

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 20 OUT OF 20 DISTRICTS

Sample description over time



Table 1: Sample description 2006-2015

Year	Districts surveyed	Villages surveyed	Households surveyed	Number of children surveyed		
				Age 3-5	Age 6-14	Age 15-16
2006	18	522	10686	3267	13241	3064
2007	19	536	10715	3512	15516	2403
2008	19	546	11337	3189	14036	2600
2009	19	519	9702	2900	11535	2400
2010	19	543	11247	3344	12723	2339
2011	19	550	11222	2948	11616	1880
2012	19	552	10848	2661	9858	1936
2013	19	550	10701	2491	9552	1756
2014	19	531	11156	2448	9070	1801
2015	20	593	11840	2687	8727	1727

School enrollment and out of school children

Table 2: % Children in different types of schools 2015

Age group	Govt.	Pvt.	Other	Not in school	Total
Age: 6-14 ALL	48.5	50.0	0.1	1.5	100
Age: 7-16 ALL	50.0	47.1	0.1	2.8	100
Age: 7-10 ALL	45.1	54.0	0.1	0.8	100
Age: 7-10 BOYS	41.8	57.1	0.1	1.1	100
Age: 7-10 GIRLS	49.1	50.3	0.2	0.4	100
Age: 11-14 ALL	52.9	44.8	0.0	2.3	100
Age: 11-14 BOYS	49.7	48.0	0.0	2.2	100
Age: 11-14 GIRLS	56.8	40.8	0.0	2.4	100
Age: 15-16 ALL	54.4	37.2	0.0	8.4	100
Age: 15-16 BOYS	53.1	39.7	0.0	7.2	100
Age: 15-16 GIRLS	55.9	34.4	0.0	9.7	100

Note: 'Other' includes children going to madarsa and EGS.
 'Not in school' = dropped out + never enrolled



Table 3: Trends over time
 % Children enrolled in private schools
 in age group 6-14 by gender 2006-2015

Year	Boys	Girls	All
2006	44.7	37.3	41.5
2007	33.9	29.0	31.8
2008	44.2	39.2	42.1
2009	33.4	28.7	31.3
2010	39.7	35.8	38.0
2011	42.4	36.2	39.6
2012	48.2	41.3	45.1
2013	50.1	42.6	46.7
2014	53.2	45.0	49.5
2015	53.1	46.4	50.0

Table 4: Trends over time
 % Children not in school in age group
 6-14 by gender 2006-2015

Year	Boys	Girls	All
2006	3.0	3.5	3.2
2007	2.7	3.3	2.9
2008	2.8	2.8	2.8
2009	5.7	5.0	5.4
2010	1.7	1.6	1.7
2011	1.7	1.4	1.6
2012	1.4	1.2	1.3
2013	1.5	1.3	1.4
2014	1.2	1.9	1.5
2015	1.5	1.4	1.5



Reading

Table 5: % Children by class and READING level
 All schools 2015

Std	Not even letter	Letter	Word	Level 1 (Std I Text)	Level 2 (Std II Text)	Total
I	21.0	38.9	25.2	7.1	7.8	100
II	9.8	25.7	29.2	17.8	17.5	100
III	4.5	14.3	20.3	20.8	40.1	100
IV	3.7	9.2	14.7	20.6	51.8	100
V	3.2	5.5	8.7	18.2	64.5	100
VI	2.9	5.1	7.1	8.6	76.3	100
VII	2.0	5.0	4.6	7.5	80.9	100
VIII	1.6	2.3	2.8	6.2	87.0	100
Total	6.2	13.5	14.2	13.4	52.8	100

How to read this table: Each cell shows the highest level in reading achieved by a child. For example, in Std III, 4.5% children cannot even read letters, 14.3% children can read letters but not more, 20.3% children can read words but not Std I level text or higher, 20.8% children can read Std I level text but not Std II level text, and 40.1% children can read Std II level text. For each Std, the total of all these exclusive categories is 100%.



Table 7: Trends over time
 % Children who can READ Std II level text by class and school type 2006-2015

Year	Govt. schools					Pvt. schools				
	Std IV	Std V	Std VI	Std VII	Std VIII	Std IV	Std V	Std VI	Std VII	Std VIII
2006	28.7	44.3	58.8	74.6	79.2	53.7	66.1	74.8	83.8	87.4
2007	45.5	65.9	71.8	82.6	88.4	52.7	61.3	75.7	80.5	88.8
2008	32.8	61.3	70.5	78.7	86.6	48.0	66.0	76.8	85.3	81.7
2009	42.1	64.3	71.4	76.6	85.4	57.7	67.6	78.5	77.4	89.6
2010	48.1	68.7	80.4	86.6	87.4	47.1	71.9	79.7	87.0	89.7
2011	51.9	71.9	79.5	85.7	88.8	58.9	71.9	78.5	85.6	88.2
2012	49.9	69.5	75.4	82.8	84.4	57.8	73.5	83.2	88.8	90.0
2013	47.2	66.5	73.6	83.9	83.6	53.7	69.9	77.8	87.7	89.1
2014	50.9	60.9	71.0	74.7	87.3	63.1	73.8	80.0	86.2	84.4
2015	51.7	61.5	71.8	78.3	86.1	52.0	68.3	81.4	85.3	88.3

