

## **Sampling Design:**

### **1. Sampling Frame:**

The sampling frame was taken from the listing of Non-Profit Institution Serving Households ( NPISHs) 2008 which is prepared by CBS. All NPISHs was collected from 75 districts of country. Total number of NPISHs by 1 digit ICNPO groups is 11,863 as below:

**Table 1: Distribution of NPISHS by ICNPO groups.**

ICNPO code	ICNPO group	Number of NPISHs
1	Culture and Recreation	1,303
2	Education and Research	811
3	Health	508
4	Social services	5,255
5	Environment	771
6	Development and Housing	1,272
7	Law, Advocacy and Politics	777
8	Philanthropic intermediaries and Voluntarism promotion	67
9	International activities	4
10	Religion	1,090
11	Business and Professional associations, Unions	0
12	Not else where classified	5
<b>Total</b>		<b>11,863</b>

### **2. Stratification:**

In this survey, Nepal was stratified into three ecological belts: Mountain, Hills and Tarai. The distribution of NPISHs by ICNPO groups of strata is given in Table 2.

**Table 2: Distribution of NPISHs by ICNPO groups for Ecological belts and Development region.**

Ecological Belt	Development Region	NPISHs by ICNPO groups											
		1	2	3	4	5	6	7	8	9	10	12	Total
Mountain	Eastern	35	24	6	137	45	75	26	1	0	62	0	411
Mountain	Central	35	5	3	143	17	8	7	8	0	31	1	258
Mountain	Western	3	7	0	29	3	1	1	0	0	1	0	45
Mountain	Mid Western	5	8	6	76	2	30	13	0	0	0	0	140
Mountain	Far Western	3	4	0	28	5	22	8	2	0	1	0	73
<b>Total</b>		<b>81</b>	<b>48</b>	<b>15</b>	<b>413</b>	<b>72</b>	<b>136</b>	<b>55</b>	<b>11</b>	<b>0</b>	<b>95</b>	<b>1</b>	<b>927</b>

Ecological Belt	Development Region	NPISHs by ICNPO groups											
		1	2	3	4	5	6	7	8	9	10	12	Total
Hills	Eastern	137	56	16	517	90	136	125	7	0	100	0	1184
Hills	Central	477	214	193	1413	123	198	135	23	3	246	1	3026
Hills	Western	58	73	49	476	77	116	86	4	0	40	0	979
Hills	Mid Western	114	46	14	276	65	99	64	2	0	9	0	689
Hills	Far Western	20	22	27	92	13	31	23	2	0	12	0	242
<b>Total</b>		<b>806</b>	<b>411</b>	<b>299</b>	<b>2774</b>	<b>368</b>	<b>580</b>	<b>433</b>	<b>38</b>	<b>3</b>	<b>407</b>	<b>1</b>	<b>6120</b>

Ecological Belt	Development Region	NPISHs by ICNPO groups											
		1	2	3	4	5	6	7	8	9	10	12	Total
Tarai	Eastern	96	62	32	661	67	127	45	14	0	261	3	1368
Tarai	Central	113	149	87	834	161	190	100	4	1	154	0	1793
Tarai	Western	58	19	24	213	19	92	33	0	0	48	0	506
Tarai	Mid Western	126	88	22	310	60	69	41	0	0	109	0	825
Tarai	Far Western	23	34	29	50	24	78	70	0	0	16	0	324
<b>Total</b>		<b>416</b>	<b>352</b>	<b>194</b>	<b>2068</b>	<b>331</b>	<b>556</b>	<b>289</b>	<b>18</b>	<b>1</b>	<b>588</b>	<b>3</b>	<b>4816</b>

### 3. Determination of sample size:

Estimation of sample size (n) is computed by

$$n = \frac{z^2 pq N_s}{e^2 (N_s - 1) + z^2 pq}$$

Where,

e = acceptable error and let the estimate should be within 5% of the true value.

z = 1.96 as pre table of area under normal curve for the given confidence level of 95%.

p = q = 50%, let there is no information available from past data.

N<sub>s</sub> = number of NPISHs of strata.

$$n = \frac{(1.96)^2 * (0.5) * (0.5) * N_s}{(0.05)^2 (N_s - 1) + (1.96)^2 * (0.5) * (0.5)}$$

The estimation of sample size (n) is given in table 3.

**Table 3: Distribution of Sample size of Ecological Belt.**

Strata	Ecological Belt	Number of NPISHs (N <sub>s</sub> )	Sample size(n)
1	Mountain	927	272
2	Hills	6120	362
3	Tarai	4816	356
Total		11863	990

### 4. Sample Allocation Scheme:

The size of sample allocated to each stratum according to the proportion of strata population. The following table 4 is given the sample size of the strata.

**Table 4: Distribution of sample size of NPISHs by ICNPO groups for Ecological belts and Development region.**

Ecological Belt	Development Region	Sample size of NPISHs by ICNPO groups											
		1	2	3	4	5	6	7	8	9	10	12	Total
Mountain	Eastern	10	7	2	40	13	22	8	1	0	18	0	121
Mountain	Central	10	2	1	42	5	2	2	1	0	8	1	74
Mountain	Western	1	2	0	8	1	1	1	0	0	1	0	15
Mountain	Mid Western	2	2	2	22	1	9	3	0	0	0	0	41
Mountain	Far Western	1	1	0	8	1	6	2	1	0	1	0	21
<b>Total</b>		<b>24</b>	<b>14</b>	<b>5</b>	<b>120</b>	<b>21</b>	<b>40</b>	<b>16</b>	<b>3</b>	<b>0</b>	<b>28</b>	<b>1</b>	<b>272</b>

Ecological Belt	Development Region	Sample size of NPISHs by ICNPO groups											
		1	2	3	4	5	6	7	8	9	10	12	Total
Hills	Eastern	8	3	1	29	5	8	7	1	0	6	0	68
Hills	Central	28	13	11	83	7	12	8	1	1	15	1	180
Hills	Western	3	4	3	27	5	7	5	1	0	2	0	57
Hills	Mid Western	7	3	1	16	4	5	4	1	0	1	0	42
Hills	Far Western	1	1	2	5	1	2	1	1	0	1	0	15
<b>Total</b>		<b>47</b>	<b>24</b>	<b>18</b>	<b>160</b>	<b>22</b>	<b>34</b>	<b>25</b>	<b>5</b>	<b>1</b>	<b>25</b>	<b>1</b>	<b>362</b>

Ecological Belt	Development Region	Sample size of NPISHs by ICNPO groups											
		1	2	3	4	5	6	7	8	9	10	12	Total
Tarai	Eastern	6	5	2	49	5	9	3	1	0	19	1	100
Tarai	Central	7	11	6	62	12	14	7	1	1	11	0	132
Tarai	Western	5	1	2	16	1	7	2	0	0	4	0	38
Tarai	Mid Western	9	7	2	23	4	5	3	0	0	8	0	61
Tarai	Far Western	2	3	2	4	2	6	5	0	0	1	0	25
<b>Total</b>		<b>29</b>	<b>27</b>	<b>14</b>	<b>154</b>	<b>24</b>	<b>41</b>	<b>20</b>	<b>2</b>	<b>1</b>	<b>43</b>	<b>1</b>	<b>356</b>

The sampling units were drawn from simple random sampling without replacement by using complex sample facility of SPSS package. Total sample size was around 8.35 % of total number of NPISHs by ICNPO groups.