Note on Sample Design and Estimation Procedure of Multiple Indicator Survey of NSS 78th round

1. Introduction

1.1 The National Sample Surveys (NSS) are being conducted by the Government of India since 1950 to collect socio-economic data employing scientific sampling methods. Seventy-eighth rounds of NSS started from 1st January 2020.

1.2 Subject Coverage: NSS 78th round covers the subject 'Multiple Indicators'.

2. Outline of Survey Programme

2.1 **Geographical coverage**: The survey covers whole of the Indian Union *except the* villages in Andaman and Nicobar Islands which are difficult to access.

2.2 **Survey Period:** The survey period is of one year duration.

2.3 **Questionnaires of enquiry:** During this round, the following Questionnaires of enquiry are canvassed:

| Questionnaire 0.0 : | List of Households |
|---------------------|---------------------------|
| Questionnaire 5.1 : | Multiple Indicator Survey |

2.4 **Participation of States:** All the States and Union Territories except Dadra & Nagar Haveli and Lakshadweep participated. Following is the matching pattern of the participating States/ UTs.

| State/UT | Extent of matching |
|-----------------------|--------------------|
| Nagaland (U) | triple |
| Manipur, Telangana | double |
| Maharashtra (U) | one and half |
| Remaining States/ UTs | equal |

3. Sample Design

3.1 Formation of sub-units (SUs):

3.1.1 **<u>Rural areas</u>**: A rural village is notionally divided into a number of sub-units (SU) of more or less equal population during the preparation of frame. Census 2011 population of villages was projected by applying suitable growth rates and the number of SUs formed in a village was determined apriori.

3.1.2 The above procedure of SU formation was implemented in the villages with population *more than or equal to 1000 as per Census 2011*. In the remaining villages, no SU was formed.

3.1.3 The number of SUs formed in the villages (with Census 2011 population 1000 or more) of the frame was decided before selection of the samples following the criteria given below:

| projected population of the village | no. of SUs formed |
|-------------------------------------|-------------------|
| less than 1200 | 1 |
| 1200 to 2399 | 2 |
| 2400 to 3599 | 3 |
| 3600 to 4799 | 4 |
| 4800 to 5999 | 5 |
| and so on | |

3.1.4 Special case:

3.1.4.1 For rural areas of (i) Himachal Pradesh, (ii) Sikkim, (iii) Andaman & Nicobar Islands, (iv) Ladakh, (v) Uttarakhand (except four districts Dehradun, Nainital, Hardwar and Udham Singh Nagar), (vi) Punch, Rajouri, Udhampur, Reasi, Doda, Kishtwar, Ramban of Jammu and Kashmir and (vii) Idukki district of Kerala, numbers of SUs formed in a village were determined in such a way that each SU contains 600 or less projected population. Further, SUs were not formed in the villages in the above mentioned districts/States with population less than 500 as per Census 2011. In the remaining villages, the number of SUs formed for these States/districts is as follows:

| projected population of the village | no. of SUs formed |
|-------------------------------------|-------------------|
| less than 600 | 1 |
| 600 to 1199 | 2 |

| projected population of the village | no. of SUs formed |
|-------------------------------------|-------------------|
| 1200 to 1799 | 3 |
| 1800 to 2399 | 4 |
| 2400 to 2999 | 5 |
| and so on | |

3.1.4.2 For rural parts of Kerala, similar procedure as mentioned in para 3.1.3 above was adopted with the modification that the SUs were formed within Panchayat Wards instead of villages.

3.1.5 <u>Urban areas</u>: SUs were formed in urban sector also. The procedure was similar to that adopted in rural areas except that SUs were formed on the basis of households in the UFS frame instead of population, since UFS frame does not have population. Each UFS block with number of households more than or equal to 250 was divided into a number of SUs. In the remaining UFS blocks, no SU was formed.

3.2 **Outline of sample design:** A stratified two stage design has been adopted for the 78th round survey. *The first stage units (FSU) are villages/UFS blocks/sub-units (SUs) as per the situation.* The ultimate stage units (USU) are households in both the sectors.

3.3 Sampling Frame for First Stage Units:

3.3.1 There was no SU formation in uninhabited villages and villages (Panchayat wards for Kerala) with population less than 1000 as per Census 2011 (less than 500 as per Census 2011 for the areas mentioned in para 3.1.4.1) and entire village was considered as one FSU. All such villages (Panchayat wards for Kerala) were the First Stage Units (FSUs).

