Frequently asked questions about ASER

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Overview

1. What is ASER?

ASER stands for Annual Status of Education Report. It is a household-based survey of children's schooling and learning status. Schooling status is recorded for children in the age group 3 to 16, and children in the age group 5 to 16 are tested for their ability to read simple text and do basic arithmetic. Except for 2015, ASER has been conducted every year since 2005.

2. Why ASER? Isn't information on children's learning outcomes already available?

Traditionally, government policy and statistics have focused on inputs and enrollment - how many schools and teachers, how many children in school, and so on. When ASER began in 2005 there was very little focus on what children were actually learning. It is true that today many more large scale assessments are conducted in India as compared to 2005 when the first ASER survey was carried out. The National Achievment Survey (NAS) is conducted by NCERT, a central government institution, every few years with children in Grades III, V and VIII. Additionally, most states/UTs conduct their own State Learning Achievement Survey (SLAS). However, ASER remains the only annual source of data on children's learning outcomes available on scale in India. It is also the only large scale assessment that focuses on children's foundational skills. Most other assessments focus on grade level competencies and assume that children's foundational skills are in place.

3. What is the geographical coverage of ASER?

ASER is a rural survey. Urban areas are not covered. In most years, ASER has attempted to reach every rural district of the country (although in some years certain states have been excluded for logistical reasons, such as Arunachal Pradesh in 2013 and Jammu and Kashmir in 2010). However, every year ASER is unable to reach some rural districts. Generally, this is due to natural disasters, situations of unrest or conflict in the district.

4. Why is ASER done every year?

For several reasons. First, in addition to presenting district, state, and national level estimates each year, ASER also presents trends over time. Comparable measurements are needed periodically in order to see how the situation is changing. The ASER measurement is done annually because government plans and allocations for elementary education are made every year. If children's learning outcomes are to improve, then evidence on how much children are learning needs to be fed into the process of review and planning. Second, longer gaps between assessments can have serious implications for children currently in school. It is well known that falling behind in school often leads to dropping out altogether. If several years go by between assessments, opportunities are lost to take rapid corrective action in order to ensure that children who are falling behind are able to catch up. Third, it takes time to shift the focus from schooling to learning. When ASER began in 2005, the issue of children's learning was rarely discussed. But after ten years of ASER, the topic of children's learning is very much on the national agenda.

5. ASER completed 10 years in 2014. Since then, the same report has not been coming out every year. There was no ASER in 2015 and a different one ('Beyond Basics') in 2017. Why these changes?

When we started ASER in 2005, we made a commitment to do it every year for five years because we believe that for data to feed into policy, it needs to be reliable, comparable, and available on a regular basis. At the end of five years the consensus was that it was too soon to discontinue ASER.

In 2014, we completed 10 years and so we decided to take a year off to reflect and consolidate our learnings. So in 2015, ASER was done only in two states - Punjab and Maharashtra - at the specific request of the respective state governments. There was no national ASER 2015 report.

Then in 2016, ASER began its second decade. Much had changed since 2005: there was far more awareness of the learning crisis, and learning assessments were being conducted regularly by the central and state governments. But despite all this attention, the problem of poor foundational reading and arithmetic abilities is still widespread. Even in 2016, less than half of all children in Std VIII could solve a simple division problem. Taking all these factors into account, we decided that for the next ten years (2016-25), ASER would switch to an alternate-year cycle. The basic ASER will be conducted every other year - it was conducted in 2016 and again this year. The next basic ASER will be in 2020. And in alternate years ASER will focus on a different aspect of the education system. So, in 2017, we conducted 'Beyond Basics', focusing on the abilities, experiences, and aspirations of youth in the 14-18 age group. In 2019, ASER will retain the focus on learning but will aim to shine the spotlight on a different segment of the population.

6. What is the survey calendar? Why was this timeline selected?

The ASER survey calendar is provided at the beginning of this report. ASER is carried out in the middle of the school year - roughly between September and November. By this time children's enrollment patterns have settled down for the year. Data entry and analysis happens in November

and December, and survey results are released in mid January of the following year. This calendar is designed to enable ASER data for the current school year to be available in time to feed into the district level annual planning process for the following year. Planning for elementary education takes place at the district level, and before ASER there was no source of district level data on children's learning outcomes that could provide inputs into this process.

