

Annual Status of Education Report

اثر  
ASER  
PAKISTAN

2023

Facilitated by Idara-e-Taleem-o-Aagahi



# ANNUAL STATUS OF EDUCATION ASER-PAKISTAN 2023

National

RURAL - URBAN



Pakistan is at a crossroads. On one hand, the country currently has the youngest population in its history (65% is below the age of 30 while 29% is between the ages of 15 to 29 years), which if equipped with relevant technical skills can result in dividends for the national economy. On the other hand, majority of the workforce lacks advanced skills required by the global labor markets; according to the ILO (2019) only 6% of youth have acquired technical vocational skills. The increasing share of unskilled working-age population threatens to become a demographic bomb, spelling potential disaster for the country.

The dismal reality is that Pakistan's human capital remains low and has only marginally grown over the past three decades. Pakistan's Human Capital Index (HCI) lies around 0.41, which is significantly lower than the regional average of 0.48 in South Asia. To remedy the situation, it is imperative to effectively tackle the prevailing crisis in the education sector.

Adverse shocks in the form of the COVID-19 pandemic and the devastating floods in 2022 have further worsened the education emergency. Before COVID-19, World Bank had estimated that 3 in 4 children in Pakistan were in learning poverty, whereas during COVID-19 the estimated learning poverty increased to more than 79%.

Before the COVID-19 related learning losses could be fully recovered, the country was faced with the unprecedented destruction caused by the floods in June-August 2022. Around 34,000 schools were damaged (UNICEF 2023) and access to schooling was disrupted for more than 3.5 million children, leading to setbacks in the education system in terms of interruption in schooling and learning losses. Without a comprehensive and timely intervention for learning recovery, the widespread disruption to education will have a long-term impact on Pakistan's human capital.

The Annual Status of Education Report (ASER) Pakistan, implemented by Idara-e-Taleem-o-Aagahi (ITA) and supported by Foreign Commonwealth and Development Office, is the largest citizen-led household-based survey, which is conducted biennially to provide reliable estimates of education status and foundational literacy and numeracy skills of children aged 5-16 years for rural districts of Pakistan. ASER Pakistan's methodology is citizen led household based assessment that is conducted across 15 countries; 9 members from Africa, 4 from South Asia and 2 from Latin-America.

The ASER 2023 survey cycle marked a significant shift for several reasons. First, the ASER rural survey adopted a hybrid model for data collection, consisting of both pen and paper-based personal interviews (PAPI) and computer assisted personal interviews (CAPI). Use of CAPI allowed for real time reporting and analysis. For this purpose, the ASER mobile data collection application was developed, through which the survey was conducted in 51 rural districts. The ASER App is also linked to an interactive dashboard which was used by the ASER team as well as field coordinators at the district level to monitor data collection, visualize data, and facilitate field management. An integrated database was also developed so that the data being uploaded through, both, the PAPI- and CAPI-based surveys can be consolidated, resulting in a single database through syncing of the two sources. 11,000 volunteers were trained for 3 days across all provinces by the ASER team for both PAPI- and CAPI-based surveys.

<sup>1</sup> <https://blogs.lse.ac.uk/internationaldevelopment/2022/12/05/can-pakistan-survive-the-next-75-years-without-strong-human-capital/>

<sup>2</sup> <https://www.worldbank.org/en/region/sar/publication/pakistan-human-capital-review-building-capabilities-throughout-life>

<sup>3</sup> <https://reliefweb.int/report/pakistan/pakistan-education-sector-working-group-flood-response-performance-monitoring-dashboard-23-january-2023>

<sup>4</sup> <https://blogs.worldbank.org/endpovertyinsouthasia/how-are-children-pakistans-2022-floods-faring>