3.3.2 In the remaining villages, notional sub-units (SUs) following the procedure as described in para 3.1 were formed. Such SUs were considered as First Stage Units (FSUs).

3.3.3 For the UFS blocks with less than 250 households, the entire UFS block was considered as one FSU. In the remaining UFS blocks, the SUs were considered as First Stage Units (FSUs).

3.3.4 List of FSUs as described above was the sampling frame for respective cases.

3.4 **Stratification**:

(a) Each district was a stratum. Within each district of a State/UT, generally speaking, two basic strata were formed: (i) rural stratum comprising of all rural areas of the district and (ii) urban stratum comprising of all the urban areas of the district. However, within the urban areas of a district, if there were one or more towns with population one million or more as per Census 2011, each of them formed a separate basic stratum and the remaining urban areas of the district was considered as another basic stratum.

- (b) A special stratum, in the *rural areas* only, was formed at all-India level before district level strata are formed in each State/UT. This stratum comprised all the uninhabited villages as per Census 2011.
- (c) Special rural stratum has been formed for the State samples also for those State/UTs which have at least 50 uninhabited villages as per census 2011.

3.5 **Sub-stratification:**

3.5.1 **Rural sector:** Three groups of villages were formed within each stratum except special rural stratum at all-India level as mentioned in para 3.4(b):

Group 1: all villages (Panchayat wards for Kerala) with Census 2011 population less than 250

Group 2: all villages (Panchayat wards for Kerala) with Census 2011 population more than or equal to 250 but less than 500

Group 3: remaining villages

The sample size for a rural stratum was allocated among 3 groups in proportion to population. Let r_1 , r_2 and r_3 be the allocations to Group 1, Group 2 and Group 3 respectively. The villages within each group were first arranged in ascending order of number of Population. For all the three groups within each strata, $r_1/4$ '>1, $r_2/4$ '>1 and $r_3/4$ '>1, implies formation of 2 or more sub-strata in each group. Sub-strata was demarcated in Group 1, Group 2 and Group 3 respectively in such a way that each sub-stratum comprises a group of villages (all SUs of a village considered together) of the arranged frame and have more or less equal number of population.

If number of FSUs in a particular Group is very small, no sub-stratum was formed in that Group.

3.5.2 **Urban sector**: Let 'u' be the sample size allocated for an urban stratum. For all strata, if 'u/4' >1, implying formation of 2 or more sub-strata, all the UFS blocks within the stratum were first arranged in ascending order of total number of households in the UFS blocks as per urban frame. Then sub-strata were demarcated in such a way that each sub-stratum comprised a group of UFS blocks (all SUs within the block taken together) having more or less equal number of households.

3.6 **Total sample size (FSUs):** 14516 FSUs have been allocated for the central sample at all-India level. For the state sample, there are 15668 FSUs allocated for all-India. 3.7 Allocation of total sample to States and UTs: The total number of sample FSUs has been allocated to the States and UTs in proportion to population as per Census 2011 subject to a minimum sample allocation to each State/UT.

3.8 Allocation of State/ UT level sample to rural and urban sectors: State/UT level sample size has been allocated between two sectors in proportion to population as per Census 2011 with 1.5 weightage to urban sector. A minimum of 4 FSUs, each for rural and urban sector separately, have been allocated to each State/UT. For more urbanised big States like Maharashtra, Tamil Nadu etc., the urban allocation was limited to rural sample size to avoid undue weightage to urban sector.

3.9 Allocation to strata: Within each sector of a State/ UT, the respective sample size has been allocated to the different strata in proportion to the population as per Census 2011. Stratum level allocation was adjusted to multiples of 4 with a minimum sample size of 4.

For special stratum formed at state level as mentioned in para 3.4(b), 4 FSUs were allocated.

3.10 Allocation to sub-strata:

3.10.1 Genrally allocation was 4 for each sub-stratum in the rural/urban sector. However, allocation was adjusted in case of constraints of sample size.

3.10.2 In certain exceptional cases, especially for some States in the North Eastern Region, bigger sub-strata were formed because of much skewed distribution of villages. In such sub-strata, the allocations were more than 4.

3.11 Selection of FSUs within a stratum/sub-stratum:

3.11.1 From all the sub-strata in both rural and urban sector within each stratum, required number of FSUs was selected by Simple Random Sampling Without Replacement (SRSWOR) scheme.