7. Who collects the data?

ASER is conducted by volunteers from local partner organizations in each district. A wide range of institutions partner with ASER each year. These include universities and colleges, self-help groups, non-government organizations, and government institutions, among others. For example, in 2018 ASER was conducted by students from the District Institutes of Education and Training (DIETs), the government teacher training colleges, in about 40% of all districts. ASER is facilitated by Pratham. The process of finding, training, and monitoring ASER partners and volunteers is led by ASER Centre, the research and assessment unit of Pratham.

8. What is the per child cost of ASER?

An external evaluation of ASER conducted in 2013-14 calculated that the ASER survey costs a little over Rs 100 per child (approximately U.S. $1.40). Compared to other large scale learning assessments, this is an extremely low cost.

9. How can the ASER results help plan action to improve children's learning?

A close look at any ASER table of results shows that even within a single grade, children's ability to read or do simple arithmetic varies enormously. Teaching from a grade level textbook will not work for children who are not at that level. In traditional classrooms, these children get left further and further behind as they move up through the system. Improving children's foundational learning levels requires an understanding of what children are currently able to do, so that teaching methods and materials can be designed to enable them to start from their current level and build towards the learning levels appropriate for their age and grade. ASER data tells us where most children are getting stuck, so that resources can be allocated accordingly. Children from different grades who are at the same level of reading ability can be grouped together. This approach has come to be known as 'Teaching at the Right Level', in other words teaching children based on what they know and can do, rather than based on their age or grade. Many schools and education programs already implement this approach. So do several state governments.

Understanding children's current learning status is the critical first step, and the ASER results can provide this. If data is required on a specific geography or group, the ASER tools and testing process can easily be used to generate this understanding for any class, school, or group of children.

About sampling

10. What is the purpose of sampling, and why does ASER do it?

Assessing foundational reading and arithmetic abilities of every child in India would be an enormous task, requiring a huge amount of resources. Fortunately, it is not necessary to do so. The careful selection of a sample of villages and households enables us to generate data that is just as accurate and reliable as testing every child in the country - provided that the process of sampling is done carefully by experts and strictly followed on the ground. This is why no large scale surveys cover every single unit in their target population, other than the Census of India, which is conducted every ten years. In the case of ASER, the sampling methodology used has been designed by experts and is standard for large scale surveys.

11. What is the sample size of ASER? How does this compare with other large scale surveys?

ASER aims to generate district level estimates of children's schooling status, basic reading and arithmetic. Each year, ASER reaches close to 570 rural districts. In each district, 30 villages are selected and in each sampled village, 20 households are randomly selected. This gives a total of 30 x 20 = 600 households in each rural district. Depending on the exact number of districts surveyed, a total of between 320,000 and 350,000 households across the country are sampled for each year's ASER. In each surveyed household, all children in the age group 3 to 16 are surveyed and children in the age group 5 to 16 are tested. The same sample size is used in all districts regardless of population or socio-economic characteristics. Refer to Sample design of rural ASER 2018 on page 261. This design is the same across all ASER years.

The National Sample Survey (NSS) Survey conducted by the Government of India's National Sample Survey Organization is the main source of official data for estimating poverty, employment, and other socioeconomic indicators. The ASER sample of villages is about twice as large as the NSS sample for rural India. In 2011-12, the NSS Employment Survey was done in 7,469 villages across India with 8 households per village. In contrast, ASER 2018 surveyed 17,730 villages with 20 households per village. The National Achievement Survey 2017 conducted by

NCERT was implemented in 701 districts across 36 states/ union territories. It covered a total of 2,121,173 students from Classes III, V and VIII. Students were tested in language, math, science, and social studies in schools. A total of 116,534 schools were surveyed.

12. Why does ASER select 30 villages per district and 20 households per village? How are villages selected? What happens if a village no longer exists, or has become an urban area?

