Comparative Study of Electoral Systems (CSES)
Module 5: Design Report (Sample Design and Data Collection Report)
September 14, 2016

Country: El Salvador
Date of Election: 2019

Prepared by: FUNDAUNGO
Date of Preparation: September 2022

NOTES TO COLLABORATORS:
- Where brackets [ ] appear, answer by placing an "X" within the appropriate bracket or brackets.
- If more space is needed to answer any question, please lengthen the document as necessary.

Collaborator(s):

Collaborators are the contact persons for election studies that appear in the CSES dataset - they are not necessarily the parties who collected the data. These collaborators and their contact information will be listed on the CSES website.

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<u>Archiving Organization</u>

If appropriate, please indicate the primary location where the full, original election study dataset (not just the CSES portion) will be archived:

Organization:
Address:

Telephone:
Fax:
E-Mail:
Website:

Please indicate the date when the study is expected to be available at this archive:

<u>Study Design</u>

1. Timing of the study that the CSES Module was included in:
  [X] Post-Election Study (with interviewing starting within 6 months after the election)
  [ ] Post-Election Study (with interviewing starting more than 6 months after the election)
  [ ] Pre-Election/Post-Election Panel Study
  [ ] Between Rounds

2a. Date Post-Election Interviewing Began:

July 4th, 2019

2b. Date Post-Election Interviewing Ended:

July 24th, 2019

3a. Mode of interviewing for the post-election survey in which the CSES Module appeared:
(If multiple modes were used, please mark all that apply.)
      [ ] In person, face-to-face - using a questionnaire on paper
      [X] In person, face-to-face - using an electronic/computerized questionnaire
      [ ] Telephone
      [ ] Mail or self-completion supplement
      [ ] Internet

3b. Was there a mode change *within* interviews (e.g., selected self-completion elements within
the questionnaire)?
      [X] No
      [ ] Yes; please provide details:

4a. Was the survey part of a panel study?
      [ ] Yes
      [X] No

4b. If the survey was part of a panel study, please describe the design of the panel study,
including the date at which interviewing for each prior wave began and ended:

4c. If the survey was entirely or partly conducted via the Internet, please indicate whether it was
based on an access panel (i.e. respondents were selected from a group of pre-screened panelists):
      [ ] Yes
      [X] No

4d. If the survey was based on an Internet access panel, please describe the access panel
(company, population [does it include persons without initial access to the Internet and how are
they interviewed], method of recruiting members, total size of access panel, method of selecting
survey respondents from the panel):

Translation

Please provide copies of questionnaires in all languages used as part of the election study deposit. For questionnaires in a language other than English, please also provide a version of each translated back into English. Note: Questions are based on those developed for the ISSP.

5. Was the questionnaire translated?
        [X] Yes, translated by member(s) of research team
        [ ] Yes, by translation bureau
        [ ] Yes, by specially trained translator(s)
        [ ] No, not translated

6. Please list all languages used for the fielded module:

Spanish

7a. If the questionnaire was translated, was the translated questionnaire assessed/checked or evaluated?
        [ ] Yes, by group discussion
        [ ] Yes, an expert checked it
        [ ] Yes, by back translation
        [ ] Other; please specify: _____
        [X] No
        [ ] Not applicable

7b. If the questionnaire was translated, was the questionnaire pre-tested?
        [X] Yes
        [ ] No
        [ ] Not applicable

7c. If the questionnaire was translated, were there any questions which caused problems when translating?
        [ ] Yes
        [X] No
        [ ] Not applicable

7d. If the questionnaire was translated, please provide a list of all questions which caused problems when translating. For each question listed, describe what problems were encountered and how they were solved:

Sample Design and Sampling Procedures

8. Please describe the population that your sample is meant to be representative of:

Salvadoran population aged 18 or over, members of households within national territory

Eligibility Requirements

9a. Must a person be a certain age to be interviewed?
    [X] Yes
    [ ] No

    If yes, what ages could be interviewed?

