

**EFFICIENT CLASSES OF RATIO-CUM-PRODUCT ESTIMATORS OF  
POPULATION MEAN IN STRATIFIED RANDOM SAMPLING**

**Gajendra K. Vishwakarma  
Manish Kumar**

*Abstract:* In this paper, classes of separate and combined ratio-product estimators are proposed for estimating the finite population mean in stratified random sampling. The expressions for biases and mean squared errors (MSEs) of the proposed classes are derived to the first order of approximation. It is also verified that the proposed classes of estimators, under their optimum conditions, are equivalent to the separate regression estimator. The proposed classes of estimators are compared with the other existing estimators by using the MSE criterion, and the conditions under which the proposed classes perform better are obtained. Theoretical results are validated with the help of an empirical study.

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