Subjects	Grade 5		Grade 8	
		(Mean % Score)		(Mean % Score)	
		Girls	Boys	Female	Male
Teachers	Overall	73	71	68	67
	English	78	77	75	75
	Math	86	89	78	80
	Science	84	84	76	77
	Urdu	79	78	81	81
	Overall	81	81	77	78

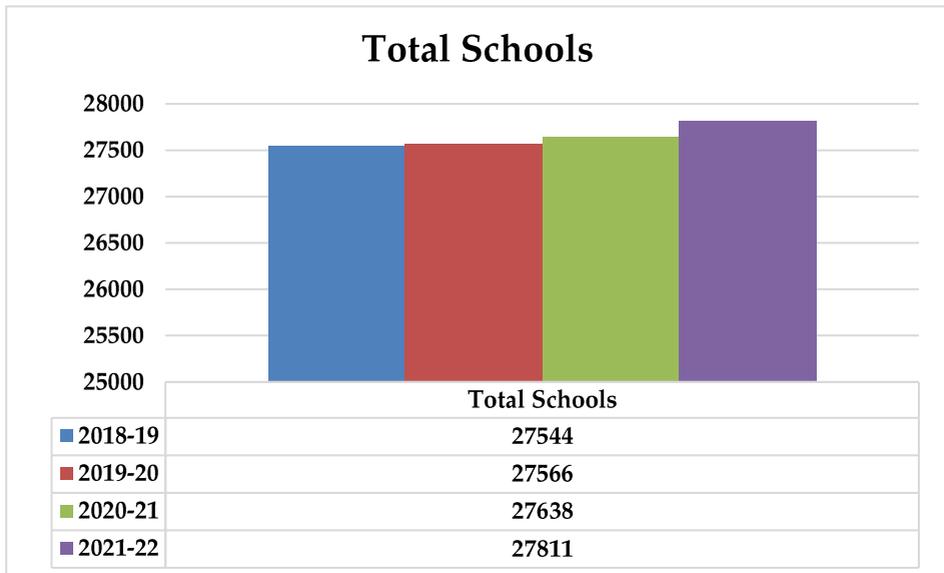
Source. PEC, 2023

6.3. KP Access Indicators

Total enrollment in KPK has remained approximately static, with slight fluctuations over the course of the 2018-2022 period. The gender parity has also remained stable around 0.76 to 0.79.

Figure 15.

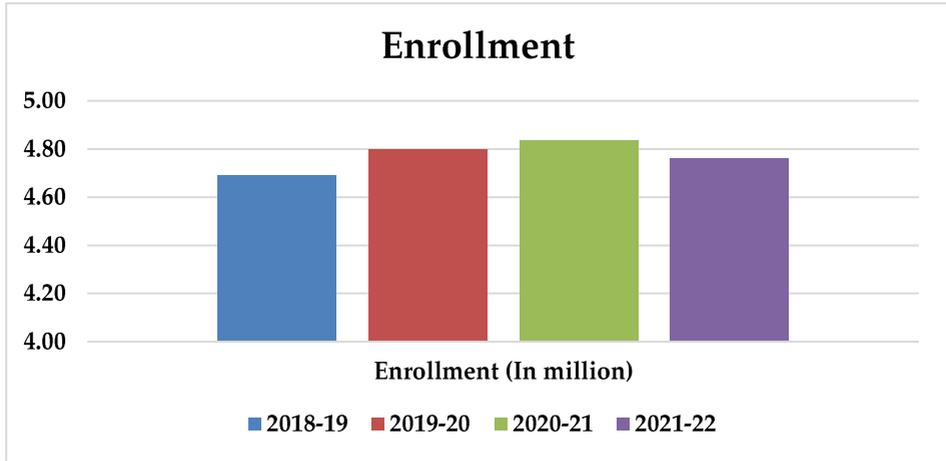
Total public schools (KP)