ASER uses a two-stage sampling strategy which enables us to generate a representative picture of each district. Almost all rural districts are surveyed in ASER each year. The estimates obtained are then aggregated (using appropriate weights) to the state and all India levels. In the first stage, 30 villages are sampled from each district using Probability Proportional to Size (PPS). From 2005 to 2014, villages were sampled from the Census 2001 village list. From 2016 onwards, Census 2011 village directory has been used. In the second stage, 20 households are randomly selected in each sampled village following a procedure known as the "every fifth household rule". The total sample size for each district is thus 30 x 20 = 600 households. This two-stage design ensures that every household in the district has an equal probability of being selected.

In previous years the 30 villages surveyed in a district comprised 10 villages from the last year's survey, 10 more from two years earlier, and 10 new villages selected from the Census village directory using PPS. The 20 old villages and 10 new villages gave us what is known as a "rotating panel" of villages, which generates more precise estimates of change. Having a rotating panel of villages means that every year some old and some new villages are included, which ensures that there is both continuity and change in the sample from previous years. Since 2016 was the first year of a new series of ASER reports that use Census 2011 as the basis for sampling, no villages from previous ASERs were retained. A fresh sample of 30 villages was generated from the Census 2011 village directory.

To maintain randomness of the sample, which is important in order to obtain reliable estimates, every year ASER Centre generates the ASER village list from the Census village directory. This village list is final. However, every year there are certain situations where replacement villages are required, such as when a village is affected by natural disasters, if it has been reclassified as a town, or due to insurgency. In such cases, ASER Centre provides the name of a replacement village.

13. How can I find out which villages have been surveyed?

You can't. This information is not in the public domain; the ASER village list is confidential. In all large scale surveys and research studies, it is standard practice to maintain the confidentiality of respondents. This means that all information that could enable someone to identify particular individuals, households, or villages is removed. This includes village names, respondent names, and so on.

14. Is ASER data representative? At what levels?

ASER data is representative at district, state, and national levels.

15. Why does ASER aim to generate district level estimates?

Most official statistics in India produce estimates only at the state and national level. Even poverty estimates in India, obtained from the National Sample Survey Organization, are available only at state or regional level, not at the district level. However, planning and allocation of resources is often done at the district level. For example, in elementary education, annual work plans are made at the district level. While information for enrollment, access, and inputs is available annually for each district, estimates of children's learning are neither available at the district level, nor are they available annually. ASER aims to help fill these gaps.

16. Who designed this sampling strategy?

The ASER sampling strategy was designed in consultation with experts at the Indian Statistical Institute, New Delhi. Inputs were also received from experts at the Planning Commission of India and the National Sample Survey Organization (NSSO).

17. Do the ASER estimates for a district also apply to individual villages or blocks in that district?

No, they don't. ASER estimates for a district are representative only at the district level, and provide a snapshot of children's schooling and learning status for the district as a whole. The sampling is not representative at the village or block level. The situation in individual villages or blocks can be different. To understand the status of a particular village or block, a different sampling strategy would have to be used.

18. ASER 2016 sampled villages from the 2011 Census village directory, whereas ASER 2005-2014 used the 2001 Census. Is data from ASER 2016 onwards comparable with earlier years?

ASER is representative at the state and district levels and a change in the sampling frame does not affect this feature of ASER. ASER 2006-2014 provided representative estimates of state and district boundaries as represented in

the Census 2001 frame, and ASER 2016 and ASER 2018 do so for the Census 2011 frame. In the case of states, since there has been no change in geographical boundaries, the state estimates are comparable. However, estimates for districts may not be comparable if geographical boundaries have changed. Census 2011 has added 31 rural districts. These new districts have been carved out of the old districts and are, therefore, not comparable. Since divisions are defined by grouping districts together, in ASER 2018 we present divisional estimates only for 2016 and 2018.

19. Is enrollment data for children age 3 and 4 comparable across all years?

Due to a change in the way this data was collected, ASER 2018 data for enrollment of children age 3 and 4 is not comparable with previous ASER years.

About design

20. Why does ASER test children at home and not in school?

The ASER survey generates estimates of schooling and basic learning levels for all children in rural India in the age group 5 to 16. This includes children enrolled in different types of schools (government, private, and others) as well as children currently not in school. The first problem with school-based testing is that there is no complete list of all schools in the country. In particular, there are many low cost private schools which are not found on any official list. Without a complete list of all schools, it is not possible to select an unbiased sample of schools. The second problem with school-based testing is that not all children are in school. Some have dropped out, some have never enrolled, and others are absent from school on the day of the survey. Testing in school would mean that all these children would be excluded. ASER tests children at home so as to include all these different kinds of children. Household-based testing is the only way to ensure that all children are included. In the Indian context, it is not possible to do this if testing is done in school.

21. How do you ensure that children are at home on the day of the survey?

The household survey is usually conducted on a Sunday and/or at other times when children are not in school. If a child is not found at home at the time of the survey, surveyors are asked to note down the child's details and return to the household at a time when family members say she will be available.

22. Why is the target age for children's assessment 5 to 16 years?

ASER was designed to capture the learning status of children in the elementary school age group. Many states allow children to enter Grade 1 at age 5, but children can start school much later. They can also drop out and then return to school, repeat grades, and so on. Therefore, although the official elementary school age range that is specified in policy documents is 6 to 14, in practice, large proportions of children who are younger than 6 and older than 14 continue to be in elementary grades.

23. Why is ASER not done in urban areas?

For several reasons. First, many urban areas have large low income populations that are undocumented and therefore not included in the available sampling frames. These areas would be left out of a sample-based survey. Second, a representative sample of the urban population in any state would include not just metros but also a diverse range of urban habitations. Whereas for rural districts, the estimates generated by ASER can be shared with the district administration, there is usually no equivalent single urban authority in a state with whom educational planning can be discussed for the state as a whole.

24. What is the definition of 'rural' that is used in ASER data?

ASER uses the Census village directory as the sampling frame. When we say ASER (rural), we refer to the definition of rural habitations as used in the Census. It does not refer to rural districts, since the Census itself does not define districts as either rural or urban.

25. Do you also collect information about the household?

Yes. In addition to children's schooling and learning status, some basic information about the household is collected (such as number of members, household assets, and parents' education). Household information collected can vary from year to year; details of what is asked are provided in each year's ASER report.

26. Do you collect information about schools?

ASER has been doing school visits every year since 2009. Survey teams visit the largest government school with primary sections in each sampled village, and collect basic information on enrollment, staffing, and school infrastructure. Details of the specific questions asked are provided in each year's ASER report. However, learning assessments are always done during the household survey, not in school.

27. Why don't you collect information on children with disabilities/special needs/working children?

The ASER approach is designed to be rapid and easy to do. Assessing children with special needs requires more time, training and expertise than ASER surveyors have. Also, since ASER is a household survey, the sampling may not be suitable for reaching working children. While it is important to have data on children with disabilities, special needs and on working children, among others, ASER may not be the appropriate vehicle to collect it.

ASER Centre is developing a separate foundational literacy and numeracy assessment tool for children with disabilities. Implementation of this tool will be separate from the regular ASER survey.

About tools and testing

28. Why does ASER assess only reading and arithmetic?

Since its inception, Pratham's work has focused on basic reading and arithmetic. Since the early years of our work we noted that a surprisingly large number of children in primary grades were struggling to acquire these basic skills. Difficulties in these two domains prevent children from acquiring higher level skills. A weak foundation of basic learning also weakens performance in other subject areas and adversely impacts children's academic outcomes. When ASER started in 2005, no estimates for learning for early grades were available in India. For these reasons assessment of basic reading and arithmetic ability came to be the primary focus of the ASER survey.[1] While these two competencies are assessed every year, additional competencies have been assessed in some years. For example, basic English was tested in 2007, 2009, 2012, 2014, and 2016. Additional arithmetic questions were asked in 2008 and 2010. Because our first priority is to ensure that the assessment process is simple and quick to administer, only a limited number of additional tasks are included in any given year.

