

ASER 2005: ALL INDIA FINDINGS (rural)

To guarantee that all children (6 to 14) enroll in school, stay in school through the elementary stage and receive education of satisfactory quality, the Government of India has launched a massive nation-wide program of universalising elementary education. The objectives of Sarva Shiksha Abhiyan (SSA) are¹:

All children in school, Education Guarantee Centre, Alternate School, ' Back-to-School' camp by 2003;
All children complete five years of primary schooling by 2007
All children complete eight years of elementary schooling by 2010
Focus on elementary education of satisfactory quality with emphasis on education for life
Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010
Universal retention by 2010

What does ASER 2005 say about India's progress towards these goals?

ENROLLMENT:

93.4% children in 6 to 14 age group are enrolled in school.

75.1% of children in the 6-14 age group are enrolled in government schools and 16.3% in private schools (aided + unaided). A very small proportion (around 1% each) are enrolled in madarssa, EGS and alternate schools.

In some states, a substantial portion of children in this age group goes to private schools. In some states one third to one fifth of all children (6-14) go to private schools. For example: Haryana (34.5%), Uttar Pradesh (28%), Punjab (25.5%), Kerala (22.4%) and Rajasthan (21.9%).

OUT OF SCHOOL CHILDREN:

6.6% children in the 6-14 age group are not in school. This fact cannot be ignored. More than half of these out of school children were never enrolled in school.

ASER 2005 estimates of out of school children are based on population figures from the 2001 census.

These estimates indicate that about 12.5 million children are not in school based on latest population projection by the census. These include never-enrolled and dropped out children.

Bihar, Uttar Pradesh, Rajasthan, Andhra Pradesh and Orissa account for 71.2% of all out of school children.

There are considerable state wise variations in the proportion of children out of school: several states such as Kerala, Karnataka, Uttaranchal, Tamil Nadu, Maharashtra, Goa and Gujarat have less than 4% children in the 6 to 14 age group out of school. Only Rajasthan and Bihar have more than 10% children out of school.

¹ <http://ssa.nic.in/ssafam.asp#1.0>

Learning

	% Children who CANNOT read ...		% Children who CANNOT solve numerical written sums of ...	
	Level 1*	Level 2**	Subtraction or Division	Division
Age : 7-14 ALL	34.9	51.9	41.0	65.5
Age : 7-10 ALL	48.2	67.6	53.6	79.4
Age : 11-14 ALL	17.3	31.0	24.3	47.0
Govt : Std II-V	43.9	65.2	49.6	77.8
Pvt : Std II-V	31.9	52.2	37.9	66.7
Govt : Std VI-VIII	9.4	22.2	17.0	40.0
Pvt : Std VI-VIII	6.7	16.7	14.6	33.4

* Level - 1: Ability to read a small paragraph with short sentences of std 1 level difficulty.

**Level - 2: Ability to read a 'story' text with some long sentences of std 2 level difficulty.

Subtraction:

2 digit subtraction with borrowing.

Division:

3 digit divided by 1 digit.

Learning curves

Children who CAN read and solve numerical written sums

Reading

% All school children who can read-standardwise						
Std	Nothing	Letter	Word	Para-Level I	Story-Level II	Total
I	42.1	32.5	15.6	4.8	5.0	100
II	17.3	28.4	27.0	14.6	12.8	100
III	8.5	16.4	22.8	24.5	27.8	100
IV	4.6	9.2	14.6	24.7	47.0	100
V	3.1	5.3	9.5	20.7	61.3	100
VI	2.4	3.3	6.3	15.5	72.6	100
VII	1.8	2.0	3.9	11.3	81.0	100
VIII	1.5	1.3	2.4	8.4	86.4	100
Total	11.3	14.1	14.5	16.6	43.6	100

