

WORLD VALUES SURVEY
April 19-24, 2012

TECHNICAL DETAILS

1. Location

The **World Values Survey** will cover the entire Philippines and will have four major study areas: National Capital Region (NCR), Balance Luzon (outside NCR), Visayas and Mindanao.

2. Proposed timetable

Fieldwork:

| | | |
|-------------------------|---|-------------------|
| National Capital Region | - | April 19-24, 2012 |
| Balance Luzon | - | April 19-24, 2012 |
| Visayas | - | April 19-24, 2012 |
| Mindanao | - | April 19-24, 2012 |

3. Respondents

Data will be gathered through face-to-face interviews of voting-age adults (18 years old and above). It will ask questions from the World Values Surveys of what people value in their life.

4. Sampling Method

Sample Sizes and Error Margins. An indicator of data quality is the standard error of the estimate, on which the margin for sampling error is based. As survey statistics are mostly proportions, the key measure of data precision is the standard error of a proportion taken from a sample. It is computed as follows:

$$\pm Z * \sqrt{\frac{p(1-p)}{n}}$$

Where Z , at 95% confidence level is 1.96; p is the sample proportion estimate and n is the sample size. The overall sample size of 1,200 voting-age adults gives a maximum error margin of $\pm 2.83\%$ at the 95% confidence level, assuming a simple random sampling design. The sampling error is at its highest when the true proportion being estimated is close to 50%.

The following approximate 95%-confidence margins for sampling error should be made when aggregating data at various levels:

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| | <u>Sample Size</u> | <u>Error margin</u> |
|-------------------------|--------------------|---------------------|
| Philippines | 1,200 | ±3% |
| National Capital Region | 300 | ±6% |
| Balance Luzon | 300 | ±6% |
| Visayas | 300 | ±6% |
| Mindanao | 300 | ±6% |

However, somewhat higher error margins should be expected since multi-stage cluster sampling are used; this design-effect is not readily measurable through established statistical software.

Sampling scheme. The Philippines is divided into four study areas: National Capital Region (NCR), Balance Luzon, Visayas, and Mindanao.

Multi-stage probability sampling will be used in the selection of sample spots. The allocation of sample units in each stages are as follows:

| | Sample Prov. | Sample Mun. | Spots | Probability Respondents |
|-------------------------|-------------------------|------------------------|--------------|------------------------------------|
| National Capital Region | -- | 17 | 60 | 300 |
| Balance Luzon | 10 | 15 | 60 | 300 |
| Visayas | 5 | 15 | 60 | 300 |
| Mindanao | 6 | 15 | 60 | 300 |
| | --- | ----- | ----- | ----- |
| | 21 | 62 | 240 | 1200 |

For the National Capital Region (NCR)

Stage 1. Selection of Sample Spots (Barangays)

For NCR's first stage, 60 barangays will be distributed among the 17 NCR cities and municipalities in such a way that each city/municipality will be assigned a number of barangays that are roughly proportional to its population size. Additional provisions are that each municipality must receive at least one barangay. Barangays will then be selected from within each municipality with probability proportional to size (PPS).



Stage 2. Selection of Sample Households

In each sample barangay, five households will be established by systematic sampling. Designated starting points will be randomly assigned - it will be either: 1) a municipal/barangay hall, 2) a school, 3) the barangay captain's house, or 4) a church/chapel/mosque, 5) a health facility, or 6) a basketball court. A random start from 1-6 will also be randomly generated for each spot. Thus, if a particular spot has a random start of 4, the first sample household should be the 4th household from the designated starting point. Subsequent sample households will be chosen using a fixed interval of 5 households in between the sampled ones; i.e. every 6th household is sampled.

Stage 3. Selection of Sample Adult

For the third stage, in each selected household, a respondent will be randomly chosen among the household members who are 18 years of age and older, using a probability selection table. In selecting the probability respondent of a household, only male family members will be pre-listed in the probability selection table of odd-numbered questionnaires; only female family members will be pre-listed for even-numbered questionnaires. A respondent not contacted during the first attempt will be visited for a second time. If the respondent remains unavailable, or in cases where there are no qualified probability respondent of a given gender, the interval sampling of households will continue until five sample respondents have been identified.

