

DETAILED METHODOLOGICAL NOTE (ASER: RURAL & URBAN)

SAMPLE DESIGN OF ASER RURAL SURVEY 2023

Sample Design – Rural (Villages)

Total Population: The total population of this survey consists of 151 rural districts of Pakistan.

Sampling Frame: Each district is provided with

- A village list.
- Data from the Population Census 2017 on the total number of households.
- Total population of each village in the list.

Sample size and its Allocation:

- Keeping in view the variability of the key variables, population distribution and field resources, a total sample of 600 households pertaining to 20 households from each village is being used.
- Sample primary sampling units (PSUs) have been considered sufficient to produce reliable estimates with 5% margin of errors at 95% level of confidence.
- The detailed allocation plan is shown below:

Number of Districts	Number of Villages per District	Number of Households per Village
151	30	20

Sample Design: A two stage sample design was adopted:

- **First stage:** 30 villages selected using the provisional village directory of the 2017 census¹.
- **Second stage:** 20 households are selected in each of the 30 selected villages.

Selection of Primary Sampling Units (PSUs): Villages of districts have been taken as PSUs:

- Sample PSUs have been selected using probability proportional to size (PPS) method.
- Every year, 20 villages from the previous year are retained and 10 new villages are added. Ten villages are dropped from the previous year's list and 10 new villages are added from the population census village directory. The 10 new villages are also chosen using PPS.

¹ "Block wise provisional summary results of 6th population and housing 2017 (as on January 03,2018)" by census division, Pakistan Bureau of Statistics www.pbscensus.gov.pk

- The 20 old villages and the 10 new villages give us a” rotating panel” of villages, which generates better estimates of changes.

Selection of Secondary Sampling Units (SSUs): Households have been treated as secondary sampling units (SSUs).

- Based on actual households in each sample PSUs, 20 households have been selected.
- We divide the village into four parts:
 - In each of the four parts, started from the central location and pick every 5th household on the left hand-side in a circular fashion till 5 households are selected from each part.

Selection of School

- 1 government school from each selected village (Mandatory)
- 1 private school from each selected village (Optional)

EXPLANATION OF THE SAMPLING METHODOLOGY ADOPTED BY ASER PAKISTAN FOR RURAL AREAS:

The sampling strategy used generates a representative picture of each district. The estimates obtained are then aggregated to the provinces and all-Pakistan level. Since estimates were to be generated at the district level, the minimum sample size calculations had to start at the district level. The sample size is determined by the following considerations:

- Incidence of what is being measured in the population. Since a survey of learning has never been done in Pakistan, the incidence of what we are trying to measure is unknown in the population.
- Confidence level of estimates. The standard used is 95%.
- Precision required on either side of the true value. The standard degree of accuracy most surveys employ is between 5 and 10 percent. An absolute precision of 5 % along with a 95% confidence level implies that the estimates generated by the survey will be within 5 percentage points of the true values with a 95% probability. The precision can also be specified in relative terms — a relative precision of 5% means that the estimates will be within 5% of the true value. Relative precision requires higher sample sizes.

Sample size calculations can be done in various ways, depending on what assumptions are made about the underlying population. With a 50% incidence, 95% confidence level and 5% absolute precision,

the minimum sample size required in each strata is 384^2 . This derivation assumes that the population proportion is normally distributed. On the other hand, a sample size of 384 would imply a relative precision of 10%. If we were to require a 5% relative precision, the sample size would increase to 1600^3 . Note that all the sample size calculations require estimating the incidence in the population. In our case, we can get an estimate of the incidence from previous ASER surveys. However, incidence varies across different indicators — so incidence of reading ability is different from incidence of dropouts. In addition, we often want to measure things that are not binary for which we need more observations.

Given these considerations, the sample size was decided to be 600 households in each district⁴. In each district, we will have 20 villages from the last previous year when the survey took place and an additional 10 villages will be added every year to the sample, giving us a total of 30 villages per district. In each village 20 households will be surveyed, giving a household sample size of 600 per district. Note that at the province level and Pakistan level the survey has many more observations lending estimates at those levels much higher levels of precision.

If we had household lists at the district level, the 600 households could be randomly selected. In the absence of these, a two-stage sample design was adopted. In the first stage, 30 villages will be randomly selected using the village directory of the 2017 Census as the sample frames. In the second stage 20 households will be randomly selected in each of the 30 selected villages in the first stage.

Villages will be selected using the probability proportional to size (PPS) sampling method. This method allows villages with larger populations to have a higher chance of being selected in the sample. It is most useful when the sampling units vary considerably in size because it assures that those in larger sites have the same probability of getting into the sample as those in smaller sites, and vice versa.⁵

² The sample size with absolute precision is given by $\frac{z^2 p q}{d^2}$ where z is the standard normal deviate corresponding to 95% probability (=1.96), p is the incidence in the population (0.5), $q = (1-p)$ and d is the degree of precision required (0.05).

³ The sample size with relative precision is given by $\frac{z^2 q}{r^2 p}$ where z is the standard normal deviate corresponding to 95% probability (=1.96), p is the incidence in the population (0.5), $q=(1-p)$ and r is the degree of relative precision required (0.1).

⁴ Sample size calculations assume simple random sampling. However, simple random sampling is unlikely to be the method of choice in an actual field survey. Therefore, often a “design effect” is added to the sample size. A design effect of 2 would double the sample size. At the district level a 7% precision along with a 95% confidence level would imply a sample size of 196, giving us a design effect of approximately two.

⁵Probability proportional to size (PPS) is a sampling technique in which the probability of selecting a sampling unit (village, in our case) is proportional to the size of its population. The method works as follows: First, the cumulative population by village calculated. Second, the total household population of the district is divided by the number of sampling units (villages) to get the sampling interval (SI). Third, a random number between 1 and the SI is chosen. This

In the selected villages, 20 households are surveyed. Ideally, a complete house list of the selected village should have been made and 20 households selected randomly from it. However, given time and resource constraints a procedure for selecting households will be adopted that preserved randomness as much as possible. The field investigators will be asked to divide the village into four parts. This is because villages often consist of hamlets and a procedure that randomly selects households from some central location may miss out households on the periphery of the village. In each of the four parts, investigators will be asked to start at a central location and pick every 5th household in a circular fashion till 5 households are selected from each part. In each selected household, all children in the age group of 5-16 will be tested⁶.

The survey will provide estimates at the district, provincial and national levels. In order to aggregate estimates up from the district level households have to be assigned weights — also called inflation factors. The inflation factor corresponding to a particular household denotes the number of households that the sampled household represents in the population. Given that 600 households are sampled in each district regardless of the size of the district, a household in a larger district will represent many more households and, therefore, have a larger weight associated with it than one in a sparsely populated district.