    18 years of age or older

9b. Must a person be a citizen to be interviewed?
    [X] Yes
    [ ] No

9c. Must a person be registered to vote to be interviewed?
    [ ] Yes
    [X] No

9d. Please list any other interviewing requirements or filters used:

Sample Frame

10a. Were any regions of the country excluded from the sample frame?
    [ ] Yes
    [X] No

    If yes, what percent of the total eligible population did this exclude from the sample frame? _____ %

    If yes, please explain:

10b. Were institutionalized persons excluded from the sample?
    [X] Yes
    [ ] No

    If yes, what percent of the total eligible population did this exclude from the sample frame? Around 0.9 %

    If yes, please explain:

    The sample did not include institutionalized people, in prisons, hospitals, long-term care facilities, nursing homes.

10c. Were military personnel excluded from the sample?
    [X] Yes
    [ ] No

    If yes, what percent of the total eligible population did this exclude from the sample frame? 0.45 %

    If yes, please explain:

    People in military service who remains on barracks were not be included in the sample

10d. If interviews were conducted by telephone, what is the estimated percentage of households without a phone? _____ %

Please explain:

10e. If interviews were conducted by telephone, were unlisted telephone numbers included in the population sampled?
[ ] Yes
[ ] No

If no, what percent of the total eligible population did this exclude from the sample frame? _____ %

10f. If interviews were conducted via the Internet, what is the estimated percentage of households without access to the Internet? _____ %

10g. If interviews were conducted via the Internet, were provisions taken to include members of the population without access to the Internet? And if so, which?
[ ] Yes
[ ] No

If "Yes", please explain:

If "No", what percent of the total eligible population did this exclude from the sample frame? _____ %

10h. Were other persons excluded from the sample frame?
[ ] Yes
[X] No

If yes, what percent of the total eligible population did this exclude from the sample frame? _____ %

If yes, please explain:

10i. Please estimate the total percentage of the eligible population excluded from the sample frame: Around 1.45 %

Sample Selection Procedures

11. Please describe, in your own words, how the sample for the study was selected. If the survey is part of a panel study and/or based on an Internet access panel, please also describe the original sample, from the beginning of the study.

The sampling method used was the stratified random sample. The size of the sample was representative at the national level and a stratified two-stage sample was used, where the primary sample unit was made up of the census segments[1] and the second stratum by the qualified respondents within the census segments.

The sample design had a proportional size of the total population between the age range of 18 years of age or older, and by departments for 2019. Within each census segments, participants were selected by age and gender, according to the national population distribution.

The formula to estimate the correct sample size for infinite populations is the following:

$$n = \frac{Z_a{}^2 \times p \times q}{d^2}$$

Where:
      n: number of respondents.
      Z: given Z value for a (1-α) confidence level.
      p: probability of success of event i.
      q: probability of failure of event i.
      d: estimated error.

Considering a Z value for a 95 % confidence level (Z=1.96), a probability of success that maximizes the required sample (p=q=0.5) and an estimated error of 2.54 % (e=0.0254), **the sample size is of 1,488 respondents.**

There were six effective interviews per census segment. This number of interviews per census segments is based on the number of interviews per census segment established by the survey LAPOP in El Salvador, coordinated by Vanderbilt University and Fundaungo as its national associate. The decision of six interviews is based on the many years of experience of LAPOP in El Salvador.

Therefore, the sample size of 1,488 interviews is equally distributed in 248 census cluster[2].

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[1] A territorial unit of about 150 household.
[2] The result of dividing the 1,488 interviews between the 6 interviews by census segment is the number of census segment selected in the first strata, i.e. 248 census cluster.

12a. What were the primary sampling units?

Census segments

12b. How were the primary sampling units selected?

Simple random systematic sampling

12c. Were the primary sampling units randomly selected?
    [X] Yes
    [ ] No

    Please explain how the units were randomly selected. If the units were not randomly
    selected, please provide a justification for why the units were not randomly selected.

