Three-Stage Multivariate Stratified Sample Surveys with Probabilistic Cost Constraint and Random Variance

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Abstract : In this paper a three stage multivariate programming problem with random survey cost and variances as random variables has been formulated as a non-linear stochastic programming problem. The problem has been converted into an equivalent deterministic form using chance constraint programming and modified E-modeling. An empirical study of the problem has been done at the end of the paper using R-simulation.

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