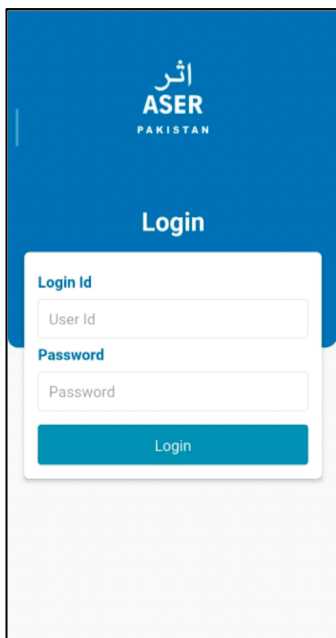


Figure 1: ASER App user authentication

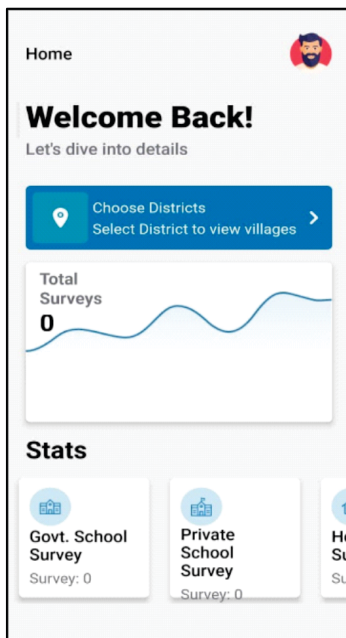


Figure 1: ASER App Home Screen



Figure 1: Survey Categories

Second, the ASER 2023 urban survey covers all 31 urban divisions of the 4 provinces of Pakistan, making it a nationally representative urban sample at the divisional level. The sample coverage of ASER 2023 has increased to 123 urban districts from only 20 urban districts covered in ASER 2021. For the current cycle, the urban sample covers 1154 urban blocks, comprising of 23,080 households using from sampling frame based on the Population and Housing Census 2017 provided by the Pakistan Bureau of Statistics.

ASER 2023 includes additional questions in sections in the school sheets (government and private) to collect information on indicators related to school facilities such as: ECE equipment, assistive devices and transport facility for Children with Disabilities (CWDs), and daycare facility for teachers. Keeping in view the devastation caused to the school infrastructure due to the floods; the facilities section includes questions on whether the school was damaged due to any natural disasters, the extent of the damage and any support received from the gov't or donor. A new section has been added to the school sheets to collect information on the frequency of teacher training and teacher training needs. Additional items have also been added on parent-teacher meetings and their frequency. These indicators provide critical inputs on the status of school effectiveness.

The household sheet also included questions on whether the household members are digitally literate in terms of use of computer and smartphone. The number of children who had a Birth registration certificate (B-Form) were also recorded. A section on climate change was included in the household sheet to record whether the household had been negatively impacted by the floods and to what extent. The questionnaire also recorded whether children's schooling had been affected due to any natural disaster. Finally, a section on child health was added for the first time to collect information on whether the child had received the 5 basic vaccines, and whether they had a vaccination card or other record.

## Sample Design – Rural (Villages)

**Total Population:** The total population of this survey consists of 151 rural districts of Pakistan.

**Sampling Frame:** Each district is provided with

- A village list.
- Data from the Population Census 2017 on the total number of households.
- Total population of each village in the list.

**Sample size and its Allocation:**

- Keeping in view the variability of the key variables, population distribution and field resources, a total sample of 600 households pertaining to 20 households from each village is being used.
- Sample primary sampling units (PSUs) have been considered sufficient to produce reliable estimates with 5% margin of errors at 95% level of confidence.
- The detailed allocation plan is shown below:

Number of Districts	Number of Villages per District	Number of Households per Village
151	30	20

**Sample Design:** A two stage sampling design was adopted:

- **First stage:** 30 villages selected using the provisional village directory of the 2017 census.
- **Second stage:** 20 households are selected in each of the 30 selected villages.

**Selection of Primary Sampling Units (PSUs):** Villages of districts have been taken as PSUs:

- Sample PSUs have been selected using probability proportional to size (PPS) method.
- Every year, 20 villages from the previous year are retained and 10 new villages are added. Ten villages are dropped from the previous year's list and 10 new villages are added from the population census village directory. The 10 new villages are also chosen using PPS.
- The 20 old villages and the 10 new villages gives a “rotating panel” of villages, which generates better estimates of changes.

**Selection of Secondary Sampling Units (SSUs):** Households have been treated as secondary sampling units (SSUs).

- Based on actual households in each sample PSUs, 20 households have been selected.
- We divide the village into four parts:
  - In each of the four parts, starting from the central location and pick every 5<sup>th</sup> household on the left hand-side in a circular fashion till 5 households are selected from each part.



