

ANALYSIS BASED ON DATA FROM HOUSEHOLDS. 33 OUT OF 33 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	33	973	19729	7475	25745	5212
2007	33	971	18448	6759	26107	3512
2008	33	985	19799	5830	24477	3804
2009	33	974	19433	5850	24739	4263
2010	33	975	19749	6052	24232	4175
2011	31	925	18416	4939	21171	4059
2012	33	967	19612	5154	19030	3434
2013	33	969	19563	5239	20286	3329
2014	33	975	19724	5014	19199	3330
2015	33	984	19772	5398	17880	3555

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	63.9	34.6	0.1	1.3	100
Age: 7-16 ALL	56.1	41.1	0.1	2.7	100
Age: 7-10 ALL	77.1	22.2	0.2	0.5	100
Age: 7-10 BOYS	75.0	24.3	0.1	0.5	100
Age: 7-10 GIRLS	79.2	20.0	0.2	0.6	100
Age: 11-14 ALL	49.3	48.3	0.1	2.3	100
Age: 11-14 BOYS	46.9	50.7	0.1	2.3	100
Age: 11-14 GIRLS	51.7	46.0	0.1	2.3	100
Age: 15-16 ALL	26.4	64.9	0.1	8.7	100
Age: 15-16 BOYS	25.0	67.4	0.0	7.7	100
Age: 15-16 GIRLS	27.7	62.6	0.1	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 not in school in age group 6-14 by gender 2006-2015

Year	Boys	Girls	All
2006	3.4	4.2	3.8
2007	1.8	1.7	1.8
2008	1.5	1.6	1.5
2009	0.7	1.2	0.9
2010	1.1	1.2	1.1
2011	1.0	1.2	1.1
2012	1.3	1.6	1.5
2013	1.4	1.8	1.6
2014	1.1	1.9	1.5
2015	1.3	1.3	1.3

Table 4: Trends over time
 % Children enrolled in private schools in age group 6-14 by gender 2006-2015

Year	Boys	Girls	All
2006	18.5	18.0	18.3
2007	25.6	26.0	25.8
2008	26.1	25.8	26.0
2009	28.3	27.9	28.1
2010	26.7	26.2	26.4
2011	30.6	29.8	30.3
2012	36.8	33.7	35.3
2013	38.6	36.4	37.5
2014	38.3	35.5	36.9
2015	36.6	32.5	34.6

Table 5: Trends over time
 % Children enrolled in private schools in Std I-V and Std VI-VIII 2010-2015

Year	Std I-V	Std VI-VIII	Total
2010	12.4	48.1	24.7
2011	15.9	50.7	28.6
2012	19.9	57.6	33.5
2013	21.4	60.8	35.6
2014	23.1	55.2	35.2
2015	23.1	50.3	33.1



Reading

Table 6: % 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	34.0	40.0	17.7	5.9	2.4	100
II	12.1	23.3	23.0	22.3	19.3	100
III	7.3	14.8	14.7	25.1	38.2	100
IV	5.0	8.3	10.4	19.7	56.6	100
V	3.6	7.4	9.4	17.8	61.8	100
VI	3.1	5.8	7.6	15.6	67.9	100
VII	2.2	4.9	5.3	14.5	73.2	100
VIII	1.6	2.9	5.3	10.7	79.5	100
Total	9.0	13.9	11.9	16.5	48.9	100

How to read this table: Each cell shows the highest level in reading achieved by a child. For example, in Std III, 7.3% children cannot even read letters, 14.8% children can read letters but not more, 14.7% children can read words but not Std I level text or higher, 25.1% children can read Std I level text but not Std II level text, and 38.2% 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 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	9.9	43.1	65.8	82.0	90.2	16.2	43.5	69.7	80.1	89.5
2007	12.1	48.1	74.7	88.2	92.1	19.1	52.0	79.2	93.2	93.6
2008	5.8	33.8	74.8	86.6	94.9	17.4	40.5	74.1	90.3	93.8
2009	13.7	46.9	74.5	90.4	93.9	17.9	53.2	75.7	87.5	95.4
2010	8.2	36.6	72.3	89.4	94.0	20.1	44.2	75.8	88.4	95.1
2011	7.8	30.8	62.6	81.0	86.8	14.4	36.8	72.2	81.5	90.9
2012	6.6	34.7	58.6	72.5	77.9	12.6	36.7	63.9	75.5	84.1
2013	4.8	36.7	57.0	70.5	81.1	10.3	39.5	62.5	74.7	81.8
2014	4.1	36.3	52.9	68.6	72.5	17.6	36.9	60.0	70.1	76.5
2015	7.3	40.2	63.0	75.5	78.2	11.4	46.6	64.7	80.5	81.8