The advantage of using PPS sampling is that the sample is self-weighting at the district level. In other words, in each district the weight assigned to each of the sampled household turns out to be the same. This is because, the inflation factor associated with a household is simply the inverse of the probability of it being selected into the sample times the number of households in the sample. Since PPS sampling ensures that all households have an equal chance of being selected at the district level, the weights associated with households in the same district are the same. Therefore, weighted estimates are exactly the same as the un-weighted estimates at the district level. However, to get estimates at the Provincial and national levels, weighted estimates are needed since provinces have a different number of districts and districts vary by population. Rural sampling mimics the random sampling.

Although the purpose of the survey is to estimate learning levels among children, the households are chosen as the second stage sampling unit. This has a number of advantages. First, children will be tested at home rather than in school, allowing all children to be tested rather than just those in school. Further, testing children in school might create a bias since teachers may encourage testing the

is referred to as the random start (RS). The RS denotes the site of the first village to be selected from the cumulated population. Fourth, the following series of numbers is formed: RS; RS+S₁; RS+2S₁; RS+3S₁; The villages selected are those for which the cumulative population contains the numbers in the series.

⁶ In larger villages, the investigators increased the interval according to a rough estimate of the number of households in each part. For instance, if a village had 2000 households, each part in the village would have roughly 500 households. Selecting every 5th household would leave out a large chunk of the village un-surveyed. In such situations, investigators were asked to increase the interval between selected households.

brighter children in class. Second, a household sample will generate an age distribution of children which can be cross-checked with other data sources, like the census. Third, a household sample makes calculation of the inflation factors easier since the population of children is no longer needed.

Often household surveys are stratified on various parameters of interest. The reason for stratification is to get enough observations on entities that have the characteristic that is being studied. The ASER survey stratifies the sample by population in the first stage. No stratification will be done at the second stage. If, we were to stratify on households with children in the 3-16 years of age group, we would need the population of such households in the village, which is not possible without a complete house list of the village.

SAMPLE DESIGN OF ASER URBAN SURVEY 2023

The universe of this survey consists of all urban areas of four provinces of Pakistan to make it nationally representative.

URBAN SAMPLING FRAME

Urban Frame: Pakistan Bureau of Statistics (PBS) has developed its own sampling frame for urban domains. Each city/town is divided into enumeration blocks. Each enumeration block comprises of 200 to 250 households on average with well-defined boundaries and maps. The frame used in this survey was the most recent frame, updated through Population and Housing Census 2017. PBS has estimated/calculated sample size of 1154 PSUs comprising of 23080 household from sampling frame based on the Population and Housing Census 2017 census on 31 divisions (Urban Part) of Pakistan. Sample Design of Urban area is entirely different from ASER-Rural and PBS is only responsible for Urban sample design.

Raising sampling weights will be computed. The weighted survey estimates will only be representative at the urban level, specifically 31 divisions, four provinces, and Pakistan Urban level.

STRATIFICATION PLAN

Urban Areas: In urban domains, each administrative district has been treated as an independent and separate stratum.

SAMPLE SIZE AND ITS ALLOCATION The formula for estimation of sample size is:

$$n = \left(\left(\left(\frac{t}{d} \right)^2 \times (p(1-p)) \times deff \times nrf \right) / r \times h \right)$$

Where, t = level of significance

p = prevalence of variable under reference

MOE = Margin of Error 6%

Deff = design effect 1.5

nrf = non-response factor 1.05

d = relative margin of error (MOE*r)

r = population at risk

h = average household size

The detailed urban sample of all surveyed administrative units will be shared later.

SAMPLE DESIGN

A two stage, stratified sampling scheme is adopted for the survey. Enumeration blocks in urban areas are selected at the first stage by probability proportional to size (PPS) method of sampling scheme using households in each block as measure of size (MOS). Complete household listing will be carried out in selected block considered as Secondary Sampling Units (SSUs) and 20 households within the sample enumeration blocks will be selected using Systematic Random Sampling with a random start at second stage.

SURVEY METHODOLOGY FOR URBAN

Block Identification

- PBS provided maps of the selected blocks based on Population and Housing Census 2023

How to Sample Households

- A specific number of households (SSUs) i.e. 20 households were selected from each sample block using systematic sampling technique with a random start.

SURVEY METHODOLOGY FOR ASER

WHAT TO DO IN THE VILLAGE

- **Contact Village Elder:** Introduce yourself to the village elder, councilor and/or to other senior members of the village community. As you walk to reach the village elder or councilor, talk to different people and ask about the village. Tell them about ASER. This initial round of walking and speaking to the village dwellers may take more than an hour. Get the approximate population number of households, the languages spoken, electricity and gas connection in the village from the Councilor.
- Also get information regarding private schools, hospital, dispensary, and maternity center (if a private school is available, then record the number of private schools by category i.e. purely private school, foundation assisted school, trust/NGO, special education).
- Ask about Government schools, Madrassa, private clinic (if available ask how many),

- While roaming in the village check for electric wiring/transformers for electricity connection.

HOW TO INTRODUCE ASER

It is important that ASER is introduced clearly and simply to the villagers. Following is a suggested way of explaining your purpose of visiting the village and the ASER survey:

“Our team is conducting a survey on quality of education in Pakistan called Annual Status of Education Report (ASER). We want to know if the children of age 3-16 are learning anything in the school or outside of it i.e. in home. We are conducting this research in more than 4,500 villages and in 151 rural districts of Pakistan and your village has been selected as one of them. We will also go to one government school here and one private school (if there is one in the area) to look at their standard. We will select 20 households in your village and ask children to read and do mathematics sums etc. This way you will also know the standard of education, and as we ask the government, the village should also come together to improve educational standards.”

The next step is to identify the households:

- Talk to people: How many different hamlets/sections are in the village? Where are they located? What is the social composition of the households in each hamlet/section? What is the estimate of households in each hamlet/section? How many government and private schools are in the village? Tell them about ASER.