### Selection of School

- 1 government school from each selected village (Mandatory)
- 1 private school from each selected village (Optional)

### SAMPLE DESIGN OF ASER URBAN SURVEY 2023

UNIVERSE: The universe of this survey consists of all urban areas of four provinces of Pakistan to make it nationally representative.

### URBAN SAMPLING FRAME

Urban Frame: Pakistan Bureau of Statistics (PBS) has developed its own sampling frame for urban domains. Each city/town is divided into enumeration blocks. Each enumeration block comprises of 200 to 250 households on average with well-defined boundaries and maps. The frame of Population and Housing Census 2017 is used in the survey. PBS has estimated/calculated sample size of 1154 PSUs comprising of 23080 household from sampling frame based on the Population and Housing Census 2017 census on 31 divisions (Urban Part) of Pakistan. Sample Design of Urban area is entirely different from ASER-Rural and PBS is only responsible for urban sample design.

Raising sampling weights will be computed. The weighted survey estimates will only be representative at the urban level, specifically 30 divisions, four provinces, and Pakistan Urban level.

### STRATIFICATION PLAN

Urban Areas: In urban domains, each administrative district has been treated as an independent and separate stratum.

SAMPLE SIZE AND ITS ALLOCATION The formula for estimation of sample size is:

$$n = \frac{\frac{t^2}{d} * p(1 - p) * deff * nrf}{r * h}$$

Where, t = level of significance

p = prevalence of variable under reference

MOE = Margin of Error 6%

deff = design effect 1.5

nrf = non-response factor 1.05

d = relative margin of error (MOE\*r)

r = population at risk

h = average household size

The detailed urban sample of all surveyed administrative units will be shared later.

## SAMPLE DESIGN

A two stage, stratified sampling scheme is adopted for the survey. Enumeration blocks in urban areas are selected at the first stage by probability proportional to size (PPS) method of sampling scheme using households in each block as measure of size (MOS). Complete household listing will be carried out in selected block considered as Secondary Sampling Units (SSUs) and 20 households within the sample enumeration blocks will be selected using Systematic Random Sampling with a random start at second stage.

## SURVEY METHODOLOGY

### Block Identification

- PBS provided maps of the selected blocks based on Population and Housing Census 2017  
How to Sample Households
- A specific number of households (SSUs) i.e. 20 households were selected from each sample block using systematic sampling technique with a random start.

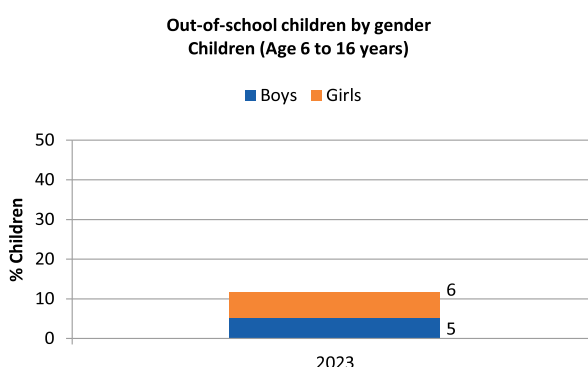
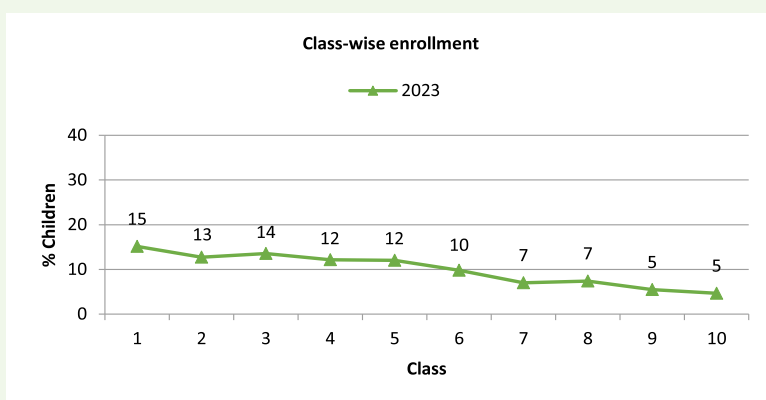
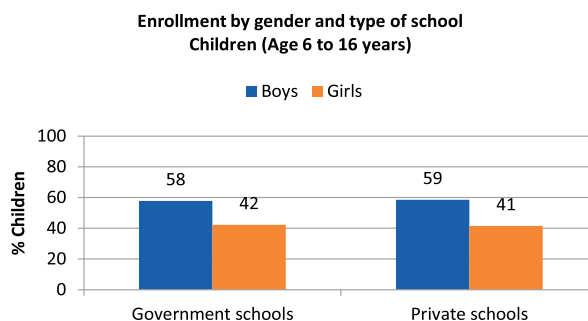
*Disclaimer: "The ASER National Rural Survey is representative at the district-level whereas the ASER National Urban Survey is representative of urban divisions. The National Rural and Urban Surveys are based on distinct methodologies (refer to Technical Note). A national average of two surveys is shown in the National Report Card only for summary purposes. Given the stark contrast in indicators by location (rural/urban) there is merit in considering the two surveys individually when drawing comparisons."*