3.12 Formation of sub-units and listing of households

3.12.1 **Procedure of formation of SUs:** After identification of the boundaries of the village/ UFS block which contains the sample FSU, the village/UFS block is divided into the number of SUs (say, D) as given in the sample list by more or less equalising the present population of the village/UFS block in which the sample FSUs are located. For villages/blocks where the number of SUs to be formed is 1 as per the sample list, no SU formation is required.

3.12.2 **Listing of households:** All the households of the sample FSU are listed. Temporarily locked households are also listed after ascertaining the temporariness of locking of households through local enquiry.

3.13 Formation of Sub-divisions in the selected SU

3.13.1 It has been observed in the previous rounds that there happen to be some extreme cases where the population/household of the selected SU is very high and listing becomes very difficult. To take care of such extreme situations, such SU are sub-divided into a number of smaller units (Sub-divisions) and one of them is randomly selected. Listing and selection of households are done in the selected Sub-division unit only. The procedure for formation of Sub-divisions is same as that of formation of SUs within village/blocks. The listing of hamlets is not required but Sub-divisions are formed in such a way that each Sub-division has more or less equal population and is a compact area.

3.13.2 The criteria for determining the number of Sub-divisions (D_1) to be formed in the selected rural/urban SUs is as follows:

| Approx. population of the SU | no. of Sub-divisions (D ₁) to be formed |
|------------------------------|---|
| less than 1800 | 1 |
| 1800 to 2399 | 2 |
| 2400 to 3599 | 3 |
| 3600 to 4799 | 4 |
| 4800 to 5999 | 5 |
| and so on | |

3.13.3 Special case:

3.13.3.1 For rural areas of (i) Himachal Pradesh, (ii) Sikkim, (iii) Andaman & Nicobar Islands, (iv) Ladakh, (v) Uttarakhand (except four districts Dehradun, Nainital, Hardwar and Udham Singh Nagar), (vi) Punch, Rajouri, Udhampur, Reasi, Doda, Kishtwar, Ramban of Jammu and (vii) Idukki district of Kerala, the criterion for determining the number of sub-divisions (D_1) in rural SUs is as follows:

| approx. population of the SU | no. of Sub-divisions to be formed |
|------------------------------|--------------------------------------|
| less than 900 | 1 |
| 900 to 1199 | 2 |
| 1200 to 1799 | 3 |

| approx. population of the SU | no. of Sub-divisions to be formed |
|------------------------------|--------------------------------------|
| 1800 to 2399 | 4 |
| 2400 to 2999 | 5 |
| and so on | |

3.14 Formation of second stage strata (SSS) and allocation of households in different SSS:

3.14.1 Five SSS are formed in both rural and urban sectors. The composition of the SSS and number of households to be surveyed from different SSS for both rural and urban sectors is as follows:

| SSS | SSS composition of SSS | | | |
|-------|---|---------------------|----|--|
| | Rural/Urban | | | |
| 1 | household size more than or equal to 7 | | 2 | |
| 2 | from the remaining, households who had constructed/purchased any new house/flat for | with UMPCE > A | 2 | |
| 3 | residential purpose after 31 st March 2014 | with UMPCE \leq A | 2 | |
| 4 | 4 from the remaining households with UMPCE > A | | | |
| 5 | | with UMPCE $\leq A$ | 8 | |
| Total | | | 20 | |

3.15 **Selection of households:** The sample households from each SSS for each of the Questionnaires are selected by SRSWOR.

4. Estimation Procedure

4.1 Notations:

- s = subscript for s-th stratum
- t = subscript for t-th sub-stratum
- i = subscript for i-th FSU [SU/ village /panchayat ward/ block]
- j = subscript for j-th second stage stratum in an FSU

k = subscript for k-th sample household within an FSU

 D_1 = total number of sub-divisions formed in the sample FSU (D_1 =1), if no Sub-division is formed in the SU)

N = total number of FSUs in any rural/urban sub-stratum

- n = number of sample FSUs surveyed including 'uninhabited' and 'zero cases' but excluding casualty for a particular sub-stratum
- H = total number of households listed in a second-stage stratum of an FSU
- h = number of households surveyed in a second-stage stratum of an FSU

x, y = observed value of characteristics *x*, *y* under estimation

 \hat{X} , \hat{Y} = estimate of population total X, Y for the characteristics x, y

Under the above symbols,

 y_{stijk} = observed value of the characteristic y for the k-th household of the j-th second stage stratum of the i-th FSU for the t-th sub-stratum of s-th stratum.

However, for ease of understanding, a few symbols have been suppressed in following paragraphs where they are obvious.