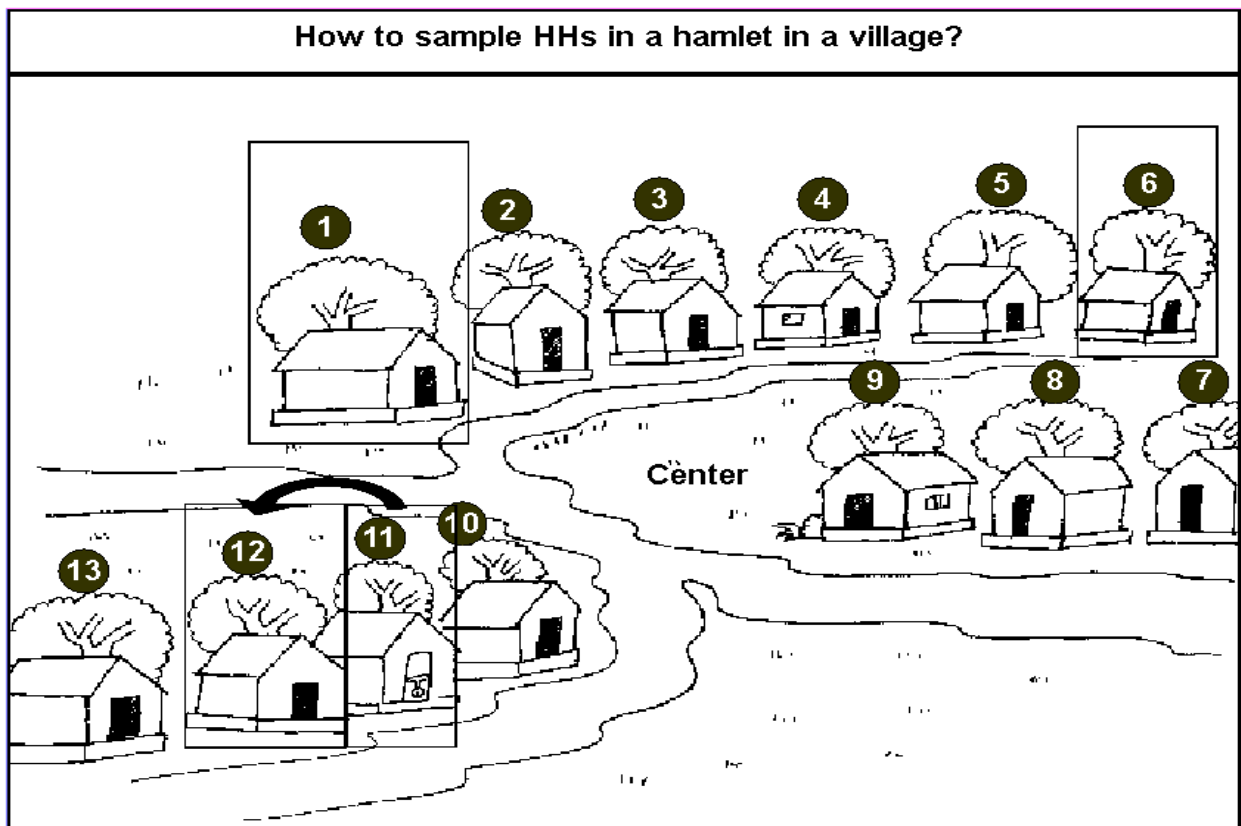
It is often helpful to first draw all the roads or paths coming into the village and going out of the village. It helps to first draw a rough sketch on the ground so that people around you can see what is being done. Mark hamlets, schools, households etc. with landmarks. With the help of the community members, identify different hamlets and their center point.

HOW TO SELECT HOUSEHOLDS

- In the entire village, information will be collected for 20 randomly selected households.
- Go to each hamlet/section. Try to find the central point in that habitation. Stand facing the houses in the center of the habitation. Visit every 5th house from the left-hand side in the habitation (e.g. 1st house, 6th house, 11th house, 16th house, and so on). Get information about the household and children following instructions in the next section.
 - House Closed: If the selected house is closed or if there is nobody at home, note that down on your compilation sheet as “House Closed”. This household DOES NOT count as a surveyed household. Move to the next/adjacent open house. Continue until you have 5 households in each hamlet/section in which there were inhabitants.
 - No Response: If a household refuses to participate, note that down on your compilation sheet as “No Response”. However, as above, this household DOES NOT count as a surveyed household. Move on to the next house. Continue until you have 5 households in each

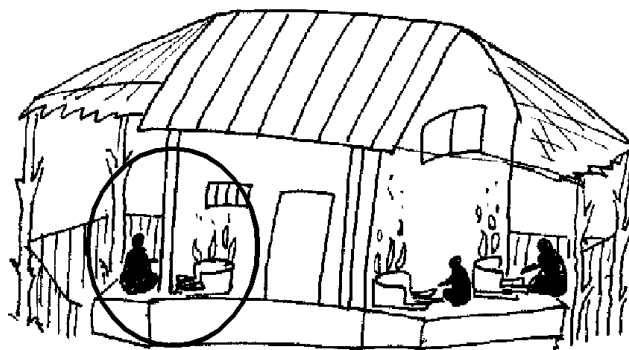
hamlet/section in which not only were the inhabitants present, but they also participated in the survey.

- No Children: If there are no children or no children in the age group of 3–16 years in a household but there are inhabitants, this household DOES NOT count as surveyed household.
- Stop after you have completed 5 households in each hamlet/section. If you have reached the end of the section before 5 households are sampled, go around again using the same every 5th household on the left-hand side rule. If a surveyed household gets selected again, then go to the next household. Continue the survey till you have 5 households in the section.
- Now move to the next selected hamlet/section. Follow the same process.
- Make sure that you go to households ONLY WHEN children are likely to be at home. This means that the day of the household survey should be a Sunday or holiday.
- If every house is turning out to be a no Response house, think about your team and strategy. It may be because the pair of volunteers consists of two male members going to the households, hence refused permission.



Instructions:

1. Find central point in a hamlet. Stand facing the dwellings.
2. Survey every 5th HH (household) occurring on the **Left-Hand Side**.
3. In case of a locked HH or if there is nobody at home, note that down as '**House Closed**' and move to the next open house.
4. If a HH refuses to participate, note that down as '**No Response**' and move to the next HH.
5. If there are no children or no children in the age group of 3-16 years in a HH but there are inhabitants, do not include that HH.
6. If you reach the end of the hamlet before five (5) HHs are sampled, go around again using the "every 5th HH rule".



In the 5th HH ask how many 'chulhas/kitchens' are there? If there are more than 1, then randomly select any one of the 'chulhas/kitchens'. After completing survey in this house proceed to the next 5th HH.

WHAT TO DO IN EACH HOUSEHOLD

Basics of the household sheet: Following is some basic information required to be filled in the household sheet before the start of the survey.

Household with multiple kitchens: If there is more than one kitchen (*chulhas*) in the selected household, then randomly select any one of the kitchens in the household and record the total number of family members who eat from that chosen kitchen.

- **Household ID:** Write the household number (e.g. 1, 2, 3.....20)
- **Gender of the respondent:** Select gender of the respondent. (Male, Female, Other)
- **Respondent head of the family:** Ask if the respondent if s/he is head of family and select option (yes/no) accordingly.
- **Name of Family:** write down the name of **family head**.
- **Mother language:** Write down the mother language of the family.
- **Religion:** Write down the religion of the household members.
- **Date and Time:** Write down the date, day, start & end time on the day of the survey visit.

