

Note on sample design and estimation procedure of NSS 76th round

1. Introduction

1.1 The National Sample Survey (NSS), set up by the Government of India in 1950 to collect socio-economic data employing scientific sampling methods, started its seventy sixth round from 1st July 2018. The survey will continue up to 31st December 2018.

1.2 **Subject Coverage:** NSS 76th round covers the subjects ‘Drinking water, Sanitation, Hygiene and Housing Condition’ and ‘Persons with Disabilities’.

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 **Period of survey and work programme:** The survey commenced from 1st July, 2018. The survey period is of six months’ duration.

There is no sub-round restriction in the sample design of this round. However, considering the operational convenience and workload in the field, it is felt that even though sub-round wise allocation was not done in sample design, sub-round assignment was useful for uniform spread of work in field. Hence distribution of sample units was made uniform over two quarters of the survey.

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

Schedule 0.0 :	list of households
Schedule 1.2 :	drinking water, sanitation, hygiene and housing condition
Schedule 26 :	survey of persons with disabilities

2.4 **Participation of States:** All the States and Union Territories except Andaman & Nicobar Islands, Chandigarh, 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 **Rural areas:** In usual NSS rounds, large sample villages are divided into a number of sub-divisions called hamlet-groups based on population (approximate present population) of the villages during survey. This procedure is modified in this round. During this round, a rural village was 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) Uttarakhand (except four districts Dehradun, Nainital, Hardwar and Udham Singh Nagar), (v) Punch, Rajouri, Udhampur, Reasi, Doda, Kishtwar, Ramban, Ladakh region (Leh and Kargil districts) of Jammu and Kashmir and (vi) 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
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 **Urban areas:** 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 200 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 76th 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 3.1.1 were formed. Such SUs were considered as First Stage Units (FSUs).

3.3.3 For the UFS blocks with less than 200 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 State/UT level before district level strata were formed in each State/UT. This stratum comprised all the uninhabited villages of the State/UT as per Census 2011. However, this special stratum was formed if at least 50 such villages were available in a State/UT.

3.5 Sub-stratification:

3.5.1 **Rural sector:** Two groups of villages were formed within each stratum (except special stratum):

Group 1: all villages (Panchayat wards for Kerala) with Census 2011 population less than 1000 (less than 500 for special cases mentioned in 3.1.4.1)

Group 2: remaining villages

In both the groups, number of sub-strata was formed in the following manner:

The sample size for a rural stratum was allocated among 2 groups in proportion to population. Let r_1 and r_2 be the allocations to Group 1 and Group 2 respectively. The villages within each group were first arranged in ascending order of population. Then ' $r_1/2$ ' and ' $r_2/2$ ' sub-strata were demarcated in Group 1 and Group 2 respectively in such a way that each sub-stratum comprised of a group of villages (all SUs of a village considered together) of the arranged frame and had more or less equal population. Sub-stratum numbers in Group 2 started from 11.

If number of villages in Group 1 was very small, no sub-stratum was formed.

3.5.2 Urban sector: Let 'u' be the sample size allocated for an urban stratum. For all strata, if ' $u/2$ ' >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): 9000 FSUs have been allocated for the central sample at all-India level. For the state sample, there are 9690 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 2 with a minimum sample size of 2.

For special stratum formed at state level as mentioned in para 3.4(b), 2 FSUs were allocated.

3.10 Allocation to sub-strata:

3.10.1 Rural: Allocation was 2 for each sub-stratum.

3.10.2 Urban: Allocation was 2 for each sub-stratum for urban sector.

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

3.11.1 From all the sub-strata of Group 1 within each stratum of rural sector, required number of FSUs was selected by Probability Proportional to Size With Replacement (PPSWR) scheme with Census 2011 population as size.

3.11.2 From the remaining sub-strata of a rural stratum, and all sub-strata in urban sector within each stratum, required number of FSUs was selected by Simple Random Sampling With Replacement (SRSWR) scheme.

3.11.3 FSUs were selected by Simple Random Sampling With Replacement (SRSWR) scheme in the special stratum formed in rural sector at the State/UT level.

3.11.4 No sub-sample wise selection was done in this round and FSUs were selected in the form of single sample only.

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 to be 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. It is to be ensured that SUs formed are clearly identifiable in terms of physical landmarks. 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 will be listed. Temporarily locked households will also be listed after ascertaining the temporariness of locking of households through local enquiry.

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

3.13.1 **Schedule 26 (Survey of persons with disabilities):** Different types of disabilities have been identified in “Rights of Persons with Disability” Act 2016, some of which are of very rare type.

