

Micro and Macro Data in Village India

A Note

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Despite the complementarity of in-depth participant-observer studies and research based on census and survey techniques, or perhaps because of it, it has proven difficult to develop a fruitful relationship between them. Until recently, differences in intellectual orientation, methodological dogma and philosophical outlook, as well as of institutional affiliation, has tended to keep their practitioners apart and at odds. Over the past few years, the situation has begun to change due to a convergence in theoretical perspectives between economists and anthropologist interested in empirical studies of decision-making and a convergence of their interests, for example in the rural poor. It appears, however, that successful collaboration depends on researchers sharing an interest in the same empirical problems, and probably some explicit co-ordination.

For a full specification of village level social change we need census, survey, and participant-observer 'anthropologic' observation at different points in time tied into a broader historical framework — both as regards the village and national community and region.

ONE of the frustrations for empirical researchers trying to assess rural change in the Indian society is the mass of high quality data on micro and macro levels and the frequency with which its use is impeded because it is accessible late or in incomparable form so that cross checks and time lines cannot be constructed,

In particular, a mass of village studies have been made which give some indication about changes in distribution, obstacles to increases in productivity, and other sorts of important social variables. Parallel to these censuses and sample surveys are conducted on the same subjects — but it is rarely possible to view the two in co-ordinated fashion. Ideally micro and macro data should fit and complement each other. Findings that poverty has not decreased or even increased in areas of rapid agricultural growth should be complemented by specification of how the products of growth are routed to the wealthier classes. Survey data on tenancy, wages and interest should find some confirmation in individual village studies.

Several village studies show very clearly that landless labourers in the Punjab have significantly improved their living standards, often by leaving the land. (Murray J Leaf, "The Green Revolution in a Punjabi Village, 1965-78: A Preliminary Report", Discussion Paper No 18, Southwest Center for Economic and Community Development, University of Texas at Dallas, Richardson, Texas, 1979; Robert Critchfield, "The Changing Peasant; Part III: The

Modern Farmer", American Universities Field Staff Reports, 1979/46 Asia.) All of this fits with the data gathered on wages and employment trends in the Punjab (Sheila Rhalla, "Real Wage Rates of Agricultural Labourers in Punjab, 1961-77: A Preliminary Analysis", *EPW*, Review of Agriculture, June 1979, pp A57-68; Joginder Singh and A S Kahlon, "Income Distribution in the Rural Punjab", *Economic Affairs* 23, June-July 1978, pp 273-279; Pratap C Aggarwal, "The Green Revolution and Rural Labour; A Study in Ludhiana", New Delhi, Shri Ram Centre for Industrial Relations and Human Resources, 1973.) On the other hand, the same studies report the exacerbation of class tensions in the villages (as in Aminder Pal Singh, "Farm Workers versus Rich Farmers", *EPW*, October 27, 1979, PP 1753-54 and Critchfield, *op cit*) and the increasing use of Bihari and Eastern UP migrants as field labourers which may explain the constant proportion of the poor found in consumption surveys (Montek Singh Ahluwalia, "Rural Poverty and Agricultural Performance in India", *Journal of Development Studies*, 1977, pp 298-323),

CENSUS VILLAGE SURVEYS

The last two censuses with their complementary census data and village surveys represent an attempt to generate data, which, would permit such a co-ordination — but one that has been imperfectly exploited.¹

Village studies of this sort, as M N

Srinivas has ably pointed out in a recent article, form a useful complement to the sort of survey and census data on which we usually rely to form Our impressions of the nature of change in India, or any other society, (M N Srinivas, "Village Studies, Participant Observation and Social Science Research in India", in Riplab Das Gupta, (ed). "Village Studies in the Third World", Hindustan Publishing Co, Delhi, n.d.) The census village studies do not meet the highest standards for the sort of deep involvement with the village community required for an author to write an informed socio-anthropologic survey, but they do represent an attempt in that direction. Their number and selection preclude them being a valid statistical sample of the country as a whole — and cost probably precludes the generation of such a sample — but they do give indications and confirmations of trends recorded elsewhere, and give some content to our survey and census data.

In fact it would be an illusion to view in-depth village survey data or anthropological studies as even potentially the material for statistically valid generalisations. The villages are frequently selected for their accessibility, physical or social, and thus not representative of the broader society.²

In any case, as B H Farmer states in some recent work pinpointing the constraints of various physical ecologies on rice growing technology, "It is salutary to measure all-India generalisations against specific areas or even single



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villages; in India, nothing is typical", (B H Farmer, 'The 'Green Revolution' in South Asian Ricefields: Environment and Production', *Journal of Development Studies* 1979, P 310.)

