ASER 2016 (Rural) findings

ASER 2016 reached 589 rural districts across India. The survey was carried out in 17,473 villages, covering 350,232 households and 562,305 children in the age group 3-16.

At the all India level, enrollment increased for all age groups between 2014 and 2016.

- Enrollment for the age group 6-14 has been 96% or above since 2009. This proportion increased from 96.7% in 2014 to 96.9% in 2016.
- Enrollment for the age group 15-16 has also improved for both boys and girls, rising from 83.4% in 2014 to 84.7% in 2016.
- However, in some states, the fraction of out of school children (age 6-14) has increased between 2014 and 2016. These include Madhya Pradesh (from 3.4% to 4.4%), Chhattisgarh (from 2% to 2.8%), and Uttar Pradesh (from 4.9% to 5.3%).
- In some states the proportion of girls (age group 11-14) out of school remains greater than 8%. These states are Rajasthan (9.7%) and Uttar Pradesh (9.9%). Joining them in 2016 is Madhya Pradesh (8.5%).

No increase in private school enrollment between 2014 and 2016.

- At the all India level, the proportion of children (age 6-14) enrolled in private schools is almost unchanged at 30.5% in 2016, as compared to 30.8% in 2014.
- The gender gap in private school enrollment has decreased slightly in both the 7-10 and the 11-14 age group. In 2014, among children age 11-14, the gap between boys’ and girls’ enrollment in private school was 7.6 percentage points. In 2016, this gap had decreased to 6.9 percentage points.
- Two states show significant increases in government school enrollment relative to 2014 levels. In Kerala, the proportion of children (age 11-14) enrolled in government school increased from 40.6% in 2014 to 49.9% in 2016. In Gujarat, this proportion increased from 79.2% in 2014 to 86% in 2016.
- Three states show substantial increases since 2014 in private school enrollment among children in the elementary school age group (age 6-14): Uttarakhand (from 37.5% to 41.6%), Arunachal Pradesh (from 24.4% to 29.5%), and Assam (from 17.3% to 22%).

Nationally, reading ability has improved especially in early grades in government schools.

- Nationally, the proportion of children in Std III who are able to read at least Std I level text has gone up slightly, from 40.2% in 2014 to 42.5% in 2016. This proportion shows substantial increases among children in government schools in many states: Punjab, Uttarakhand, Haryana, Chhattisgarh, Gujarat, Maharashtra and Telangana. All these states show an improvement of more than 7 percentage points since 2014.
- Overall reading levels in Std V are almost the same year on year from 2011 to 2016. However, the proportion of children in Std V who could read a Std II level text improved by more than 5 percentage points from 2014 to 2016 in Gujarat, Maharashtra, Tripura, Nagaland and Rajasthan. This improvement is driven by gains in learning levels in government schools in these states.
- Nationally reading levels in Std VIII show a slight decline since 2014 (from 74.7% to 73.1%). Then and now, three out of every four children enrolled in Std VIII can read at least Std II level (the highest level assessed in the ASER survey). The state-wise picture for Std VIII reading levels does not show much improvement except for government schools in Manipur, Rajasthan, Maharashtra and Tamil Nadu.
Arithmetic shows improvement in government schools in primary grades.

- Although low, the all India (rural) figures for basic arithmetic have improved slightly for Std III in 2016 as compared to 2014. This is the first year since 2010, that there is an upward trend in arithmetic figures.

- In 2014, for the country 25.4% of Std III children could do a 2-digit subtraction. This number has risen slightly to 27.7% in 2016. This improvement has come primarily from government schools where the percentage of Std III children who could do a 2-digit subtraction increased from 17.2% in 2014 to 20.2% in 2016.

- In almost all states there is some improvement in the arithmetic levels of children enrolled in government schools in Std III. States with an increase of 5 percentage points or more since 2014 include Himachal Pradesh, Uttarakhand, Gujarat, Andhra Pradesh, Telangana, Odisha and Chhattisgarh.

- From 2014 to 2016, for Std V children, the level of arithmetic as measured by children's ability to do simple division problems has remained almost the same at 26%. Only five major states show an improvement of more than 5 percentage points. These are Himachal Pradesh, Madhya Pradesh, Odisha, Chhattisgarh and Uttarakhand.

- However, the ability to do division among Std VIII students has continued to drop. This declining trend has been observed since 2010. The proportion of Std VIII students who could correctly do a 3-digit by 1-digit division problem was 68.4% in 2010. This number dropped to 44.2% in 2014, and has further declined to 43.3% in 2016. Only children in Manipur, Karnataka and Telangana show an increase of 5 percentage points or more.

Ability to read English is unchanged for lower primary grades.