Considering the types of disabilities and their rarity, a suitable strategy for SSS formation has been adopted. The households are grouped into seven second stage strata (SSS) in the following manner:

SSS no.	Composition of SSS	Disability Group	Allocation of households
1	households having person(s) with any of the 11 rare disabilities: (i) acid attack victims, (ii) autism spectrum disorder, (iii) cerebral palsy, (iv) dwarfism, (v) haemophilia, (vi) multiple sclerosis, (vii) muscular dystrophy, (viii) other chronic neurological conditions, (ix) Parkinson's disease, (x) sickle cell disease, (xi) thalassemia	I	8
2	from the remaining, households having at least one person with mental disability	II	10
3	from the remaining, households having at least one person with speech disability		
4	from the remaining, households having at least one person with visual disability		
5	from the remaining, households having at least one person with hearing disability		
6	from the remaining, households having at least one person with locomotor disability		
7	households without any disability	No disability	2

3.13.2 **Schedule 1.2** (Drinking water, Sanitation, Hygiene and Housing Condition): A cut-off point 'A' has been determined from household's usual monthly consumer expenditure collected in Schedule 21.1: Domestic Tourism Expenditure of NSS 72nd round (July 2014 – June 2015) data (with proper adjustments using price indices) for each NSS region for both rural and urban areas separately, in such a way that top 10% of the population have MPCE more than or equal to 'A'.

3.13.3 Composition of the SSS and number of households to be surveyed from different SSS for both rural and urban sectors is as follows:

SSS	composition of SSS	number of households allocated
SSS 1:	households having MPCE \geq A	2
SSS 2:	remaining households	10
Total		12

3.14 **Selection of households:** The sample households from each SSS for each of the schedules 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

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

Z = total size of villages in a rural sub-stratum (where villages are selected as FSUs i.e. sub-stratum numbers 01 - 10)

z = size of sample FSU used for selection in sub-stratum numbers 01 - 10

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 Schedules 1.2, 26:

4.2.1.1 Rural:

4.2.1.1.1 Case 1: Sub-strata of special Stratum (i.e. stratum = 99 and sub-stratum = 01)

(i) For j-th second-stage:

$$\hat{Y}_j = \frac{N}{n_j} \sum_{i=1}^{n_j} \left[\frac{H_{ij}}{h_{ij}} \sum_{k=1}^{h_{ij}} y_{ijk} \right]$$

4.2.1.1.2 Case 2: Sub-strata of Group 1 villages (Sub-stratum Number: 01, 02, ..., 10)

(i) For j-th second-stage stratum of a stratum × sub-stratum:

$$\hat{Y}_j = \frac{Z}{n_j} \sum_{i=1}^{n_j} \frac{1}{z_i} \left[\frac{H_{ij}}{h_{ij}} \sum_{k=1}^{h_{ij}} y_{ijk} \right]$$

4.2.1.1.3 Case 3: Sub-strata of Group 2 villages (Sub-stratum Number: 11 onwards)

(i) For j-th second-stage stratum of a stratum × sub-stratum:

$$\hat{Y}_j = \frac{N}{n_j} \sum_{i=1}^{n_j} \left[\frac{H_{ij}}{h_{ij}} \sum_{k=1}^{h_{ij}} y_{ijk} \right]$$

4.2.1.1.3 For all second-stage strata combined:

$$\hat{Y} = \sum_j \hat{Y}_j$$

4.2.1.2 Urban:

4.2.1.2.1 (i) For j-th second-stage stratum of a stratum × sub-stratum:

$$\hat{Y}_j = \frac{N}{n_j} \sum_{i=1}^{n_j} \left[\frac{H_{ij}}{h_{ij}} \sum_{k=1}^{h_{ij}} y_{ijk} \right]$$

(ii) For all second-stage strata combined:

$$\hat{Y} = \sum_j \hat{Y}_j$$

4.3 Overall Estimate for Aggregates for a stratum:

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

$$\hat{Y}_s = \sum_r \hat{Y}_{sr}$$

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 Estimates of Error: The estimated variances of the above estimates will be as follows:

4.6.1 For aggregate \hat{Y} :

$$V\hat{a}r(\hat{Y}) = \sum_s V\hat{a}r(\hat{Y}_s) = \sum_s \sum_t V\hat{a}r(\hat{Y}_{st})$$

