GOVERNMENT OF INDIA
MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION

LOK SABHA
UNSTARRED QUESTION NO. 2941
TO BE ANSWERED ON 20.12.2023

GRANTS-IN-AID TO NGOS

2941. MS. LOCKET CHATTERJEE:

Will the Minister of STATISTICS AND PROGRAMME IMPLEMENTATION be pleased to state:

(a) whether the Ministry has provided grants-in-aid to NGOs and research institutions for special studies or surveys in the last three years, if so, the details thereof; and

(b) the details of the amount disbursed, the names of NGOs and research institutions, State-wise including the distribution, and specifics of the studies and its outcome?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION, MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF PLANNING AND MINISTER OF STATE IN THE MINISTRY OF CORPORATE AFFAIRS [RAO INDERJIT SINGH]

(a) & (b) Yes, Sir. The details of the amount disbursed to NGOs and research institutions in last three years, state-wise is given at Annexure -I. The details of the study conducted and their outcomes is given at Annexure -II.

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Annexure -I

ANNEXURE REFERRED TO IN REPLY TO THE LOK SABHA UNSTARRED QUESTION NO. 2941 TO BE ANSWERED ON 20/12/2023

The details of the amount disbursed to NGOs and research institutions in last three years, state wise given below in table:

Financial Year	Name of State	Name of Institution	Details of Research Study	Grant-in Aid provided (₹ in lakhs)
2020-21	1. West Bengal	Indian Statistical Institute (ISI), Kolkata	Developing an Appropriate Structure Preserving Estimation (SPREE) Method for Estimation Domain-Level Aggregates from NSSO Household Surveys	2.56
		Indian Statistical Institute (ISI), Kolkata	Developing an Appropriate Methodology for Estimating Proportion of Villages with Specific Infrastructure Facility	2.45
2021-22	1. West Bengal	Indian Statistical Institute (ISI), Kolkata	Developing an Appropriate Structure Preserving Estimation (SPREE) Method for Estimation Domain-Level Aggregates from NSSO Household Surveys	2.90
		Indian Statistical Institute (ISI), Kolkata	Developing an Appropriate Methodology for Estimating Proportion of Villages with Specific Infrastructure Facility	2.77
	2. Odisha	Development Initiative, Odisha	The Impact of Remittances from Migrant Workers on their Families and Local Economy Development in Odisha	8.33
2022-23	No Fund has been released			

Annexure -II

ANNEXURE REFERRED TO IN REPLY TO THE LOK SABHA UNSTARRED QUESTION NO. 2941 TO BE ANSWERED ON 20/12/2023

1. Funds released to Indian Statistical Institute (ISI), Kolkata, West Bengal.

Details of the Study:

Developing an Appropriate Structure Preserving Estimation (SPREE) Method for Estimation Domain-Level Aggregates from NSSO Household Surveys.

Conclusion of the Study:

Estimation of aggregates in NSS precedes the estimation of rates and ratios. Nevertheless, NSS has long shielded its estimates of aggregates of households and population of various categories from public view, at least in its presentation of survey findings, to avoid coming in conflict with the accepted Census estimates. A basic objective of the exercise undertaken by this project was to arrive at a set of NSS estimates consistent with the Census population counts. The project team was able to produce estimates consistent with Census counts of both households and population, confining itself to minimal calibration. It did this by adjusting the design-based weights for the sample observations to extents varying with the size of the sample households. This was necessary to arrive at a single set of multipliers for estimating individual-and household-level parameters. Given that the width of the gap between projections/estimates from the Population Census and from NSS surveys tends to differ depending on whether it is population or number of households that is being estimated, it is imperative that this method be embodied in any calibration method adopted for NSS data. The proposed minimal calibration method should serve as a basic building block for constructing more intricate calibration methods, or model-based estimation procedures, that would meet the requirement of consistency with Population Census counts or projections of households and population.

Besides attaining consistency with the census counts of households and population, adoption of the minimal calibration method is proposed for the following reasons:

–It is one among the simplest calibration methods that ensures consistency with the census-like counts of households and population. The raking of the survey estimates to control totals derived from Population Census figures, in fact, is a special kind of calibration based on minimizing distance of calibration weights from the design-based weights developed by Deville et. al.(1993).

–Minimal calibration leaves open the scope of its extension to include other auxiliary variables. However, only the auxiliary variables which represent characteristics of households (and not of individuals), such as social group, religion, and house structure type can be used for this purpose.

–Valid measures of sampling error of the calibrated estimates can be obtained by reweighting the sub-samples independently with the same control totals derived from external sources. The choice of control totals from external sources depends, needless to say, on their reliability, especially for the reference time point of the NSS survey.

There are, however, a few trivial and non-trivial limitations of the minimal calibration method. They are discussed below:

(a) Unlike the design-based weights, the calibrated weights cannot be determined in advance. But for adjustments necessitated by unit non-responses, the design-based weights can be worked out once the sample selection at different stages is completed. On the other hand, computation of calibrated weights has to wait till the entire survey dataset is processed and is ready for tabulation.

