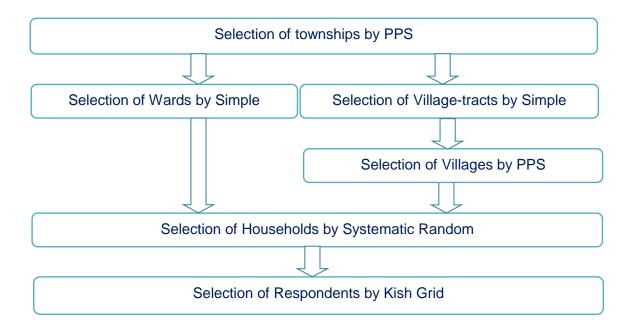
# **Annex D - Sampling Procedures**

#### Overview of normal process of sample selection:

MSR recommends the application of a multi-stage random sampling method. The stages of sampling are depicted in the flowchart below:



Stage 1: Selection of sample townships to each in state and regions by PPS

Normally townships are selected by PPS method. Selection procedures of sample townships by PPS are as follows:

- Step 1: List all the townships in each state or region in a logical order
- Step 2: Insert the number of population in the second column.
- Step 3: Calculate the accumulated number of population in the third column.
- Step 4: Determine the number of sample townships.
- <u>Step 5</u>: Calculate the sampling interval by dividing total number of population by number of sample townships.
- Step 6: Generate a random number between 1 and the sample interval
- <u>Step 7</u>: Locate the first sample township by finding the township whose cumulative population just exceeds the random number.
- Step 8: Select the subsequent sample township by adding intervals

The List of Sample townships selected by PPS is produced.

# **Selection of wards and Village Tract:**

Generally, the sizes of population are not too different among wards. Therefore, the sample selection of wards in chosen townships of each of the states and regions will be as follows:

- <u>Step 1</u>: The list of urban wards for the chosen townships in each state or region is prepared.
- <u>Step 2</u>: By using random numbers, generated from computer, sample wards are selected from the list as many as the number of wards to be survey in each state or region.

For example, the two sample townships in Kachin State will be surveyed. First, all the wards from the two townships will be listed. Then 4 wards will be selected in random.

# **Selection of Village-tracts:**

The selection of village-tracts will follow the same procedure as that of wards.

### **Selection of Villages:**

From a selected village-tract, a village will be selected. However, the sizes of villages within a village-tract can vary largely. Therefore, simple random sampling method cannot be used.

MSR survey team will collect population data of villages in the selected village-tracts from the village-tract authorities when they arrive at the field location and the data will be sent to MSR head office in Yangon. The head office will select a sample village by PPS method and the name of the selected village will be informed to the survey team in the field. For better quality control, field survey teams are not allowed to select the sample villages by themselves.

### **Selection of Household:**

Households will be selected by systematic random sampling method.

- <u>Step 1</u>: Total number of households in the selected ward/village will be counted in the field.
- <u>Step 2</u>: The total number of households will be divided by sample size, in this case 10, to get an interval.
- Step 3: A starting point at the ward/village will be determined. (Before sampling, the survey team looks around the village, and chooses the starting point as appropriate, mostly at the entrance to the village or from a significant building such as a school. In urban areas, residential wards are in blocks, and the starting point is fixed from a street corner.)
- Step 4: A random number between 1 and the interval will be generated.

Step 5: Suppose the random number is 2, the third household from the starting point is selected for the first interview. The next household is identified by adding the interval. In the case of multi-apartment buildings, the interviewer does the sampling clock-wise. He starts from the apartment on his left side on the ground floor, goes up the staircase, sticking to the left side while counting the interval, and from the top floor, he switches to the other half of the apartments.

**NOTE:** If a selected ward/village is too big to count the households, the ward/village is divided into equal parts (for example, northern part, southern part, western part, and eastern part) and a part is selected at random. Households are selected from the selected part.

### **Selection of Respondents**

At the selected household, the interviewer checks the skip pattern number. If it is an **odd number**, he/she records the names of all **adult women (from the oldest to the youngest, aged 18 and older)**. If the skip pattern number is an **even number**, he/she records the names of all **adult men** in the same way as in the case of adult women. The purpose is to obtain equal numbers between male and female respondents. Household members with a 'mental' disability, house guests and employees of the household are not included in the grid.

For example: if the questionnaire number at the selected household is 0721, the last digit is 1 (an odd number). So all the adult female members (age 18 and older) of the household are entered in the Kish Grid from the oldest down to the youngest. On consulting the Kish Grid table, the serial number of the respondent (to be interviewed) is at the point where the column and the row meet, in this case the serial number of the respondents falls on No. 4. So, the respondent is Ma Ni Ni (Age 23)

# **KISH GRID for selection of respondent**

					Questionnaire No.				0721				
Sr.	Name	M Age (in yrs.)	F Age (in yrs.)	1	2	3	4	5	6	7	8	9	10
1	Daw Phyu		63	1	1	1	1	1	1	1	1	1	1
2	Daw Mi Mi		55	2	1	2	1	2	1	2	1	2	1
3	Daw Aye Thi		43	1	2	3	1	2	3	1	2	3	1
4	Ma Ni Ni (Selected)		23	1	2	3	4	1	2	3	4	1	2
5	Ma Than Than		21	4	5	1	2	3	4	5	1	2	3
6	Ma Aye Chit		18	4	5	6	1	2	3	4	5	6	1
7				3	4	5	6	7	1	2	3	4	5

If the selected eligible respondent is not in the household after three attempts, the interviewer will move to another household. This process should continue until the required numbers of respondents (both men and women) are interviewed in the PSU.

MSR's interviewers are used to, and will, follow such standard procedure.

#### Rules for household substitution if a refusal is encountered

If a refusal is encountered, the household to the immediate right of the originally sampled household will be used for the survey. If this household also refuses, the household to the immediate left of the originally selected household will be interviewed. If this household also refuses, all the interviews at the sampling point will be completed, and another household will be chosen by the usual interval after the last household interviewed.

## **Call-Back Policy**

Interviewing is face-to-face in the respondent's home. Only one member of the selected household will be interviewed. After the selection of the respondent, should that person not be at home, the interviewer will make two call-backs (altogether three visits) to find the respondent at home. If the respondent is not present at home on the interviewer's third visit (second call-back), the interviewer will not substitute, under any circumstances, the Kish grid respondent with another member of the household. In the case of a substituted household, the interviewers need to make only one visit.