Assessments of basic English have been carried out in 2007, 2009, 2012, 2014 and 2016.

- Children’s ability to read English is slightly improved in Std III but relatively unchanged in Std V. In 2016, 32% children in Std III could read simple words in English as compared to 28.5% in 2009.

- In comparison, in 2016, 24.5% of children enrolled in Std V could read simple English sentences. This number is virtually unchanged since 2009. However, a few states show improvements since 2014 for government school children enrolled in Std V. These states are Himachal Pradesh, Uttarakhand, Haryana, Maharashtra and Kerala (all with improvements of 5 percentage points or more). In nine states, the levels of English reading of private schools has also improved. These are Himachal Pradesh, Punjab, Assam, Jharkhand, Chhattisgarh, Madhya Pradesh, Tamil Nadu, Andhra Pradesh and Telangana.

- However, the decline in upper primary grades continues. For example, in 2009, 60.2% of children in Std VIII could read simple sentences in English; in 2014, this figure was 46.7% and in 2016 this ability has further declined to 45.2%.

- In 2016, of those who can read words (regardless of grade), roughly 60% could explain the meanings of the words read. Of those who can read sentences, 62.4% in Std V could explain the meaning of the sentences. Both these levels are virtually unchanged since 2014.
School observations

As part of the ASER survey, one government school with primary sections is visited in each sampled village.

ASER 2016 visited 15,630 government schools with primary sections. Of these, 9,644 were primary schools and 5,986 were upper primary schools which also had primary sections.

Children's attendance shows no major change from 2014.

- In 2016, ASER data indicates that 71.4% of enrolled children in primary schools and 73.2% of enrolled children in upper primary schools were present on the day of the visit. In 2014, these figures were 71.3% in primary schools and 71.1% in upper primary schools.

- As in previous years, children's attendance varies considerably across the country. States like Himachal Pradesh, Punjab, Uttarakhand, Haryana, Nagaland, Mizoram, Gujarat, Maharashtra, Karnataka, Andhra Pradesh, Kerala, and Tamil Nadu have attendance levels that are above 80%. But in states like Uttar Pradesh, Bihar, Manipur, West Bengal, and Madhya Pradesh, attendance rates range from 50 to 60%.

- Trends over time show that children's attendance in both primary and upper primary schools was higher in 2009 as compared to 2016. In 2009, attendance was at 74.3% in primary schools. The figure for 2016 is 71.4%. Similar data for upper primary schools shows a decline from 77% in 2009 to 73.2% in 2016.

The proportion of "small schools" in the government primary school sector continues to grow. The percentage of multigrade classrooms has also increased.

- Of the government primary schools visited in 2016, close to 40% are "small schools" with a total enrollment of 60 children or less. 8.9% of the upper primary schools visited had a total enrollment of 60 children or less.

- In 2009, the percentage of government primary schools visited that were "small" was 26.1%. The corresponding number for upper primary schools was 4.5%.

- ASER also notes the proportion of children enrolled in Std II and Std IV who are sitting with other grades. This proportion has been going up over time. In primary schools, in 2010, 55.2% of Std II classes sat with other grades. This figure has gone up to 63.7% in 2016. Similar trends are also visible for Std IV. The proportion of classes in which Std IV children are sitting with other grades increased from 49% in 2010 to 58% in 2016.

For the most part, improvement in school facilities continues.

- ASER records whether toilets are available and useable on the day of the visit. Since 2010, there has been significant progress in the availability of useable toilets. Nationally in 2016, 68.7% of schools visited had toilet facilities that were useable as compared to 47.2% in 2010. In 2016, only 3.5% of the schools visited had no toilet facility.

- The proportion of schools visited where girls' toilets were available and useable has gone up from 32.9% in 2010 to 55.7% in 2014 to 61.9% in 2016. In four states, 80% or more schools visited had useable girls' toilets. These states are Gujarat, Rajasthan, Himachal Pradesh, and Haryana.

- Drinking water was available in 74.1% of the schools that were visited in 2016, down from 75.6% in 2014. In 2010, this figure was 72.7%. In four states (Bihar, Chhattisgarh, Gujarat, and Himachal Pradesh), drinking water was available in 85% or more of schools.

- There has been no change in the availability of computers in schools since 2014. The 2016 figure is 20% as compared to 19.6% in 2014. However, some states stand out in terms of high provision of computers. In Kerala, 89% of schools visited had computers; this number was 75.2% in Gujarat, 55.1% in Maharashtra, and 57.3% in Tamil Nadu.

- The proportion of schools with libraries has fallen from 78.1% in 2014 to 75.5% in 2016. However, children were seen using library books in more schools in 2016. In 42.6% of schools that were visited, children were seen using library books as compared to 40.7% in 2014.