

## **SAMPLES ALLOCATION FOR EVALUATION OF DEVELOPMENTAL PROGRAM: A CASE OF COMBINED ADDITIVE AND MULTIPLICATIVE IMPACT ON UNITS OF DIFFERENT PHASES**

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- **ABSTRACT:** *Evaluation of any program, implemented in various phases for determining existing level requires systematic study of the units selected from the target population. This helps to appreciate existing status of the initiatives and possible intervention for further improvements, if needed. Therefore, inferences based on the selected units should be precise and appropriate. This can be achieved by proper allocation of sampling units from each phase of program for further analysis. This paper discusses the sample allocation problem for the population in which interventions has been made on phased manner and realized impacts are governed by additive and multiplicative effect in respective phases and follows arithmetico-geometric progression. A method of proportional allocation has been proposed by assigning weight based on the impact factor. The mean and variances are also worked out. A comparison is also made based on hypothetical case with standard techniques.*
- **KEY WORDS:** *Stratified sampling; impact evaluation; sample allocation; geometric; arithmetic progression; weight.*

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