(b) At all-India level, the employment-related calibrated estimates are found to have marginally higher RSEs than the direct estimates. But they are expected to be freer from non-sampling biases that cause divergence of NSS estimates from Census estimates.

(c) In case of consumption related variables, however, the RSEs of calibrated estimates are in most cases marginally lower than that of the direct estimates.

(d) The multiplier adjustment factors for the households in the size class 15+ turn out to be unduly high–ranging from 2.5 to 4. This brings about undesirably high dispersion in the adjusted weights (multipliers), which in turn tends to increase the RSEs, especially when the study variable is weakly associated with the variable 'household size class'. As the share of size class 15+ in total number of households is very small (0.66% as per PC2011), the project team suggests adopting an appropriate trimming of the multiplier adjustment factors for the households of this size class. For example, the adjustment factor for the 15+ size class may be trimmed to make it equal to that for the size class "11 – 14".Alternatively, the households of 15+ size class, just as the single-member households, may be left out of calibration process altogether. Trimming of the adjustment factors for the 15+ size class is not likely to affect much the estimates of population and the number of households.

(e) In all standard processes of calibration and post-stratification involving variables of interest (study variables), the calibrated weights depend on the choice of study variables as well as the associated variables. Whether or not different sets of weights should be used for a survey dataset is an issue much debated upon. In fact, the issue reduces to "whether to calibrate or not?"

(f) As for the choice of associated variables, there are a number of options. Associated variables may be chosen on the strength of their correlation with the variables of interest to improve efficiency of the calibrated estimates. The results obtained from use of alternative sets of associated variables are bound to be different. For instance, the choice of household size as the only associated variable (for consistency with the population census like estimates of aggregates) will be in conflict with the choice of social group as the only associated variable (on the basis of its high correlation with the study variable and the availability of data or reliable estimates for the reference time point of the survey). The suggestion of the project team in this regard is to use a cross-classified data of the two associated variables as the association structure, provided the cross-classified data or reliable estimates are available. In this case, estimates of the required cross-classification can be derived from the PC2001 and PC2011 published figures.

(g) Estimating the number and size distribution of households is a crucial step for application of minimal calibration. But, there is no official projection of number of households and their size-distribution for the survey years. It is thus necessary to develop a standard generalised procedure of making the required projections for both inter-censal and other years with the available datasets.

(h) In the context of (f) and (g) above, the project team suggests exploring other datasets for deriving more control totals for a specific reference time point. One such is available from the sub-annually conducted survey under the Sample Registration Scheme (SRS) of the ORGI. This is the dataset from which the official estimates of vital statistics are generated every year. But the unit-level data of the SRS are not available in the public domain.

2. Funds released to Indian Statistical Institute (ISI), Kolkata, West Bengal.

Details of the Study:

Developing an Appropriate Methodology for Estimating Proportion of Villages with Specific Infrastructure Facility.

The following short forms are used to denote the seven estimators in the tables and figures presenting the results:

	estimator of proportion of villages using	Short form
A1	Design-based (PPS) estimators at the domain level	Ratio_est_state or PPSWR
A2	Design-based (PPS) estimators at the region level	SR-wise reweighted or rwt-SR
A3	Design-based (PPS) estimators at the stratum level	District-wise reweighted or rwt-dist
A4	SRS estimator for sub-stratum 1 and PPS for the rest	SRS in SS1 or SRS-SS1
B1	Logistic model-based estimates at district (stratum) level	District Logistic or log-dist
B2	Logistic model-based estimates at region level	SR Logistic or log-SR
B3	Logistic model-based estimates at domain (state) level	State Logistic or log-state

Note: RSE = Relative Standard Errors; and RB= Relative Bias

Conclusion of the Study:

The results of applying the estimators on the experimental population are summarized in Table 6.1. It shows for each estimator, the number of states (out of 20) with the least RSE among the 7 estimators separately for the 10 selected village facilities. The sum of each row is 20 (the number of 'large' States), when the minimum RSE is unique for the facility. In some cases, where the minimum is not unique, the sum exceeds 20. The final conclusions emerging from the study are summarized below.

Table 6.1: Number of States (out of 20) with least RSEs of the 7 estimators by 10 village facilities

Village Facility	All-India Proportion (Rd) %	Number of States by estimator						
		Ratio_est_state	SRS in SS1	District-wise reweighted	SR-wise reweighted	District Logistic	SR Logistic	State Logistic
Bus Stop	40.70	0	1	0	11	0	3	7

Navigable Waterways	6.14	0	3	0	16	0	0	1
Primary School	78.50	0	2	0	6	4	7	2
Secondary School	10.97	0	0	0	19	1	0	0
Senior Secondary School	3.00	0	0	0	20	0	0	0
Primary Health Centre	3.67	0	0	0	20	0	0	0
Regd. Med. Practitioner	8.18	0	0	0	20	0	0	0
Post Office	28.46	0	0	0	17	0	1	3
Commercial Bank	11.89	0	0	0	20	0	0	0
Power Supply	70.45	0	5	0	1	1	1	13
Sum	**--**	**0**	**11**	0	**150**	**6**	**12**	**26**

A. Evaluation based on estimation of bias and sampling error from a sample drawn from a model population

Bias

- The estimators A1 and A2 are the least biased ones among the seven. A1 has RB between minus 4% and 3% in the vast majority of cases. A2 has RB under 5% in practically all cases.
- The model-based estimators are all subject to high order of bias, rising as parameter value falls. B1, for instance, has RB rising above 15% and going higher up as the parameter falls below 0.2.
- A4 (which uses SRS estimator for sub-stratum 1) has RB exceeding 10% in about 20% of the cases, the inverse association between the parameter and the RB being weaker for A4 than for the model-based estimators.