Table 9: Trends over time
% Children in Std III and V at different READING levels by school type 2006-2015

Year	% Children in Std III who can read at least Std I level text			% Children in Std V who can read Std II level text		
	Govt.	Pvt.	Govt. & Pvt.*	Govt.	Pvt.	Govt. & Pvt.*
2006	65.8	69.7	66.1	60.1	57.6	59.6
2007	74.7	79.2	74.9	73.7	74.9	74.2
2008	74.8	74.1	74.8	74.3	76.3	75.0
2009	74.5	75.7	74.6	71.5	77.6	73.8
2010	72.3	75.8	72.6	71.0	77.6	73.2
2011	62.6	72.2	63.5	62.1	66.0	63.5
2012	58.6	63.9	59.3	55.3	62.2	58.3
2013	57.0	62.5	57.7	58.2	61.3	59.5
2014	52.9	60.0	54.1	51.7	56.2	53.5
2015	63.0	64.7	63.3	59.8	65.2	61.8

*This is the weighted average for children in government and private schools only.

Reading Tool

गोष्ट

दाजी आजोबा आजारी असतात. ते खूप थकलेले दिसतात. हल्ली त्यांना नीट दिसत नाही. आजोबांचा नातू रमेश त्यांची खूप काळजी घेतो. त्यांना खूप खोकलाही झाला आहे. रमेश त्यांना वेळेवर औषध देतो. नीट दिसत नसल्यामुळे आजोबा घरात बसून असतात. रमेश त्यांच्या हाताला धरून घरातल्या घरात फिरवतो. घरात बसून आजोबा जुनी गाणी ऐकतात. त्यांना नवीन गाणीही ऐकायला आवडतात. आजोबांना बरे वाटल्यावर दोघे लांबवर फिरायला जाणार आहेत.

परिच्छेद

आज गावाहून मामा आला. मला खाऊ व फुगे घेऊन आला. ताईला बाहुली घेऊन आला. आईला छान साडी आणली.

खडू

टोपी पतंग

लाल

विमान केळे

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Table 8: 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	46.8	60.1	70.5	76.8	82.6	45.0	57.6	64.9	75.5	83.1
2007	59.3	73.7	80.9	86.7	89.6	63.5	74.9	83.7	88.6	91.5
2008	52.6	74.3	82.5	87.1	90.8	57.3	76.3	82.9	88.3	91.7
2009	60.7	71.5	81.1	87.2	86.5	56.6	77.6	84.7	89.6	93.0
2010	57.8	71.0	81.3	86.0	88.2	53.5	77.6	84.6	88.6	92.9
2011	47.3	62.1	72.8	79.7	83.0	48.4	66.0	75.2	84.0	86.9
2012	50.5	55.3	69.1	79.4	81.4	54.9	62.2	74.9	78.0	83.7
2013	46.0	58.2	64.3	69.9	81.7	46.8	61.3	68.3	74.6	79.6
2014	48.1	51.7	61.2	70.4	71.6	48.3	56.2	68.9	70.0	78.3
2015	55.5	59.8	64.5	71.3	77.7	62.5	65.2	72.9	75.6	80.5

While reading Tables 7 and 8, the 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 7 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 8 shows the percentage of children in Std IV to VIII who can read a Std II level text.

Tables 7 and 8 show that in 2015 there has been an improvement in reading ability in government schools in all grades (I-VIII). For instance, in government schools, the percentage of children in Std III who could read at least a Std I level text, increased from 52.9% in 2014 to 63.0% in 2015 (Table 7). This proportion is slightly higher at 64.7% for Std III children in private schools in 2015. Similarly, the percentage of children in Std V who could read Std II level text in government schools increased by 8% points – from 51.7% in 2014 to 59.8% in 2015 (Table 8). In contrast, 65.2% children in Std V in private schools could read Std II level text in 2015.