- **In Each Sampled Household:** We will note information about the household and all the children (3-16 years), their mother and father who live in the household on a regular basis.
- **Children 3 to 4:** On the household sheet, note down child's name, age, whether they are attending Kachi or any other form of pre-school centre. **We will NOT test children who are under 5 years of age.**
 - Ask all children in this age group their current schooling status, meaning whether the child is currently enrolled in kachi or any other school, dropped out of school or was never enrolled in any school.
 - Ask all (enrolled and dropped out) children if they take any private supplementary tuition (paid classes in addition to regular school).
 - Also ask the enrolled children if they go to the specific school which you have/will be surveying. whether they receive scholarship from government
- **Children 5 to 16:** On the household sheet, note down child's name, age, gender and all other details.
 - Ask the current schooling status of each child, i.e. whether the child is currently enrolled in school, dropped out of school or was never enrolled in any school.
 - If the child is enrolled then note down the class which the child is attending at the time of the survey and the type of school each child is going to, i.e. government, private, madrassah or any other type of school.
 - Ask all (enrolled and dropped out) children if they take any private supplementary tuition (paid classes in addition to regular school).
 - Also ask the enrolled children if they go to the specific school which you have/will be surveying, and if they receive any government scholarship?
 - **All children in this age group (5 to 16) will be tested in basic reading, arithmetic and English.** (We know that younger children will not be able to read much or do sums but still follow the same process for all children so as to keep the process uniform). Ensure that the child is comfortable before and during the test and that sufficient time is given to each child.

Out of school children (drop outs and never enrolled children)

- Ask the child if s/he has dropped out and the last class that has passed. Also ask for the reason of dropping out or never being enrolled (such as law and order, poverty, flood, school building shifted by government or others). Reasons for dropping out or never being enrolled are mentioned at the bottom of the page with asterisk.
- Even the dropped out and never enrolled children of ages 5 to 16 years have to be tested.

OTHER THINGS TO REMEMBER:

- **Non-resident children:** Do not survey children who are visiting their relatives and friends in the sampled village.
- **Older children:** Often older girls and boys (in the age group of 11 to 16 years) may not be thought of as children. Be sensitive to this issue and therefore avoid using words like "children".
- **Children out of the village:** If there are children in the family but who are not present in the village during the survey, do not take their details. There might be children of the household who study in other cities, do not include such children.

- **Mothers under or 16 years of age:** Often in villages, you can come across mothers who are less than 16 years of age. Information on them will be collected as a mother as well as a child between the age of 5 to 16 years, and they will also be tested in all three assessments.

*Many children may come up to you and want to be included in the process out of curiosity. Do not discourage these children. You can interact with them. But concentrate on the fact that data must be noted down **ONLY** for children from households that have been randomly selected.*

- **Parents' Information:** Following information regarding parent's information will also be recorded:
 - Name and Age
 - Total number of Children (0-16)
 - Whether mother and/or father have gone to school?
 - Mother and/or father's education (Highest class completed)
 - Does mother father have CNIC?
 - Do not take information if the mother/father is deceased/alive.
 - Is mother working woman and is she married/widowed.

Household Indicators: All information on household indicators is to be recorded based, as much as possible, on observation and evidence. However, if for some reason you cannot observe it, note down what is reported by the household. This information is being collected in order to link the educational status of the child with household economic conditions.

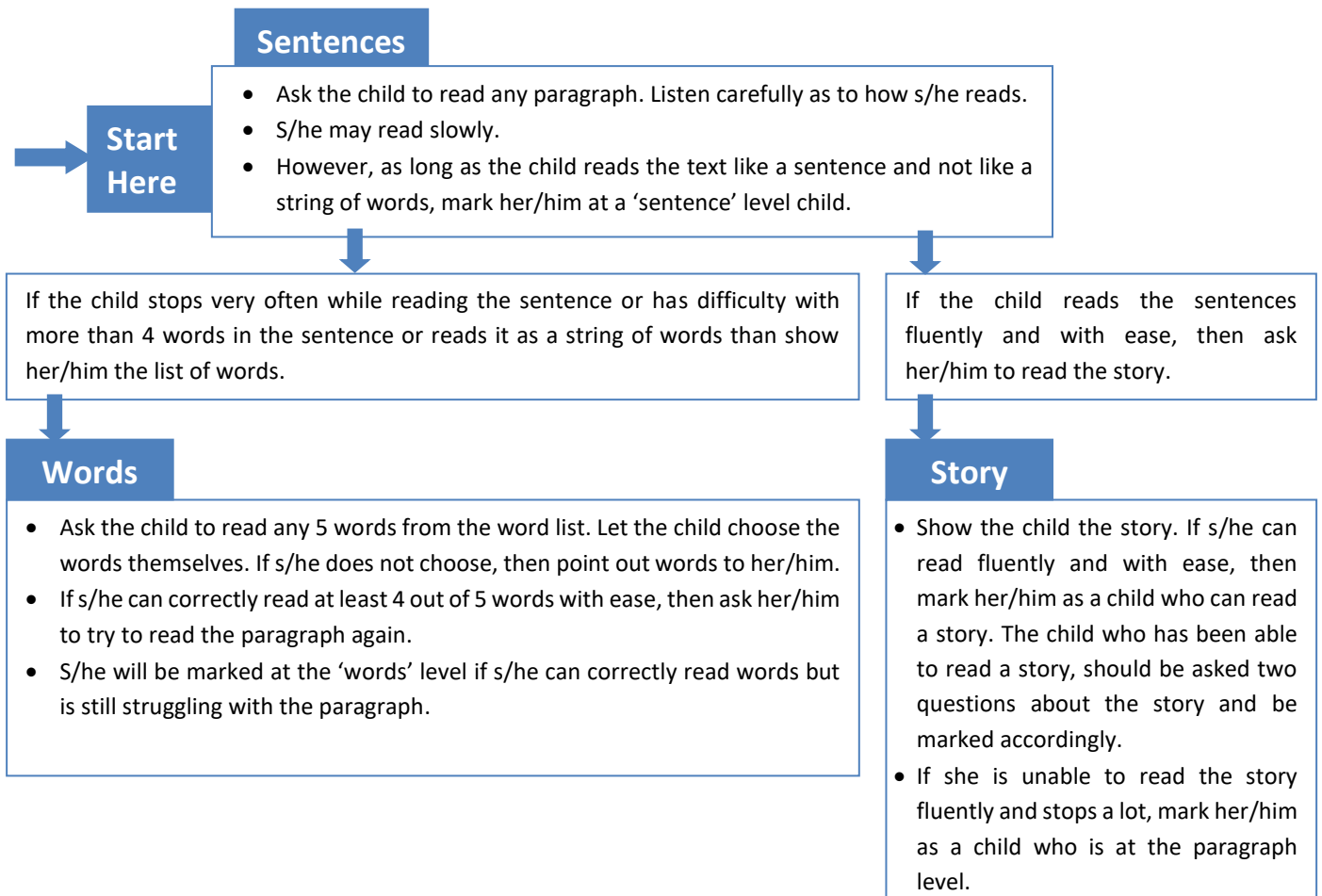
- 1) **House Ownership:** Mark yes or no regarding the ownership of the house.
- 2) **Type of house the child lives in:** Types of houses are defined as follows:
 - *Kutchra House:* The walls and/or roof of which are made of material other than those mentioned here, such as un-burnt bricks, bamboos, mud, grass, reeds, thatch, loosely packed stones, etc.
 - *Semi -Pucca House:* A house that has fixed walls made up of pucca material but roof is made up of the material other than those used for pucca house.
 - *Pucca House:* A pucca house is one, which has walls and roof made of the following material. Wall material: Burnt bricks, stones (packed with lime or cement), cement concrete, timber, ekra etc. Roof Material: Tiles, GCI (Galvanized Corrugated Iron) sheets, asbestos cement sheet, RBC (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc.
- 3) **HH Members with the Same Kitchen:** Write down the **number of male, female and other identifying members** eating from the same kitchen. This includes children. Write the total number under each category and also mention total earning members of that particular household. Also mention total earning members under the age of 18.
- 4) **Source of clean drinking water:** Ask the source of clean drinking water from among the following response options and mark the appropriate response:
 - a. **Tap water:** Water that is supplied through the tap.
 - b. **Bore:** groundwater that has been accessed by drilling a bore/hole into underground aquifers (water storages) and pumping to the surface.
 - c. **Filtration plant:** water supplied through filtration plant.
 - d. **Toba:** pond water.
 - e. **Stream/Chashma:** stream or "chashma" water.
 - f. **Other:** if the response is not given in the options
- 5) **Functional toilet:** Mark yes or no

