



World Values Survey Wave 7 in Uruguay: Sample Design

The survey was organized by three consolidated companies that makes up an economic group: Equipos Consultores (BAY S.A.), Telemedios (Madytel S.A.) and Fieldwork (Denveral S.A.). Fieldwork is the company of our group in charge of doing all the face-to-face surveys.

Target population: people aged 18+ living in private households. Outside Montevideo (capital department of the country), dispersed rural population is excluded (5% according to 2011 Census).

Sample size: 1000 respondents

Data collection period: Spring 2022

Sampling points were extracted using a 12 strata variable that combines geographic, demographic and socioeconomic basis, with these criteria:

- Montevideo department, is subdivided in three segments (strata 1-3) that groups neighborhoods with similar Socio Economic Level (SEL)¹. This aggregation is based on the official SEL of the market and opinion research sector². The reduced version of SEL was used.
- Metropolitan zone, using official definition (stratum 4). This area comprises localities that lie within a 30 km distance from Montevideo.
- Next eight strata are based on the size of the localities (strata 5-12) considering total population. Theses strata includes both big cities and smaller towns.

| Srta code | Strata Label | Population 18+ (N)* | Population 18+ (%)* | PSU round | Sample |
|-----------|-------------------------|---------------------|---------------------|-----------|--------|
| 1 | Mvd SEL Red18 1-8 | 513.574 | 22,4% | 22 | 220 |
| 2 | Mvd SEL Red18 9-11 | 265.313 | 11,6% | 12 | 120 |
| 3 | Mvd SEL Red18 12-16 | 231.408 | 10,1% | 10 | 100 |
| 4 | Metropolitan zone | 256.073 | 11,2% | 11 | 110 |
| 5 | Localities 100k or more | 71.436 | 3,1% | 3 | 30 |
| 6 | Localities 50k to <100k | 219.234 | 9,6% | 10 | 100 |
| 7 | Localities 30k to <50k | 161.771 | 7,1% | 7 | 70 |
| 8 | Localities 20k to <30k | 108.266 | 4,7% | 5 | 50 |
| 9 | Localities 10k to <20k | 125.172 | 5,5% | 5 | 50 |
| 10 | Localities 5k to <10k | 126.916 | 5,5% | 6 | 60 |
| 11 | Localities 2k to <5k | 96.581 | 4,2% | 4 | 40 |
| 12 | Localities <2 k | 112.386 | 4,9% | 5 | 50 |
| | Total | 2.288.130 | 100,0% | 100 | 1.000 |

¹ Each neighborhood has a point (1 to 16) that sums to the general SEL (the more the point the more the SEL)

² Aavailable at: <https://www.ceismu.org/site/indice-de-nivel-socioeconomico-inse-2018/>



*Source: Based on Census 2011

Mvd: Montevideo department

SEL: Socio Economic Level

Note: Dispersed rural population excluded (5% of total 18+).

Localities of all sizes are included. As a practical use of INE (National Statistics Institute) in its Regular Household Survey, localities of population under 5.000 are considered rural. These small localities are included in sample frame. Only highly dispersed rural households (rural population as defined by INE in the Census) is not covered.

The main source for sampling design was the National Census performed in 2011 by INE³.

The sampling points will be census segments. 100 sampling points will be selected using a single stage design with these characteristics:

- Stratified with proportional allocation
- Method: systematic Probabilistic Proportional to Size (PPS) without replacement.
- Measure of size: total households of census segments

Before sampling, the list of PSUs is sorted by department, locality, barrios, and total number of private households within each stratum.

Starting points within PSU are randomly selected: a block is randomly selected, a corner randomly selected and a number of household (1-4) to start the routine.

Once at the given starting point, the interviewer will have to place his or her back to the (main) entrance of the structure and move to the right. Counting three households (excluding the starting point), the interviewer will attempt a contact at the third household. The third HH is the 1st main HH, where the interviewer will make three attempts, on separate occasions, to secure an interview with an eligible household member. Every effort should be made so that those attempts are distributed over more than one day. There may be times when it is not possible to return to an area on another day and attempts will have to be made on the same day. In this case, it is important to leave a gap of at least 2 hours between each attempt, unless it is by appointment. Interval of three is going to be implemented in rural and urban areas. Structures that are not occupied or where no one lives will not be counted as part of the interval.

PSU of less than 15 private households in the sampling frame are excluded (this represent 0,1% of total private households in the sampling frame) to allow to reach 10 households per PSU. PSU size range from 15 to 2293 private households. The mean per PSU is 329 private households.

All adults 18 and older living permanently in the household are eligible.

Once at a given household, interviewers ask for the names, gender and ages of all individuals aged 18 and older who live permanently in the household, whether they are

³ Available at: <http://www.ine.gub.uy/web/guest/marcos-censales> and <http://www.ine.gub.uy/web/guest/censos1>



present or not at the time of the interviewer's visit. The CAPI program (SurveyToGo/Dooblo) randomly selects the one individual to be interviewed. All eligible household members have an equal chance of being selected for the interview. If selected respondent is not available at the time of the visit, the interviewer needs to go again to the HH in different time/day. If it is a third visit at that household, the interviewer cannot come back and needs to replace that household. In addition, the interviewer must code the reason for the replacement on the tracking sheet.

Data collection mode: Face to face interview, CAPI mode using smartphones. SurveyToGo/Dooblo is the CAPI software to be used.

The quality control team monitored survey quality during fieldwork combining these techniques:

- 1) Using SurveyToGo/Dooblo capabilities a set of flags will be programmed (duration of all interview and parts of it, gps location, audio recording). A regular quality control will be performed on the so called "Operations console" verifying all the flags, approving cases or activating further supervision if necessary (listening audio recording, for example). Flags based on length will be prioritized for listening. This is more a per interview based control.
- 2) Analysis of KPI by interviewer looking for patterns or deviations that could be indicative of malfeasance, bias introduced by the interviewer, or simple error, for example based on his/her interviews: % without audio recordings, % of 1 eligible adult in the household, number of surveys per day, % without GPS, % of interviews of less than 15/20 minutes of duration, % without telephone for contact. Interviewers that show a potential problematic pattern/deviations will be sent to supervision.
- 3) Listening to audio recordings. The validator will evaluate the interviewer's performance in selecting the respondent, conducting the interview, including following the questionnaire, reading all survey questions (and not abbreviating them), not leading the respondent, and appropriate probing. This method may also be used as a follow up to in person or phone recontacts where results may indicate quality issues.
- 4) Back-checking: repeated visits to the respondents or phone calls. By this procedure will be verified: fact and date of interview; correctness of household and respondent selection; age and sex of respondent; theme of interview; use of cards; length of interview, answers to some questions.

In case if any interviews were conducted with violation of the rules or have not been confirmed during the quality control procedures, they were replaced:

- At least 10% from the total sample will be verified by back-checking, primarily by phone and complementary by re-visit to respondents home. The other forms of control explained previously will assure to surpass the 10%.
- Geographical coordinates of the interview are recorded and two forms of control are performed: 1) A flag is programmed to inform if each case is outside of a standard radius of the PSU 2) Analytical controls are performed of all the cases in the same PSUS to identify if there are cases highly deviated from the other.