Source. Elementary & Secondary Education department KP, 2023

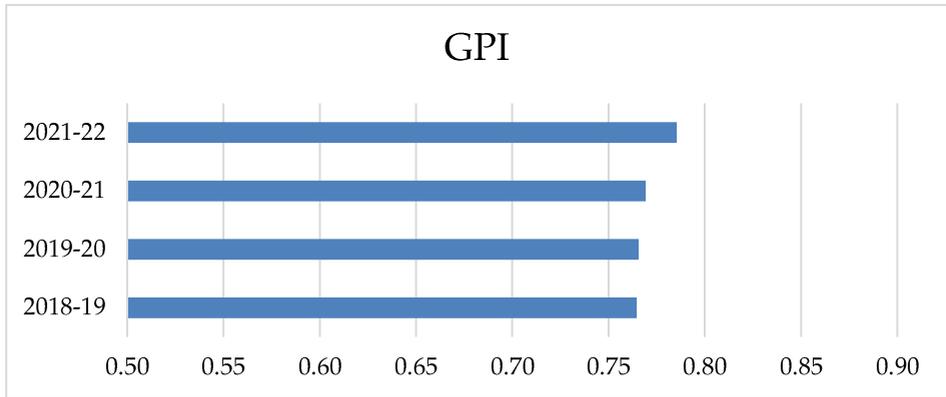


Figure 16.
Enrollment in public schools



Source. Elementary & Secondary Education department KP, 2023

Figure 17.
Gender Parity in Public Schools



Source. Elementary & Secondary Education Department KP, 2023

Average dropout rates have deteriorated from 8.9% in 2019 to 10.7% in 2021-22.

Table 7.
Dropout rates across different grades

	2018-19	2019-20	2020-21	2021-22
Prep	24.55	21.66	14.86	12.03
Class-1	10.75	8.09	5.53	11.80

	2018-19	2019-20	2020-21	2021-22
Class-2	7.64	5.09	3.77	8.58
Class-3	7.23	5.17	4.54	8.82
Class-4	10.29	7.65	5.77	10.87
Class-5	7.86	6.70	9.24	11.25
Class-6	6.49	6.31	6.09	8.70
Class-7	4.98	6.07	5.52	9.89
Class-8	10.91	9.27	10.66	13.43
Class-9	12.81	13.40	6.57	11.85
Average Dropouts	10.35%	8.94%	7.26%	10.72%

Source. Elementary & Secondary Education Department KP, 2023

STR at the primary level is extremely high, which may demonstrate multi-grade teaching and reduced focus.

Table 8.

Student-teacher ratio at different levels

Year	Primary	Middle	High	Higher Secondary
2018-19	45.89	15.24	34.59	23.35
2019-20	42.64	13.88	33.17	23.01
2020-21	40.75	14.19	33.73	24.13
2021-22	40.77	13.88	32.26	23.42

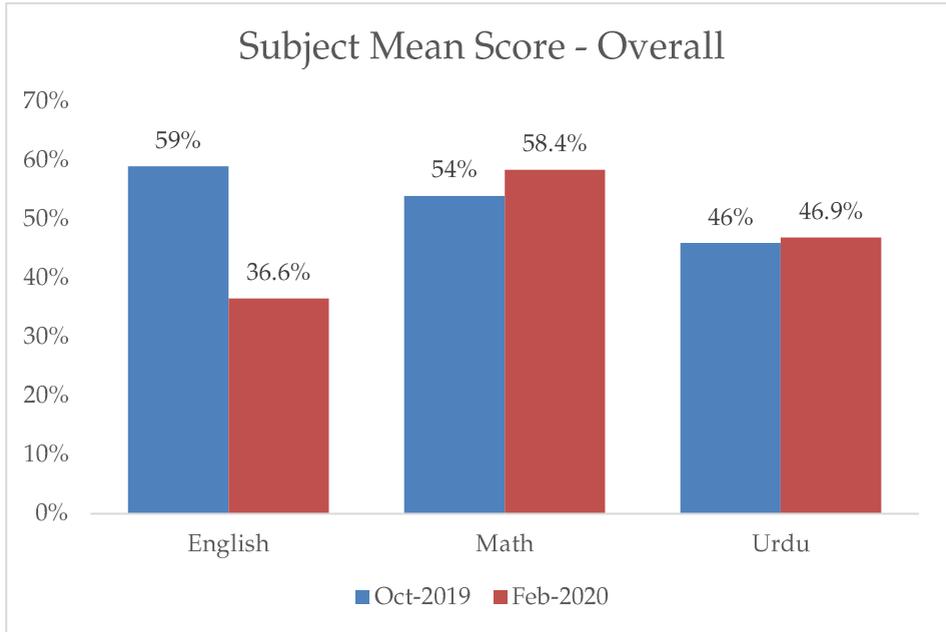
Source. Elementary & Secondary Education Department KP, 2023

