

## Sumatra Earthquake 2009 Joint Monitoring

### Sampling methodology to select villages and households

#### Aim

To survey a representative sample of the affected population  
To collect representative observational data from affected Korongs

#### Sample Size

The resources available to undertake this exercise are still being confirmed. It is expected that around 200 households will be surveyed over six weeks. With greater contribution from monitoring agencies this will be greater.

#### Selection

To avoid bias due to geography or population density households will be selected at random. Villages will be identified from the household.

#### Methodology

1. Villages with over 30% damage will be available to be selected.
2. The total number of households will be calculated and listed.
3. A random number should be selected from the total number of houses. The village correlating to this house (this place on the list) would be the first village visited. Subsequent villages can be selected by taking the nth number of houses from this first house.

*For example the number 345678 could be randomly selected from a range 1 to 1,084,867 and correlate to the 345,678<sup>th</sup> household in the list. If the list has villages xyx with a population of 100,000, village pqr with a population of 200,000 and village abc with a population of 150,000 then the 345,678<sup>th</sup> household is found in village abc.*

Name	Population	Sum of population	
Village xyz	100,000	100,000	
Village pqr	200,000	300,000	
Village abc	150,000	450,000	345,678 <sup>th</sup> household is in this village

n can be calculated like this: Envisaging a sample size of 200 the total number of households should be divided by 200. The result of the calculation will be n.

4. Once the households are identified the next step is to find where these households are. Using the list created in step two each of the households can be traced back to a Nagari.
5. Each Nagari identified should receive 5+2 interviews. Five are to be randomly selected and 2 to be targeted to vulnerable households.
6. The next step is to identify the Korong/jorong in the Nagari in which to conduct the interviews. This can be done by making a simple random choice from the korongs/jorongs in the Nagari.
7. To select the five households to interview a total list of all households who would normally live in all the Korong/jorong should be compiled and five households selected at random. This might be labor intensive but is necessary to ensure a proper sample.  
*All households should appear on one list and five should be selected at random.*
8. To select the final two households to interview the Wali-Korong/Jorong should be asked to provide details of a list of households with either elderly (>65), single mother with children or disabled persons, orphans.
9. Where households cannot be found the interview should be postponed a reasonable time to enable the household to be found. If it is still not possible to find the household then another random household should be selected.