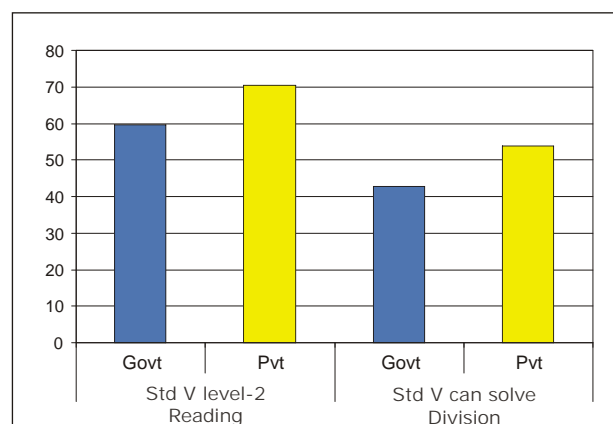
Arithmetic

% All school children who can solve written numerical sums - standardwise					
Std	Nothing	Number recogn	Subtraction	Division	Total
I	57.6	34.0	5.6	2.8	100
II	31.3	45.2	17.2	6.3	100
III	17.4	35.6	32.1	15.0	100
IV	10.9	24.1	33.8	31.2	100
V	7.5	18.1	29.9	44.6	100
VI	5.5	14.1	26.0	54.5	100
VII	4.3	11.5	21.2	63.1	100
VIII	3.3	9.3	17.5	69.8	100
Total	19.0	26.4	23.7	30.9	100

Performance of top five and bottom five states in India based on % all children Std V

Reading	% std V CANNOT read level-2	Arithmetic	% std V CANNOT solve division
Top - 5		Top - 5	
Kerala	18.5	West Bengal	26.3
Uttaranchal	20.5	Haryana	35.8
Chhatisgarh	24.4	Bihar	36.8
WestBengal	24.5	Uttaranchal	39.8
Bihar	26.9	Chhatisgarh	41.3
Bottom - 5		Bottom - 5	
Tamil Nadu	49.3	Karnataka	75.7
UP	48.7	Tamil Nadu	68.2
Karnataka	48.7	Orissa	68.1
Gujarat	48.3	UP	66.8
Madhya Pradesh	48.0	Madhya Pradesh	62.0

Comparison of government and private schools based on % Std. V children who CAN read level-2 and solve written numerical sums



GENDER DIFFERENCES:

60% of students in private schools are boys.

There are noteworthy state differences. At one end we have Rajasthan and Uttaranchal where the proportion of boys in private schools is over 65% and at the other end in Kerala where proportion of girls is 51%. Boys and girls are almost even in Tamil Nadu, Karnataka and Maharashtra.

Girls as a percentage of all out-of-school children 6-14 are 52.8% (52.3% 6-10 and 55% 11-14).

LEARNING: READING

ASER records basic reading levels as:

Level 1 is the ability to read a small paragraph with short sentences at standard I level of difficulty.

Level 2 is the ability to read a 'story' text with some long sentences with standard II level of difficulty.

35% of all children in the age group 7-14 could not read simple paragraphs (Level 1 text) and close to 52% could not read a short story (Level 2 text).

In the 7-10 age group, this number is higher with 48.2% children unable to read Level 1 paragraphs and almost 68% unable to read Level 2 stories. For older children in the age group 11-14, 17.2% could not read easy paragraphs (Level 1) and 31% could not read stories (at Level 2).

44% children studying in standard II to V in government schools cannot read easy paragraphs (Level 1). In private schools in standard II to V, this number is somewhat lower at 32%. A much higher proportion in both types of schools (65.3 in government and 52.4 in private) cannot read Level 2 stories.

Although many more children in higher classes (standard 6 to 8) can read, there are still 22% children in government schools and 17% in private schools who cannot read standard II level text.

There are wide state-wise variations in reading ability. For example, among children currently studying in standard V, only 25% or fewer children are unable to read Level 2 text in Kerala, Uttaranchal, Chattisgarh and West Bengal. But the proportion of children unable to read (Level 2) is substantially higher: close to 50% children in Uttar Pradesh, Tamil Nadu, Gujarat, Karnataka and Madhya Pradesh cannot read simple 'story' text. Bihar features in the top five states when ranked by standard V children's ability to read.

Note : Only states where all or almost all districts that have been surveyed are ranked here. States that were not fully surveyed are not ranked here.

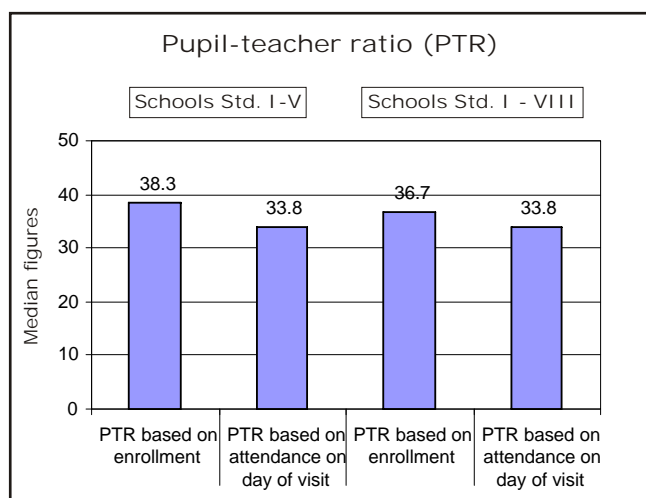
LEARNING: ARITHMETIC

41% of children in the 7 to 14 age group are unable do either the two digit subtraction problem

Teachers, children, and classrooms

Teachers' attendance		
	Schools with:	
	Std. I-IV/V	Std. I - VIII
Total number of schools visited	4895	3552
% teachers attending (average)	74.9	74.6
% of schools with NO teachers present	9.5	8.4
% of schools with ALL teachers present	50.9	36.5

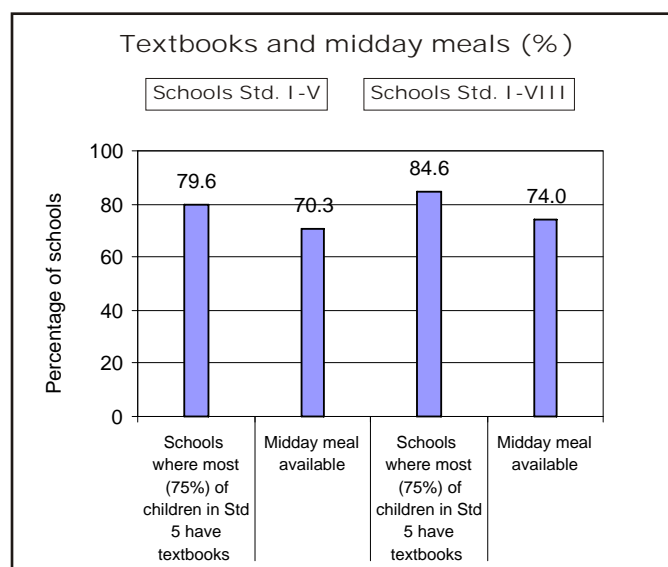
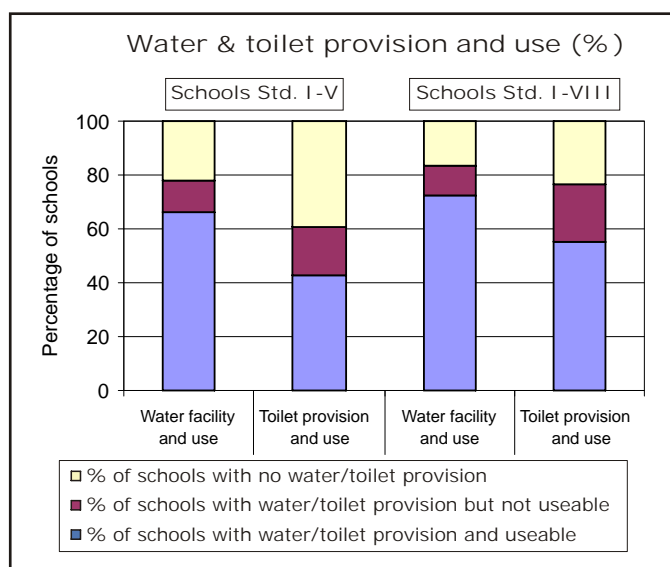
Children's attendance		
	Schools with:	
	Std. I-IV/V	Std. I - VIII
Total number of schools visited	4935	3546
% enrolled children attending (average)	70.8	72.5
% of schools with less than 50% of enrolled children attending	15.8	14.0