6.4. KP Learning Indicators

There has been no systematic effort from the KP education department to assess learning outcomes, nor is there any specialized agency like PEC in Punjab to conduct student assessments. Literacy and numeracy test was conducted once in the study period; hence, for learning indicators of KP, we have relied on ASER Reports on learning outcomes about maths, regional language and English. The analysis reveals poor learning outcomes at all levels.

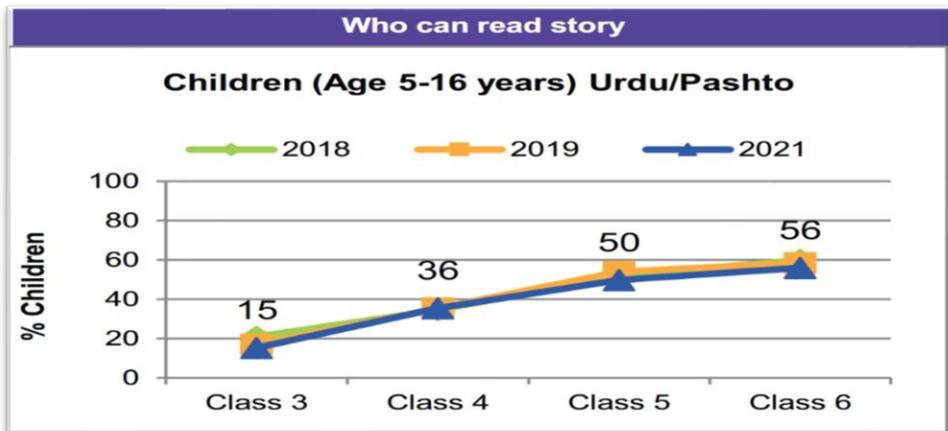


Figure 18.
Subject scores LitNum test



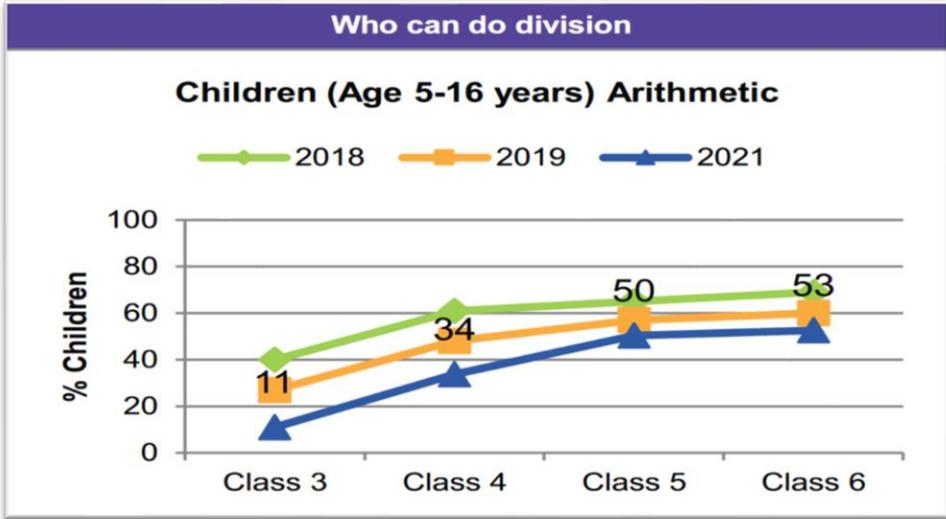
Source. Elementary & Secondary Education department KP, 2023

