International Academy of Science,
Engineering and Technology
Connecting Researchers; Nurturing Innovations
IASET

CHAIN RATIO TYPE ESTIMATOR FOR POPULATION MEAN USING KNOWN COEFFICIENT OF VARIATION OF THE STUDY CHARACTER IN THE PRESENCE OF NON- RESPONSE

B.B. KHARE & HABIB UR REHMAN

Department of Statistics, Banaras Hindu University, Varanasi

ABSTRACT

Using the known coefficient of variation of the study character, chain ratio type estimator for population mean in the presence of non-response have been proposed and their properties have been studied. The conditions under which the proposed estimator is more efficient than the relevant estimators have been obtained. The empirical studies have been given in the support of the problems in the case of positive and negative correlation between the study and the auxiliary characters which show the increase in the efficiency of the proposed estimator using known coefficient of variation of the study character with respect to the relevant estimators.

KEYWORDS: Ratio Estimator, Population Mean, Study Variable, Coefficient of Variation, Non- Response