4.2 Formulae for Estimation of Aggregates for a stratum × sub-stratum:

4.2.1 Questionnaire 0.0 (Rural/Urban):

(i) For estimating the number of households in a stratum × sub-stratum possessing a characteristic:

$$\hat{Y} = \frac{N}{n} \sum_{i=1}^{n} D_1 \times y_i$$

where y_i is the total number of households possessing the characteristic y in i-th FSU respectively.

4.2.2 Questionnaire 5.1:

4.2.2.1 For j-th second-stage stratum of a stratum × sub-stratum:

$$\hat{Y}_{j} = \frac{N}{n_{j}} \sum_{i=1}^{n_{j}} \left[D_{1} * \frac{H_{ij}}{h_{ij}} \sum_{k=1}^{h_{ij}} y_{ijk} \right]$$

Where n_j is the number of sample FSUs with non-void j-th second-stage stratum.

4.2.2.2 Aggregate \hat{Y} is obtained combining all the second-stage strata:

$$\hat{Y} = \sum_{j} \hat{Y_{j}}$$

Note: Values of j for both the questionnaires will be 5:

i.e. for questionnaires 5.1, j = 1, 2, 3, 4 or 5

4.3 Overall Estimate for Aggregates for a stratum:

Overall estimate for a stratum (\hat{Y}_s) will be obtained as

$$\hat{Y}_s = \sum_t \hat{Y}_{st}$$

4.4 Overall Estimate of Aggregates at State/UT/all-India level:

The overall estimate \hat{Y} at the State/UT/ all-India level is obtained by summing the stratum estimates \hat{Y}_s over all strata belonging to the State/UT/ all-India.

4.5 Estimates of Ratios:

Let \hat{Y} and \hat{X} be the overall estimates of the aggregates Y and X for two characteristics y and x respectively at the State/UT/ all-India level.

Then the combined ratio estimate (\hat{R}) of the ratio $(R = \frac{Y}{X})$ will be obtained as $\hat{R} = \frac{\hat{Y}}{\hat{X}}$.

4.6 Estimation of Errors:

4.6.1 Formula for estimated variance (for Rural/Urban):

4.6.1.1 Here FSU is selected by SRSWOR method and USU (households) also selected SRSWOR method. If i^{th} FSU has been selected then h_i unit is selected from this particular FSU x SSS by SRSWOR method.

(a) Formula for aggregate \hat{Y} (for Rural/Urban):

$$\widehat{Y_{ij}} = H_{ij} * \overline{y_{ij}} * D_{1si}$$
 and $\overline{y_{ij}} = \frac{\sum_{1}^{h_{ij}} y_{ijk}}{h_{ij}}$

$$V\hat{a}r(\hat{Y}) = \sum_{s} V\hat{a}r(\hat{Y}_{s}) = \sum_{s} \sum_{t} \sum_{j} V\hat{a}r(\hat{Y}_{stj})$$

$$\widehat{var}(\widehat{Y_{stj}}) = N_{st}^{2} \left(\frac{1}{n_{stj}} - \frac{1}{N_{st}}\right) \left(1/(n_{stj} - 1)\right) \sum_{1}^{n_{stj}} (H_{stij} * D_{1sti} * \overline{y_{stij}} - \frac{1}{n_{stj}} \sum_{1}^{n_{stj}} H_{stij} * D_{1sti} \overline{y_{stij}})^{2} + \frac{N_{st}}{n_{stj}} \sum_{1}^{n_{stj}} H_{stij}^{2} * D_{1sti}^{2} \left(\frac{1}{h_{stij}} - \frac{1}{H_{stij} * D_{1si}}\right) s^{2}_{wij}$$
where $s^{2}_{wij} = \frac{1}{(h_{stij} - 1)} \sum_{k=1}^{h_{stij}} (y_{stijk} - \overline{y_{stij}})^{2}$

(b) Formula for ratio \hat{R} (for Rural/Urban):

Note that X² MSE(\widehat{R}) is unbiasedly estimated by V(\widehat{Y} - R \widehat{X}) V(\widehat{Y} -R \widehat{X})= v(\widehat{u}) where u_{ijk} = (y_{ijk} - R x_{ijk}), U_i = (Yi - R Xi) and U=(Y-RX)=0. $\widehat{X^2} \ \widehat{MSE} (\widehat{R}) = \widehat{V} (\widehat{U})$ at R= \widehat{R} $\widehat{Y_{stij}} = \frac{1}{N_{st}} * \sum_k y_{stijk} * n_{stj} *$ multiplier $\widehat{X_{stij}} = \frac{1}{N_{st}} * \sum_k x_{stijk} * n_{stj} *$ multiplier

$$M\hat{S}E(\hat{R}) = \frac{1}{\hat{X}^2} \sum_{s} \sum_{t} M\hat{S}E_{st}(\hat{R})$$