Figure 19.
Children who can read story



Source. ASER, 2021

Figure 20.
Children who divide (arithmetic)



Source. ASER, 2021

6.5. Key Inferences: Breaking The Established Myths & and Deciphering Links Between Public Spending and Education Outcomes

As evidenced through the critical analysis of provincial ADP and budgetary mix, substantial investments have been made in the education sector over the years. However, the same has not translated into corresponding improvements in learning outcomes. While both provinces focused on infrastructural or brick-and-mortar schemes, a comparative assessment reveals that such investments have not even translated into substantial gains on access indicators. This raises questions about the development priorities of Punjab and KP with a need for a more nuanced approach to education finance and a better sectoral mix.

6.5.1. The Challenge of Isolating Causality

The sectoral development mix and budgetary outlay for the school education sector do not correspond to substantial improvement in education and learning outcomes. Establishing causal pathways is an intricate task when exogenous factors like political considerations, bureaucratic planning tools, economic factors and the role of the private education sector may disperse and skew the findings. Our study reinforces the established premise of earlier research studies that isolating causality is tricky in assessing the impact on educational attainment and learning.

6.5.2. Misplaced Priorities: Skewed Sectoral Mix

The development matrix of Punjab and KP presents a less-than-ideal sectoral mix with skewness in both horizontal (across sectors) and vertical terms (within sector). Punjab spends much less on school education as a percentage of its GDP, whereas KP is doing comparatively better on this benchmark. When the respective provinces' budgetary data is analyzed, a major chunk is allocated to the non-development expenditure catering to salaries and operational expenses. A major portion of ADP is focused on "brick-and-mortar" intervention, while the qualitative aspect, primarily responsible for sustainable education outcomes evidenced through student learning, is not a priority. A substantial number of posts of teachers are vacant, and there is a meagre investment in training and capacity building of existing teachers. Habib (2013) contends that student learning outcomes primarily depend on school-level factors at the grassroots, which may offset inadequacies at the macro level. However, as demonstrated through data analysis, the public finance model in the school education sector relies on infrastructural components and current expenditures. As highlighted earlier, ODP, which caters only to PEF, PEIMA and Daanish schools in Punjab, forms a major chunk of overall ADP of school education, and hence, strategic focus is diverted from the majority towards the minority.

6.5.3. Lack of Alignment Between Education Sector Planning and Sectoral Needs

The rigorous analysis of budgetary allocations and learning outcomes coupled with the observations of key informant interviewees reveals a distinct lack of alignment between education planning and overall sectoral needs. Moreover, there is no integration between federal and provincial planning tiers. Similarly, overcentralized education planning occurs at the provincial level with acute disregard for facts. The New Deal 2018 of the School Education Department, Punjab, outlined quality educational experience as the main goal for the next 5 years (School Education Department Punjab, 2018). Similarly, the Punjab Growth Strategy and KP Education Sector Plan also accord centrality to improving learning outcomes. However, the data analysis reveals path dependency and focuses on addressing infrastructural issues. This policy-reality mismatch reduces the efficacy of public spending. It deviates the spending from qualitative aspects of learning to more tangible forms of school buildings, missing facilities, boundary walls, etc.

