**Sample design and final sample 27**

The final sample is a representative sample of the households in Zamboanga del Norte, Zamboanga del Sur and Zamboanga Sibugay. The sample was drawn from the set of barangays that the University of Western Zamboanga identified as having municipal fisheries or as having fishing households. The sampling method is two-stage stratified using the presence of insurgent groups as stratification variable. The primary sampling unit is the barangay. The following table describes the number of barangays in each province, the number of barangays in the sample and the number of households in the sample.

Table 1. Total and sampled barangays and municipalities by Province

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Province | Total municipalities | Municipalities in sample | Total barangays | Barangays in sample | Households in sample |
| Zamboanga del Norte | 27 | 11 | 691 | 23 | 590 |
| Zamboanga del Sur | 28 | 7 | 681 | 15 | 350 |
| Zamboanga Sibugay | 16 | 9 | 388 | 27 | 560 |
| Total | 71 | 27 | 1760 | 65 | 1500 |

The same number of barangays with and without armed groups was meant to be included. In the barangays with armed group presence 20 households should have been surveyed and in the barangays without armed group presence 30 households should have been surveyed. Given the stratification criterion, and the conditions on field, the sample was split by armed group presence as described in the following table.

Table 2. Sample by presence of armed groups

|  |  |  |
| --- | --- | --- |
|  | Number of barangays | Sample size |
| Presence of insurgent groups | 29 | 951 |
| No presence of armed groups | 36 | 549 |
| Total | 65 | 1500 |

**Replacement rules**

These are the rules that were designed and given to the supervisors and enumerators to follow in case the household quota is not completed in the sample barangays.

**Household replacement rules**

In case a household can not be reached, in any kind of barangay, the enumerator was told to take the route to the closest seacoast and survey the next fishing household they found. This criterion was chosen to maximize the odds of finding a fishing household. This replacement rules applies for barangays with and without armed group presence.

**Barangay replacement rules**

For barangays without insurgent group presence

As was mentioned before, the quota for these barangays is of 20 fishing households. If a barangay with less than 20 fishing households is identified, all the fishing households should be surveyed. To complete the quota, the field team should go to the closest barangay in direction to the seacoast, count the fishing households and survey the households needed to complete the required 20 households. If the quota is not completed there either, the field team should select the next closest barangay in direction to the seacoast to complete the quota. This process should be repeated as many times as needed in order to complete the quota.

The field team was asked to record and report the process in full detail as sample weights will need to be adjusted alongside any modifications made to the location of the sample.

If the original barangay is located on the seacoast and there are not enough fishing households to complete the quota, the barangays on the coastline considered as “closest neighbors” should be used to complete the quota. For example, if barangays are located on a seacoast that stretches from east to west, the first substitute barangay should be the one immediately to the right. If there are not enough fishing household to complete the quota, then the barangay immediately to the left of the original should be included in the sample. If the quota is still incomplete, then the barangay immediately to the right of the right should be included in the sample and so on.

For barangays with insurgents groups' presence

The quota for these barangays is of 30 fishing households. If a barangay with less than 30 fishing households is identified, all the fishing households should be surveyed. To complete the quota, the field team should go to the closest barangay in direction to the seacoast, even if this barangay does not have armed group presence, count the fishing households and survey the households needed to complete the required 20 households. If the quota is not completed there either, the field team should select the next closest barangay in direction to the seacoast to complete the quota. This process should be repeated as many times as needed in order to complete the quota.

The field team was asked to record and report the process in full detail as sample weights will need to be adjusted alongside any modifications made to the location of the sample.

If the original barangay is located on the seacoast and there are not enough fishing households to complete the quota, the barangays on the coastline considered as “closest neighbors” should be used to complete the quota. For example, if barangays are located on a seacoast that stretches from east to west, the first substitute barangay should be the one immediately to the right. If there are not enough fishing household to complete the quota, then the barangay immediately to the left of the original should be included in the sample. If the quota is still incomplete, then the barangay immediately to the right of the right should be included in the sample and so on.