

## About the Survey

## Sample Design for ASER 2012 (Rural)

**Total Population:** The total population of this survey consists of 136 rural districts of Pakistan.

**Sampling Frame:** Each district is provided with

- A village list.
- Data from the Population Census 1998 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
136	30	20

**Sample Design:** A two stage sample design was adopted:

- **First stage:** 30 villages selected using the village directory of the 1998 census.
- **Second stage:** 20 households are selected in each of the 30 selected

**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.
- 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 5<sup>th</sup> household 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)

## Sample design for ASER 2012 (Urban)

**Total Population:** The total population of this survey consists of urban areas from Karachi, Hyderabad, Lahore, Multan, Quetta and Peshawar districts.

**Sampling Frame:** FBS has its own urban area frame updated in 2004 through Economic Census.

- Each of the 6 districts has been divided into well defined blocks consisting of 200-250 households.
- These blocks have been considered Primary Sampling Units (PSUs) for urban domain.

**Stratification Plan:** Each district has been further sub-stratified in the following strata:

- Low income groups
- Middle income groups.
- High income groups.
- Other Urban localities (there is no other urban locality in Karachi, Quetta & Peshawar)

**Sample size and its Allocation:** Keeping in view the variability of the key variables, population distribution and field resources, the following is the composition of the total 2328 sample households:

The 194 sample PSUs have been considered sufficient to produce reliable estimates with 5% margin of errors at 95% level of confidence. The detailed allocation plan of sample PSUs is shown below:

Serial No.	City/Area	No. of Sample PSUs			Other Urban	Total Sample PSUs	Households
		Type of Income Group					
		Low	Middle	High			
1	Karachi	11	20	4	0	35	420
2	Lahore	4	18	4	4	30	360
3	Peshawar	5	24	6	0	35	420
4	Hyderabad	7	19	4	4	34	408
5	Multan	5	17	3	5	30	360
6	Quetta	6	19	5	0	30	360
Total		38	117	26	13	194	2328

Note: 12 households (SSUs) were selected from each sample PSU

**Sample Design:** A stratified two-stage sample design has been adopted for this survey.

### **Selection of primary sampling Units (PSUs):**

- The PSUs are selected using probability proportional to size (PPS) method.
- The number of households (updated 2004), were used as measure of size for selection of sample PSUs.

### **Selection of Secondary Sampling Units (SSUs):**

- Households have been treated as secondary sampling units (SSUs).
- 12 households have been selected by systematic sampling technique, in each sample PSU.

### **Selection of School**

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

## Survey Methodology

### How to Make a Map and Sections

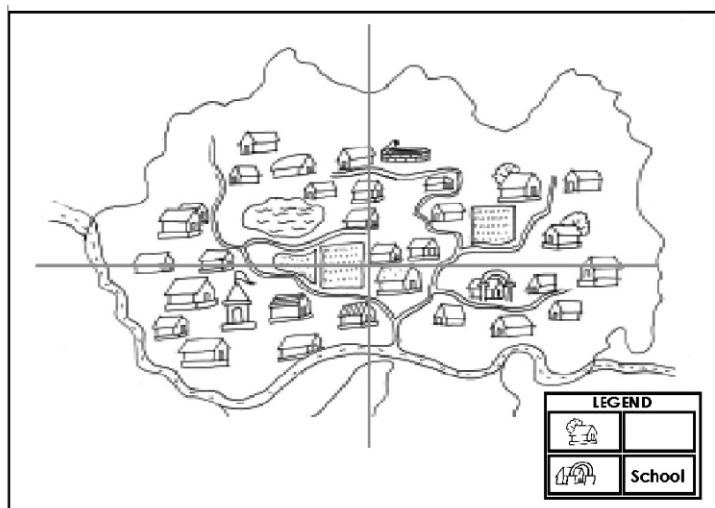
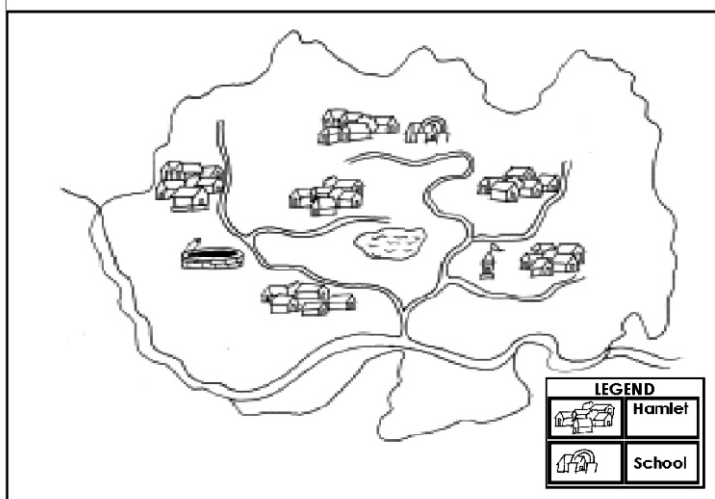
- **Contact Village Elder:** Introduce yourself to the Village Elder, Councilor or to other senior members of the Panchayat to give them a sense of the visit's objective. As you walk around in the village talk to different people and ask about the village. **Tell them about ASER.** This initial walking and talking may take more than an hour.