In total, 248 census segments were selected of the 12,435 census segments of 2007, where 60 %
were urban areas and 40% were rural areas. To select the 248 census cluster of the sample, a simple
random systematic sampling was performed, considering the stratification (urban-rural). Overall,
148 census cluster (60 %) were urban and 100 were rural areas (40 %), which corresponds to the
national proportions of geographical areas. The following table illustrates the census segments in
the sample, distributed by department and geographical area.

Total of census segments in the sample, distributed by department and geographical area

Department	Area		
	Urban	Rural	Total
Ahuachapán	8	5	13
Santa Ana	13	9	22
Sonsonate	11	8	19
Chalatenango	4	3	7
La Libertad	19	13	32
San Salvador	42	30	72
Cuscatlán	5	5	10
La Paz	8	5	13
Cabañas	3	3	6
San Vicente	5	2	7
Usulután	8	5	13
San Miguel	11	7	18
Morazán	5	2	7
La Unión	6	3	9
Total	**148**	**100**	**248**

13. Were there further stages of selection?
   [X] Yes
   [ ] No

13a. If there were further stages of selection, what were the sampling units at each of the additional stages?

   Secondary sample unit: household

13b. If there were further stages of selection, how were the sampling units selected at each of the additional stages?

   Secondary sample unit: household

Within each census segments (primary sample unit), six households were selected, where one person completed the survey. Households were selected systematically. After interviewing the first respondent, a skip to select the next house was made. This strategy of skipping houses systematically reduces the probability of interviewing family members or relatives.

13c. If there were further stages of selection, were units at each of these stages randomly selected?
   [] Yes
   [X] No

   Please explain how the units were randomly selected. If the units were not randomly selected, please provide a justification for why the units were not randomly selected.

14a. How were individual respondents identified and selected in the final stage?

In the final stage, the six respondents were selected and interviewed according to gender and age range quota, determined in accordance with national population proportions. The following table shows the total of respondents by department and geographical area.

Number of surveys by department and geographical area.

Department	Area		
	Urban	Rural	Total
Ahuachapán	48	30	78
Santa Ana	78	54	132
Sonsonate	66	48	114
Chalatenango	24	18	42
La Libertad	114	78	192
San Salvador	252	180	432
Cuscatlán	30	30	60
La Paz	48	30	78
Cabañas	18	18	36
San Vicente	30	12	42
Usulután	48	30	78
San Miguel	66	42	108
Morazán	30	12	42
La Unión	36	18	54
Total	**888**	**600**	**1,488**

Source: own elaboration.

14b. Could more than one respondent be interviewed from a single household?
        [ ] Yes
        [X] No

        If yes, please explain:

15. Did the sample design include clustering at any stage?
        [ ] Yes
        [X] No

        If yes, please describe:

16. Did the sample design include stratification?

Definition: Stratification involves the division of the population of interest according to certain characteristics (for instance: geographic, political, or demographic). Random selection then occurs within each of the groups that result.

    [X] Yes
    [ ] No

    If yes, please describe (please include the list of characteristics used for stratification, and in the case of multi-stage selection processes the stage[s] at which stratification occurred):

The population was sorted into geographical areas (urban and rural), taking as a base the definition of the census segment. Integrated by the 12,435 census segments within the country, where 40 % are rural areas and 60 % are urban areas. Random selection was performed in each geographical area.

17. Was quota sampling used at any stage of selection?

    [X] Yes
    [ ] No

    If yes, please describe:

In sum, the respondents per census segment was one male and one female from the age range 18 to 29, one male and one female between 30 and 45 years old, and one male and one female from the age range 46 or older. All the respondents were selected using a non-probability sampling by quota, according to the national population distribution mentioned before.

Number of respondents per census segment, by gender and age range quota

Gender	Age range			Total
	18 to 29 years	30 to 45 years	46 years or older	
Male	1	1	1	3
Female	1	1	1	3
Total	**2**	**2**	**2**	**6**

Source: own elaboration.