Finally;

$$\widehat{MSE}_{st}(\widehat{R}) = \sum_{j} N_{st}^{2} \left(\frac{1}{n_{stj}} - \frac{1}{N_{st}}\right) \frac{1}{(n_{stj} - 1)} \sum_{1}^{n_{stj}} (H_{ij} \ D_{1si} \ \overline{u_{ij}} - \frac{1}{n_{stj}} \sum_{1}^{n_{stj}} H_{ij} \ D_{1si} \ \overline{u_{ij}})^{2} + \sum_{j} \frac{N_{st}}{n_{stj}} \sum_{1}^{n_{stj}} H^{2}_{ij} * D_{1si}^{2} \left(\frac{1}{h_{ij}} - \frac{1}{H_{ij} * D_{1si}}\right) S_{uij}^{2} Where S_{uij}^{2} = \frac{1}{(h_{ij} - 1)} \sum_{k=1}^{h_{ij}} (u_{ijk} - \overline{u_{ij}})^{2} \overline{u_{ij}} = \overline{y_{ij}} - \widehat{R} \ \overline{x_{ij}}$$

Multiplier formulae are as given in Section 5.

4.7.2 Estimates of Relative Standard Error (RSE):

$$R\hat{S}E(\hat{Y}) = \frac{\sqrt{V\hat{a}r(\hat{Y})}}{\hat{Y}} \times 100$$
$$R\hat{S}E(\hat{R}) = \frac{\sqrt{M\hat{S}E(\hat{R})}}{\hat{R}} \times 100$$

5. Multipliers:

5.1 The formulae for multipliers at stratum/sub-stratum/second-stage stratum level for a Questionnaire type are given below.

| questionnaire | sector | formula for multipliers |
|---------------|-----------------|--|
| 0.0 | Rural/urban | $\frac{N_{st}}{n_{st}}$ |
| 5.1 | Rural/urban | $\frac{N}{\frac{st}{n_{stj}}} * D_1 * \frac{H}{\frac{stij}{h_{stij}}}$ |
| | j = 1, 2, 3, 4, | 5 |

Note:

- (i) For estimating any characteristic for any domain not specifically considered in sample design, indicator variable may be used.
- (ii) Multipliers have to be computed on the basis of information available in the listing Questionnaire irrespective of any misclassification observed between the listing Questionnaire and detailed enquiry Questionnaire.

6. Treatment for zero cases, casualty cases etc.:

6.1 While counting the number of FSUs surveyed (n_{st} or n_{stj}) in a stratum/sub-stratum, all the FSUs with survey codes 1 to 6 in Questionnaire 0.0 will be considered. In addition, if no household is available in the frame then also that FSU will be treated as surveyed. However, household of a particular Questionnaire type are available in the frame of the FSU but none of these could be surveyed then that FSU has to be treated as casualty and it will not be treated as surveyed in respect of that Questionnaire.

6.2 *Casualty cases*: FSUs with survey code 7 as per Questionnaire 0.0 are treated as casualties. In addition to this, an FSU, although surveyed, may have to be treated as casualty for a particular Questionnaire type and a particular *second stage stratum* as given in the following para:

6.2.1 FSUs with survey codes 1 or 4 as per Questionnaire 0.0 having number of households in the frame of j-th second stage stratum greater than 0 (i.e. H > 0) but number of households surveyed according to data file as nil (h =0), will be taken as casualties for j-th second stage stratum.

All the FSUs with survey codes 1 to 6 as per questionnaire 0.0 minus the number of casualties as identified above will be taken as the number of surveyed FSUs (n_{stj}) for that (stratum/substratum) ×(second stage stratum).

7. Treatment in cases of void second-stage strata/sub-strata /strata at FSU or household level

7.1 A stratum/sub-stratum may be void because of the casualty of all the FSUs belonging to the stratum/sub-stratum.

7.2 When a stratum/sub-stratum is void, the following procedure is recommended:

Case(I): Stratum/Sub-stratum void cases at FSU levels (i.e. all FSUs having survey code 7):

(i) If a rural/urban sub-stratum is void then it may be merged with the other sub-stratum of the same Group of the stratum. If for a particular group only one sub-stratum is there and only FSU is allocated and the FSU become casualty then this sub-stratum can be merged with next group sub-stratum with proper size adjustment. Merged(in which void sub-stratum is merging) sub-stratum size may be calculated as :

Merged stratum size + Merging stratum size * (per FSU size of merging substratum/per FSU size of merged sub-stratum).