# NATIONAL (RURAL-URBAN)

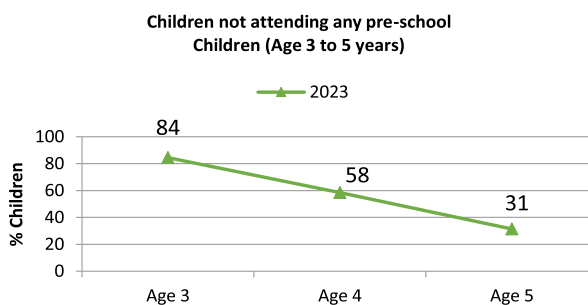
## SCHOOL ENROLLMENT AND OUT-OF-SCHOOL CHILDREN

Age group	% Children in different types of schools				% Out-of-school		Total
	Govt.	Non-state providers			Never enrolled	Drop-out	
		Pvt.	Madrasah	Others			
6 - 10	60.62	27.30	2.11	0.51	7.95	1.51	100
11 - 13	56.57	28.51	1.81	0.39	7.07	5.65	100
14 - 16	52.73	27.28	1.56	0.26	7.91	10.26	100
<b>6 - 16</b>	<b>58.15</b>	<b>27.58</b>	<b>1.93</b>	<b>0.43</b>	<b>7.73</b>	<b>4.17</b>	<b>100</b>
<b>Total</b>	<b>88.1</b>				<b>11.9</b>		<b>100</b>
<b>By Type</b>	66	31	2	0			



## EARLY YEARS SCHOOLING (PRE-SCHOOLING)

Age group	% Children who attend different types of pre-schools				Out-of-school	Total
	Govt.	Non-state providers				
		Pvt.	Madrasah	Others		
3	11.3	3.8	0.4	0.1	84.5	100
4	27.6	12.8	0.8	0.4	58.4	100
5	47.6	20.3	0.2	0.4	31.4	100
<b>3 - 5</b>	<b>28.5</b>	<b>12.2</b>	<b>0.5</b>	<b>0.3</b>	<b>58.5</b>	<b>100</b>
<b>Total</b>	<b>41.5</b>				<b>58.5</b>	<b>100</b>
<b>By Type</b>	<b>68.7</b>	<b>29.4</b>	<b>1.2</b>	<b>0.7</b>		



## AGE CLASS COMPOSITION

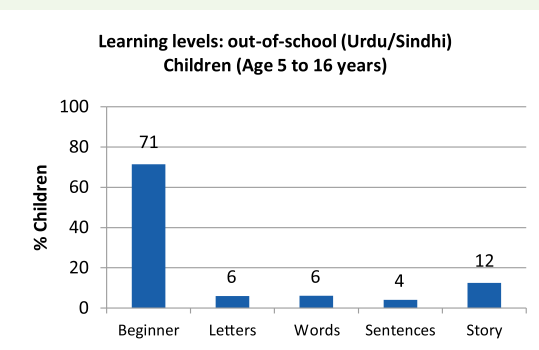
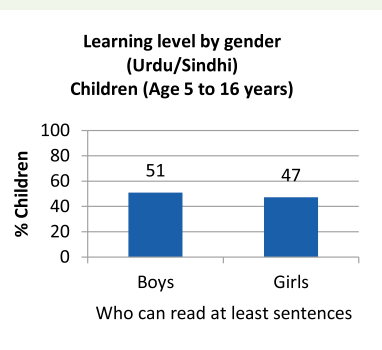
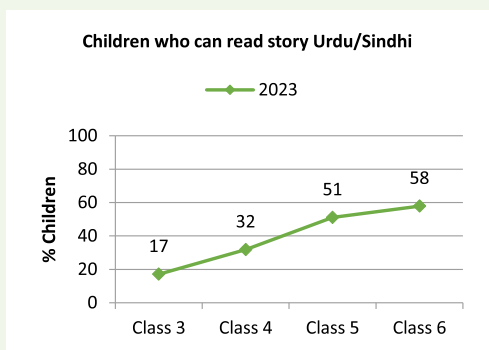
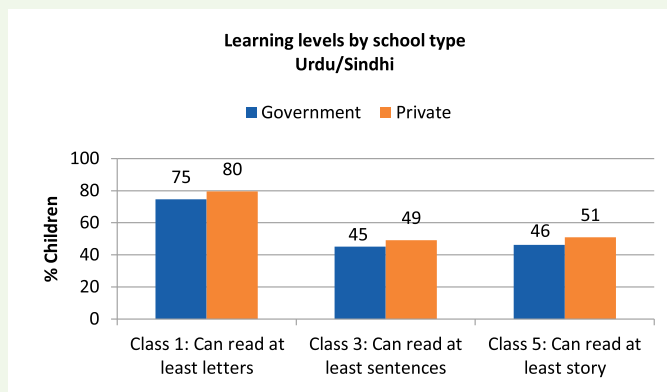
Age/Class	5	6	7	8	9	10	11	12	13	14	15	16	Total
1	100	43	24	13	6	0	1	1	0	0	1	2	16
2	0	57	32	21	13	0	2	1	1	0	0	0	13
3	0	0	43	28	22	14	7	3	2	1	0	0	13
4	0	0	0	38	25	19	13	7	3	3	1	1	12
5	0	0	0	0	34	35	23	14	6	4	4	2	12
6	0	0	0	0	0	33	22	25	12	8	4	3	10
7	0	0	0	0	0	0	32	18	22	14	10	4	7
8	0	0	0	0	0	0	0	31	22	32	16	14	8
9	0	0	0	0	0	0	0	0	33	25	35	16	6
10	0	0	0	0	0	0	0	0	0	12	29	58	4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

# NATIONAL (RURAL-URBAN)

## LEARNING LEVELS (URDU/SINDHI)

Class-wise % children who can read						
Class	Nothing	Letters	Words	Sentences	Story	Total
1	27.9	45.1	17.6	5.1	4.2	100
2	14.9	24.8	38.8	13.1	8.3	100
3	9.9	13.6	31.7	27.8	17.1	100
4	8.9	8.9	22.7	27.7	31.8	100
5	5.1	6.0	18.2	19.7	51.0	100
6	8.5	3.8	12.1	17.8	57.8	100
7	7.4	3.0	8.9	15.3	65.3	100
8	7.7	2.2	5.7	12.4	72.0	100
9	8.1	1.7	3.9	10.5	75.8	100
10	3.3	0.8	2.1	7.4	86.4	100