6.5.4. Political Economy of Education: Unpacking Political Will

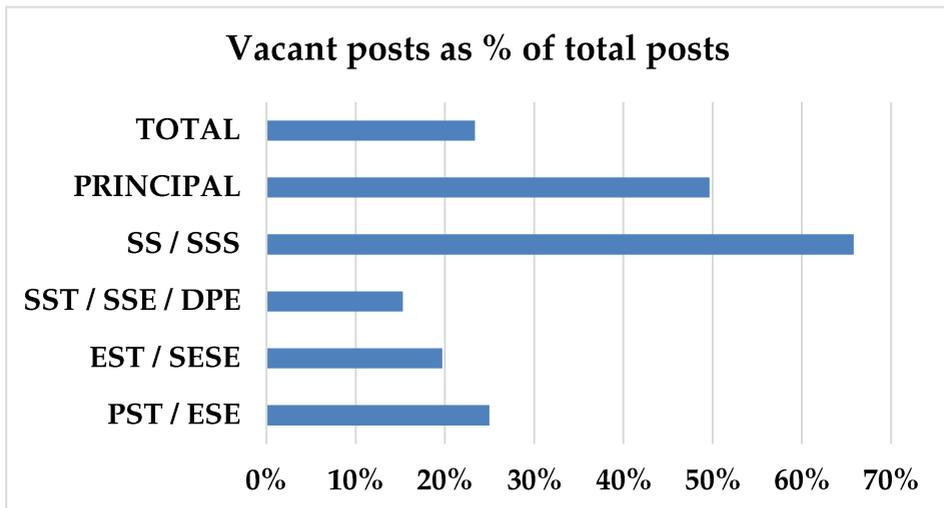
The lens of political settlement provides a qualitative interpretation of low education and learning outcomes in Punjab and KPK. Physical infrastructure projects generally offer returns both in economic and political terms in the short run, whereas prioritizing and investing in the social sector requires

commitment and patience (Khaliq & Ahmad, 2016). The returns on qualitative education expenditure are spread over a longer time horizon.

The major focus of the political elite is on infrastructural projects in the sectoral mix, and development outlay contains more space for funds misappropriation and leads to the creation of tangible assets which can be used as a positive image for the next elections. Outputs like the construction of new schools and classrooms or the provision of missing facilities are more aligned with political economy considerations of the government. In contrast, teachers, the fulcrum of the educational edifice, are neglected. Currently, In Punjab, 23% of total school posts are vacant. Out of these, 66% of posts of subject specialists and senior subject specialists and 50% of posts of principals are vacant. This encapsulates the gravity of the situation and misplaced developmental priorities.

Figure 21.

Percentage of vacant positions of teachers at various levels in Punjab



Source. School Education Department Punjab, 2023

ASER conducted a pilot study in 4 political constituencies, which zooms in on education and development priorities at the constituency level and how political representatives respond to the issues of education. While education features on party manifestos, the same is not being translated into noteworthy improvements in the practical realm (ASER, 2022).

6.5.5. Micro-Macro Paradox and Public Spending on Education

When delivered well, education has a transformative effect on individual quality of life and the sustainable development of a country. Applying the micro-macro paradox of Mosley (1986) to the framework of public spending in



Punjab and KP reveals interesting corollaries. As demonstrated by data analysis, while government spending has improved the access issues and provision of missing facilities at the micro level, there has been no substantial improvement in learning outcomes and hence no transformative change at the macro level enhancing the quality of human capital or sustainable development.

6.5.6. Spending as a Measure of Success vs Allocative Efficiency

The detailed data analysis demonstrates that increased education financing may be necessary but insufficient for improving learning outcomes (Wales et al., 2016). The complexity of educational attainment and improvement in educational yardsticks requires a more inclusive and innovative approach. Mere allocation of funds and expenditure matrix cannot guarantee critical gains in learning outcomes. Given broader economic challenges, the scarcity of funds and reduced fiscal space make it expedient to exercise both allocative and dynamic efficiency to achieve better returns for public investment in education.

6.5.7. Fiscal Decentralization to Improve Governance Factors at School

School is the most vital building block of the education architecture. Habib (2013) contends that a good school environment can compensate for regional and socio-economic disparities affecting learning outcomes. The centralized planning framework of the education sector, along with political considerations affecting public spending priorities, reduce the ability of individual schools to invest in relevant areas and improve student learning levels. Moreover, investment in school councils, enhancement of NSB and empowerment of head teachers and principals with robust monitoring framework are important inputs in education architecture.