Here merging sub-stratum means void sub-stratum and merged sub-stratum means in which void sub-stratum is merging.

(ii) If a rural/urban stratum (district) is void due to all FSUs being casualty, it may be excluded from the coverage of the survey. The state level estimates will be based on the estimates of districts for which estimates are available and remarks to that effect may be added in appropriate places.

Case (II): Stratum/Sub-stratum void case at second stage stratum level (i.e. all the FSUs were casualties for a particular second stage stratum):

An FSU may be a casualty for a particular *second stage stratum* although survey code is not 7. If all the FSUs of a stratum/sub-stratum become casualties in this manner for a particular *second stage stratum*, the stratum/sub-stratum will become void.

| Table 1: allocation of sample FSUs in NSS 78 th round | | | | | | |
|--|-----------------------------|-------|-------|-------|-------|-------|
| State/UT | number of sample FSUs | | | | | |
| | central sample state sample | | | | le | |
| | total | rural | urban | total | rural | urban |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Andhra Pradesh | 581 | 357 | 224 | 584 | 360 | 224 |
| Arunachal Pradesh | 240 | 164 | 76 | 244 | 168 | 76 |
| Assam | 468 | 336 | 132 | 472 | 340 | 132 |
| Bihar | 953 | 773 | 180 | 952 | 772 | 180 |
| Chhattisgarh | 280 | 160 | 120 | 284 | 164 | 120 |
| Goa | 32 | 16 | 16 | 32 | 16 | 16 |
| Gujarat | 632 | 316 | 316 | 636 | 320 | 316 |
| Haryana | 276 | 152 | 124 | 280 | 156 | 124 |
| Himachal Pradesh | 134 | 86 | 48 | 136 | 88 | 48 |
| Jharkhand | 354 | 226 | 128 | 356 | 228 | 128 |
| Karnataka | 713 | 373 | 340 | 716 | 376 | 340 |
| Kerala | 400 | 200 | 200 | 400 | 200 | 200 |
| Madhya Pradesh | 780 | 472 | 308 | 784 | 476 | 308 |
| Maharashtra | 1288 | 644 | 644 | 1616 | 648 | 968 |
| Manipur | 324 | 176 | 148 | 652 | 356 | 296 |
| Meghalaya | 165 | 113 | 52 | 168 | 116 | 52 |
| Mizoram | 192 | 88 | 104 | 196 | 92 | 104 |
| Nagaland | 156 | 104 | 52 | 260 | 104 | 156 |
| Odisha | 500 | 368 | 132 | 504 | 372 | 132 |
| Punjab | 332 | 172 | 160 | 336 | 176 | 160 |
| Rajasthan | 757 | 489 | 268 | 760 | 492 | 268 |
| Sikkim | 104 | 80 | 24 | 104 | 80 | 24 |
| Tamil Nadu | 805 | 405 | 400 | 808 | 408 | 400 |
| Telangana | 368 | 188 | 180 | 740 | 380 | 360 |
| Tripura | 248 | 168 | 80 | 248 | 168 | 80 |
| Uttar Pradesh | 1681 | 1101 | 580 | 1684 | 1104 | 580 |
| Uttarakhand | 144 | 88 | 56 | 148 | 92 | 56 |
| West Bengal | 1005 | 589 | 416 | 1008 | 592 | 416 |
| A & N Islands | 48 | 28 | 20 | 48 | 28 | 20 |
| Chandigarh | 24 | 4 | 20 | 24 | 4 | 20 |
| D & N Haveli | 24 | 12 | 12 | | | |
| Daman & Diu | 24 | 12 | 12 | 24 | 12 | 12 |
| Delhi | 200 | 12 | 188 | 200 | 12 | 188 |
| Jammu & Kashmir | 188 | 96 | 92 | 192 | 100 | 92 |
| Ladakh | 24 | 12 | 12 | 24 | 12 | 12 |
| Lakshadweep | 24 | 8 | 16 | | | |
| Puducherry | 48 | 16 | 32 | 48 | 16 | 32 |
| all - India | 14500 | 8588 | 5912 | 15524 | 8904 | 6620 |

16 more FSUs allocated to rural special stratum all-India level

| Table 2 : State wise Rural survey summary | | | | | | | |
|---|------------|-----------|-------------|------------|----------|--|--|
| | Rural | Inhabited | Uninhabited | Zero cases | no. of | | |
| State | allocation | FSUs | FSUs | FSUs | casualty | | |
| Jammu & Kashmir | 96 | 93 | 0 | 3 | 0 | | |
| Himachal Pradesh | 86 | 82 | 2 | 0 | 2 | | |
| Punjab | 172 | 172 | 0 | 0 | 0 | | |
| Chandigarh(U.T.) | 4 | 4 | 0 | 0 | 0 | | |
| Uttrakhand | 88 | 86 | 2 | 0 | 0 | | |
| Haryana | 152 | 148 | 0 | 4 | 0 | | |
| Delhi | 12 | 12 | 0 | 0 | 0 | | |
| Rajasthan | 489 | 487 | 1 | 1 | 0 | | |
| Uttar Prdesh | 1101 | 1088 | 3 | 9 | 1 | | |
| Bihar | 773 | 762 | 6 | 3 | 2 | | |
| Sikkim | 80 | 80 | 0 | 0 | 0 | | |
| Arunachal Pradesh | 164 | 163 | 0 | 0 | 1 | | |
| Nagaland | 104 | 104 | 0 | 0 | 0 | | |
| Manipur | 176 | 176 | 0 | 0 | 0 | | |
| Mizoram | 88 | 88 | 0 | 0 | 0 | | |
| Tripura | 168 | 166 | 0 | 0 | 2 | | |
| Meghalaya | 113 | 111 | 0 | 1 | 1 | | |
| Assam | 336 | 330 | 2 | 4 | 0 | | |
| West Bengal | 589 | 547 | 2 | 0 | 40 | | |
| Jharkhand | 226 | 223 | 2 | 0 | 1 | | |
| Odisha | 368 | 366 | 0 | 2 | 0 | | |
| Chattisgarh | 160 | 159 | 0 | 1 | 0 | | |
| Madhya Pradesh | 472 | 464 | 1 | 5 | 2 | | |
| Gujarat | 316 | 314 | 2 | 0 | 0 | | |
| Daman and Diu | 12 | 12 | 0 | 0 | 0 | | |
| Dadra and Nagar Haveli | 12 | 12 | 0 | 0 | 0 | | |
| Maharashtra | 644 | 634 | 2 | 4 | 4 | | |
| Andhra Pradesh | 357 | 354 | 2 | 1 | 0 | | |
| Karnataka | 373 | 369 | 1 | 2 | 1 | | |
| Goa | 16 | 15 | 0 | 0 | 1 | | |
| Lakshadweep (U.T.) | 8 | 6 | 0 | 2 | 0 | | |
| Kerala | 200 | 198 | 0 | 2 | 0 | | |
| Tamilnadu | 405 | 403 | 1 | 1 | 0 | | |
| Puducherry (U.T.) | 16 | 16 | 0 | 0 | 0 | | |
| A and N Islands (U.T.) | 28 | 26 | 1 | 1 | 0 | | |
| Telangana | 188 | 187 | 1 | 0 | 0 | | |
| Ladakh (U.T.) | 12 | 12 | 0 | 0 | 0 | | |
| Total | 8604 | 8469 | 31 | 46 | 58 | | |