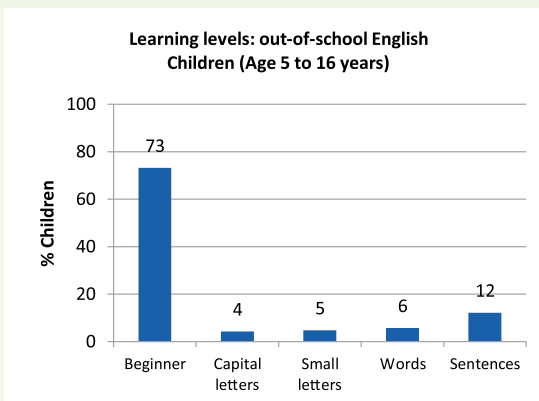
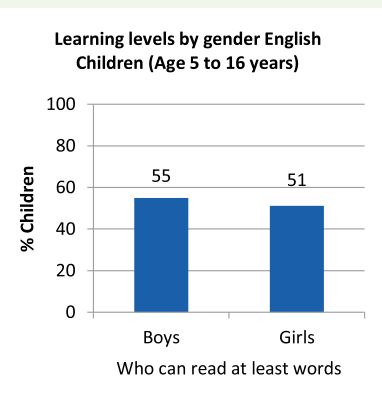
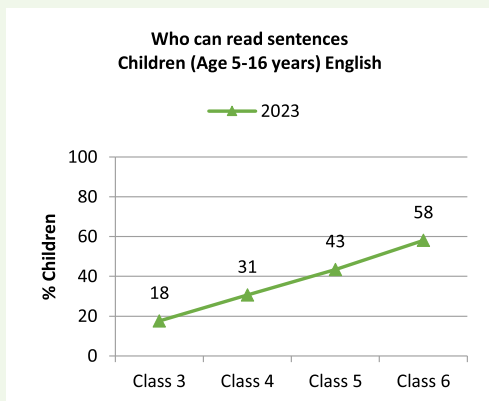
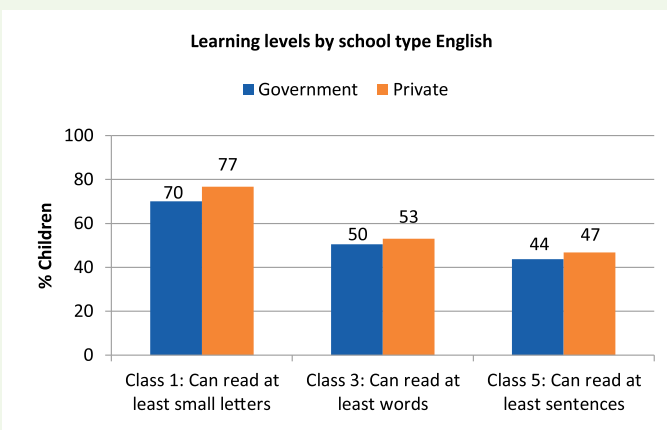
How to read: 9.5% (5.1+4.2) children of class 1 can read atleast sentence



## LEARNING LEVELS (ENGLISH)

Class-wise % children who can read						
Class	Nothing	Letters		Words	Sentences	Total
		Capital	Small			
1	31.7	37.6	18.5	7.8	4.4	100
2	18.0	21.3	34.4	17.4	9.0	100
3	12.9	11.2	26.3	31.9	17.6	100
4	11.4	7.3	13.3	37.2	30.7	100
5	3.0	5.5	8.6	26.9	56.0	100
6	10.5	3.5	5.7	22.2	58.1	100
7	9.3	2.5	4.4	16.6	67.3	100
8	9.7	1.8	2.8	11.7	74.0	100
9	9.4	1.5	2.4	8.0	78.8	100
10	3.9	0.9	1.1	5.1	89.0	100

How to read: 12.2% (7.8+4.4) children of class 1 can read atleast word





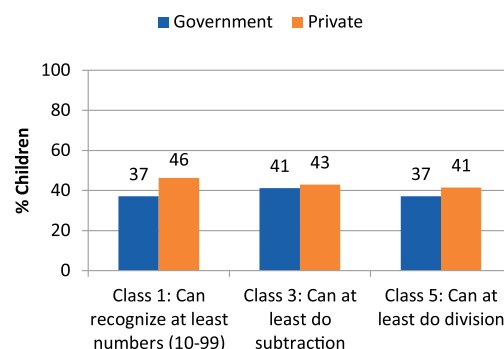
# NATIONAL (RURAL-URBAN)

## Learning levels (Arithmetic)

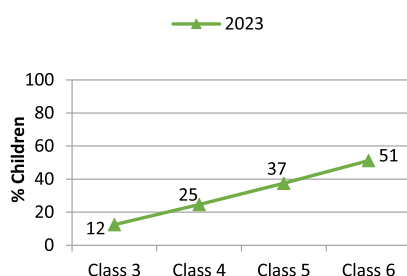
Class	Class-wise % children who can do							
	Nothing	Number recognition			Subtraction		Division (2 Digits)	Total
		1-9	10-99	100-200	2 Digits	3 Digits		
1	28.1	34.1	20.0	8.2	4.8	1.9	2.9	100
2	15.2	15.6	27.9	19.8	10.9	4.9	5.7	100
3	10.4	8.1	17.6	23.7	17.9	9.9	12.5	100
4	8.8	4.7	10.7	16.4	18.4	16.4	24.6	100
5	3.2	4.3	6.8	8.3	13.8	16.0	47.6	100
6	8.3	2.4	5.1	8.5	12.0	12.5	51.2	100
7	7.0	2.1	3.5	7.3	8.9	11.5	59.7	100
8	7.4	1.2	2.7	5.2	6.7	9.2	67.6	100
9	7.8	1.1	2.1	4.8	5.0	7.4	71.9	100
10	3.0	0.5	1.0	3.3	3.7	6.8	81.7	100

How to read: 9.6% (4.8+1.9+2.9) children of class 1 can do atleast subtraction

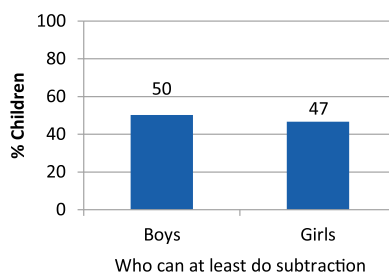
### Learning levels by school type Arithmetic



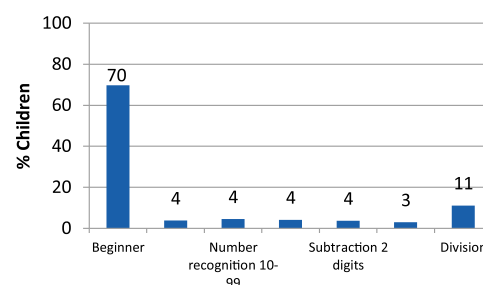
### Children who can do division (Age 5 to 16 years)



### Learning levels by gender Arithmetic Children (Age 5 to 16 years)



### Learning levels: out-of-school Arithmetic Children (Age 5 to 16 years)



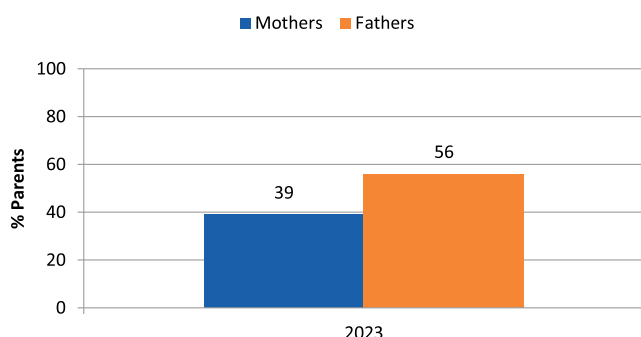
## PARENTAL EDUCATION AND PAID TUITION

### Class-wise % children attending paid tuition

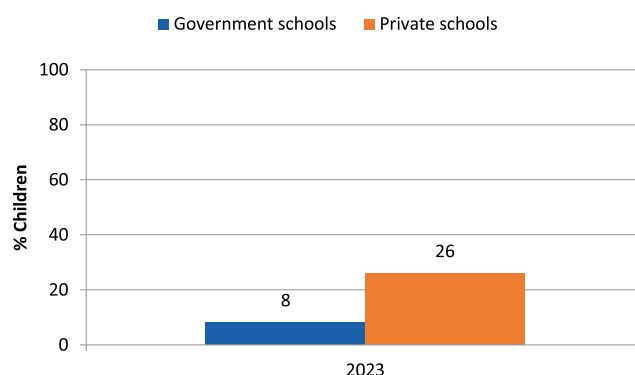
Class	I	II	III	IV	V	VI	VII	VIII	IX	X	By institution	Total
Govt.	5.5	6.4	6.5	8.0	8.4	10.1	12.1	11.8	14.7	15.9	8.2	12.1
Pvt.	24.7	26.5	27.2	26.8	27.4	26.4	27.6	25.9	29.3	27.1	26.1	