#### Mapping:

- **Talk to people:** How many different hamlets/sections are in the village? Where they are located? What is the social composition of the households in each hamlet/section? What is the estimate of households in each hamlet/section? Tell them about ASER.
- **Rough map:** It is often helpful to first draw all the roads or paths coming into the village and going out of the village. Use the help of local people to show the **main landmarks** – mosques, river, road, school, bus-stop, baithak, shop etc. Mark the main roads/streets/paths through the village prominently on the map. Marking the directions – north, south, east, and west will be helpful.
- **Final map:** Once everyone agrees that this map is a good representation of the village, and it matches with your experience of having walked around the whole village, then copy it on the map sheet provided.

**Marking and numbering sections on the map:** Use the map sheet provided and fill out all the information provided.

- **If the village has hamlets:**
    - Mark the hamlets on the map and indicate the approximate number of households in each hamlet.
    - If the village consists of **more than 4 different hamlets**, then **make chits with numbers for each hamlet. Randomly pick 4 chits.** On the map, indicate which hamlets were randomly picked for surveying.
    - Do not worry if there are more people in one hamlet than in the other.
    - If there are 4 or less hamlets, then we will go to all of these hamlets.
  - **If it is a village with continuous habitation:**
    - **Divide the entire village in 4 sections equally.**
- For each section, **note the estimated number of households.**



### How to Sample 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 hamlet/section. Stand facing the houses in the center of the habitation.

- Conduct the survey with every 5<sup>th</sup> household rule, from the left-hand side in the habitation (e.g. 5<sup>th</sup> house, 10<sup>th</sup> house, 15<sup>th</sup> house, etc). While selecting households, count only those households that someone lives in. In every selected household:

- **Multiple kitchens:** Ask how many kitchens or 'chulhas' there are? If there is more than one kitchen, then randomly select any one of the kitchens in the household. After surveying this household, select the next 5<sup>th</sup> household (door or entrance to the house). Ask for all the children in each household within the age group 3 to 16 who eat from the same chulha.

- **House closed:** If the selected household 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 as one of the 20 households for the survey.** DO NOT include this household in the survey sheet.