18. Was substitution of individuals permitted at any stage of the selection process or during fieldwork?

    [ ] Yes
    [X] No

    If yes, please describe:

19. Under what circumstances was a household designated non-sample? Please check all that apply:
> [ ] Non-residential sample point
> [X] All members of household are ineligible
> [X] Housing unit is vacant
> [ ] No answer at housing unit after _____ callbacks
> [ ] Other (Please explain):

20. Were non-sample replacement methods used?
> [ ] Yes
> [X] No

21a. For surveys conducted by telephone, was the sample a random digit dial (RDD) sample?
> [ ] Yes
> [ ] No

21b. For surveys conducted by telephone, was the sample a listed sample?
> [ ] Yes
> [ ] No

21c. For surveys conducted by telephone, was the sample a dual frame sample?
> [ ] Yes
> [ ] No
>
> If yes, what % list frame_____ and what % RDD_____

22. For surveys conducted by mail, was the sample a listed sample?
> [ ] Yes
> [ ] No
>
> Please describe:

23. For surveys conducted on the Internet, did respondents self-select into the survey, at any stage?
> [ ] Yes
> [ ] No
>
> Please explain:

Incentives

24a. Prior to the study, was a letter sent to the respondent?
        [X] Yes
        [ ] No

        (If yes, please provide a copy of the letter.)

24b. Prior to the study, was a payment sent to the respondent?
        [ ] Yes
        [X] No

        If yes, please describe (including amount of payment):

24c. Prior to the study, was a token gift sent to the respondent?
        [ ] Yes
        [X] No

        If yes, please describe:

24d. Did respondent receive an additional payment after their participation? (Do not include any payment made prior to the study.)
        [ ] Yes
        [X] No

        If yes, please describe (including amount of payment):

24e. Were any other incentives used?
        [X] Yes
        [ ] No

        If yes, please describe:

A USD 3 telephone recharge was transferred to the participants who completed the survey.

Interviewers

25. Please describe the interviewers (e.g., age, level of education, years of experience):

The data collection team was made up of 8 supervisors and 40 interviewers, they are part of FUNDAUNGO professional network, with years of experience in field work.

30% of the supervisors were women and 70% were men. Of the total number of supervisors, 50% had secondary or high school studies, 40% had incomplete university studies, and 10% had completed university studies. Regarding field work experience, 10% of supervisors had 1 to 5 years of experience, 30% 6 to 10 years, and 60% more than 10 years of experience in similar projects.

65% of the interviewers who participated in the collection of information were women and 35% men. Of the total number of interviewers assigned to collect information, 30% had secondary or high school studies, 47% had incomplete university studies, and 23% had completed university studies. In relation to the experience in collecting information in the field, 20% of the interviewers had less than 1 year, 36% from 1 to 5 years of experience, 22% from 6 to 10 years and 22% more than 10 years of experience.

26. Please provide a description of interviewer training. If possible please differentiate between general interviewer training and study-specific components:

26a. Please provide a description of the content, structure and time used for general training of interviewers:

Interviewer training took 2 days. The general content of the training consisted of an institutional induction on the work of FUNDAUNGO, learning about the field work protocols and disseminating the data collection security protocol. In a second stage, the objectives of the study, the content of the questionnaire and the use of the mobile application for data collection are disclosed. Finally, interview simulations are done for the team to practice.

26b. Please provided a description of the content, structure and time used for training interviewers in the specifics of the study within which CSES was run:

Team training took 2 days. The training was divided into 4 sessions, each lasting approximately 3 hours.

Day 1
In the first section, the institutional induction, study objectives, field protocol and security were developed, which is one of the core parts of this and all the studies carried out in FUNDAUNGO, this with the objective that all the personnel assigned to the work know the data collection protocols used in the field and can apply the quality standards.

In the second section, the management of the survey was addressed, where a reading of each of the questions of the information collection instrument in which all participated was made, the objective of this activity is that there is a clear understanding among all the participants, and in which some important points of the study were explained, doubts are clarified at this time.

