International J. of Math. Sci. & Engg. Appls. (IJMSEA)
ISSN 0973-9424, Vol. 5 No. I (January, 2011), pp. 137-143

COMPARISON OF VARIANCES OF STRATIFIED RANDOM SAMPLING AND NON LINEAR RESOURCE ALLOCATION

MAYURA MATHANKAR AND H. S. LUNGE

Abstract

Allocating limited resources to various competing activities is known as resource allocation (RA) problem. A simple resource allocation problem is considered as to allocate single resource among various competing activities. A resource is defined by the physical variables such as men, money (cost), equipment, material etc. available to the management to achieve objective of the task. The objective of resource allocation methods is to prevent the day to day fluctuations in the level of required resources and obtain a uniform resource allocation during the project or task duration. In this paper an attempt has been made to study the application of non linear resource allocation problem in stratified sampling. A variance, suggested by Cochran is considered as objective function and obtained by non linear resource allocation problem, which is in turn converted into approximate linear programming problem to obtain the sample size and variance.

Key Words: Resource allocation, Activities, Performance function.

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