6.5.8. Donors Fund Complex Qualitative Interventions & Government Focuses on Tangible Outputs

While donor intervention in key social sectors like education in both Punjab and KP is commendable, the provincial governments need to take primary responsibility for qualitative inputs. The current budgetary outlay and ADP mix reveal a predominant focus on infrastructural investments, whereas the donor interventions evidenced through World Bank-funded PESP (Punjab) and FCDO-funded KESP (KP) programs mostly target qualitative aspects of learning, assessments and teacher training. This creates a policy illusion and financial mismatch wherein the provincial development portfolio becomes path-dependent and biased towards less sophisticated and tangible outputs. Moreover, the uncertainty of donor funding jeopardizes the sustainability of these critical reforms.

6.6. A Tale of Two Schools: Lessons for Development and

Financial Framework

6.6.1. Government Primary School, Nawab Kay Kathia, Chichawatni

To substantiate and decipher the important factors influencing educational attainment and learning a qualitative study of a primary school in a poor riverine area of Chichawatni, Sahiwal district was done. In-depth interviews with head teacher and students were conducted to get an insight into the school's story. When Mr Nasir, the headmaster, was posted to the school in 2010, there was only one classroom in a dilapidated condition with no boundary wall, main gate, functioning toilet and drinking water facility. Only 5 students were enrolled, and no teacher preferred to be posted in the school due to the far-off location and non-welcoming community. Mr Nasir, who possessed a Master's degree, considered taking the non-favourable environment a challenge. Over the course of 10 years, the school has grown both in infrastructural and qualitative terms. The headmaster, along with the help of the community, managed to add one additional classroom, 4 washrooms, a boundary wall and a main gate on a self-help basis and through prudent utilization of a non-salary budget. The student enrollment has grown to 138 and the learning levels of students are consistently improving through LND and PEC assessments. When Mr. Nasir was asked to identify the key lessons from his mini-transformation story, he alluded to the pivotal role of the teacher in improving the learning outcomes. The dedication, commitment, qualification and skillset of teachers can positively impact student attainment even when infrastructural issues are not addressed. NSB is a good initiative and financially empowers the head teacher; however, it depends upon its efficient utilization. Moreover, soft interventions like stationery and bags are also important in poor localities and rural areas to attract students and improve their learning levels (Nasir, Personal Communication, April 02, 2023).

6.6.2. Government Primary School Kahi Bazid Khel, Kohat (KP)

Government Primary School Kahi Bazid Khel is a mixed school in Kohat, a district in south KP where rural schools often lack access to key infrastructure. The non-availability of electricity seriously hampered student enrollment and learning outcomes. The harsh weather conditions, wherein temperatures rose to 45 degrees, made it unbearable for students and teachers. Consequently, the school had to be closed often during summer. Mr. Abid Saeed, a teacher at the school, explained that during summer days, he had to take the students out and teach in the shade of trees. This scenario seriously affected the ability of students to focus on their studies and led to dropouts and absenteeism. In 2019, GPS Kahi Bazid Khel became the first school to move towards affordable renewable electricity as part of an innovative project of solar schools funded by FCDO and the Saudi Fund for Development to cater to poor learning conditions in more than 1,200 schools south of KP. There was a visible improvement in



attendance at the selected schools with enrolment rates up by 5% on average. At GPS Kahi Bazid Khel, 265 students were attending school in 2021, compared to 227 in 2018. There was also qualitative improvement in student learning and teacher commitment (United Nations Pakistan, 2023)

The two case studies allude to important lessons for social sector development and provincial financing framework. While the school in Punjab relied primarily on the soft intervention of teacher leadership and pedagogy, the school in KP required infrastructural intervention to address the key issue hampering student learning outcomes. There is a need to align school needs depending upon the context, such as rural-urban dynamics, high-middle-low income, male-female, agrarian-industrial and geographical terrain. There is no silver bullet or ideal developmental or financial model. However, a need to constantly evaluate and design development priorities according to the contextual requirement.