Day 2

In the third section, each person had a mobile device for induction in managing the use of the Survey123 application, practical exercises were carried out directed by the FUNDAUNGO technical team, in which the role of respondent was assumed; and both supervisors and interviewers ask each of the questions and take notes, this dynamic gives rise to questions and clarifications.

In the fourth section, directed exercises were carried out for the management of the questionnaire. At this point, the completion of the sample identification and the control of effective ballots were explained to them. Several exercises were done with changes of roles, to practice more the use of the device and the handling of the interview. This activity ends with rounds of questions and answers.

Contacts

27a. What was the average number of contact attempts made per household, for the entire sample?

On average, 7 contacts were made for each effective interview in the sample.

27b. For households where contact was made, what was the average number of contact attempts prior to first contact?

All households within the sample were contacted on the first occasion

27c. During the field period, how many contacts were made with the household before declaring it a **non-sample?**

All uninhabited households were immediately excluded from the sample

28d. During the field period, how many contacts were made with the household before declaring it a **non-interview?**

Households that did not respond to the second contact were not considered in the final sample.

28e. During the field period, what were the maximum number of days over which a household was contacted?

Data collection lasted 21 effective days. Households within the sample were contacted in a maximum of 2 days, in accordance with the planning of households visits at national level.

28f. During the field period, did interviewers vary the time of day at which they re-contacted the household?
          [X] Yes
          [ ] No

          If yes, please describe:

Some census segments were visited again on weekends, when people tend to stay home more often. This allowed to improve the efficiency in data collection.

Refusal Conversion

29a. Were efforts made to persuade respondents who were reluctant to be interviewed?
>[ ] Yes
>[X] No

>Please describe:

29b. Were respondents who were reluctant to be interviewed sent a letter persuading them to take part?
>[ ] Yes
>[X] No
>(If yes, please provide a copy of the letter or letters.)

>If yes, please describe:

29c. Was payment offered to respondents who were reluctant to take part?
>[ ] Yes
>[X] No

>If yes, how much?

29d. Were respondents who were reluctant to take part turned over to a more experienced interviewer?
>[ ] Yes
>[X] No

29e. What was the maximum number of re-contacts used to persuade respondents to be interviewed?

One

29f. Were any other methods used to persuade respondents reluctant to be interviewed to take part?
>[ ] Yes
>[X] No

>If yes, please describe:

Interview/Survey Verification

Definition: Interview/survey verification is the process of verifying that an interview was conducted and that the survey was administered to the correct respondent, for quality control purposes.

30. Was interview/survey verification used?

       [X] Yes

       [ ] No

       If yes, please describe the method(s) used:

Surveys were conducted in Survey123. When sending a complete questionnaire, a random sample of sent interviews was validated by a research assistant in the office. This person checked if the survey had been completed in the assigned census segment, if it was complete and if the sociodemographic information responded to the assigned quota.

       If yes, please indicate the percent of completed surveys that were verified: 10 %

Response Rate

Note: If multiple modes of interviewing were used for the post-election survey in which the CSES Module appeared, please repeat the following questions as appropriate for each of the modes used.

31. What was the response rate of the survey that the CSES Module appeared in? Please show your calculations. (If the CSES Module appeared in a panel study, please report the response rate of the first wave of the study, even if the CSES Module did not appear in that wave.)

32. Please provide the following statistics for the survey that the CSES Module appeared in. (If the CSES Module appeared in a panel study, please report the statistics for the first wave of the study, even if the CSES Module did not appear in that wave.)