29. What guidelines are followed in developing the reading and arithmetic assessment tools?

By design, ASER is a 'floor' test which aims to evaluate children's basic reading and arithmetic ability. The reading and arithmetic assessments, first used in 2005, were developed taking into account the state mandated curriculum for each state. The content of the reading assessment, i.e. the selection of words, the length of sentences and reading passages was aligned to the Grade 1 and 2 level textbooks in each state. At the letter level, recognition of only simple letters is assessed. At the word level, simple one and two syllable words, commonly used every day and appropriate for Grade 1 are included. In the development of Grade 1 and 2 level passages, orthography specific indicators such as the use of simple letters, secondary representations of letters, and conjoint letters have been considered along with sentence and passage length. Vocabulary used in the reading passages is aligned to the state mandated curriculum for appropriateness.

Since ASER 2010 we have also calculated the type-token ratios for the reading passages as an additional index to ensure comparability. A type-token ratio indexes the lexical diversity of a text. It is calculated by obtaining a ratio of the total number of unique words in the text (types) to the total number of words in the text (tokens). A higher type-token ratio indexes greater lexical diversity, which is important in the measurement of fluency, as children who read passages with many repetitive words (lower type-token ratio) are likely to have an easier time and read faster than children who read passages that are more lexically diverse (higher type-token ratio) who have to decode a greater number of different words through the passage.

The ASER arithmetic assessment measures children's foundational skills in numeracy such as one- and two-digit number recognition and the ability to perform basic arithmetic operations such as subtraction (with borrowing) and division (3-digit by 1-digit). The content of the arithmetic assessment is aligned to grades 1, 2 and 3 or 4 level of the state mandated curriculum. 3-digit by 1-digit numerical division is expected of children in Grade 3 in some states and Grade 4 in others.

30. What languages do you test in? Are the reading assessments comparable across different languages?

The ASER reading tool is available in 19 languages including English.[2] The ASER reading assessments do not strive to be comparable across different languages. The objective is to develop a tool that assesses the most basic foundation skills for literacy acquisition, i.e. letter recognition, the reading of simple words and reading words in connected text that are of Grade 1 and Grade 2 level for each language. Consequently, the inference based on the ASER reading assessment is not about comparing performance across

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[1] The ASER reading assessment contains four levels: letters; common two-letter words; a simple four line "para" (Grade 1 level text); and a longer "story" (Grade 2 level text). The fifth level is that when a child has not yet learnt to recognize letters. The ASER arithmetic assessment also contains four levels: number recognition (1-9); number recognition (10-99); subtraction (2-digit by 2-digit); and division (3-digit by 1-digit). The fifth level is that when a child has yet to learn to recognize numbers. The testing process is explained at the beginning of this report.

[2] Assamese, Bangla, Bodo, English, Garo, Gujarati, Kannada, Khasi, Hindi, Malayalam, Manipuri, Marathi, Mizo, Nepali, Odiya, Punjabi, Tamil, Telugu, and Urdu

different languages but to evaluate children's level of reading in relation to the state mandated curriculum for Grades 1 and 2.

31. Why does ASER test children individually and in an oral format?

Over the last decade, reading has come to be recognized as an important skill. The assessment of early reading can only be done orally and for each child individually. Assessments of early reading ability in other countries are also administered in this format, for example the Early Grade Reading Assessment (EGRA) and the Dynamic Indicators of Basic Literacy Skills (DIBELS, developed by the University of Oregon Center on Teaching and Learning)[3]. A typical pen-and-paper test of comprehension assumes that the child can read. Thus the oral format has emerged as the only way to separate 'reading' and 'comprehension'. A paper-and-pencil test is not a viable option for a child who is a beginning reader or a struggling reader as it places additional cognitive demands on the child to read and comprehend instructions. In ASER, to minimize the cognitive demands of reading and comprehending instructions and to maintain a standard administration approach, both the reading and the arithmetic assessment are administered individually in an oral format. However, children are provided a paper and pencil to solve the subtraction and division problems.

32. Why does the ASER assessment of reading begin at the Grade 1 passage level? Why does the ASER assessment of arithmetic begin at the Grade 2 subtraction level?