Arithmetic

Table 10: % 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	30.8	49.7	18.6	0.7	0.2	100
II	10.5	37.8	45.2	6.0	0.6	100
III	5.4	26.8	44.1	21.6	2.1	100
IV	3.9	16.5	36.6	32.8	10.2	100
V	2.5	14.2	33.8	25.2	24.4	100
VI	1.7	12.3	35.9	22.3	27.8	100
VII	1.6	8.3	38.0	24.1	28.0	100
VIII	1.6	5.7	36.4	23.5	32.7	100
Total	7.6	22.0	36.0	19.3	15.3	100

How to read this table: Each cell shows the highest level in arithmetic achieved by a child. For example, in Std III, 5.4% children cannot even recognize numbers 1-9, 26.8% children can recognize numbers upto 9 but not more, 44.1% children can recognize numbers upto 99 but cannot do subtraction, 21.6% children can do subtraction but cannot do division, and 2.1% children can do division. For each Std, the total of all these exclusive categories is 100%.

Table 11: 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	5.2	23.4	52.2	70.5	80.8	13.5	35.3	53.9	73.3	81.9
2008	3.1	15.5	48.7	67.9	83.4	14.6	24.2	54.4	71.2	80.4
2009	5.2	25.4	55.2	78.5	85.3	16.0	29.2	59.5	71.4	87.9
2010	2.6	15.1	46.5	71.8	83.5	12.3	27.0	51.9	70.8	84.0
2011	3.4	12.2	35.4	58.5	70.2	7.2	17.1	42.2	59.6	75.3
2012	1.4	6.6	22.5	39.9	47.4	5.3	14.1	34.1	46.9	54.7
2013	0.6	4.5	17.1	31.9	41.7	4.3	11.3	21.9	42.2	45.4
2014	0.6	5.3	17.9	37.3	38.6	5.0	8.3	22.6	40.6	44.5
2015	0.3	5.1	22.7	40.7	46.8	3.1	11.9	27.8	54.6	54.4

Table 13: Trends over time
 % Children in Std III and V at different ARITHMETIC levels by school type 2007-2015

Year	% Children in Std III who can do at least subtraction			% Children in Std V who can do division		
	Govt.	Pvt.	Govt. & Pvt.*	Govt.	Pvt.	Govt. & Pvt.*
2007	52.2	53.9	52.3	45.7	42.5	44.5
2008	48.7	54.4	49.2	46.9	47.4	47.1
2009	55.2	59.5	55.5	49.8	53.4	51.1
2010	46.5	51.9	46.8	39.9	44.6	41.4
2011	35.4	42.2	36.0	31.4	35.2	32.8
2012	22.5	34.1	24.0	20.2	25.8	22.6
2013	17.1	21.9	17.8	16.3	20.4	18.1
2014	17.9	22.6	18.7	16.6	22.2	18.9
2015	22.7	27.8	23.6	21.9	28.6	24.4

*This is the weighted average for children in government and private schools only.

Math Tool

अंक ओळखा १ ते ९	संख्या ओळखा १० ते ९९	वजाबाकी	भागकार
१ ४	५१ ८३	४६ ६३ - २९ - ३९	७) ८७९ (
७ ३	३७ ६५	४७ ३५ - २८ - १७	६) ८२४ (
६ ९	५५ २६	९२ ७४ - ७६ - ५७	८) ९८५ (
५ २	९९ २७	५२ ६६ - १४ - ४८	४) ५१७ (
	३६ ४३		

कोसवोही पाच अंक विचार. ५ अंकांची ५ अंक ओळखणे जसरीच आहे. कोसवोही पाच संख्या विचार. ५ पैकी चार संख्या ओळखणे जसरीच आहे. कोसवोही दोन उदाहरणे सोडवण्याला द्या. दोन्ही बरोबर सोडवणे गरजेचे आहे. एक उदाहरण सोडवण्याला द्या. ते बरोबर सोडवणे गरजेचे आहे.