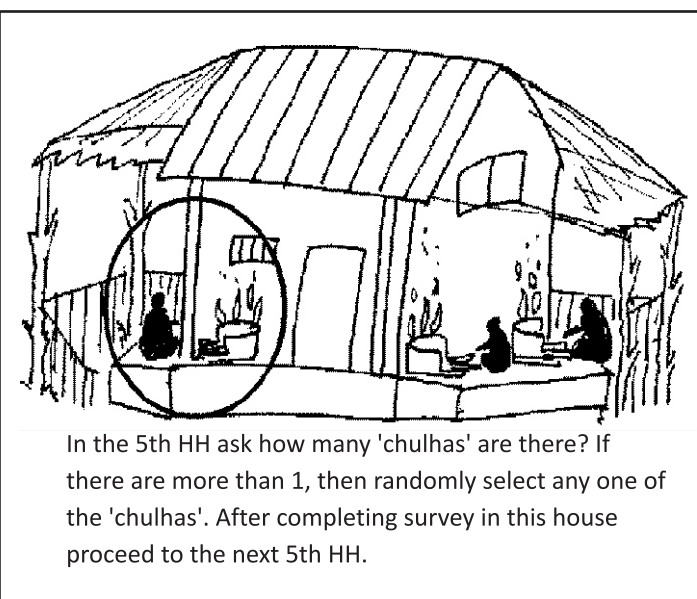
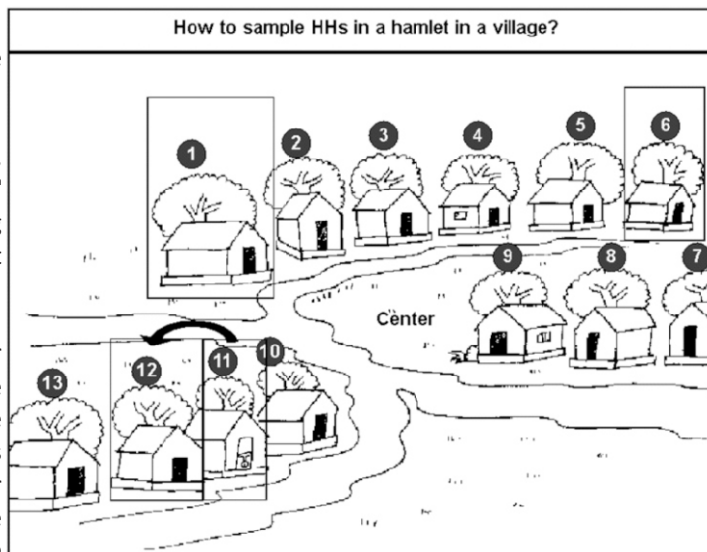
- **No response:** If a household refuses to participate, note that down on your compilation sheet as "No response". However, as above, **this household DOES NOT count as a surveyed household.** Move on to the next house. Continue until you have 5 households in each hamlet/section in which not only were the inhabitants present, but they also participated in the survey.

- **No children:** If there are no children or no children in the age group 3–16 in a household but there are inhabitants, **INCLUDE THAT HOUSEHOLD.** Take all the relevant information like the household number, name of the family head, age and education related information of the mothers, if any. **Such a household WILL BE COUNTED as one of the 5 surveyed households in each hamlet/section.**

- **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 5<sup>th</sup> 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/quadrant. Follow the same process.

- Make sure that you go to households **ONLY** when children are likely to be at home. This means that it should be a **Saturday/Sunday or a holiday.**



### **What to do in Each Household**

**Basics of the household sheet:** Following are few basic information required to be filled in the household sheet before the start of the survey.

- **Household ID:** Write the household number ( e.g. 1, 2, 3,.....20)
- **Name of Family:** write down the name of **Family head**.
- **Total household members:** Write down the **number of male and female members** eating from the same kitchen. This should include children also.
- **Date and Time:** Write down the date, day, start & end time on the day of the survey visit.
- **Surveyors:** Write down the names of the Surveyors.
- **Village identification:** Carefully fill out the relevant name of the village, tehsil/taluka, district and province.

**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.

**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.

- **Children 3 to 5:** On the Household sheet, note down the 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 each enrolled child whether they had to miss school for 4 or more continuous days in the past schooling month.
  - 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
- **Children 5 to 16:** On the Household sheet, note down the 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, madrasah or any other type of school.
  - Ask each enrolled child whether they had to miss school for 4 or more continuous days in the past schooling month.
  - Ask all (enrolled and dropped out) children if they ever went to any form of pre-school centre.
  - 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.

- **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.
- **Parents' Education : Following information regarding parents education will also be recorded**
  - Total number of Children
  - Whether mother & father have gone to school?
  - Mother & Father's education (Highest class completed)

**Fathers:** Note down the information about the father for each child in the age of 3 to 16. The information includes the fathers' age, whether he has attended school or not and up to what class has he studied. Fathers will not be tested.

- If the father is not present during the time of survey, note down all the available information
- Do not take information if the father is dead.

**Mother's Code:** Write down the Mother code. It is simply a number (1-10) that you give to each mother so you can differentiate between two persons of same name and their respective children. (same code as appears in the Mothers code column in the mother information section)

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

- Ask for the last class that the dropped out child passed and the year in which he/she dropped out of school.
- Even the dropped out and never enrolled children aged 5 to 16 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 11 to 16) 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.
- **Mothers under or of 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 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.*

**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 education status of the child with household economic conditions.

