Ratio Type Estimators for the Estimation of Population Coefficient of Variation under Two-Stage Sampling

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Abstract : In this paper we propose two ratio and ratio type exponential estimator for the estimation of population coefficient of variation using the auxiliary information under two-stage sampling. The properties of these estimators are derived up to first order of approximation. The efficiency conditions under which suggested estimator are more efficient, are obtained. Numerical and simulated studies are conducted to support the superiority of the estimators. Theoretically and numerically, we have found that our proposed estimator is always more efficient as compared to its competitor estimator.
Keywords : two-stage sampling, coefficient of variation, ratio type exponential estimator

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