Reading Tool

ਕਹਾਣੀ

ਜੀਤੂ ਦੇ ਘਰ ਇੱਕ ਕੁੱਤਾ ਹੈ। ਉਸ ਦਾ ਨਾਮ ਜੈਕੀ ਹੈ। ਉਸ ਦਾ ਰੰਗ ਕਾਲਾ ਹੈ। ਇੱਕ ਦਿਨ ਰਾਤ ਨੂੰ ਉਹਨਾਂ ਦੇ ਘਰ ਚੋਰ ਆ ਗਏ। ਸਾਰੇ ਸੁੱਤੇ ਪਏ ਸਨ। ਜੈਕੀ ਨੂੰ ਚੋਰਾਂ ਦੀ ਅਵਾਜ਼ ਸੁਣਾਈ ਦਿੱਤੀ। ਉਸ ਨੇ ਜ਼ੋਰ-ਜ਼ੋਰ ਨਾਲ ਭੌਂਕਣਾ ਸ਼ੁਰੂ ਕਰ ਦਿੱਤਾ। ਅਵਾਜ਼ ਸੁਣ ਕੇ ਸਾਰੇ ਉੱਠ ਗਏ। ਜੀਤੂ ਨੇ ਚੋਰਾਂ ਨੂੰ ਫੜ ਲਿਆ। ਉਹਨਾਂ ਨੇ ਚੋਰਾਂ ਨੂੰ ਪੁਲਿਸ ਦੇ ਹਵਾਲੇ ਕਰ ਦਿੱਤਾ।

ਬੋਰਾ

ਸਵੇਰ ਹੋ ਗਈ ਹੈ।
 ਸੂਰਜ ਚਮਕ ਰਿਹਾ ਹੈ।
 ਚਿੜੀਆਂ ਚੀਂ-ਚੀਂ ਕਰ ਰਹੀਆਂ ਹਨ।
 ਬੱਚੇ ਸਕੂਲ ਜਾ ਰਹੇ ਹਨ।

ਲ ਪ ਸ

ਕ ਗ

ਛ ਬ ਮ

ਟ ਰ

ਹਾਰ ਖੁਰ

ਪਾਣੀ

ਮੈਲਾ ਸਿਰ

ਪੂਰਾ ਸੁਰ

ਤੇਲ

ਸ਼ੇਰ ਮੌਕਾ

Table 6: Trends over time
 % Children who can READ at least Std I level text by class and school type 2006-2015

Year	Govt. schools					Pvt. schools				
	Std I	Std II	Std III	Std IV	Std V	Std I	Std II	Std III	Std IV	Std V
2006	6.4	16.2	38.8	61.8	75.0	11.9	41.1	62.1	76.6	85.8
2007	8.5	21.5	47.8	70.3	85.8	12.9	36.0	64.9	75.5	83.1
2008	5.4	15.9	40.9	66.0	84.5	9.2	37.3	61.3	81.3	93.2
2009	8.1	21.5	44.2	72.5	86.1	21.0	40.9	62.2	83.3	85.9
2010	6.3	19.6	52.4	77.4	87.9	9.9	30.3	54.2	79.6	89.1
2011	5.0	23.0	57.3	79.4	86.3	10.2	30.5	60.5	82.8	88.3
2012	3.1	22.4	51.4	71.4	86.8	14.2	38.4	68.0	81.5	86.2
2013	5.6	18.4	52.3	68.8	82.9	10.5	40.2	68.2	77.0	85.8
2014	2.4	19.4	42.4	67.8	76.1	20.5	39.4	62.8	81.2	88.0
2015	12.3	25.8	56.6	71.6	81.3	16.4	42.3	64.6	73.2	84.1

While reading Tables 6 and 7, following things need to be kept in mind:

ASER is a "floor" level test. The highest level in the ASER reading tool is the ability to read a Std II level text. All children (age 5 to 16) are assessed using the same tool. ASER does not assess children using grade level tools.

Table 6 shows the percentage of children in Std I to V in government and private schools who can read at least a Std I level text. Similarly, Table 7 shows the percentage of children in Std IV to VIII who can read a Std II level text.