- **Type of house the child lives in:** Types of houses are defined as follows:
  - **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 etc.
    - Roof Material: Tiles, GCI (Galvanised Corrugated Iron) sheets, asbestos cement sheet, RBC (Reinforced Brick Concrete), RCC (Reinforced Cement Concrete) and timber etc
  - **Kutcha House:** The walls and/or roof of which are made of material other than those mentioned above, 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.
- **Ownership of House:** whether they owned the house or not?
- **Electricity in the household:**
  - Mark yes or no by observing if the household has wires/electric meters and fittings or not.
  - Mark yes even if electricity is off because of load shedding. (The purpose of this is to find out whether the household had the facility of electricity available to them or not)
- **Toilets:** Mark yes or no by observing if there is a constructed toilet in the house.
- **Mobile phone:** Write down the number of mobile phones are there in the household used by family members.
- **TV:** Mark yes or no based on their response.

#### **General Information**

*How Far is the Nearest School:* Ask the family head or other adults in the family about the distance, a child has to cover to reach school. You can ask approximate distance in kilometers and record it in the respective box.

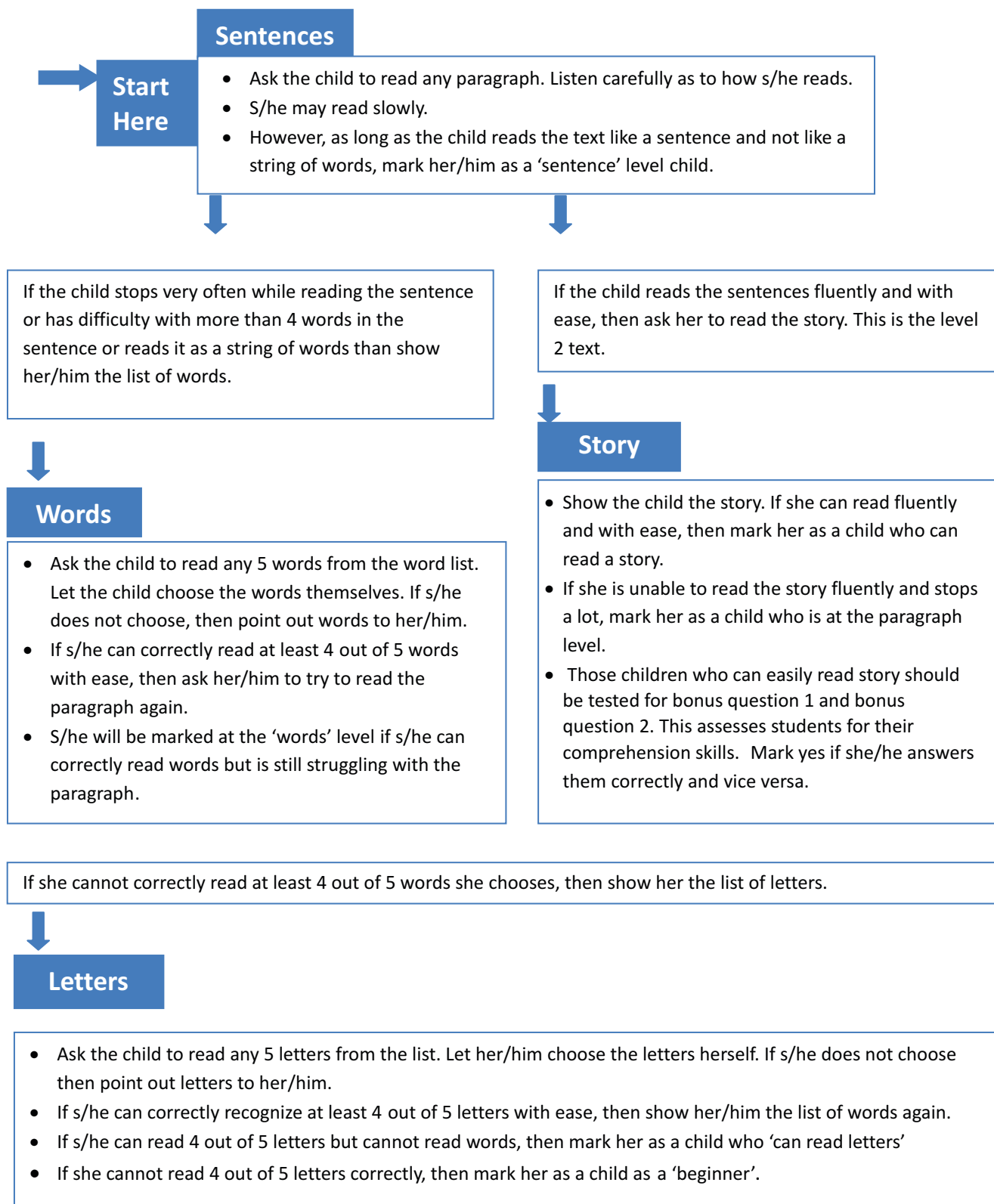
**Language Spoken at Home by Members of the Family:** Ask mother, father or other correspondents about the language which is being spoken in the household. This can further be linked with the medium of instruction in the school and helps examining impact of mothers tongue on child's learning.