7. Conclusion

Investment in education and human capital lies at the edifice of sustainable human development and economic growth. The development priorities towards the school education sector of Punjab and KP demonstrated through budgetary allocations and ADP portfolio present a skewed picture. While overall spending has increased over the course of time, the overwhelming focus has been on infrastructural components, which paradoxically has not even led to resolving the chronic issues of access to education. The pathway of learning outcomes also presents a bleak picture, as public spending has not translated into corresponding improvements in the qualitative aspect of student learning outcomes. This scenario alludes to serious introspection for policy framers, practitioners and political elite. The question of political economy attains the Centre stage as subjective considerations outstrip qualitative domains of learning outcomes, which is the primary outcome of the whole public educational architecture. The school education sector is the largest employer in both Punjab and KPK, with an ever-increasing current expenditure. The alignment of education planning with sectoral needs and overall development priorities of provinces is also missing, which leads to the wastage of precious public resources with minimal productive outcomes. There is no silver bullet or on-size-fits-all model for development priorities and budgetary mix; it depends upon unique context and evidence-based iterative planning process to gain maximum results from existing public expenditure.

8. Policy Recommendations

The issues highlighted in the preceding sections and data analysis allude to making the following policy recommendations:

- Development priorities must move from an anecdotal and path-dependent trajectory to a more evidence-based iterative framework

with constant monitoring and evaluation.

- The sectoral mix must be re-evaluated with a better balance between infrastructural components and soft qualitative interventions translating into better learning outcomes.
- Infrastructural interventions must be need-based rather than cater to questions of political economy.
- Participative and inclusive planning regime by aligning education planning with overall sectoral goals and broader development strategy.
- Periodic financial and planning evaluation of public investments, especially in social sectors, to recalibrate efforts and ensure no wastage of resources as outlined in PIMA and PEFA frameworks.
- In line with global financing benchmarks, education finance must be gradually increased to meet the 4% GDP and maintain a 15-20% allocation in provincial budgetary outlay.
- Donor intervention in key social sectors like education in both Punjab and KP is commendable; however, the provincial governments need to take primary responsibility for qualitative inputs. The current budgetary outlay and ADP mix must gradually shift towards a more nuanced and evidence-based framework focusing on qualitative outcomes. This would also ensure the sustainability of the critical reform agenda currently championed by donors.
- There is a need to align various education funding sources: public, private and external donors to the goal of quality education and enhanced learning outcomes.
- The provincial governments must ensure a strategic balance between the goal of universal primary education and reasonable learning levels.
- More public investment may be directed towards ECE, ICT interventions and strengthening governance at the school level through empowered school councils and more structured NSB grants.
- The monitoring and accountability mechanism established through regular visits of MEAs in schools led to substantial improvements in teacher and student attendance, provision of facilities and performance evaluation in Punjab. PMIU-PESRP oversaw the system; however, the priorities have shifted over time and less focus is given to the monitoring framework. Education Monitoring Authority in KP also plays a vital role in generating actionable data which can be used for better monitoring and evaluation.

- Provincial governments must direct resources towards hiring competent and qualified teachers through a merit-based transparent recruitment process. As discussed, currently in Punjab, more than 0.1 million posts of teachers are vacant, which is causing a significant learning loss across government schools (School Education Department, 2023)
- There is a need for built-in flexibility in the financial model to break the path-dependent incremental approach of provincial development priorities towards critical social sectors like school education.
- Education finance must focus not merely on instrumental aspects but should also reflect the priorities of government at a conceptual level.
- The planning practice of including ODP in overall development portfolio of education sector in Punjab must be discontinued and the non-development component in ODP must be reflected in current expenditure.
- The more intricate and multilayered underpinnings of learning outcomes require a nuanced approach to qualitative inputs. More financial allocations would not solve the educational dilemma, there is a need for prioritization and better utilization of existing resources.
- Investment in school councils, enhancement of NSB and empowering head teachers and principals with robust monitoring framework are important inputs in education architecture.
- The PFM Act 2022 of both KP and Punjab must be implemented in true letter and spirit for prudent fiscal management and monitoring of development priorities. Performance management and measurable KPIs are critical to achieving expenditure efficiency rather than path-dependent resource wastage with negligible outcomes.

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