

1. Sampling Design and Sample Size

The NTPS survey 2005 called for a nationally representative sample of 10710-target population between the ages of 18 and over. Survey estimates are produced for 12 individual provinces (Banteay Mean Chey, Kampong Cham, Kampong Chhnang, Kampong Spueu, Kampong Thum, Kandal, Kaoh Kong, Phnom Penh, Prey Veang, Pousat, Svay Rieng, and Takaev) and for the following 5 groups of provinces:

- I. Bat Dambang and Krong Pailin
- II. Kampot, Krong Preah Sihanouk, and Krong Kaeb
- III. Kracheh, Preah Vihear, and Stueng Traeng
- IV. Mondol Kiri and Rotanak Kiri
- V. Otdar Mean Chey and Siem Reab.

The master sample developed in 1998 by the National Institute of Statistics served as the sampling frame for the NTPS survey. The master sample is based on the 1998 Cambodia General Population Census and consists of 600 villages selected with probability proportional to the number of households within the village. Villages are listed with the total population count and the number of enumeration areas (EAs), households, and segments. Enumeration areas were created during the cartography conducted in preparation for the 1998 census. An enumeration area in a village corresponds to a block of about 110 households. The villages retained in the master sample and maps showing their boundaries were also available for all of them.

The sample for the NTPS survey is a stratified sample selected in three stages. As for the master sample, stratification was achieved by separating every reporting domain into urban and rural areas. The sample was selected independently in every stratum.

The master sample contains a small number of villages for some of the provinces. For this reason, additional villages were directly selected from the census frame in order to reach the required sample size in these provinces. In the first stage, 434 villages were selected with probability proportional to the number of households in the village. Of these 434 villages, 49 were directly selected from the 1998 census frame. In the second stage, 1 EA were retained from each of the villages selected from the master sample, as well as 1 EA was retained from each of the 49 villages directly selected from the 1998 census frame updated.

A household listing was carried out in all selected EAs, and the resulting lists of households served as the sampling frame for the selection of households in the third stage. All population 18 and over was interviewed in selected households.

The following 5 groups of provinces are included in the Table below:

Table 1

Sr. No.	Domains	Sector				Total	
		Urban		Rural			
		No. of villages	No. of households	No. of villages	No. of households	No. of villages	No. of households
1.	Banteay Mean Chey	4	44	22	330	26	374
2.	Kampong Cham	1	11	25	375	26	386
3.	Kampong Chhnang	2	22	24	360	26	382
4.	Kampong Spueu	2	22	24	360	26	382
5.	Kampong Thum	3	33	23	345	26	378
6.	Kandal	1	11	25	375	26	386
7.	Kaoh Kong	5	55	20	300	25	355
8.	Phnom Penh	13	143	11	165	24	308
9.	Prey Veang	1	11	24	360	25	371
10.	Pousat	3	33	22	330	25	363
11.	Svay Rieng	1	11	25	375	26	386
12.	Takaev	1	11	25	375	26	386
13.	Bat Dambang	4	44	21	315	25	359
	Krong Pailin	1	11	0	0	1	11
14.	Kampot	1	11	18	270	19	281
	Krong Preah Sihanouk	5	55	0	0	5	55
	Krong Kaeb	1	11	0	0	1	11
15.	Kracheh	4	44	11	165	15	209
	Preah Vihear	1	11	5	75	6	86
	Stueng Traeng	1	11	3	45	4	56
16.	Mondol Kiri	1	11	5	75	6	86
	Rotanak Kiri	3	33	16	240	19	273
17.	Otdar Mean Chey	1	11	2	30	3	41
	Siem Reab	4	44	19	285	23	329
Total		64	704	370	5550	434	6254

Note that the intention is to select 11 households from every sample village in urban areas and 15 households in rural areas in all the Domains.

2. Selection of PSU's (villages)

Sample villages have been selected separately. For each Domain, the selection was made by Circular Systematic Sampling (CSS) with probability of inclusion of the village proportional to its size (PPS). The method of selection was applied after arranging the villages in each Domain according to Province, District and Commune, to derive the benefits of implicit stratification. The selection was done through the use of a computer program.

3. Selection of Enumeration Area (EA)

Each enumeration area (EA) will be randomly selected from each sample village.

4. Selection of SSU's (households)

For each sample village, a field listing operation will be undertaken and Form 1 filled in. From each sample village, the enumeration area (EA) was already defined in the village map. The number of enumeration areas in each sample village should be more or less depends on the size of the households in that village. Each enumeration area has to be randomly selected and created at the stage of household listing that must be recorded in Form 1. The procedure to be followed for preparing a list of all households in the village/(EA) and that for selecting one (EA) at random, if necessary, has been described in detail in Chapter 6: Listing of Households in the Village (NTPS Form 1).

The sample of households will be selected from the list of households prepared for the selected village/(EA). In all the Domains, 11 and 15 households will be selected from every sample village/(EA) in urban and rural sector respectively by circular systematic sampling with a random start. The sampling interval will be equal to the total number of households listed divided by 11 for urban and 15 for rural rounded off to the nearest whole number. Further the details in the method of sampling of households have been given in Chapter 6 on Listing of Households relating to Form 1.