**Preferred Medium of Instruction in the School:** Ask the family what is their preferred medium of instruction in the school. For example ask them if they want their child to learn in school in Urdu, English or any other regional language and write the response in the respective box.

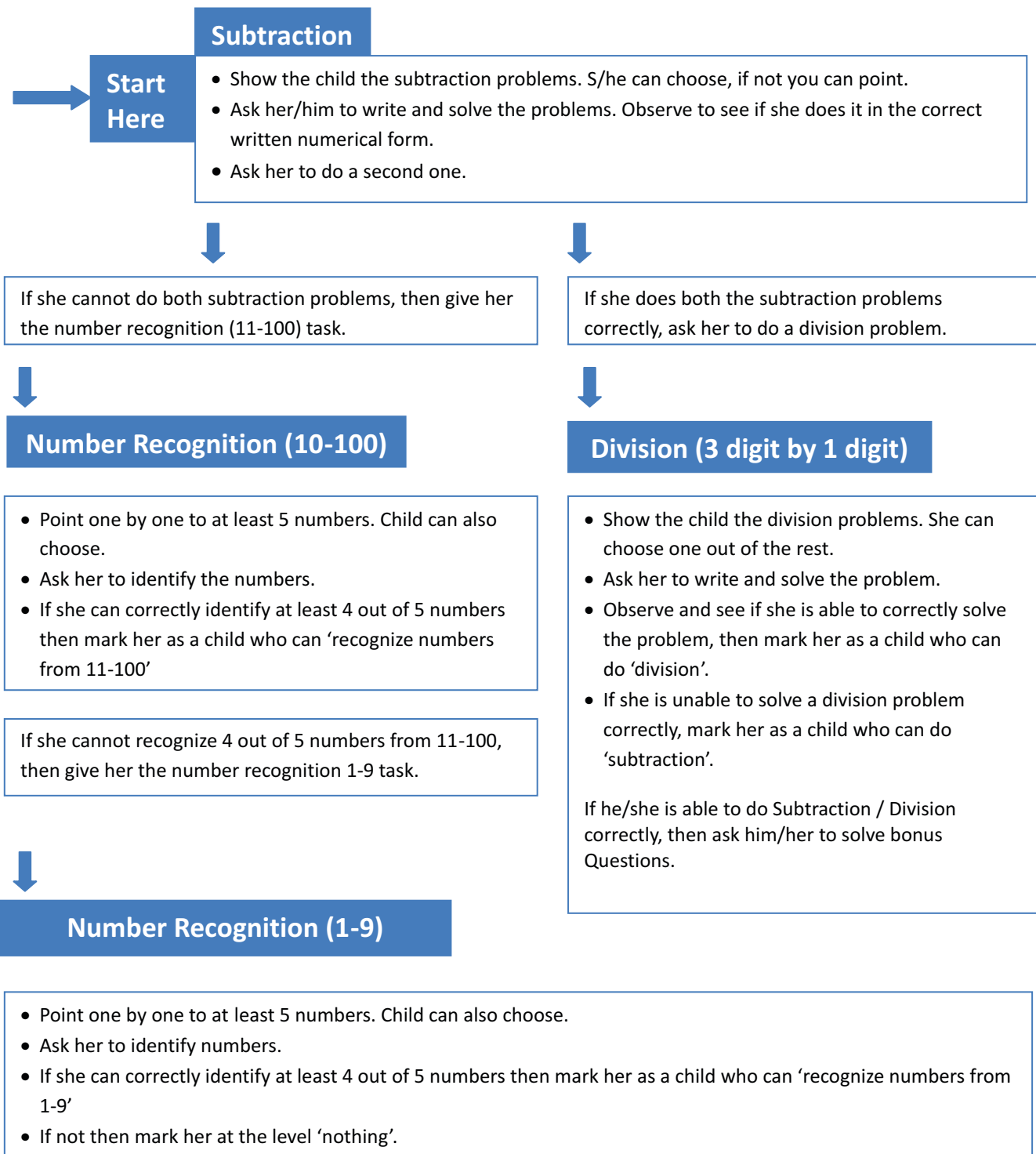
**Computer Usage:** Ask the family if anyone in the household knows how to use a computer and report your answer as yes or no. Remember this question does not ask for a computer present in the household.