Table 6 shows that in 2015 there has been an improvement in reading ability in government schools in all primary grades (I-V). While the gap between reading levels in government and private schools remains, it is substantially smaller this year. For instance, in government schools, the percentage of children in Std III who could read at least a Std I level text, increased from 42.4% in 2014 to 56.6% in 2015 – an increase of over 14 percentage points. In comparison, in private schools the corresponding increase was only about 2 percentage points, from 62.8% to 64.6%. While reading ability has improved in government schools in higher grades, the gains have not been substantial as compared to those for primary grades (Table 7).

Arithmetic

Table 8: % Children by class and ARITHMETIC level
 All schools 2015

Std	Not even 1-9	Recognize numbers		Can subtract	Can divide	Total
		1-9	10-99			
I	14.8	29.6	43.6	8.1	3.8	100
II	4.0	23.5	43.8	25.1	3.6	100
III	1.5	10.6	31.4	39.2	17.4	100
IV	1.3	7.9	21.9	28.8	40.0	100
V	1.4	5.3	15.5	25.2	52.7	100
VI	1.3	3.4	20.1	24.9	50.3	100
VII	1.1	3.8	21.8	19.6	53.9	100
VIII	0.9	2.4	18.4	18.4	59.9	100
Total	3.4	11.0	27.1	23.5	35.0	100

How to read this table: Each cell shows the highest level in arithmetic achieved by a child. For example, in Std III, 1.5% children cannot even recognize numbers 1-9, 10.6% children can recognize numbers upto 9 but not more, 31.4% children can recognize numbers upto 99 but cannot do subtraction, 39.2% children can do subtraction but cannot do division, and 17.4% children can do division. For each Std, the total of all these exclusive categories is 100%.



Math Tool

और पहिचान 1-9		संख्या पहिचान 10-99		घटाएँ		काग
3	7	65	38	41 - 13	64 - 48	
1	4	92	23	84 - 49	73 - 36	6) 769
8	2	47	72	56 - 37	31 - 13	8) 987
5	9	54	87	45 - 18	53 - 24	4) 519

3) 928 का भागफल 116 है।
 6) 769 का भागफल 128.1666... है।
 8) 987 का भागफल 123.375 है।
 4) 519 का भागफल 129.75 है।

Table 9: Trends over time
 % Children who can do at least SUBTRACTION by class and school type 2007-2015**

Year	Govt. schools					Pvt. schools				
	Std I	Std II	Std III	Std IV	Std V	Std I	Std II	Std III	Std IV	Std V
2007	11.0	22.7	46.4	67.6	82.9	14.6	37.5	62.5	74.7	78.3
2008	3.9	11.8	34.8	58.8	79.2	9.0	34.9	55.9	79.6	87.1
2009	8.0	20.0	46.0	71.0	82.6	20.7	36.7	62.6	78.5	83.4
2010	7.8	28.4	62.0	80.8	89.9	17.6	37.3	66.5	82.5	90.0
2011	4.9	29.8	60.3	74.6	81.5	15.6	40.2	63.1	79.7	88.5
2012	1.7	16.0	40.6	55.6	70.4	12.2	40.6	64.8	74.4	80.2
2013	6.0	17.7	42.9	57.7	74.2	9.0	43.2	68.1	76.9	84.1
2014	1.1	10.8	32.1	48.3	58.7	15.5	40.8	60.6	78.1	82.6
2015	8.2	17.1	48.9	65.9	73.2	14.1	37.2	63.1	72.1	83.7

Table 10: Trends over time
 % Children who can do DIVISION by class and school type 2007-2015**

Year	Govt. schools					Pvt. schools				
	Std IV	Std V	Std VI	Std VII	Std VIII	Std IV	Std V	Std VI	Std VII	Std VIII
2007	37.3	55.2	61.4	72.9	80.9	41.1	50.9	67.4	77.0	83.8
2008	18.1	39.7	49.6	57.1	71.4	36.3	49.7	60.5	71.5	73.2
2009	28.4	48.6	55.2	61.9	71.2	36.7	54.0	66.8	66.2	77.6
2010	47.8	70.8	76.8	78.4	80.2	44.4	68.0	75.0	82.7	85.6
2011	43.1	62.5	65.4	67.7	70.5	44.5	59.0	67.2	73.6	78.9
2012	29.5	48.6	58.0	55.0	59.9	34.5	56.5	60.4	71.0	71.3
2013	29.9	47.1	52.0	58.9	62.2	39.1	53.7	58.7	68.8	76.6
2014	23.8	37.1	41.0	46.2	56.4	39.4	53.9	62.8	67.1	70.7
2015	38.8	51.5	44.4	47.8	53.4	41.3	54.2	57.1	64.1	68.0

** ASER 2006 arithmetic results are not comparable to the subsequent years because of a change in the assessment tool. Hence this data is not included in the above tables.

