List Of Papers

PUBLISHED PAPERS


ACCEPTED PAPERS


REVISED PAPERS


SUBMITTED PAPERS


10. A Class under Post Stratified Cluster Sampling [with D. Shukla].

11. A Generalized Class Under Post Stratified Cluster Sampling [with D. Shukla].

12. An Estimator under Post-Stratified Cluster Sampling [with D. Shukla].

13. Mean Estimation under Setup of Post-Stratified Cluster Sampling [with D. Shukla].
PRESENTED PAPERS IN SEMINARS / CONFERENCES

1. Efficient Estimation In Post-Stratification Using Prior Information [with D. Shukla]. Presented in Seminar on "Role of Science in Sustainable Development", organized at the National Science Day by Dr. Hari Singh Gour Vishwavidyalaya, Sagar, on February 28th 2000.


7. **Mean Estimation under Post-Stratified Cluster Sampling Scheme.** [with D. Shukla]. Presented at *16th M.P. Young Scientists Congress, 2001* held at Devi Ahilya University, Indore from Sept. 6-8, 2001

CHAPTER

1. INTRODUCTION 1-15

1.1.0 Introduction and Review of Literature
1.2.0 Data Collection
1.3.0 Sampling Techniques
1.4.0 Cluster Sampling
1.5.0 Aspect of Post-stratification
1.6.0 Review of Literature
   A. Based on Cluster Sampling, Stratification, Deep-stratification and Post-stratification
   B. Authors Contribution in Sample Surveys
   C. Some other Interesting Contributions in Sample Surveys
1.7.0 Problems discussed in Subsequent Chapters

2. ESTIMATION IN POST-STRATIFICATION USING PRIOR INFORMATION AND GROUPING STRATEGY 16-34

2.1.0 Introduction
2.2.0 Notations and Assumptions
   2.2.1 Population Proportions of Mean Matrix (P.P.M.)
2.3.0 Proposed Estimator
   2.3.1 Motivation and Justification
   2.3.2 Bias and Mean Square
2.4.0 Choice of $C_i$
   2.4.1 Criteria for Optimum Choice
2.5.0 Empirical Study
   2.5.1 Calculation of Variance, MSE and Bias
   2.5.2 Efficiency Comparison
2.6.0 Counter Examples
   2.6.1 Reason for Counter Examples

2.7.0 Journal Grouping Strategy
   2.7.1 Grouping Plan (1, K-1)
   2.7.2 Grouping Plan (K-1,1)
   2.7.3 Optimum Equations
   2.7.4 Comparison of (1, K-1) and (K-1,1)

2.8.0 Conclusion

3. USE OF STABILITY OF RATIO M₁/M₂ IN POST-STRATIFICATION

3.1.0 Introduction

3.2.0 Notation
   3.2.1 The Ratio M₁/M₂
   3.2.2 Database Support

3.3.0 Application of P in Mean Estimation
   3.3.1 Some Standard Results
   3.3.2 Estimation Strategy

3.4.0 Estimation of Variance

3.5.0 Robustness of Estimator

3.6.0 Generalization in r x s Setup
   3.6.1 Notations
   3.6.2 Proposed Strategy in r x s Setup
   3.6.3 Standard Results in r x s Setup
   3.6.4 Estimation Strategy

3.7.0 Estimation of Variance in r x s Setup

4. MEAN ESTIMATION USING THE DEEP-POST-STRATIFICATION UNDER TWO WAY r x r SETUP

4.1.0 Introduction
   4.1.1 Notations
   4.1.2 An Example
4.2.0 Some Results
  4.2.1 Justification
  4.2.2 Some Symbols
4.3.0 Proposed Estimation Strategy
  4.3.1 Motivation
  4.3.2 Special Estimators
4.4.0 MSE of Special Estimators
4.5.0 Optimum Estimators
4.6.0 Efficiency Comparison
4.7.0 Numerical Illustration
4.8.0 Proposed Estimation Strategy under $r \times s$ Setup
  4.8.1 MSE of Special Estimators
  4.8.2 Optimum Estimator
4.9.0 Numerical Illustration for $r \times s$ Setup
4.10.0 Conclusions
4.11.0 Data Presentation

5. ESTIMATION UNDER POST-STRATIFIED CLUSTER SAMPLING SCHEME

5.1.0 Introduction
5.2.0 Notation
  5.2.1 An Example
5.3.0 Proposed Estimation Strategy
5.4.0 A Class of Proposed Estimators
  5.4.1 A Technique
  5.4.2 Application of Technique
5.5.0 Optimum Estimator $\hat{Y}_0^{(u)}$
5.6.0 Choice of $\theta$
5.7.0 Comparisons
5.8.0 Numerical Illustration
5.9.0 Efficiency Comparison
6. **A MODIFIED CLASS OF ESTIMATORS FOR MEAN ESTIMATION IN POST-STRATIFIED CLUSTER DESIGN**

6.1.0 *Introduction*

6.2.0 *Notations*

6.3.0 *Usual Estimators*

6.3.1 Proposed Estimators

6.4.0 *Derivation of Expressions*

6.5.0 *A Generalised Class of Estimators*

6.5.1 A Technique for Obtaining $C^{**}(\alpha)$

6.5.2 Application of Technique

6.5.3 Optimum Estimator in $\bar{Y}_\theta^{(u)}$

6.6.0 *Some Special Optimum Estimators*

6.7.0 *Numerical Illustrations*

6.8.0 *Calculations of Variance and MSE*

**REFERENCES**

**APPENDIX A**

**APPENDIX B**

**APPENDIX C**

**APPENDIX D**

**APPENDIX E**

112-139

140-159

160-174

175-187

188-192

193-201

202-214