Variance estimation in second cameroonian households survey

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The lack of knowledge about variance estimation in complex survey and the lack resources to get of computing package usually lead sub-saharian statistic offices to abandon the task of variance estimation after point estimation in surveys. This article treats of variance estimation in complex survey and for complex statistics. It is our contribution to help researchers in poor countries to avoid difficulties in variance estimation. We use linearisation and replication methods to estimate variance of interest statistics in Second Cameroonian Households Survey (CHS 2). Finally, our computations carry out with R survey package show a good accuracy for survey estimators. The results are used to propose and optimal sampling design for the CHS 3 and to proceed to hypothesis tests. We show that CHS 3 can be realized with a smaller sample size without lost of accuracy.

References

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