While reading Tables 9 and 10, following things need to be kept in mind:

ASER is a "floor" level test. The highest level in the ASER arithmetic tool is the ability to do a numerical division problem (dividing a three digit number by a one digit number). In Punjab, children are expected to do such computations by Std III. All children (age 5 to 16) are assessed using the same tool. ASER does not assess children using grade level tools.

Table 9 shows the percentage of children in Std I to V in government and private schools who can do at least subtraction. Similarly, Table 10 shows the percentage of children in Std IV to VIII who can do division.

Ability to do arithmetic operations has improved significantly in 2015 in government schools, especially for grades I to V. For instance, in government schools, the percentage of children in Std III who can do subtraction or more, increased from 32.1% in 2014 to 48.9% in 2015 - an increase of about 17 percentage points. In contrast, the increase in private schools was only about 3 percentage points, from 60.6% to 63.1% (Table 9). Similarly, the percentage of children in Std V who could do division, in government schools, increased from 37.1% in 2014 to 51.5% in 2015 (Table 10). However, these large gains are not seen in higher grades (Std VI to VIII) in private schools.

ANALYSIS BASED ON DATA FROM GOVERNMENT SCHOOLS. 20 OUT OF 20 DISTRICTS

School observations

In each sampled village, the largest government school with primary sections is visited on the day of the survey. Information about schools is based on these visits.

Table 11: Number of schools visited 2010-2015

Type of school	2010	2011	2012	2013	2014	2015
Primary schools (Std I-IV/V)	391	457	469	424	473	538
Upper primary schools (Std I-VII/VIII)	58	32	56	74	23	23
Total schools visited	449	489	525	498	496	561

Table 12: Student and teacher attendance on the day of visit 2010-2015

All schools	2010	2011	2012	2013	2014	2015
% Enrolled children present (Average)	82.7	81.6	80.6	79.7	81.4	76.9
% Teachers present (Average)	88.5	86.9	80.0	83.8	85.5	79.9

Table 13: Small schools and multigrade classes 2010-2015

All schools	2010	2011	2012	2013	2014	2015
% Schools with total enrollment of 60 or less	17.2	19.6	17.4	22.8	25.4	27.6
% Schools where Std II children were observed sitting with one or more other classes	52.5	43.7	53.7	51.1	47.5	57.9
% Schools where Std IV children were observed sitting with one or more other classes	37.6	41.2	44.7	46.7	42.4	53.9

RTE indicators

The Right of Children to Free and Compulsory Education (RTE) Act, 2009 specifies a series of norms and standards for a school. Data on selected measurable indicators of RTE are collected in ASER.

Table 14: Schools meeting selected RTE norms 2010-2015

% Schools meeting the following RTE norms:		2010	2011	2012	2013	2014	2015
PTR & CTR	Pupil-teacher Ratio (PTR)	34.9	30.4	34.6	45.4	64.0	60.5
	Classroom-teacher Ratio (CTR)	76.9	82.2	80.3	78.9	69.3	65.2
Building	Office/store/office cum store	78.5	79.3	80.0	85.4	78.5	81.0
	Playground	69.3	71.2	71.0	62.0	70.6	64.8
	Boundary wall/fencing	82.8	83.9	83.0	89.2	88.9	88.9
Drinking water	No facility for drinking water	8.9	8.4	8.0	8.9	8.3	2.2
	Facility but no drinking water available	8.0	8.8	9.3	9.5	10.7	6.7
	Drinking water available	83.1	82.9	82.8	81.5	81.0	91.2
	Total	100	100	100	100	100	100
Toilet	No toilet facility	0.9	1.9	0.6	0.8	1.4	0.2
	Facility but toilet not useable	37.9	39.5	28.9	18.7	19.4	24.1
	Toilet useable	61.2	58.7	70.5	80.5	79.2	75.7
	Total	100	100	100	100	100	100
Girls' toilet	No separate provision for girls' toilet	7.3	4.9	4.4	4.9	6.5	5.6
	Separate provision but locked	16.9	4.0	8.6	7.5	5.8	7.1
	Separate provision, unlocked but not useable	26.5	34.8	21.4	13.7	16.2	17.6
	Separate provision, unlocked and useable	49.4	56.2	65.6	74.0	71.6	69.7
	Total	100	100	100	100	100	100
Library	No library	4.1	5.6	9.4	23.2	11.3	14.4
	Library but no books being used by children on day of visit	30.0	24.0	44.7	42.3	49.0	37.3
	Library books being used by children on day of visit	66.0	70.4	46.0	34.6	39.7	48.4
	Total	100	100	100	100	100	100
Mid-day meal	Kitchen shed for cooking mid-day meal	94.7	93.9	97.7	96.8	94.5	96.8
	Mid-day meal served in school on day of visit	97.9	96.4	95.5	94.1	92.7	95.5