Table 12: 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	27.2	45.7	56.4	66.2	74.2	38.2	42.5	54.1	63.9	73.5
2008	27.1	46.9	58.6	68.5	71.8	32.4	47.4	56.4	64.3	72.3
2009	31.8	49.8	59.9	72.8	77.2	26.9	53.4	64.3	71.1	80.6
2010	20.2	39.9	52.9	61.2	72.0	23.1	44.6	58.8	67.5	74.3
2011	15.0	31.4	42.7	51.8	63.4	18.9	35.2	45.5	52.8	60.3
2012	11.5	20.2	29.3	40.4	45.1	17.3	25.8	32.7	35.4	44.2
2013	9.0	16.3	24.5	27.8	35.7	12.0	20.4	26.4	28.2	33.4
2014	12.1	16.6	21.7	28.0	30.8	8.2	22.2	23.9	28.6	33.6
2015	9.2	21.9	24.1	26.3	31.7	15.1	28.6	32.9	30.1	33.3

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

While reading Tables 11 and 12, the 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 Maharashtra, 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 11 shows the percentage of children in Std I to V in government and private schools who can do at least subtraction. Similarly, Table 12 shows the percentage of children in Std IV to VIII who can do division.

Ability to do arithmetic operations has improved in 2015 in both government and private schools. However, arithmetic levels remain low. For instance, in government schools, the percentage of children in Std V who can do subtraction or more, increased by around 8% points - from 38.6% in 2014 to 46.8% in 2015. The increase in private schools was around 10% points, from 44.5% to 54.4% (Table 11). The percentage of children in Std VIII in government schools who can do division is 31.7% in 2015, more or less unchanged from 2014 (Table 12). This proportion is 33.3% for Std VIII children in private schools.

Divisional Estimates

Districts have been clubbed into divisions to produce these estimates. The grouping of districts is based on administrative divisions used in the state or by geographical regions.

Table 14: Trends over time
 % Children in Std I and II at different levels by division/region 2010-2015

Division/Region	% Children in Std I-II who CAN READ at least letters						% Children in Std I-II who CAN RECOGNIZE numbers 1-9 or more					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Amravati	95.4	86.3	76.1	59.6	63.4	71.1	94.5	87.1	75.6	65.5	69.9	72.0
Aurangabad	94.3	89.9	72.4	64.4	66.1	69.3	93.8	92.0	76.2	73.2	73.9	74.8
Konkan	97.1	91.4	82.2	72.1	71.5	81.2	96.5	90.0	82.1	75.4	75.8	80.9
Nagpur	90.6	88.7	73.6	67.9	67.1	80.0	88.4	87.7	75.1	73.7	73.4	79.8
Nashik	96.0	94.3	78.9	63.5	62.6	76.2	95.1	94.1	81.6	68.5	69.9	79.4
Pune	94.9	93.0	81.7	85.6	82.9	85.8	94.1	93.7	84.7	90.0	86.7	88.7
State	94.8	91.2	77.4	68.5	68.8	76.5	93.9	91.6	79.8	74.4	75.1	79.0

List of districts under each division

Amravati
Buldana
Akola
Washim
Amravati
Yavatmal
Aurangabad
Nanded
Hingoli
Parbhani
Jalna
Aurangabad
Bid
Latur
Osmanabad
Konkan
Thane
Raigarh
Ratnagiri
Sindhudurg
Nagpur
Wardha
Nagpur
Bhandara
Gondiya
Gadchiroli
Chandrapur
Nashik
Nandurbar
Dhule
Jalgaon
Nashik
Ahmadnagar
Pune
Pune
Solapur
Satara
Kolhapur
Sangli

Table 15: Trends over time
 % Children in Std III-V at different levels by division/region 2010-2015

Division/Region	% Children in Std III-V who CAN READ at least Std I level text						% Children in Std III-V who CAN DO at least subtraction					
	2010	2011	2012	2013	2014	2015	2010	2011	2012	2013	2014	2015
Amravati	80.7	65.8	58.1	60.5	54.7	65.7	60.7	40.5	27.2	27.0	21.8	34.6
Aurangabad	83.2	76.4	65.5	67.4	61.5	69.5	67.4	56.1	31.0	22.5	27.0	31.3
Konkan	85.4	82.4	75.1	76.3	76.5	72.6	69.3	67.9	42.0	36.3	39.5	40.7
Nagpur	79.9	73.4	68.1	71.4	68.7	73.7	47.2	45.0	32.0	28.5	29.0	37.0
Nashik	88.6	81.4	72.1	64.6	56.9	71.4	74.9	52.7	40.6	28.4	30.3	34.6
Pune	90.4	82.2	82.3	83.7	82.6	84.6	74.7	67.7	52.4	50.3	50.8	54.9
State	85.5	77.8	71.1	70.5	65.9	72.8	67.6	56.0	38.6	31.7	32.8	38.4