### Parental education

#### Parental Education-Atleast Primary



### Children attending paid tuition



## Sample Composition

- ASER 2023 survey was conducted in 151 rural district and 123 urban districts (Across 31 divisions) of Pakistan. This covered 106,974 households in 4,381 rural villages and 1,154 urban blocks across the country during September-December 2023.
- Detailed information was collected for 272,370 children (56% males and 44% females) aged 3-16 years. Out of these 200,987 children aged 5-16 years were assessed for language and arithmetic competencies.
- School information was collected for public and non-state/private schools. A total of 5,508 government schools and 2357 non-state/private institutions, including madrassahs and non-formal schools were surveyed.

## THEME 1: ACCESS

- In 2023, 12% of children were reported to be out-of-school. Around 8% of children have never been enrolled in a school and 5% have dropped out of school for various reasons.
- 88% of all school-aged children within the age bracket of 6-16 years were enrolled in schools. Amongst these, 66% of children were enrolled in government schools whereas 33% were going to non-state institutions (31% private schools and 2% Madrassah and 0% others).
- Amongst the enrolled students in government schools, 42% were girls and 58% were boys whereas in private schools 59% enrolled students were boys and 41% were girls.

## THEME 2: EARLY CHILDHOOD EDUCATION

- 42% of all school-aged children in the age bracket of 3-5 years were enrolled in ECE.
- 58% children of age 3-5 are currently not enrolled in any early childhood education program/school.
- Of the children enrolled in ECE, 69% are enrolled in government schools and 31% are enrolled in non-state institutions/private schools.

1. Household respondents identified Migration (32%), Law and order (18%), and Poverty (2%) as the main reasons for children dropping out.

## THEME 3: CLASS WISE LEARNING LEVELS

*Learning levels of children are assessed through language and arithmetic tools. The same tools are used for all children between the ages of 5 to 16. The literacy and numeracy assessments cover up to Class 2 level competencies mapped to the National Curriculum of Pakistan.*

### Urdu/Sindhi Learning levels of class 3 and class 5:

- 17% of class 3 children could read story in Urdu/Sindhi.
- 51% of class 5 children could read a class 2 level story in Urdu/Sindhi.

### English learning levels of class 3 and class 5:

- 18% of class 3 children could read class 2 level sentences.
- 56% of class 5 children could read class 2 level sentences.

### Arithmetic learning levels of class 3 and class 5:

- 13% of children enrolled in class 3 could do two-digit division.
- 48% of class 5 children could do two-digit division as.

## THEME 4: LEARNING LEVELS BY SCHOOL TYPE (GOVERNMENT VS PRIVATE)

### Children enrolled in private schools are performing better in literacy compared to government counterparts.

- 51% children enrolled in class 5 in private schools are able to read at least a story in Urdu/Sindhi as compared to 46% class 5 children enrolled in government schools.
- 47% of class 5 children enrolled in private schools can read at least sentences in English whereas only 44% government school children can do the same.
- 41% of class 5 children enrolled in private schools can do at least subtraction in Arithmetic whereas only 37% government school children can do the same.



## THEME 5: GENDER GAP

**Gender gap in learning: boys outperform girls (age 5-16 overall) in literacy and numeracy skills**

- 51% of boys and 47% of girls could read at least sentences in Urdu/Sindhi.
- 55% boys could read at least English words while 51% of girls can do the same.
- 50% of boys were able to do at least subtraction compared to 47% girls.

## THEME 6: PARENTAL EDUCATION

- 39% mothers and 56% fathers in the sampled households had completed at least primary education.

## THEME 7: PAID TUTIONS

**Private tuition incidence is greater for private school students. Overall, 26% students enrolled in private schools are attending paid tuition as compared to 8% students enrolled in government schools .**

- Children across all classes/grades take private tuition. In government schools, 6% of children enrolled in class 1 take tuition as compared to 8% children in class 10.







Annual Status of Education Report



Facilitated by Idara-e-Taleem-o-Aagahi



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