



### **World Values Survey Wave 7 in Romania: Sample Design.**

The target population size was 16,266,394 (National Institute of Statistics - INSSE - 2011 Census). The target sample size was 1,200 individuals.

A stratified two-stage probability sampling was employed, with stratification in the first stage of the primary selection units (voting precincts) proportional to their number of secondary selection units (adults registered on the voting lists).

#### Stratification factors:

- The socio-cultural area (18 areas)
- The type and size of the locality (poor communes, medium developed communes, developed communes, cities with less than 30 thousand inhabitants, cities of 30-100 thousand inhabitants, cities of 100-200 thousand inhabitants, cities with more than 200 thousand inhabitants)

#### Stages of sampling:

##### *Stage 1:*

- Primary sampling units: voting precincts
- Total number of primary sampling units: 150
- PSU selection type: probability proportional to size (PPS); size is the number of registered adults
- The number of PSU's to be selected within a stratum was obtained by multiplying the sample size  $n = 1,500$  with the portion  $p_i$  of each stratum in the population of electors. The number of voting precincts used for selection was obtained by  $np_i / 10$  (usually not an integer).

##### *Stage 2:*

- 10 registered electors were selected by systematic sampling with equal probabilities from the electoral list of a selected voting precinct.
- Sampled unit after office sampling:
  - Individuals (name, address, age).

**In 2017, the respondents from 2012 were approached. The panel approach was required by the financing scheme. The 2012 sample included 1504 respondents. In this wave, the responsible organization targeted a minimum sample size as follows:**

- For the 1504-respondent panel, the data-collecting agency used the 4-visits algorithm. For each PSU, the responsible organization made sure that questionnaires were filled with at least 1050/1504 respondents from the initial panel (response rate 70%). So, for each PSU, interviewers had on average 7 interviews with respondents from the first wave (2012).
- In order to address the under-representation of those aged 18-22, a sample of 150 young people was randomly selected, one for each PSU. The selection followed the next steps:
  - The fieldworker considered the first address from the 2012 sample.
  - Starting from this address, the next dwelling on the same street/bloc (house or apartment) was selected.
  - At the selected dwelling, when there was exactly one individual of age 18-22, he/she was selected.



- At the selected dwelling, when there were two or more individuals aged 18-22, a random selection was performed, using the “next birthday method”.
- When there was no 18-22 young adult, the selection process was restarted from the second address from the 2012 sample and so on until one young respondent was reached and the questionnaire was filled in.

By using the sample design presented above, we estimate that rural population was represented correctly (in correlation with the official figures) in the sample.

Primary sampling units were voting precincts from last elections. PSUs were selected with probability proportional to size (PPS) where size was the number of registered adults in a voting precinct. PSUs were selected for each stratum. The number of PSU's to be selected within a stratum was obtained by multiplying the sample size  $n = 1,500$  with the portion  $p_i$  of each stratum in the population of electors. The number of voting precincts used for selection was obtained by  $np_i / 10$  (usually not an integer).

The difference in percentage between sex and age groups in the survey data compared to census data:

	% in census data	% in your survey	$\Delta$ %
Male	48	45	-3
Female	52	55	+3
18-35	34	28	-6
36-50	26	25	-1
50+	40	47	+7

Females were slightly over-represented and males were under-represented in the final sample. Moreover, young people were under-represented and old people were over-represented in the final sample. In order to address this, the final sample was weighted.

The conditions that were taken into account during the planning of fieldwork:

- Sometimes, some of the interviewers do not follow fully the rules of selection and they select persons available at the moment of visit. In addition, sometimes they do not ask all the questions. Using tablet or PC data collection mode in WVS-7 enabled the checking (GPS and internal software) if and where the interviewer was in the field, for how much time, and if a question was read or not.

The responsible organization did not need any special permission from the state governing bodies in order to do the WVS-7.