Average number of rooms available

Type of school by enrollment	% Schools visited	Std I-V rooms	Type of school by enrollment	% Schools visited	Std I-VIII rooms
<=50	13.5	2.7	<=150	18.8	4.8
51-75	12.4	3.1	151-250	30.2	6.7
76-150	32.6	3.7	251-350	22.9	8.1
151-225	21.7	4.3	351-450	11.6	8.8
>225	19.9	5.1	>450	16.5	12.1

Provision and use



24.4% of the same age group could do the subtraction problems (2 digit problem with borrowing) but could not correctly do the division problems that were given to them.

For the younger age group, the numbers are higher: close to 54% cannot do the two-digit subtraction problem. For the older age group (11 to 14), about a quarter of the children could not do either subtraction or division and about half of all children could not do the division problem.

The gap between government and private school is also interesting. Private schools lead by about 12% in the younger age group and by 2.4% in the older age group. Even in private schools in the higher classes (standards VI to VIII) 33.4% children could not do division problems that children are expected to do in primary grades. The picture in government schools is worse with 40% children in standards VI to VIII unable to handle the simple division problem.

The All-India findings indicate that across the board, whether we look at the situation by age or standard or type of school, the level of arithmetic is weak and needs serious improvement.

As with reading, there are significant state-wise variations in arithmetic. For example, the arithmetic ability of standard V children in states like West Bengal, Haryana, Bihar, Uttaranchal and Chhattisgarh have over 50% children who can do the simple division problems. Again, the big surprises are the southern states: Tamil Nadu and Karnataka recording high percentages of children who cannot do the division problem that was given to them.

SCHOOL FUNCTIONING³:

All school observation information pertains only to government schools in the surveyed villages.

Teachers and children:

On average, over 75% teachers were found to be attending on the day of the visit in sampled schools. Less than 10% schools had no teachers and 51 % schools at the primary level and 36% of schools at the upper primary level had all teachers present on the day of the visit.

Children's attendance patterns indicate that approximately 71% of enrolled children in primary schools and close to 73% of children in schools up to standard VIII were in school on the day of the visit.

Bihar recorded the lowest attendance numbers with 51.8 % of enrolled children attending. In several states, the attendance level was between 60% to 70%. These are Rajasthan, Uttar Pradesh, West Bengal, Jharkhand, Orissa and Madhya Pradesh. Other states have higher levels. Similar patterns were observed in upper primary schools. Regular and sustained attendance of children in school is clearly an issue in many states.

3 ASER teams visited 9252 government schools. Along with the village visit, the team was asked to pay a visit to the local government primary school. During the school visit, the team got information on enrolled children as well as appointed teachers and para-teachers from the school records register. The team observed the number of children and teachers present. The team also recorded whether there was tap or hand pump in the school premises and whether it was functioning. Similar information about availability and use of toilets, rooms and textbooks was noted. Finally, whether the midday meal was being prepared and served on the day of the visit was also observed. In 460 villages, ASER teams did not find a school that was open on that day.