| Table 3: State wise Urban Survey Summary | | | | | | | |
|--|---------------------|-----------|-------------|------------|---------------------|--|--|
| State | Urban allocation | Inhabited | Uninhabited | Zero cases | No. of. Casualty | | |
| Jammu & Kashmir | 92 | 91 | 0 | 0 | | | |
| Himachal Pradesh | 48 | 48 | 0 | 0 | 0 | | |
| Puniab | 160 | 160 | 0 | 0 | 0 | | |
| Chandigarh(U.T.) | 20 | 19 | 0 | 1 | 0 | | |
| Uttrakhand | 56 | 54 | 0 | 0 | 2 | | |
| Harvana | 124 | 121 | 0 | 2 | 1 | | |
| Delhi | 188 | 183 | 0 | 2 | 3 | | |
| Rajasthan | 268 | 268 | 0 | 0 | 0 | | |
| Uttar Prdesh | 580 | 576 | 2 | 1 | 1 | | |
| Bihar | 180 | 178 | 0 | 0 | 2 | | |
| Sikkim | 24 | 24 | 0 | 0 | 0 | | |
| Arunachal Pradesh | 76 | 76 | 0 | 0 | 0 | | |
| Nagaland | 52 | 52 | 0 | 0 | 0 | | |
| Manipur | 148 | 148 | 0 | 0 | 0 | | |
| Mizoram | 104 | 104 | 0 | 0 | 0 | | |
| Tripura | 80 | 76 | 0 | 0 | 4 | | |
| Meghalaya | 52 | 51 | 0 | 0 | 1 | | |
| Assam | 132 | 132 | 0 | 0 | 0 | | |
| West Bengal | 416 | 385 | 2 | 0 | 29 | | |
| Jharkhand | 128 | 124 | 2 | 1 | 1 | | |
| Odisha | 132 | 132 | 0 | 0 | 0 | | |
| Chattisgarh | 120 | 119 | 0 | 0 | 1 | | |
| Madhya Pradesh | 308 | 304 | 0 | 3 | 1 | | |
| Gujarat | 316 | 314 | 1 | 0 | 1 | | |
| Daman and Diu | 12 | 11 | 0 | 1 | 0 | | |
| Dadra and Nagar Haveli | 12 | 12 | 0 | 0 | 0 | | |
| Maharashtra | 644 | 622 | 3 | 2 | 17 | | |
| Andhra Pradesh | 224 | 222 | 0 | 2 | 0 | | |
| Karnataka | 340 | 326 | 0 | 0 | 14 | | |
| Goa | 16 | 16 | 0 | 0 | 0 | | |
| Lakshadweep (U.T.) | 16 | 16 | 0 | 0 | 0 | | |
| Kerala | 200 | 199 | 0 | 0 | 1 | | |
| Tamilnadu | 400 | 395 | 0 | 4 | 1 | | |
| Puducherry (U.T.) | 32 | 32 | 0 | 0 | 0 | | |
| A and N Islands (U.T.) | 20 | 20 | 0 | 0 | 0 | | |
| Telangana | 180 | 175 | 1 | 0 | 4 | | |
| Ladakh (U.T.) | 12 | 12 | 0 | 0 | 0 | | |
| Total | 5912 | 5797 | 11 | 19 | 85 | | |

| Table 4: Distribution of Central Sample in Special Stratum | | | |
|--|-----------------------------------|--|--|
| State Name | # FSU allotted in Special Stratum | | |
| HIMACHAL PRADESH | 2 | | |
| RAJASTHAN | 1 | | |
| UTTAR PRADESH | 1 | | |
| BIHAR | 5 | | |
| MEGHALAYA | 1 | | |
| WEST BENGAL | 1 | | |
| JHARKHAND | 2 | | |
| ANDHRA PRADESH | 1 | | |
| KARNATAKA | 1 | | |
| TAMIL NADU | 1 | | |
| Total | 16 | | |

| Table 5: Distribution of State Sample in Special Stratum | | | | |
|--|--|--------------------------------------|--|--|
| State | # Uninhabited villages in special stratum as per census 2011 | # FSU allotted in Special Stratum | | |
| JAMMU & KASHMIR | 213 | 4 | | |
| HIMACHAL PRADESH | 2808 | 4 | | |
| PUNJAB | 412 | 4 | | |
| UTTARAKHAND | 1047 | 4 | | |
| HARYANA | 199 | 4 | | |
| RAJASTHAN | 1408 | 4 | | |
| UTTAR PRADESH | 8960 | 4 | | |
| BIHAR | 5801 | 4 | | |
| ARUNACHAL PRADESH | 331 | 4 | | |
| MANIPUR | 67 | 4 | | |
| MIZORAM | 126 | 4 | | |
| MEGHALAYA | 380 | 4 | | |
| ASSAM | 1024 | 4 | | |
| WEST BENGAL | 2740 | 4 | | |
| JHARKHAND | 2902 | 4 | | |
| ODISHA | 3636 | 4 | | |
| CHHATTISGARH | 559 | 4 | | |
| MADHYA PRADESH | 2969 | 4 | | |
| GUJARAT | 382 | 4 | | |
| MAHARASHTRA | 2706 | 4 | | |
| ANDHRA PRADESH | 913 | 4 | | |
| KARNATAKA | 1943 | 4 | | |
| TAMIL NADU | 930 | 4 | | |
| TELANGANA | 600 | 4 | | |
| Total | 43056 | 96 | | |
| All-India | 43254 | | | |