Rural

(a) Sub-strata of special stratum (i.e stratum = 99 and sub-stratum = 01):

$$V\hat{a}r(\hat{Y}_{st}) = V\hat{a}r_{srswr}(\hat{Y}_{st}) = \left[\sum_t \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} (N_{st} \hat{Y}_{sti} - \hat{Y}_{st})^2 \right]$$

where $N_{st} \hat{Y}_{sti} = \sum_j \sum_k y_{stijk} \times n_{st} \times multiplier \dots\dots\dots(i)$

Multiplier is as given in the table in para 5 of Page A – 11

(b) Sub-strata of Group 1 villages (Sub-stratum Number: 01, 02, ,10):

$$V\hat{a}r(\hat{Y}_{st}) = V\hat{a}r_{ppswr}(\hat{Y}_{st}) = \left[\sum_t \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} \left(\frac{Z_{st} \hat{Y}_{sti}}{z_{sti}} - \hat{Y}_{st} \right)^2 \right],$$

where $\frac{Z_{st}}{z_{sti}} \hat{Y}_{sti} = \sum_j \sum_k y_{stijk} \times n_{st} \times multiplier \dots\dots\dots(ii)$

(c) **Sub-strata of Group 2 villages (Sub-stratum Number: 11 onwards):**

$$\hat{V}ar(\hat{Y}_{st}) = \hat{V}ar_{srswr}(\hat{Y}_{st}) = \left[\sum_t \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} (N_{st} \hat{Y}_{sti} - \hat{Y}_{st})^2 \right]$$

where $N_{st} \hat{Y}_{sti}$ is same as given in 4.6.1 a(i)

Urban:

$$\hat{V}ar(\hat{Y}_{st}) = \hat{V}ar_{srswor}(\hat{Y}_{st}) = \left[\sum_t \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} (N_{st} \hat{Y}_{sti} - \hat{Y}_{st})^2 \right]$$

where $N_{st} \hat{Y}_{sti}$ is same as given in 4.6.1 a(i)

4.6.2 For ratio \hat{R} :

$$M\hat{S}E(\hat{R}) = \frac{1}{\hat{X}^2} \sum_s \left[\sum_t M_{st} + \sum_{t'} M_{st'} \right]$$

where t, t' indicate respectively the sub-strata with PPSWR and SRSWR selection at first stage.

Rural:

(a) **Sub-strata of special stratum (i.e. stratum = 99 and sub-stratum = 01):**

$$M_{st'} = \frac{1}{n_{st'}(n_{st'}-1)} \sum_{i=1}^{n_{st'}} \left[N_{st'} (\hat{Y}_{st'i} - \hat{R} \hat{X}_{st'i}) - (\hat{Y}_{st'} - \hat{R} \hat{X}_{st'}) \right]^2$$

where

$$N_{st'} \hat{Y}_{st'i} = \sum_j \sum_k y_{st'ijk} \times n_{st'} \times multiplier \dots\dots\dots(iii)$$

and $N_{st'} \hat{X}_{st'i} = \sum_j \sum_k x_{st'ijk} \times n_{st'} \times multiplier \dots\dots\dots(iv)$

(b) **Sub-strata of Group 1 villages (Sub-stratum Number: 01, 02, ..., 10):**

$$M_{st} = \frac{1}{n_{st}(n_{st}-1)} \sum_{i=1}^{n_{st}} \left[\frac{Z_{st}}{z_{sti}} (\hat{Y}_{sti} - \hat{R} \hat{X}_{sti}) - (\hat{Y}_{st} - \hat{R} \hat{X}_{st}) \right]^2$$

where

$$\frac{Z_{st}}{z_{sti}} \hat{Y}_{sti} = \sum_j \sum_k y_{stijk} \times n_{st} \times multiplier \quad \text{and}$$

$$\frac{Z_{st}}{z_{sti}} \hat{X}_{sti} = \sum_j \sum_k x_{stijk} \times n_{st} \times multiplier$$

(c) Sub-strata of Group 2 villages (Sub-stratum Number: 11 onwards):

$$M_{st'} = \frac{1}{n_{st'}(n_{st'} - 1)} \sum_{i=1}^{n_{st'}} \left[N_{st'} (\hat{Y}_{st'i} - \hat{R}\hat{X}_{st'i}) - (\hat{Y}_{st'} - \hat{R}\hat{X}_{st'}) \right]^2$$

Where

$N_{st'} \hat{Y}_{st'i}$ and $N_{st'} \hat{X}_{st'i}$ are same as given in 4.6.2 a(iii) and 4.6.2 a(iv) respectively.

Urban:

$$M_{st'} = \frac{1}{n_{st'}(n_{st'} - 1)} \sum_{i=1}^{n_{st'}} \left[N_{st'} (\hat{Y}_{st'i} - \hat{R}\hat{X}_{st'i}) - (\hat{Y}_{st'} - \hat{R}\hat{X}_{st'}) \right]^2$$

Where

$N_{st'} \hat{Y}_{st'i}$ and $N_{st'} \hat{X}_{st'i}$ are same as given in 4.6.2 a(iii) and 4.6.2 a(iv) respectively.

4.6.3 Estimates of Relative Standard Error (RSE):

$$R\hat{S}E(\hat{Y}) = \frac{\sqrt{\text{Var}(\hat{Y})}}{\hat{Y}} \times 100$$

$$R\hat{S}E(\hat{R}) = \frac{\sqrt{\text{MSE}(\hat{R})}}{\hat{R}} \times 100$$

5. Multipliers:

The formulae for multipliers at stratum/sub-stratum/second-stage stratum level for a schedule type are given below:

sch type	sector	multipliers
1.2, 26	rural (sub-strata of special stratum i.e. stratum = 99)	$\frac{N_{st}}{n_{stj}} \times \frac{H_{stij}}{h_{stij}}$
	rural (sub-stratum number: 01, 02,....., 10)	$\frac{Z_{st}}{n_{stj}} \times \frac{1}{z_{sti}} \times \frac{H_{stij}}{h_{stij}}$
	rural (sub-stratum number: 11 onwards)	$\frac{N_{st}}{n_{stj}} \times \frac{H_{stij}}{h_{stij}}$
	urban	$\frac{N_{st}}{n_{stj}} \times \frac{H_{stij}}{h_{stij}}$
	j = 1, 2 for Schedule 1.2 and j = 1, 2, 3, 4, 5, 6, 7 for Schedule 26	

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 schedule irrespective of any misclassification observed between the listing schedule and detailed enquiry schedule.

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 schedule 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 schedule 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 schedule.

6.2 *Casualty cases*: FSUs with survey code 7 as per schedule 0.0 are treated as casualties. In addition to this, an FSU, although surveyed, may have to be treated as casualty for a particular schedule 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 schedule 0.0 having number of households in the frame of j-th second stage stratum greater than 0 but number of households surveyed according to data file as nil, will be taken as casualties for j-th second stage stratum.

All the FSUs with survey codes 1 to 6 as per schedule 0.0 minus the number of casualties as identified above will be taken as the number of surveyed FSUs (n_{stj}) for that (stratum/sub-stratum) \times (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.
- (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 was 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. In such cases, sub-stratum may be merged for all the second stage stratum.

Table 1: allocation of sample FSUs in NSS 76th round

State/UT	number of sample FSUs					
	central sample			state sample		
	total	rural	urban	total	rural	urban
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ANDHRA PRADESH	328	200	128	328	200	128
ARUNACHAL PRADESH	98	66	32	98	66	32
ASSAM	300	228	72	300	228	72
BIHAR	586	466	120	586	466	120
CHHATTISGARH	180	114	66	180	114	66
GOA	20	10	10	20	10	10
GUJARAT	406	204	202	406	204	202
HARYANA	184	102	82	184	102	82
HIMACHAL PRADESH	82	56	26	82	56	26
JAMMU & KASHMIR	150	88	62	150	88	62
JHARKHAND	216	134	82	216	134	82
KARNATAKA	410	210	200	410	210	200
KERALA	284	142	142	284	142	142
MADHYA PRADESH	496	314	182	496	314	182
MAHARASHTRA	780	390	390	976	390	586
MANIPUR	188	108	80	376	216	160
MEGHALAYA	110	74	36	110	74	36
MIZORAM	102	52	50	102	52	50
NAGALAND	76	46	30	136	46	90
ODISHA	308	236	72	308	236	72
PUNJAB	200	104	96	200	104	96
RAJASTHAN	440	284	156	440	284	156
SIKKIM	68	44	24	68	44	24
TAMIL NADU	516	258	258	516	258	258
TELANGANA	248	126	122	496	252	244
TRIPURA	188	114	74	188	114	74
UTTAR PRADESH	1042	700	342	1042	700	342
UTTARAKHAND	84	54	30	84	54	30
WEST BENGAL	652	384	268	652	384	268
A & N ISLANDS	24	14	10			
CHANDIGARH	16	4	12			
D & N HAVELI	16	8	8			
DAMAN & DIU	16	8	8	16	8	8
DELHI	140	24	116	210	36	174
LAKSHADWEEP	16	8	8			
PUDUCHERRY	30	10	20	30	10	20
ALL-INDIA	9000	5384	3616	9690	5596	4094