

Nepal 2023 Technical Document

Nepal Sampling

A stratified multi-stage cluster sample design was used to complete 1,000 face-to-face surveys.

Target Population/Coverage: Non-institutionalized adult population (15 years of age or older) living in households. Stratification and selection used information from the National Population and Housing Census 2011.

Stratification: The sampling frame was stratified by geographic region, eco region, and urbanicity, resulting in a total of 20 strata groups. They represent the seven geographic regions: Province No. 1, Madhesh, Bagmati, Gandaki, Lumbini, Karnali, Sudurpashchim, and the three eco regions: Hill, Terai, and Mountain. With each region, the sample was further divided into urban and rural areas.

Sample Selection: Primary Sampling Units (PSUs) are wards. PSUs were selected using PPS (probability proportional to size) method, where number of households was the measure of size. A total of 100 PSUs were selected in the final sample.

Within each selected ultimate cluster, a random starting point was identified. Using the right-hand rule and a fixed interval of 3 households (i.e. every third household is selected), interviewers selected eligible households until the required number of interviews were completed. Within each selected household, interviewers listed all eligible (15+ adults) individuals and the CAPI program randomly selected a respondent. In case of refusals or non-contacts, households were replaced along the random route using the same interval.

Data Collection: June 10, 2023 – July 18, 2023

AAPOR3 response rate: 62%

Weighting: The sample data were weighted to minimize bias in survey-based estimates. The weighting procedure was formulated based on the sample design and was carried out in multiple stages. A probability weight factor (base weight) was constructed to correct for unequal selection probabilities. At the next step, the base weights were post-stratified to adjust for non-response and to match the weighted sample totals to known target population totals obtained from country-level census data.

Design Effect: 1.38

Margin of error: $\pm 3.6\%$ (95% confidence level)

Population sources used for constructing weights were based on the following:

Age, Gender, Region, Urbanicity: National Population and Housing Census 2021, Central Bureau of Statistics

Education: Nepal Demographic and Health Survey 2016

Age	SAMPE_UNWTD	SAMPLE_WTD	TARGET
15-24	24.2	27.3	27.3
25-34	21.4	20.9	21.9
35-44	19.0	17.8	18.0
45-54	14.5	14.2	13.5
55+	20.9	19.9	19.3
Education	SAMPE_UNWTD	SAMPLE_WTD	TARGET
No formal education	25.8	34.8	37.0
Some education - Some secondary	36.1	39.4	39.5
Sec complete and above	38.1	25.9	23.6
Sex	SAMPE_UNWTD	SAMPLE_WTD	TARGET
Male	41.8	46.5	47.6
Female	58.2	53.5	52.4
Region	SAMPE_UNWTD	SAMPLE_WTD	TARGET
Koshi Pradesh	17.0	17.3	17.4
Madhesh Pradesh	21.0	19.9	19.4
Bagmati Pradesh	20.0	22.3	22.6
Gandaki Pradesh	9.0	9.0	8.9
Lumbini Pradesh	17.0	16.8	17.4
Karnali Pradesh	6.0	5.6	5.4
Sudurpashchim Pradesh	10.0	9.0	8.8
Urbanicity	SAMPE_UNWTD	SAMPLE_WTD	TARGET
Urban	63.0	66.3	67.1
Rural	37.0	33.7	32.9