For the rest of the Philippines

Stage 1. Allocation and Selection of Sample Provinces

Balance Luzon is further divided into 6 regions: Region I, CAR + Region II, Region III, Region IV-A, Region IV-B and Region V; Visayas into 3 regions: Region VI, Region VII and Region VIII; and Mindanao into 6 regions; Region IX, Region X, CARAGA, Region XI, Region XII and ARMM.

Using probability proportional to population size (PPS) of the region, the allocation of 10 provinces in Luzon, 5 in Visayas and 6 in Mindanao are as follows:

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| <u>LUZON</u> | | <u>VISAYAS</u> | | <u>MINDANAO</u> | |
|--------------|------|----------------|------|-----------------|------|
| Region I | 2 | Region VI | 2 | Region IX | 1 |
| CAR/REG II | 1 | Region VII | 2 | Reg X | 1 |
| Region III | 2 | Region VIII | 1 | CARAGA | 1 |
| Region IV-A | 3 | | | Region XI | 1 |
| Region IV-B | 1 | | | Region XII | 1 |
| Region V | 1 | | | ARMM | 1 |
| | ---- | | ---- | | ---- |
| TOTAL | 10 | | 5 | | 6 |

The non-quota provinces will be selected without replacement using probability proportional to their remainders. The remainders are fractions derived when the proportion of the regions (based on their respective study area) are multiplied by 10 for Luzon, and 5 for Visayas and 6 for Mindanao. For instance, if 1.28 is obtained for Region I, then 1 province is assigned to this region and remaining fraction of 0.28 is included for the allocation of the non-quota province.

Given the target number of provinces for each region, sample provinces will then be selected by PPS, without replacement. An additional provision is that each region must receive at least one province.

Stage 2. Allocation and selection of sample municipalities

Within each study area, 15 municipalities will be allocated among the sample provinces. 15 is multiplied by the proportion of the provinces. The resulting integers become the number of municipalities in that province. If there are remaining municipalities to be allocated, they will be distributed using probability proportional to the remainders.

Sample municipalities will then be selected from within each sample province with probability proportional to population size, without replacement. An additional provision is that each province must receive at least one municipality.

Stage 3. Allocation and Selection of Sample Spots

Once the sample provinces have been selected, 60 spots for each of the major areas will be allocated among the sample provinces. Using the target number set for each spot in each region, the spots will be distributed in such a way that each province will be assigned a number of spots roughly proportional to its population size.

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| <u>LUZON</u> | | <u>VISAYAS</u> | | <u>MINDANAO</u> | |
|--------------|------|----------------|------|-----------------|------|
| Region I | 8 | Region VI | 24 | Region IX | 9 |
| CAR+REG II | 7 | Region VII | 22 | Reg X | 12 |
| Region III | 15 | Region VIII | 14 | CARAGA | 7 |
| Region IV-A | 17 | | | Region XI | 12 |
| Region IV-B | 5 | | | Region XII | 11 |
| Region V | 8 | | | ARMM | 9 |
| | ---- | | ---- | | ---- |
| TOTAL | 60 | | 60 | | 60 |

Sample barangays within each sample municipality will be selected with probability proportional to size.

Sample barangays will then be classified as urban or rural based on the latest National Statistics Office classification (2000).

Stage 4. Selection of Sample Households

For the fourth stage, within each sample spot, five households will be established by systematic sampling. In urban barangays as well as in rural barangays, designated starting points will be randomly assigned - it will be either: 1) a municipal/barangay hall, 2) a school, 3) the barangay captain's house, 4) a church/chapel/mosque, 5) a health facility, or 6) a basketball court. A random start from 1-6 is also randomly generated for each spot. Thus, if a particular spot has a random start of 4, the first sample household should be the 4th household from the designated starting point. The sampling interval for urban barangays is six, while for rural barangays, it is two.