- 6) **Electricity Connection:** Mark yes or no by observing if the household has wires/electric meters and fittings or not.
- 7) **Solar Panel:** Mark yes if the household has a solar panel otherwise mark no.
- 8) **Television – TV in the household:** Mark yes if the household has a TV set otherwise mark No.
- 9) **Radio:** Ask the respondent if they have a radio and mark yes or no accordingly.
- 10) **Computer/Tablet/Laptop:** Mark yes if the household has a Computer/Tablet/Laptop otherwise mark No.
- 11) **Internet Connection:** Mark yes or no by observing if the household has an internet connection.
- 12) **Means of communication:** Ask the respondent if they use mobile phone, smart phone, SMS, and WhatsApp for communication. And mark yes or no accordingly.
- 13) **Vehicle owned by the households (mention in numbers):** Mention the number under the label “car” and “motorbike” if it is owned by the household.
- 14) **Recipient of cash transfer or Safety-Nets:** Mark yes or no if respondent is a recipient of BISP, Bait-ul-maal, Punjab Social Protection Authority, and Akhuwat.
- 15) **Knowledge of computer and smartphone usage:** Write the number of household members who can use a computer, use a smart phone, and read newspaper.
- 16) **Use of digital learning platform:** Take support from digital learning platform: mark PTV Tele School, no, or other.
- 17) **Effect of floods on the household:** Ask the respondent if their HH was affected by 2022-23 floods and mark yes/no accordingly.
- 18) **If household members have been affected by displacement:** If the HH is migrant/refugee/IDP then mark “yes” otherwise mark “no”.
- 19) **Awareness regarding climate change:** Ask how well they are informed about climate change.
- 20) **Extent of impact of natural disaster/flooding on household members:** Has your family been impacted by natural disaster/flooding within the last year? Choose from “Yes, significantly”, “Yes, moderately”, or “No, not affected”.
- 21) **Effect of natural disasters on earnings:** To what extent were your earnings negatively impacted by natural disasters e.g., flooding? Select “Less than 10%”, “btw 11% - 25%”, “btw 26% - 50%”, “More than 50%”, or “No affect”.
- 22) **Effect of climate change on psychological well-being:** Has your emotional/psychological well-being been affected due to climate changes? Choose from (“Substantially affected”, “Somewhat affected”, “Affected only bit”, “Not at all”).
- 23) **Mode of travel:** Select all that apply (by foot, bicycle, school transport, motor bike, car, other).
- 24) **Time travel:** mark the approximate time required to travel to school from “Less than 0.5 hr”, “0.5 to 1 hr”, or “More than 1 hr”.
- 25) **Registered under NADRA:** Write the number of children who have been registered under NADRA (have B-form).
- 26) **Birth certificate:** Write the number of children for whom birth certificate has been issued.
- 27) **Change of school:** If any of the children have change the school in last year then mark yes and write the reason (such as law and order, poverty, flood, school building shifted by government, etc. these reasons are mentioned at the end of the survey booklet with an asterisk) to why they had to change school, otherwise choose no.
- 28) **Educational expense:** Total expense incurred on the child’s education per month. Write the average expense of education per child per month.
- 29) **If schooling was affected by natural disaster:** Was any of your children’s schooling affected due to natural disaster within last year (e.g., Due to school closure, school absence, teachers’ absence etc.): choose from extremely affected, moderately affected, somewhat affected, or not at all.

