

APPENDIX IV

Estimation Procedure

The estimated total value of a variable in h^{th} district for I.S.I.C. three digit category s is given by,

$$\hat{Y}_{hs} = \sum_{i=1}^j Y_{hsi} \left(\frac{N_{hsi}}{n_{hsi}} \right)$$

The estimated total value at h^{th} district is given by

$$\hat{Y}_h = \sum_{s=1}^{35} \hat{Y}_{hs}$$

The estimated total value at all island levels is given by,

$$\hat{Y} = \sum_{h=1}^{24} \hat{Y}_h$$

Where

- h = district
- s = I.S.I.C. three digit level
- i = A.G.A./M.C/U.C
- j = Total number of A.G.A./M.C/U.C in h^{th} district
- N_{hsi} = No. of establishment in h^{th} district in i^{th} A.G.A./M.C/U.C and s^{th} I.S.I.C. three digit category level.
- n_{hsi} = Sample number of establishment in h^{th} district in i^{th} A.G.A./M.C/U.C and s^{th} I.S.I.C. three digit category level.
- Y_{hsi} = The observed value for y variable in h^{th} district in i^{th} A.G.A./M.C/U.C and s^{th} I.S.I.C. three digit category level.