Performance of all states

State	All Children	Std III to V children		State	All Children	Std III to V children	
	% Out-of-school	% CAN read level - 2	% CAN solve subtraction		% Out-of-school	% CAN read level - 2	% CAN solve subtraction
Andhra Pradesh	8.0	61.7	48.4	Kerala	1.6	81.5	56.0
Arunachal Pradesh*	5.0	68.9	58.9	Madhya Pradesh	4.0	52.0	38.0
Assam*	7.5	54.8	40.9	Maharashtra	2.8	67.3	39.5
Bihar	13.1	73.1	63.2	Manipur*	13.7	74.3	56.3
Chhattisgarh	4.7	75.6	58.7	Meghalaya*	8.1	90.4	71.1
Dadra & Nagar Haveli	0.6	35.0	19.5	Nagaland*	18.9	81.5	49.7
Daman & Diu	1.7	37.6	35.4	Orissa	8.9	58.4	31.9
Goa	0.3	68.1	45.3	Punjab	4.3	60.4	46.8
Gujarat	3.6	51.7	42.6	Rajasthan	10.4	62.0	47.8
Haryana	5.3	71.1	64.2	Tamil Nadu	2.7	50.7	31.8
Himachal Pradesh*	1.0	89.6	75.2	Tripura*	1.8	83.6	57.1
Jammu & Kashmir*	2.7	48.7	48.6	Uttar Pradesh	7.3	51.3	33.2
Jharkhand	9.8	67.1	47.6	Uttaranchal	2.0	79.5	60.2
Karnataka	1.9	51.3	24.3	West Bengal	4.4	75.5	73.7
				India	6.6	61.3	44.6

*Partial coverage



Pupil-teacher ratio based on attendance (i.e. number of children actually present and number of teachers attending on the day of the visit.) shows that the all India pupil-teacher ratio is well below 40 – with the exception of Uttar Pradesh (49). The picture in schools that are up to the upper primary level (standard I to VII/VIII) reveal a similar pattern – all India is 33.3. Most States have a PTR on the day of the visit of below 50.⁴

At the national level, on average, there is one teacher in a school with enrollment of 50 or less and 2 teachers in schools of 51 to 75 children. However there are many states (like Bihar, Uttar Pradesh, Orissa, Jharkhand, Chattisgarh) which have median attendance of only 3 teachers or less in schools where children's enrollment is between 150 and 225.

School facilities – provision and use:

78% of primary schools visited had either a hand pump or a tap. Of these schools 85% had water supply. 60% of schools visited had toilet facilities out of which 70% were usable. (4891 primary schools visited.)

83% of schools up to standard VIII had hand pump or a tap and 87% of those had water supply. 77% had toilets of which 72% were working. While upper primary school had better provisioning, there was not much difference in the proportion of those which are usable / functional. (3541 primary+upper primary schools visited.)

Out of the 8886 schools observed (primary schools and combined primary and upper primary) in more than 80% schools, children in standard V had textbooks.

The picture was very encouraging in several states where most children had textbooks in 90% of schools. This was the case in Rajasthan, W Bengal, Chhattisgarh, Madhya Pradesh, Gujarat, Maharashtra, Goa, Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. Availability of textbooks was relatively low in primary schools of Bihar (52.4%), Jharkhand (35.1%) and Orissa (32.3%). The overall snapshot of textbook provision is a positive one suggesting that the supply and distribution of textbooks have improved greatly in large areas of the country.

70% of schools visited were preparing or serving mid day meal.

However there are some noteworthy state-wise variations – in Punjab 17.3% (where midday meal program is not yet being implemented on scale), Bihar 38.2%, Goa 46%, Uttar Pradesh 53.6%, Jharkhand 65.5% and Orissa 63.3%. The percentage was highest in Chhattisgarh (95.1%) and Kerala (94.9%).

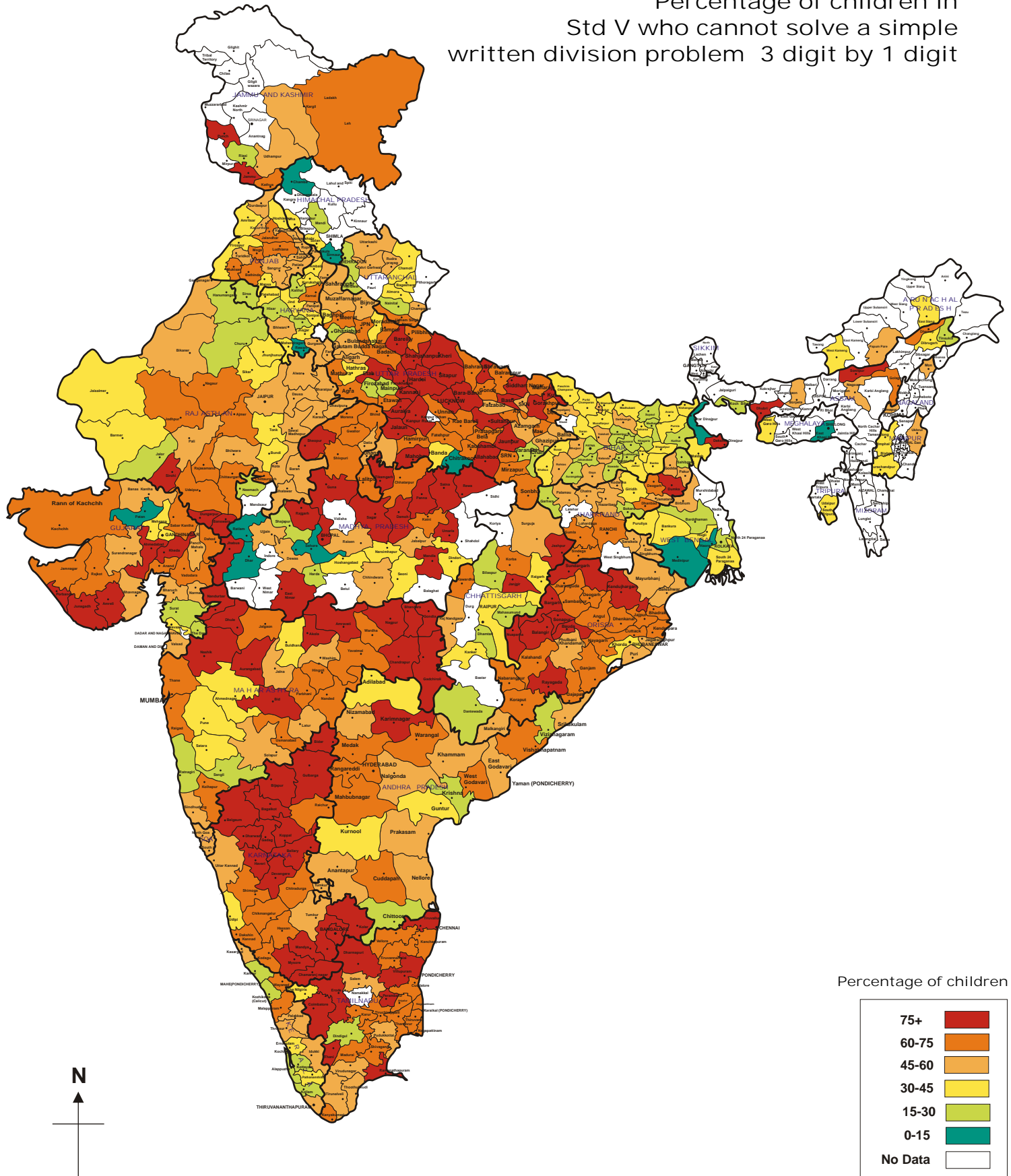
ASER will be conducted on an annual basis until 2010. ASER 2005 shows that enrollment levels are very high in almost all states however the foundations of basic reading and arithmetic needs to be urgently strengthened in the early grades in school. A strong beginning is essential for building a solid foundation for elementary education.

Note : In some districts, very little data was available on "standard of child". Results from these districts should be regarded as anomalous. These are : Khammam (AP), Sonitpur (Assam), Durg (Chhattisgarh), Ujjan, Indore, Shadol and Barwani (MP) and Erode (TN).

4 The information on number of teachers and para-teachers appointed to the school was given to the ASER team by the teachers. If this number is reported as lower than actual, it will influence the ratio of teachers attending to teachers appointed. PTR based on enrollment is the ratio of enrolled children to appointed teachers (teachers + para teachers). PTR based on attendance i.e. it is the ratio of children attending to teachers attending on the day of the visit.

INDIA Rural

Percentage of children in Std V who cannot solve a simple written division problem 3 digit by 1 digit



Percentage of children

75+	
60-75	
45-60	
30-45	
15-30	
0-15	
No Data	



Maps may not be accurate or to-scale. These are mere representations.