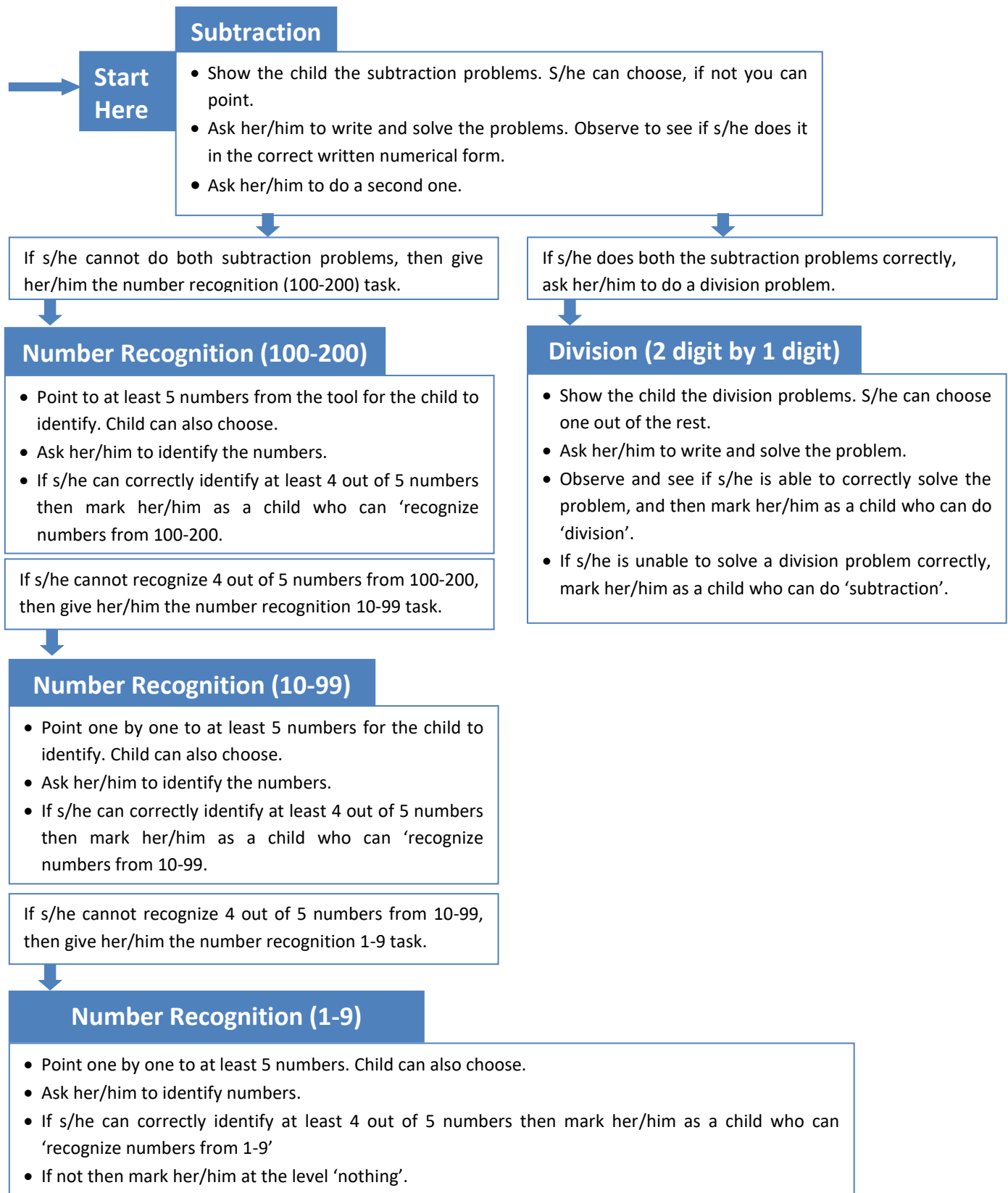
Information on child’s health:

- 1) Copy name from the assessment sheet for each child in the child health section.
- 2) **Child's Overall Health:** Ask the respondent, how would they describe their child's health on a scale from Excellent to Poor ("Excellent", "Very Good", "Good", "Fair", and "Poor").
- 3) **Diseases:** has a doctor or health care provider ever told you that the child has any of the following health problems?
 - a. Allergies
 - b. Asthma (also known as "dama")
 - c. Type 2 diabetes (known as "ziabetes")
 - d. Epilepsy (known as "mirgi")
 - e. Heart condition
 - f. Blood disorder.
- 4) **Vaccines:** has the child received any of the following basic vaccines?
 - a. BCG (also known as TB)
 - b. Polio
 - c. DPT-HepB-Hib (also known as hepatitis)
 - d. Pneumococcal
 - e. Measles (Khasra)
 - f. If all of the vaccines are received, then choose "All of the above" and if none of the vaccines are received then choose "None".
- 5) **Immunization:** Ask the respondent if they have an immunization card or any other documentation indicating child's vaccination. Mark the response option accordingly.
- 6) Has your child received de-worming pills or any other medicine in school? Choose yes, no or don't know accordingly.

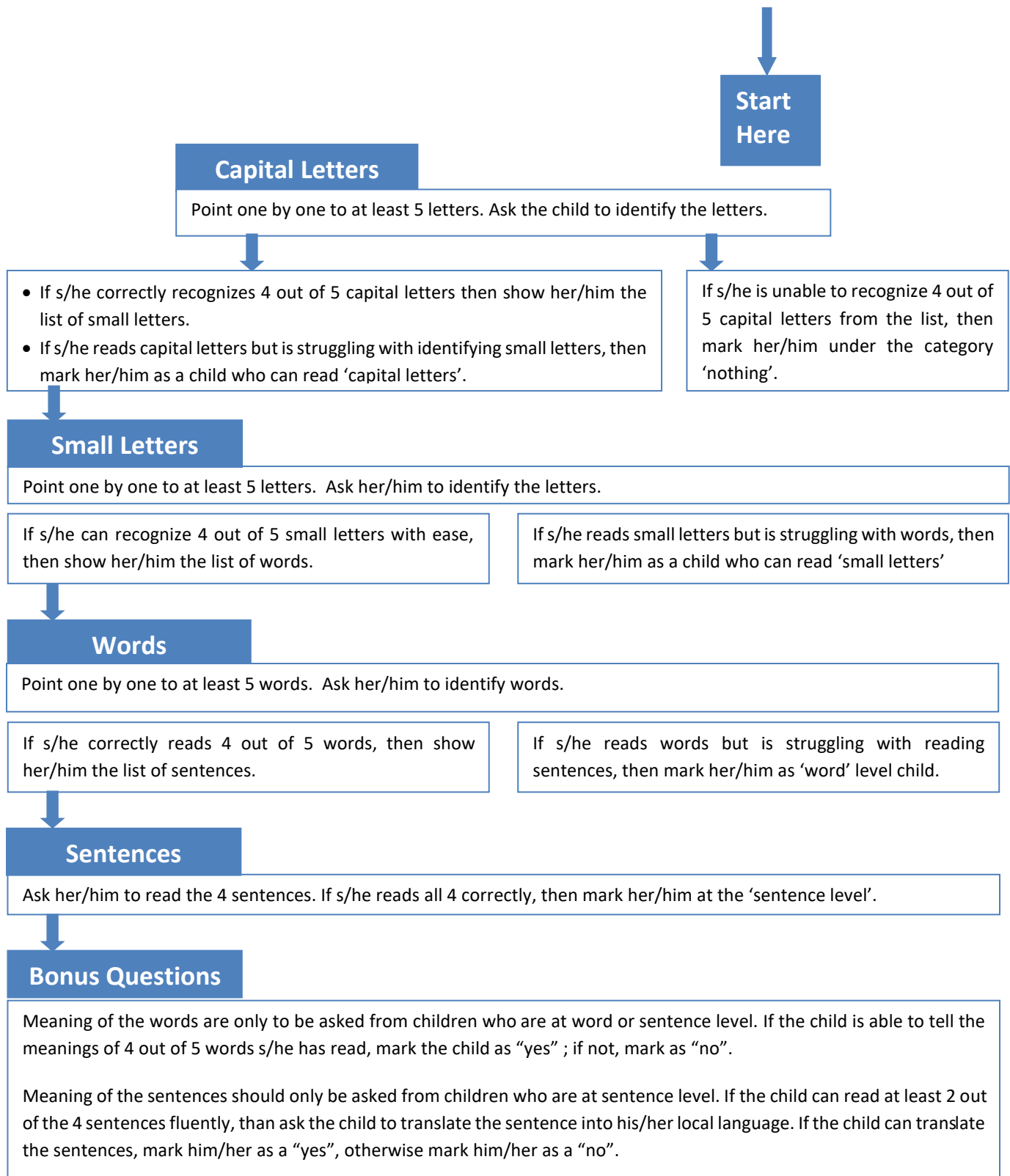
HOW TO TEST URDU READING?