## How to test Reading?



### How to test Arithmetic?



## How to test English?

Start  
Here

### Capital Letters

Point one by one to at least 5 letters. Ask her to identify the letters.

- If s/he correctly recognizes 4 out of 5 letters then show her/him the list of small letters.
- If s/he reads capital letters but is struggling with identifying small letters, then mark her/him as a child who can read 'capital letters'.

If s/he is unable to recognize 4 out of 5 capital letters from the list, then mark her/him under the category 'nothing'.

### Small Letters

Point one by one to at least 5 letters. Ask her to identify the letters.

If she can recognize 4 out of 5 small letters with ease, then show her the list of words.

If she reads small letters but is struggling with words, then mark her as a child who can read 'small letters'

### Words

Point one by one to at least 5 words. Ask her to read them.

If she correctly reads 4 out of 5 words, then show her the list of sentences.

If she reads words but is struggling with reading sentences, then mark her as 'word' level child.

#### Meaning of words: (after the child has been marked at "word" level)

- For the same words the child has just read, ask her to tell you the meaning of the words in her local language.
- Meaning of words can either be the literal meaning or can be an associated word. E.g. Instead of saying 'red' means 'laal' the child may point out to an object around her that is red in color. Similarly, instead of saying that 'man' means 'aadmi' the child may point to her father or to a man standing beside her. Similarly, for a word like 'cup', the child says 'Piyali'. All these responses are acceptable.  
If the child can correctly tell the meaning of at least 4 words, then mark her as "can say". If not, mark "cannot say".

### Sentences

Ask her to read the 4 sentences. If she reads at least 2 out of the 4 fluently, then mark her at the 'sentence level'.

#### Meaning of sentences: (after the child has been marked at "sentence" level)

- For the same sentences the child has just read; ask her to tell you the meaning of each sentence in her local language.
- The child should be able to at least tell the meaning of the main underlined words in the sentence but do not point out these words to the child. E.g. for a sentence like 'what is your name?' the child should at least say 'what' means 'kya' and 'name' means 'naam'. It is acceptable as long as the child is able to say the meaning of the main words.
- If the child can correctly tell the meaning of at least 2 sentences, then mark her as "can say" else "cannot say".  
If the child cannot say the meaning of the sentences then ask the child meaning of the 5 words she read and mark accordingly.

## What to Do in a School

### General Instructions

- 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 middle school. In case middle school is not available go to primary school. In the top box of the Observation Sheet, tick according to the school type. If there is no government school in the village go to nearest **Government School** located in nearby village.
- Meet the Head Master/head Mistress (if the Head Master/Mistress (HM) is absent, then meet the senior most teacher of the school) and take Following Information.
- Record Name of the School, name of village, name of Tehsil/Taluka, District/Agency and the Province.
- Tick the respective box for type of school i-e High, Middle or Primary.
- Tick type of school
  - Boys and Girls School
  - Boys only School
  - Girls only School
- Tick Medium of School
  - English
  - Urdu
  - Pashto
  - Sindhi
  - Or any other Medium
- EMIS Code: write the EMIS code of the school
- Write Down School since (Establishment Year).
- Note the **Time of Entry** into the school and **Time of Exit** from School.
- Date of visit: write the date of survey
- Day of visit: write the day of survey
- Name of surveyors: write the names of both surveyors
- Any project started in the school. If yes who started the project? Government or Private sector? Tick the relevant box. *(Only for Government School Sheet)*
- School affiliation with any NGO like Punjab Education Foundation, Balochistan Education Foundation, Sindh Education Foundation, UNICEF, NCHD, etc ( write NGO Name) if yes then ask the name and year of affiliation.
- When at the school, ask the Head Master for the **Enrollment register** or any official document on the enrollment in that school.

### What to do in government / private school?

#### Children's Enrollment & Attendance (Section 1)

1. ASK for the registers of all the Classes and fill in the **enrollment**. If there is more than one section for same class, randomly choose **any one** section.
2. Make sure the HM has introduced you to the teacher. If not, introduce yourself and ASER. Request for his/her permission to collect information on the classroom.
3. MOVE AROUND to the classes/areas 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.
5. Ask head teacher School Fee, separately for each class and record in the relevant box.