Sampling error

- The model-based estimators B1, B2 and B3 are found to have the least RSE in a good proportion of cases, but not when the parameter value is low. Their RSE tends to stay below 15% when the parameter exceeds 0.3, but is very high for lower values of the parameter.

- The RSEs of A1 and A3 fall with rise in the parameter and are brought down below 15% only when the parameter exceeds 0.35. But the RSE of A2 tends to stay under 15% even when the parameter value is low.
- The RSE of A2 was under 5% for 64 out of 200 parameters estimated (followed by 38 for B2), under 7.5% for 134 parameters (followed by 52 for B2), and under 10% for 177 (followed by 66 for A3).
- Out of 200 parameters estimated, A2 has the least RSE among all seven estimators in case of 150 parameters, followed by B3 (26parameters) and then B2 (12 parameters).
- All things considered, A2, the estimator using ratio-method reweighting at region level, appears to be most suitable.

B. Evaluation based on time pattern followed by the estimators when applied to NSS data of different rounds

The pattern of round-to-round changes displayed by the estimators A1 (estimator used at present) and A2 (the estimator found most suitable on the basis of the criteria of estimated RSE and estimated RB) do not provide evidence of greater stability of the A2 over A1. This cannot, in fact, be expected, given the level of sampling error they are subject to. Our findings relating to RSE of A2 quite certainly illustrate that it is not feasible to reliably assess the magnitude of very small year-to-year changes in the spread of facilities across a State's villages from the village-level data collected along with the normal household surveys of the NSS. Measuring small changes in a State's progress in this respect inevitably requires a larger sample size.

C. Developing suitable model-based estimators

Among the estimators examined in the study, the model-based estimators are found to have the least RSE in a good proportion of cases. But, needless to say, the model-based estimators explored in the study are not suitable for estimating village characteristics under the sample design generally used by the NSS. But, the common pattern followed by the RBs and RSEs of all the three estimator indicate a determining role of bias in the mean square error. Most importantly, the strong association between the RSE and population parameter point at the possibility of building appropriate models for estimation of village characteristics that could possibly be better than the design-based estimators.

Sum Up

Among the estimators examined in the project, A2, the estimator using ratio-method reweighting at region level, appears to be most suitable. But, even this estimator is not suitable for providing reliable estimates for the small states/ U.T.s. Further, with the currently-used sample size, it is not feasible to assess the magnitude of very small year-to-year changes even for the 'large' states.

3. Funds released to Development Initiative, Odisha.

Details of the Study:

The Impact of Remittances from Migrant Workers on their Families and Local Economy Development in Odisha.

Conclusion of the Study:

From the above findings of the study it can be concluded that internal migration and remittances in Odisha is a household survival strategy. Major part of the remittances spent on basic subsistence need of the household in all most all the six districts of the state we have studied. In a state where there is high landlessness, dominance of small and marginal peasants, huge unemployment wide spread mass poverty, debt ridden peasants; migration and remittances for them is blessing in disguise. Remittance has lead to positive economic outcome in terms of increasing household expenditure, better economic condition, increasing in saving pattern and reducing the household indebtedness. This is a positive form of social transformation. Remittances are household strategy to counter backwardness.

The empirical result also provides positive social impact of remittance on the households. Remittance leads to better educational facilities and better access to health and medical facilities. Households receiving remittances feel better in the village social standing. Remittances are safety net for them.

Migration is an integral part of modern capitalist development. Hence migration and remittances impact to a great extent on changing the production relation. One noteworthy feature of the study is that even after migration and remittance the migrant households have not withdrawn their labour from the village labour market. However as expected the wage rate in the village labour market has not increased due to the migration and remittances. This is partly due to mechanisation of agriculture and partly due to labour circulation and use of seasonal migratory labour as replacement labour. However, remittances have raised the bargaining strength of the migrating and remittance receiving households. Remittances have set the labouring household free to sale their labour in the village labour market or to migrate. Now there is no attachment with village rich peasants or patriarchal ties or patron-client relationship. This is the dynamics of remittances in changing the rural structure.

One shortcoming of this study is that it has collected data on migrant households from the source area. So that what is happening to the migrants those who are remitting money at the destination is not finding place in the report. Hence the situation of the remitterat destination has remained untold.

To conclude, the results of this study suggest that future research on internal migration and remittances should collect data from both the source area as well as the destination of the remitter for better understanding of its impact on the remittances receiving households.

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