Stage 5. Selection of Sample Respondents

For the fifth and final stage, as discussed earlier, a respondent will be randomly chosen from among the voting-age adults in each selected household using a probability respondent selection table. A respondent not contacted during the first attempt will be visited for a second time. If the respondent remained unavailable, or in cases where there are no qualified probability respondent of a given gender, the interval sampling of households will continue until five sample respondents have been identified.



5. Research Methodology

a. Preparation

(1) Questionnaire

The WVSA provided SWS with the English version of the questionnaire which was translated into the following languages: Filipino, Cebuano, Iluko, Hiligaynon, Bicol, Waray, Chavacano and Maranao.

The translated questionnaires were back-translated into English by separate translators.

(2) Training

(a) Training will be conducted in several strategic locations with interviewers assigned to cover specific areas to be trained near their area of assignments.

(b) Training time – The minimum training time for group supervisors and interviewers is 2 days prior to field implementation. The third day will be the start-off, where the field supervisor will observe the field interviewers on their first interviews.

(c) Training Activities – The activities during the training are the following:

One or two days office training to learn the basics of the project. Mock interviews among participants, i.e. field interviewers interviewing supervising anchors as respondents will be done to get accustomed to the flow of interviewing and questionnaire format.

Interviews are practiced with a supervisor around until the interviewer can be left on her own.

(d) Evaluation of interviewer's work – All first interviews of each field interviewer will be observed by her field supervisor, and then evaluated. Only after meeting the evaluation criteria can an interviewer be allowed to be left to interview on her own, although her field supervisor will always stay within the vicinity of the sample spot to conduct checks.

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b. Field Work

(1) Workers on Hand

For this project, a total of 102 field staff will be deployed.

(2) Supervision

Supervisors will report to the field manager who monitors the study full-time. They will observe interviewers, (at least 10% of total interviewers will be observed by supervisors), will follow-up and will do surprise checks on the field interviewers. They will ensure that field logistics will be received promptly and be administered properly.

(3) Spot-checking

Part of quality control is to make sure that at least 30% of each interviewer's output will be spot-checked and back-checked. If there are incomplete or inconsistent answers in the questionnaire, the field interviewer will be asked to go back to the respondent's house to re-ask the question for verification.

c. Field Editing

- (1) After each interview, the interviewer is asked to go over her own work and check the questionnaire.
- (2) All accomplished interviews will be submitted to the assigned group supervisor who, in turn, will edit each of the accomplished interview.

d. Data Processing

- (1) Office editors will conduct final consistency checks on all interviews prior to coding.
- (2) A data entry computer program will verify and check the consistency of the encoded data before data tables will be generated.
- (3) Encoded data will be validated (100%) by a group separate from the encoders.
- (4) All data tables to be generated will be checked by a group separate from the encoders.



6. Weighting Procedure

To yield representative figures at the national level, census-based population weights will be applied to the World Values survey data. The weight projection is computed by dividing the projected population in the area by the sample size of the same area. Appropriate projected factors will be applied so that original population proportions will reflect in the data tables using this formula.

$$\text{Projection factors (Weight)} = \frac{\text{Population}}{\text{No. of Interviews}}$$

The following projection factors will be used for the World Values Survey

| | 2012 NSO Projected Population Age 18 and above | Total Sample Size (1200) | Projection factor for 1 probability Respondent (000) |
|---------------|---|---|---|
| NCR | 7,979,824 | 300 | 26.5994142582 |
| Balance Luzon | 24,242,995 | 300 | 80.8099848355 |
| Visayas | 10,644,428 | 300 | 35.4814275449 |
| Mindanao | 12,948,105 | 300 | 43.1603503012 |
| | ----- | ----- | |
| TOTAL | 55,815,353 | 1,200 | |

The SPSS version of the data file will be weighted according to the above projection factors. As the data are weighted, the total number of cases that appear is 55,815. The figure is in thousands, i.e., 55,815,353 persons representing NSO's projected number of adults (18 years old and above) for year 2012 based on the 2007 Census.

Researchers who are defining data using the ASCII files should apply these projection factors.

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