**Class Room Observations, Observe and Ask if required** (Section 2- Govt & Section III –Pvt)

1. This section is to be filled for Class 2 and Class 8 only (in case of primary school only choose Class 2. 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. OBSERVE where the Class is sitting (room, verandah, outdoor) and fill accordingly.
3. Is there a Black Board in the class? Yes / NO
4. Check whether the Black board is useable or not? Write yourself on the Black Board.
5. OBSERVE if children have their textbooks at least of one subject, ask the children to show English textbook or that of Urdu to make a correct assessment.
6. 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.

**General Comments and Observations** (Section 3 – Govt. & Comments –Pvt.)

Write any general comments / observations that you noted while observing the school. Use back side of sheet for more comments/observations

**Teachers -** (Section 4 – Govt & Section 2 –Pvt. )

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. Teachers appointed
  - c. Regular/Government teachers does not include the Head Master
  - d. Contract/Para teachers: If the school has para-teachers or teachers appointed by the School Management Committee (SMC), mark that separately.
  - e. Number of Teachers present on the day of the survey
  - f. Number of Teachers living in this village, if applicable.
  - g. Also ask each category of teachers (Head Teacher, regular teachers, para-teachers) whether they reside in the village or a neighboring village. Count the number of teachers residing in the same visited village/neighboring villages and write this number in the observation sheet.

**No of Qualified Teaching Staff** (Section 5 - Govt & Pvt )

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

- Educational Levels i-e Matric, FA/F.Sc, BA, B.Sc, MA/M.Sc, M.Phil or any other. Count teachers for their respective educational levels and mention the count in the respective boxes.
- Professional Qualification i-e CT, PTC, B.Ed, M.Ed etc. Count teachers for their respective professional qualifications and mention the count in the respective boxes.

**No. of Teachers who Got training in the Last Year (Jul 2011-June2012)** (Section 6 - Govt)

This requires you to enlist number of teachers who got any training in the previous year, see the date mentioned above to count what is meant by one year. If yes determine the time period for the training e.g. 15 days, 30 days or more than 30 days.

**Facilities in the School** (Section 7 - Gov & Section 6 - Pvt )

Count yourself and Write down

- Total Numbers of rooms in The School.
- Number of rooms used for Classes

Tick the Relevant

- Drinking facility available and being used by children
- Is there school boundary wall/ fence?
- Toilet available and being used by children. You need to check the functionality and also observe if children are going to toilet present in the school. Or are they using staff toilet or one available in the mosque for example. Ask children.

- Does the school have library books?
- Could you see the library books?
- Is there any playground?
- Is there any special Teacher (PIT) for games/playtime?
- Is there a science Laboratory available in the School.
- Is there a computer lab.
- Does the school have internet?
- *Note the **time of exit** from the school.*

#### **Page No 2 (Only for Government School Sheet)**

- Record Name of the School, name of village, name of Tehsil/Taluka, District/Agency and the Province.
- Record Name of Head Teacher/Principle, School phone number and Head Teacher/Principle 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.

#### **SMC/SC/PTA Information** (Section 8 - Govt)

- Is SMC/SC/PTA active? Yes, No
- Write total number of members
- Write number of active members
- Write amount in bank

#### **School Fund Information** (Section 10 - Govt)

1. For this section, note down information for July 2011 to June 2012.
2. Get funds information for **SMC/SC/PTA FUNDS, FAROGHE TALEEM FUND, TUCK SHOP FUND, CYCLE STAND FUND**, and Write down the name of other source of funds.
3. 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".
4. If the fund was received ask if the school has spent the entire fund? Yes, No, Do not know.
5. There are instructions under this section asking where the school fund was spent? Mark which is relevant.
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.

#### **School Fund Information** (Section 11 - Govt)

This section is similar to section 10 other than the date by which you are required to record the information for school fund. Record the information for school fund from July 2012 to date of survey.

#### **Only for Private School Sheet**

#### **School Fund Information** (Section 4 - Pvt)

1. For this section, note down information for July 2011 to June 2012 and July 2012 to date.
2. Write down the name of person who provide the information.
3. If the school gets any funds from Government/ Private Individual/NGO, mark yes.
4. If the school got a Fund, then note down the amount and the **Month and the year** in which the 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". Also write the name of the Department/Organization,
5. 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.