

**Appendix - I****Procedure of selection of first stage units, NSS 55th round**

1. **General** : A stratified sampling design has been adopted for selection of the sample first stage units (fsu's). The fsu's are villages (panchayat wards for Kerala) for rural areas and Urban Frame Survey (UFS) blocks for urban areas.

2. **Sample size (fsu's)**: A total number of 10,400 FSUs is selected for survey in the *central sample* at all-India level (rural & urban combined) in the 55th round. For *state samples*, there will be a matching sample size as per the usual matching pattern being followed over the last few rounds. Sample size for the whole round for each State/U.T. X Sector (i.e. rural/urban) will be allocated equally among the 4 sub-rounds. Sample FSU's for each sub-round will be selected afresh in the form of 2 independent sub-samples. State/U.T. level sample size in this round is finalized in such a way that relative standard errors of estimates of important study variables for various States/U.T.s are within tolerable margins of error. Respective sample size with rural and urban break-up is given in the last page of this Appendix.

3. **Sampling Frame**: List of villages (panchayat wards for Kerala) as per 1991 Census and latest lists of UFS blocks are respectively used for selection of rural and urban sample FSUs. For selection of sample villages from the State of Jammu & Kashmir, list of villages as per 1981 Census has been used as the sampling frame. It may be mentioned that all the uninhabited villages of the country as per 1991 Census, interior villages of Nagaland situated beyond 5 kms. of a bus route and inaccessible villages of Andaman & Nicobar Islands are left out of the survey coverage of the NSS 55th round.

**4. Stratification**

(a) Rural: Two strata are formed at the **state/u.t. level** viz.

Stratum 1: all FSUs with population between 1 to 100 and

Stratum 2: FSUs with population more than 15,000.

Above strata of either type are formed if at least 50 such FSUs are there in the respective frames. Otherwise, they are merged with the general strata. While forming general strata (consisting of fsu's other than those covered under strata 1 & 2), efforts have been made to treat each district as a separate stratum. If limitation of sample size does not allow forming so many strata, smaller districts within a particular NSS region are merged to form a stratum. Each district with rural population of 2 millions or more as per 1991 Census (1.8 millions or more as per 1981 Census in case of Jammu & Kashmir) is as usual split into a number of strata.

(b) Urban: Strata are formed within NSS Regions as follows:

stratum number	composition of strata by considering population of various towns as per the 1991 Census
1, 3, 5 *	'hospital area' (H.A.) / 'industrial area' (I.A.) / 'bazaar area' (B.A.) blocks taken together of each single city with a population of 10 lakhs or more (there could be a maximum of 3 such cities within an NSS Region)
2, 4, 6 *	other blocks of each single city with a population of 10 lakhs or more
7	H.A. or I.A. or B.A. blocks of all towns with population between 50,000 to less than 10 lakhs
8	other blocks of all towns with population between 50,000 to less than 10 lakhs
9	H.A. or I.A. or B.A. blocks of all towns with population less than 50,000
10	other blocks of all towns with population less than 50,000

\* stratum numbers 3, 4, 5 & 6 will remain void if there is only one city in an NSS region with a population of 10 lakhs or more

If limitation of sample size does not allow forming so many strata, all blocks of stratum 7 are merged with those of stratum 8 and all blocks of stratum 9 are merged with those of stratum 10.

**5. Allocation of FSUs Among Strata:** State/u.t. level rural sample size is allocated among the rural strata in proportion to population. State/u.t. level urban sample size is first allocated among the three classes of towns (i.e. 10 lakh +, 50000 to less than 10 lakhs and less than 50,000) in proportion to population. Then sample allocation for each of the three classes of towns within an NSS region is further allocated between two strata types consisting of (i) H.A./ I.A./ B.A. blocks and (ii) the rest in proportion to total number of FSUs in the respective frames with double weightage given to the first category of blocks. Stratum level allocations for both rural and urban areas of a sub-round are made in even numbers in order to facilitate selection of FSUs in the form of 2 independent sub-samples. Sub-sample numbers are 1 & 2 for sub-round 1; 3 & 4 for sub-round 2; 5 & 6 for sub-round 3 and 7 & 8 for sub-round 4.

**6. Selection of FSUs:** For each sub-round, sample FSUs from each stratum are selected in the form of 2 independent sub-samples by following circular systematic sampling with (a) probability proportional to population for all rural strata other than stratum 1 and (b) equal probability for rural stratum 1 as well as all urban strata. FSUs in the frame of any stratum are arranged as per the following procedure before sample selection if number of sample FSUs per sub-sample is at least 2.

sector	stratum	arrangement rule for FSUs in the frame
rural	1	arranged in the ascending order of population over the State/U.T.
	others	as per the census arrangement

sector	stratum	arrangement rule for FSUs in the frame
urban	strata of H.A./ I.A./ B.A. blocks (str. 1, 3, 5)	considered H.A. blocks of the city one after another, followed by I.A. blocks of the city, further followed by B.A. blocks of the city
	strata of other blocks (str. 2, 4, 6)	as per arrangement of blocks of the city in the UFS frame
urban	strata of H.A./ I.A./ B.A. blocks (str. 7, 9)	considered H.A. blocks of different districts X towns one after another, followed by arrangement of I.A. blocks of different districts X towns, further followed by B.A. blocks of various districts X towns within the stratum
	strata of other blocks (str. 8, 10 )	arranged the towns of the 1st district in the <i>ascending</i> order of town population; then arranged the towns of the 2nd district in the <i>descending</i> order of town population; followed by arrangement of towns of the 3rd district in the <i>ascending</i> order of town population and so on. Within a particular town, arrangement of blocks as per the UFS frame is retained. If stratum 7 or 9 is not formed, H.A./I.A./B.A. blocks of all towns taken together for a particular group of towns (i.e. broad stratum) are placed first in the other stratum type (i.e 8 or 10 as the case might be) of the broad stratum. The same is followed by arrangement of other FSUs as per the rule suggested above.

**7. Allocation for central and state samples:** Sample fsu's for central and state samples taken together are selected at one stroke (i.e. using a common random start) from each stratum keeping in view the matching pattern of state samples. For States/U.T.s having an equal matching state sample, sample fsu's with odd orders of selection are allotted to the central sample and those with even orders of selection to the state sample. If there is a double matching pattern, fsu's with 3 times the central sample allocation are selected together from each stratum. Then the fsu's with order of selection numbers 2, 5, 8, 11, .....,etc. are allotted to the central sample and those with order of selection numbers 1, 3, 4, 6, 7, 9, 10, 12, ....., etc. to the state sample.

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