HOW TO TEST ARITHMETIC?



HOW TO TEST ENGLISH READING?



HOW TO TEST GENERAL KNOWLEDGE?

ENGLISH

This section should only be asked from children who are at “Word” level on English Tool.

- a) Ask the child to see the picture and then ask two questions from the child. Mark “yes” if the child answer correctly, otherwise mark as “no”.
- b) Ask the child to complete the sentences by identifying the picture of the items drawn on the sample. If a child answers any two correctly, mark him/her “yes”, otherwise “no”.

Word Problems

Show word problems to all children (5-16 years). S/he has to answer all three questions.

- Ask her/him to tell the time in the clock, if S/he answers correctly then mark as “can tell” otherwise mark as “cannot tell”.
- Ask her/him to solve the problem # 2 and #3 on a piece of paper.
- Watch what s/he does.
- If s/he is able to follow the right method and solve with the right answer, then mark her/him as a “can do” for each word problem otherwise mark her/him as “cannot do”.
- Ask at least one child from each household to do at least one word-problem at the back of the household sheet.

WHAT TO DO IN A SCHOOL

GENERAL INSTRUCTIONS:

Mention the name of the Target Village on the top.

- Take permission from Head Masters/Mistress or Teacher of respective Class before observing the class.
- Visit any **government school** in the village with classes from Class 1 to 10 or High School. If there is no High school in the village, then go to a Middle School, in case Middle School is not available then go to a primary school. In the top box of the Observation Sheet, mark the school type. If there is no government school in the village, **than go to the nearest Government School located in a nearby village.**
- If the village has a Boy's High School and a Girl's High School, preference should be given to the girl's school.
- Meet the Head Master/Head Mistress (if the Head Master/Mistress (HM) is absent, then meet the senior most teacher of the school) and note down the following information:
 - Record the name of the School, name of the village, and name of Tehsil/Taluka, District/Agency and the Province.
 - Tick the school level i.e. Kachi/ECE to 5, Class 1 to 5, Class 1 to 8, and Class 1 to 10.
 - Tick the respective box for type of school i.e. High, Middle, Primary or Others.
 - Tick type of school (by enrollment):
 - Boys and Girls School
 - Boys only School
 - Girls only School
 - Tick the Medium of Instruction
 - English
 - Urdu
 - Pashto
 - Sindhi
 - Arabic
 - Or any other medium
 - EMIS/BEMIS/SEMIS Code: write the EMIS/BEMIS/SEMIS code of the school.
 - Write down school's establishment year.
 - If it is a private school or not, and whether the school is affiliated with any NGO.
 - Note the **Time of Entry** into the school and **Time of Exit** from School.
 - Date of visit: write down the date of survey

When at the school, ask the Head Master for the **enrollment register** or any official record of the school's enrolment.

What to do in Government/Private School?

Children's Enrollment & Attendance: (Section I)

1. ASK for the registers of all the Classes and fill in the enrollment. **If there is more than one section for same class**, add the enrollment of all the sections and write accordingly.

2. Make sure the HM has introduced you to the teacher. If not, introduce yourself and the ASER survey. Request for his/her permission to collect information on the classroom.
3. MOVE AROUND the class/area where children are seated and take down their attendance **class-wise** by **counting** them YOURSELF. You may need to seek help from the teachers to distinguish children class-wise as they are normally found seated in mixed groups. In such a case, ask children from each standard to raise their hands. Count the number of raised hands and accordingly fill the same in the observation sheet, class-wise. Please note that you should **only** COUNT those children who are physically present in the class.
4. You can fill this information after you have collected all information from school records and registers. But make sure you do the head count of children enrolled in the school yourself also.

Class Room Observations (Observe and Ask if required): (Section II)

1. This section is to be filled for Class 2 and Class 8 only (in case of a primary school, do class 2 only). If there is more than one section for a class, then randomly choose any one. Write down the Class with whom these classes are sitting.
2. Is there a usable black/white board in the class? Yes/No – write on the black/white board yourself to find out.
3. OBSERVE if children have their textbooks for at least of one subject. Ask the children to show English textbook or that of Urdu to make a correct assessment.
4. Apart from the textbooks, OBSERVE if there is any other supplementary material (e.g. books, charts on the wall, board games, etc.) in the room. Mark accordingly for each class you observe.
5. OBSERVE where the Class is sitting (room, verandah, outdoor) and fill accordingly.
6. Observe any ECE equipment (toys, activity material) and mark accordingly.

Health and Disability (Observe and Ask if required): (Section III)

Request the Head Teacher to provide information on health and disability section and tick the relevant response options.

- a) Do you have children with disability in your school?
- b) If yes, how many in each type of disabilities (“visual”, “hearing”, “physical”, “intellectual”, “self-care”, “communication”) in the specific extent of disability (“some difficulty”, “a lot of difficulty”, “cannot do at all”)? Ask for total number and gender wise information.
- c) Do you have special facilities/personnel available? (Tick relevant option from the listed facilities: “ramps”, “accessible toilets”, “health and nutrition officer”, “trained support staff”, “assistive devices for hearing impaired”, and “transport facility”).

Page 2:

Teachers: (Section IV – Govt. School Sheet & Section III –Pvt. School Sheet)

1. Request the Head Teacher to provide you information on teachers in the school. Collect and note down the information on:
 - a. Number of sanctioned teaching posts (*Only for Government school*).
 - b. Number of teachers appointed (male and female both).
 - c. Regular/Government teachers (male and female both) do not include the Head Master.
 - d. ECE teacher/ECE assistant: If the school has ECE teacher or assistant.

