

$$\hat{Y} = \frac{Z}{n} \sum_{i=1}^n \frac{1}{z_i} [y_{i1} + D_i^* \times y_{i2}]$$

where  $y_{i1}$ ,  $y_{i2}$  are the total number of households possessing the characteristic  $y$  in hg's 1 & 2 of the  $i$ -th FSU respectively.

(ii) For estimating the number of villages in a stratum  $\times$  sub-stratum possessing a characteristic:

$$\hat{Y} = \frac{Z}{n} \sum_{i=1}^n \frac{1}{z_i} y_i$$

where  $y_i$  is taken as 1 for sample villages possessing the characteristic and 0 otherwise.

### A.3.2 Urban:

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

$$\hat{Y} = \frac{N}{n} \sum_{i=1}^n [y_{i1} + D_i^* \times y_{i2}]$$

where  $y_{i1}$  and  $y_{i2}$  are the total number of households possessing the characteristic  $y$  belonging to sub-blocks 1 and 2 respectively, of the  $i$ -th FSU.

### A.4 Schedules 1.2:

#### A.4.1 Rural:

(i) For  $j$ -th second-stage stratum of a stratum  $\times$  sub-stratum:

$$\hat{Y}_j = \frac{Z}{n_j} \sum_{i=1}^{n_j} \frac{1}{z_i} \left[ \frac{H_{i1j}}{h_{i1j}} \sum_{k=1}^{h_{i1j}} y_{i1jk} + D_i^* \times \frac{H_{i2j}}{h_{i2j}} \sum_{k=1}^{h_{i2j}} y_{i2jk} \right]$$

(ii) For all second-stage strata combined:

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

#### A.4.2 Urban (only for sub-samples 1 and 2):

(i) For  $j$ -th second stage stratum of a stratum  $\times$  sub-stratum:

$$\hat{Y}_j = \frac{N}{n_j} \sum_{i=1}^{n_j} \left[ \frac{H_{i1j}}{h_{i1j}} \sum_{k=1}^{h_{i1j}} y_{i1jk} + D_i^* \times \frac{H_{i2j}}{h_{i2j}} \sum_{k=1}^{h_{i2j}} y_{i2jk} \right]$$

(ii) For all second-stage strata combined:

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

### A.5 Schedules 0.21:

#### A.5.1 Urban (for sub-samples 1, 2 and 3):

(i) For estimating the number of slums in a stratum  $\times$  sub-stratum possessing a characteristic: