

Reliable Statistics for Subpopulations Some Unresolved Issues

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Two theories currently pave the way for estimation for subdivisions of a sampled finite population: (design-based) domain estimation and (model based) small area estimation. Depending on domain size, it is one or the other of these two theories that will guide our efforts to produce reliable estimates. In one theory as in the other, a weak basis – a lack of sufficient data or other factors – reduces the chances of obtaining reliable estimates.

The presentation will comment on some of the unresolved issues in estimation for subpopulations.

One aspect of importance is that the outlook on estimation for subpopulations varies between countries. They differ in regard to infrastructure, for example in regard to the availability of high quality registers that can provide auxiliary information for the estimation. As a result, the national statistical agencies in different countries adopt different strategies in the choice of methodology for subpopulations.