- e. Contract/Para-teachers: If the school has para-teachers or teachers appointed by the School Management Committee (SMC), local government, or community. Mark that separately.
- f. Administrative staff
- g. Support staff
- h. Number of teachers/staff present on the day of the survey.
- i. Number of teachers/staff living in the village, if applicable.
- j. Also ask each category of teachers (Head Teacher, regular teachers, para-teachers) whether they reside in the village or a neighboring village and how many have more than 3 years of experience. Count the number of teachers residing in the same visited village and write this number in the observation sheet.

No. of Qualified Teaching Staff: (Section V – Govt. School Sheet & Section VI - Pvt. School Sheet)

Qualifications of teachers should be incorporated separately in the form of their:

- Educational Levels i.e. Below Matric, Matric, FA/F.Sc, BA, B.Sc, MA/M.Sc, M.Phil, PhD or any other. Count teachers for their respective highest educational level and mention the count in the respective boxes.
- Professional Qualification i.e. None, CT, PTC, B.Ed, M.Ed/MA.Ed, Others etc. Count teachers for their respective professional qualifications and mention the count in the respective boxes.

Note: Total numbers of teachers must be equal to total number of appointed teachers.

SMC/SC/PTA Information: (Section VI– Govt. School Sheet)

- Is SMC/SC/PTA/PTC/PTSMC active? (Yes or No).
- Write the total number of members.
- Write the number of active members.
- Write amount in bank.
- Write last meeting date.
- How many parents attended the meeting?
- When was the school council established?

Facilities in the School: (Section VII – Govt. School Sheet & Pvt. School Sheet)

Observe, count and write down:

- Total numbers of rooms in the school (observe and count)
- Number of rooms used for classes (observe and count)
- Average size of the classroom (in square feet)

Tick the relevant:

- Is there a complete school boundary wall/fence?
- Is there a playground?
- Does the school have an electricity connection?
- Does the school have solar panels?
- Does the school have a working library?
- How many electronic tables does the school have or have been assigned? (Give number)

- Is there useable furniture available in this school?
- IS running water available in handwashing sink?
- Was your school damaged by the natural disaster? If yes, then ask the extent of the damage (partially damaged or fully damaged) and if they received funding from govt or any other donor body.
- Drinking facility available and being used by children.
- Are there usable toilets/latrines for students?
- Are there separate toilets for girls and boys?
- Are disinfectant available for cleaning?
- Are the toilets clean?
- Clean drinking water for students?
- Is sick room available?
- Is first aid equipment available?
- Day care facility available for teachers?
- Is there a computer lab?
- Does the school have internet connection? If yes where? Give numbers.
- No. of hand washing sinks without water (count yourself).
- No. of handwashing sinks without soap/handwash (count yourself).
- No. of hand washing sinks outside toilets?
- No. of hand washing sinks inside toilets?
- No. of *wuzu* taps?
- No. of toilets for teachers only?
- No. of toilets for students only?
- No. of toilets without running water (count yourself).

No. of teachers who got training(s) recently: (Section VIII – Govt. School Sheet)

This requires you to note down the number of teachers who received (teacher) training in the previous year. Mark how long ago the training was received i.e., “less than 15 days”, “15-30 days”, “more than 30 days”, or “none”.

Ask the head teacher regarding the topics of these trainings. Mark the relevant response options from among those listed: “Pedagogy”, “School Leadership”, “Subject Specific Knowledge”, “Curriculum”, “Assessment”, “Community Engagement”, “Classroom Management”, “Education and Technology” and “Others”. More than one response option can be selected.

Then, ask the head teacher regarding the training needs for teachers in the school. Then mark the relevant options from among those listed: “Pedagogy”, “School Leadership”, “Subject Specific Knowledge”, “Curriculum”, “Assessment”, “Community Engagement”, “Classroom Management”, “Education and Technology”, “Data Literacy”, “Teacher Leadership”, “Change Management”, and “Others”. More than one response option can be selected.

Parent-teacher meeting: (Section IX)

- How many times in an academic year does the school organize parent-teacher meetings? Mark the relevant response from among: “monthly”, “quarterly”, “semi-annually”, “annually”, and “none”?
- Does the teacher follow up with the parent in case of student absence?
- How many marked absences are allowed in a month? Choose from 1, 2, 3, 4, and 5.

- Did the school remain closed due to any natural disaster within the last year? If yes, then for how many days?

Page No 3 (Only for Government School Sheet)

- Record Name of Head Teacher/Principal, school phone number and Head Teacher's/Principal's mobile number.
- The Head Master should be requested to provide information for this section. In the absence of the Head Master, ask Senior Most teacher OR the person who is in charge of the school to provide information for this section.

School Fund Information: (Section X – Govt. School Sheet)

1. For this section, note down information for July 2022 to June 2023, and July 2023 to date.
2. Write down the name of the person who provided the information.
3. If the school gets any funds from Government/Private Individual/NGO You can write down the name of other source of funds in the additional space given if there are any.
4. Ask if the school got a fund. If yes, then note down the amount and when this fund was received, write down the **month and year** in which fund was received. If the person answering this section says that he/she is going to receive the fund in the future, then mark “no”.
5. If the fund was received ask if the school has spent the entire fund? Yes, No, Do not know.
6. There are instructions under this section asking where the school fund was spent? Mark which is relevant.
7. Ask the person answering this section about the fund in a way that the person does not feel threatened or uncomfortable. If the person refuses to answer or is hesitant to answer this section, then do not force the person and move on to the next section. The remaining questions of this section should be left BLANK.

School Fund Information: (Section XI– Govt. School Sheet)

This section is similar to section IX other than the date by which you are required to record the information for school fund. Record the information for school fund from July 2023 to date of survey.

School Fund Information: (Section XI and Section XII – Govt. School Sheet)

Below the fund section, also mark the relevant fields that inquire whether the fund was spend on utilities such as class room construction, school uniform, repair of computer etc.

Only for Private School Sheet

School Fund Information: (Section V – Pvt. School Sheet)

1. For this section, note down information for July 2022 to June 2023 and July 2023 to date of survey.
2. Write down the name of the person who provided the information.
3. If the school gets any funds from Government/ Private Individual/NGO, mark yes or no accordingly.
4. If the school has received funds, then note down the **amount** and when these funds were received i.e., **month and year**. If the person answering this section says that he/she is going to receive funds

in the future, then mark “No”. Also write the name of the Department/Organization providing the funds.

5. If the school received a fund, then note down where that fund was spent or used.
6. Ask the person answering this section about the fund in a way that the person does not feel threatened or uncomfortable. If the person refuses to answer or is hesitant to answer this section, then do not force the person and move on to the next section. The remaining questions of this section should be left BLANK.

Note the **time of exit** from the school.