

ESTIMATION OF A DOMAIN MEAN UNDER NONRESPONSE USING DOUBLE SAMPLING

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The well-known two-phase (or double) sampling procedure developed to deal with nonresponse relies on subsampling survey nonrespondents and repeating efforts to collect the data they failed to provide in the initial phase of the survey. If there is complete response in the second phase then unbiased estimates of population parameters may be constructed. Otherwise, if there is incomplete response in the second phase, the introduction of subsample data and construction of estimators utilizing this data allows to reduce the nonresponse bias. In this paper the two-phase sampling procedure is applied to estimation for domains. Estimators of the domain mean are considered and their properties are studied.

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