The content of the ASER assessments is aligned to Grades 1 and 2 for reading and Grades 1, 2, and 3 or 4 for arithmetic. Since the same assessments are also administered to children in Grade 3 or higher, an adaptive testing approach is used. Administration of the reading test begins at grade 1 passage level and the administration of the arithmetic test begins at Grade 2 subtraction level. If the child performs to a satisfactory standard, the child is given the task at the next level, i.e. Grade 2 passage for reading and Grade 3 or 4 level division for arithmetic. If the child does not perform to a satisfactory standard, the child is given the task at the lower level, i.e. reading simple words for reading and two-digit number recognition for arithmetic. Hence, the level of the task administered is adapted to match the child's ability. In this administration format, each child attempts only two or three tasks for each assessment instead of all four tasks, making the assessment quicker to administer without compromising the objective of identifying the child's reading and arithmetic level.

33. Why does the arithmetic testing process not include addition or multiplication?

Pratham's extensive experience of working with children indicates that when children are given all four basic numeric operations (addition, subtraction, multiplication, and division), practically every child who can do subtraction (2-digit operations with borrowing) can also do addition with carry over. Similarly, with division and multiplication. These trends were also observed in preparatory data work done for the ASER survey and in other data collection efforts.

34. Why are all children in the age group 5 to 16 assessed with the same tools? Why does ASER not assess children at their grade level?

All children are assessed with the same tools as the objective of the ASER survey is to ascertain whether or not children have attained early foundational skills in reading and arithmetic. This is irrespective of age or grade level. It is not designed to be a grade appropriate assessment, but rather to provide an understanding of school aged children's early reading and basic arithmetic ability.

35. What do we know about the reliability and validity of the ASER assessments?

Reliability is the consistency with which a test measures any given skill and thereby enables us to consistently distinguish between individuals of differing ability levels. Given that the ASER assessments evaluate mastery at different reading and arithmetic levels, reliability here is the consistency of the decision-making process. Validity indicates whether the test measures what it aims to measure - in other words, is the inference based on the ASER reading assessment about children's mastery of basic reading valid? Is the inference based on the ASER arithmetic assessment about children's mastery of basic arithmetic valid? Three studies have been conducted to explore the question of reliability and validity of ASER measurements. The findings from these studies provide favourable empirical evidence for the reliability and validity of the ASER assessments. The findings indicate (a) substantial reliability of decisions across repeated measurements, i.e. consistency in the level assigned to a child assessed by the same examiner on two different occasions and (b) satisfactory inter-rater reliability, i.e. consistency in the level assigned to a child assessed by different examiners. In 2010, an impact evaluation study of Pratham's Read India program was conducted by Abdul Jameel Poverty Action Lab (JPAL). In this evaluation, the measurement of children's learning outcomes included several literacy and arithmetic assessments including the

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[3] Technical analyses comparing ASER and EGRA have been carried out. See
http://img.asercentre.org/docs/Aser%20survey Tools%20validating_the_aser_testing_tools__oct_2012__2.pdf

ASER reading and arithmetic assessments. This allowed us to correlate children's performance on the ASER assessments with the additional assessments of reading and arithmetic. This empirical study provided compelling evidence for the validity of the ASER assessments.

36. How long does the process of testing a child take?

ASER is designed to be easy and quick to administer. Depending on the age and ability of the child, the assessment of reading and arithmetic takes an average of about ten minutes per child.

About implementation

37. Why does ASER use volunteers?

ASER is a citizens' initiative, implemented by partner organizations in every rural district across the country. One of the major aims of the survey is to generate awareness and mobilize people around the issue of children's learning. The entire design of ASER thus revolves around the fact that it aims to reach and involve 'ordinary people' rather than experts. All tools and procedures are designed to be simple to understand, quick to implement, and easy to communicate.

38. Which organizations partner with ASER? How do you find them?

Participation in ASER is open to any institution, organization, or group that can provide volunteers who are comfortable spending time in rural locations. Many different kinds of institutions participate. In the months leading up to the survey, ASER Centre staff travel extensively around their respective states to find institutions that are interested and willing to participate and that meet the criteria required of all ASER partners. Institutions often partner with ASER for more than one ASER cycle. Partner organizations sign a Memorandum of Agreement that lists their responsibilities and those of Pratham. A complete list of ASER partners is published in each year's ASER report.

39. Are the volunteers capable and well trained to do the survey? How do you ensure data quality?

Yes! Volunteers are trained intensively prior to the survey, including a field pilot where they practice every procedure that they will be required to implement during the actual survey. During training, their performance is carefully monitored and documented. Once the survey is underway, trainers monitor their performance and help sort out any problems that are encountered. For more details, a training

report is available on the ASER website at www.asercentre.org/p/136.html.

Even though ASER tools and procedures are simple and intuitive, enormous effort is dedicated to ensuring that the data produced by the survey meets stringent quality standards. Quality monitoring processes have been put in place at every stage of the process, from training of trainers and surveyors, to monitoring survey implementation in the field, to recheck of the data collected once the survey is complete. Every year these procedures are carefully reviewed, refined and improved. Details are available in each year's report. For more details, a quality control report is available on the ASER website at www.asercentre.org/p/136.html.

40. How do volunteers collect the data?

To conduct the survey, a pair of volunteers is assigned to each sampled village. They work together to complete the survey of 20 households, usually over a period of two days. Usually village and school information is collected on the first day, and the household survey is conducted for the rest of that day and all of the next day. In each household, the survey team records basic household information and schooling status for all children age 3 to 16. They then assess the reading and arithmetic ability of children in the household age 5 to 16, one at a time. For more details, see the ASER village process section of this report on page 266.

About ASER results

41. Why don't you provide district level reports on reading and arithmetic?

District level data is not published in the ASER report for reasons of space. However, divisional estimates are included in the report and district level data is available for download from the ASER Centre website.

42. Why don't you rank states? How can I compare my state with others?

ASER doesn't rank states because state rankings will vary depending upon the indicator that is selected - for example, children in Std I and II might be doing better in one state relative to others, but children in Std VII and VIII might be doing worse. Or, the proportion of children who can do arithmetic in a state could have improved, but the proportion of children who can read may not have. By providing the data, those wanting to compare states can choose the parameters on which to do so. However, the inference based on the ASER reading assessment is not

about comparing performance across different languages but to evaluate children's level of reading in relation to the state mandated curriculum for Std 1 and 2.

43. What if the data I am looking for is not in the published report? Is the raw data available in the public domain?

ASER publishes this national report annually, which includes selected estimates at district, state, and national level. There is also an ASER Trends over Time report on the website which presents data on selected indicators from 2006 to 2014. All of this information is available for individual states as well as for India as a whole. ASER reports can be downloaded from the ASER Centre website (www.asercentre.org). Some additional data is available on the ASER Centre website, including estimates at district level. Data queries on some key parameters can also be run through the query function on the website. Beyond these options, ASER Centre makes the ASER data sets available for research purposes on request.

44. ASER collects household information, so why does the ASER report not publish it? What is the relationship between household indicators and children's learning?

Information on selected household indicators is included in an annexure in each year's ASER report. The body of the report focuses on children's schooling and learning status because these are the main objectives of the survey. While it is true that household information is collected in order to understand the relationship between household characteristics and children's learning, unpacking these relationships requires more time and deeper analysis. The ASER report simply presents the findings of the survey, but these data have been used by researchers in India and abroad to explore many important questions about the nature of the influences on children's learning.

About impact

45. What impact has ASER had on education policy in India?

ASER has had a major influence in bringing the issue of learning to the centre of the stage in discussions and debates on education in India. In 2005, when ASER began, most people, from parents to government functionaries, were concerned with getting children into school. The assumption was that if children were in school, they must be learning. Today, the fact that large proportions of children are not learning even the basics is widely recognized. For example, ASER has been cited in major Government of India documents such as the XI and XII Five Year Plan and the Economic Survey of India. Most recently, ASER data

has been used in following reports: Three Year Action Agenda of NITI Aayog, Economic Survey of India 2017-2018, and The World Development Report-Learning to Realize Education's Promise to make the learning crisis visible and advocate for remedial steps towards improving learning outcomes.