      A. Total number of households in sample: 12341

      B. Number of valid households: 7769
      C. Number of invalid (non-sample) households: 3506
      D. Number of households of unknown validity: 1066

      E. Number of completed interviews: 1488
      F. Number of partial interviews: 0
      G. Number of refusals and break-offs: 1275
      H. Number non-contact (never contacted):   5006
      I. Other non-response: 0

      The sum of B+C+D should equal the value of A. If not, please describe why:

      If statistic D (number of households of unknown validity) has a value greater than zero (0), please estimate the proportion of households of unknown validity that are valid:

      0.689

      The sum of E+F+G+H+I should equal the value of B. If not, please describe why:

      If statistic I has a value greater that zero (0), please describe what cases fall into this category:

33. If the CSES Module appeared in a panel study, how many waves were conducted prior to the wave that included the CSES Module?

34. If the CSES Module appeared in a panel study, what was the total panel attrition between the first wave of the study and the wave that included the CSES Module? Please show your calculations.

35. If the CSES Module appeared in a panel study, please provide the number of completed interviews for the wave that included the CSES Module:

36. If the CSES Module appeared in a panel study, please provide the following statistics for panel attrition by age and education. In each cell, indicate the percent of all completed interviews in each category for the indicated wave.

Age	First wave of study	Wave that included CSES
18-25	%	%
26-40	%	%
41-64	%	%
65 and over	%	%

Education	First wave of study	Wave that included CSES
None	%	%
Incomplete primary	%	%
Primary completed	%	%
Incomplete secondary	%	%
Secondary completed	%	%
Post-Secondary Trade/Vocational	%	&
University incomplete	%	%
University degree	%	%

Post-Survey Adjustment Weights

37. Are weights necessary to make the sample representative of the populated being studied?
    [X] Yes
    [ ] No

    If yes, please explain:

38. Are weights included in the data file?
    [X] Yes
    [ ] No

39. If weights are included in the data file, please describe in detail how the weights were constructed:

The weight […] was calculated using the raking procedure in SPSS. However, because several variables were incorporated to control (age, education, and gender; also including electoral participation and self-reported voting), in some cases the weighting results in total cases ranging from 1487 to 1489. This is a trade-off to consider. As an example, the correlative id number experience rounding; and in the case of variable q13b without the weight more people voted for Sanchez Ceren (like it actually happened), but with the weight it shows than more people voted for Norman Quijano than Sanchez Ceren (Sáncez Ceren won, and Norman Quijano finished in second place).

40a. If weights are included in the data file, are the weights designed to compensate for disproportionate probability of selection?
    [ ] Yes
    [X] No

    If yes, please describe:

40b. If weights are included in the data file, are the weights designed to match known demographic characteristics of the population?
    [X] Yes
    [ ] No

    If yes, please describe:

40c. If weights are included in the data file, are the weights designed to correct for non-response?
    [ ] Yes
    [X] No

    If yes, please describe:

40d. If weights are included in the data file, are the weights designed to correct to the official election results?

    [X] Yes
    [ ] No

    If yes, please describe:

41. Comparison of Completed Interviews to Population (please provide as percentages of the total):

Characteristic	Population Estimates	Completed Interviews Unweighted Distribution	Weighted Distribution*
Age			
18-25	22.8%	24.9%	22.8%
26-40	30.2%	32.1%	30.2%
41-64	33.1%	32.3%	33.0%
65 and over	14.0%	10.8%	14.0%
Education			
None	12.6%	8.0%	12.6%
Incomplete Primary	20.0%	17.7%	29.2%
Primary Completed	9.2%	9.5%	%
Incomplete Secondary	28.1%	38.0%	28.1%
Secondary Completed	15.9%	15.1%	15.9%
Post-Secondary Trade/ Vocational	1.7%	0.0%	1.7%
University Incomplete	6.6%	6.1%	12.5%
University Degree	5.9%	5.6%	%
Gender			
Male	45.3%	49.1%	45.3%
Female	54.7%	50.9%	54.7%

*Weights were not necessary to make the sample representative of national population

42. Please indicate the source of the population estimates in the prior question. English language sources are especially helpful. Include website links or contact information if applicable.

Multipurpose Household Survey 2019, by National Statistics Office (General Directorate of Statistics and Censuses, DIGESTYC: http://www.digestyc.gob.sv/).