Many state governments are now implementing their own learning assessments, sometimes using tools very similar to the ASER tools; and some are implementing programs aimed at improving learning outcomes. A great deal remains to be done to ensure that every child in India is in school and learning well. But the first step is for the problem to be recognized. The second step is to have reliable evidence on the nature and extent of the problem. Only then can workable solutions be found.

46. What response do you get from the parents of children you test, or from the community in general?

In the village there is usually a great deal of curiosity and discussion as the ASER testing is being done. People crowd around to observe and talk about what is going on. The simplicity of the tool helps parents and community members to engage with the effort and also to engage with the question of whether their children are learning. Very often parents assume that because their children are going to school, they must be learning. ASER is sometimes the first time that parents become aware that their children may be lagging behind.

47. Has ASER had an impact in other countries as well?

Yes, it has.

The ASER model is increasingly being recognized on global education platforms. The simplicity of ASER's tools and processes coupled with the rigor of its sampling methodology and low cost makes it an interesting option for many countries with contexts similar to India. The ASER methodology has spread organically to several other countries, all of which follow the same set of basic guiding principles while adapting the model to their own context. There is an ASER in Pakistan, conducted since 2008. The initiative is called Uwezo in East Africa (Kenya, Tanzania, Uganda), where it has been implemented since 2009. In Mali, the Beekungo initiative began in 2011 and Jangandoo in Senegal in 2012. In Mexico the Medición Independiente de Aprendizaje (MIA) began in 2014, and LearNigeria in 2015. The People's Action for Learning (PAL) Network was established in 2015 in order to strengthen, coordinate, and promote the work of these countries, and Bangladesh, Cameroon, Ghana, Mozambique, Botswana and Nepal joined the network in 2016.

In the lead up to the establishment of the post 2015 Millennium Development Goals, members of the extended ASER network in many countries made concerted efforts to ensure that indicators of learning and not just schooling are included in the new Sustainable Development Goals. ASER and ASER-like initiatives are mentioned in documents of Global Education Monitoring Report brought out by UNESCO, the Learning Metrics Task Force (coordinated by Brookings Institution and UNESCO Institute of Statistics), and other UNESCO-UIS documents such as the recent Data Digest. The importance of large scale community-based assessments carried out by citizens has been recognized in international policy and advocacy circles as a viable alternative to other existing assessment models, especially with respect to providing data for Indicator 4.1.1a of the Millennium Development Goals, which examines children's proficiency in reading and arithmetic in Grade 2/3. The ASER model is designed to provide exactly this information.

The ASER survey model has been used by governments, international development organisations, and civil society groups in other contexts as well. For example, BRAC has used the ASER tool to test children of Rohingya refugees in Bangladesh to understand the learning levels of children in conflict zones. Similarly, the International Rescue Committee adapted the ASER tool into Arabic to assess children of Syrian refugees.

About resources

48. Who funds ASER?

ASER is a citizens' initiative, designed by Pratham/ASER Centre and implemented each year by partner organizations in every rural district. Approximately 25,000 volunteers participate in ASER each year. People who conduct ASER each year donate their time to ASER and are compensated only for their local travel and food costs. The ASER survey receives support from a variety of sources including foundations, development agencies and corporates. Significant funding also comes from individuals. Each year the names of the partner organizations and sources of support are listed in the ASER report. ASER does not receive funding from any government institution.

49. Can I volunteer for ASER or participate in any way?

Yes, you can; ASER depends on volunteers! You can reach out to us at ASER Centre by sending an email to contact@asercentre.org. Depending on your location, your interests, and your availability, we can figure out how best you can join in this effort.

50. How can I contribute towards ASER surveys?

As a user of good quality data, you will appreciate the effort that goes into it. It takes about a lac of rupees (Rs 100,000) to conduct ASER in a district. While ASER reports and tools are available free of charge, donations of any amount are welcome and will help us continue to generate evidence on learning outcomes in India.

For online payments, please visit: http://www.pratham.org/get-involved/donate-now

For cheque payments, please send to our mailing address: ASER Centre, B4/54, Safdarjung Enclave, New Delhi - 110029

Cheques can be written in favour of "ASER Centre NFC". All donations are eligible for tax exemptions under Section 80G.