This kind of in-depth micro-studies employing the participant-observer field research methods characteristic of social anthropology can, however, play an important role in illuminating many kinds of issues. The most distinctive feature of such studies is that data are gathered by a trained researcher who speaks the local language and who spends a prolonged period of time (one to two years is common in anthropology) participating, to the extent possible in the daily, seasonal and other activities of the group under study. The actual duration of field work varies with the circumstances and purpose of the study. What is critical is that the researcher becomes sufficiently familiar with members of the community to discuss with them sensitive topics that touch upon their interests, fears and hopes; to cross check information received with members of differing interest groups; to understand the way people categorise and conceptualise the phenomenon under study (for example caste, kinship or the local farming or marketing systems); to map out social relationships and persistent patterns of interaction; and to collect case studies that illuminate the processes and relationships of particular concern (for example, cases of succession to a position of leadership, land inheritance or land dispute, applications for loans, or instances of illness).

IN-DEPTH STUDIES

An in-depth study of this kind, in contrast to survey research, yields a large amount of high-quality data about a small number of people interacting over a period of time in a variety of situations and relationships to one another. Like a magnifying glass the study shows village life in greater detail and thereby reveals far more complexity and organisation of thought and behaviour than is apparent when it is viewed from afar on a different scale. Its higher resolution; also reveals the dynamic quality of behaviour and relationships that have been viewed as static, customary and tradition bound. The farmer's agricultural practices, for example, are found to be the product of recurrent decisions made in light of intricate indigenous typologies of soils, plants and agricultural techniques. The apparent uniformity of poverty is found to mask differences of power, honour

and wealth that are of the utmost significance to members of the community and play a vital role in determining who will have access to new developmental resources and who will reap the benefits. Patron-client ties, far from being bound by fixed tradition, are found to be subject to continual testing and renegotiation.

In-depth studies can complement and strengthen other sources of information, including survey research used for planning and evaluation in many ways.

- They can clarify in detail decision-making processes and individual strategies that can only be inferred from other sources.
- They can explain linkages between phenomena in different "sectors" or domains that are not intuitively obvious and that vary between differing classes or ethnic groups.
- They can provide sensitive, continuous and rapid feedback to help management monitor projects.
- They can help to design a sample frame for survey research to pose meaningful questions, to interpret puzzling data and explain apparent anomalies, and to generate new hypotheses for testing.
- They can provide highly reliable data for small samples which can be used to judge the plausibility of survey research findings, particularly on sensitive topics such as income, land holdings, power relations within the community, sexual activity or fertility control. This point cannot be emphasised too much, for economists and other social scientists often perform sophisticated operations on data which are known, at least by their first user, to be of low quality. This is justified on the grounds that the data are better than no data, and certainly are more representative than data from a sample of a few score households. This assumption is not always warranted as was demonstrated in recent study by Gabriel Campbell in Nepal and by one of the authors (Hoheri) in Ethiopia.⁵ In both cases it was found that survey research resulted in the under-reporting of landholdings for example, by a factor of from five to tenfold, Campbell found a similar discrepancy in a number of responses to questions which had been used in the World Fertility *pro forma* in Nepal.

CROSS-CHECKING

More specifically, Campbell and his associates first paid three experienced interviewers to interview a sample of villagers in three Nepal villages in which they had done anthropological surveys and then cross-checked some of the responses with local informants and respondents themselves.

The questions were drawn from four recent surveys administered in rural Nepal covering both medical and family planning and economic data. In each case, Campbell, *et al*, tried to determine the reasons for the incorrect responses. In not a few cases, the problems were linguistic or conceptual. Particularly in those villages where the home language was not Nepali (though the accepted *lingua franca* was) a large number of words were incomprehensible to the villagers, but nowhere were all the words understood. Beyond purely linguistic problems *per se* there were more complicated conceptual problems. Grain exchanges in kind were under-reported because the villages did not include traditional "jajmai-type" payments when reporting them. In addition, a number of questions, especially in the Family Planning section were misperceived. Questions about whether villagers had "heard" about abortion or family planning techniques were perceived as asking about whether they used them and were answered in the negative, whereas knowledge of these matters turned out to be near universal.

Next there were categories with which we all must sympathise, where close-ended questions forced a simplified response that was too "simple" for the villagers. When asked whether the government presence in the village was good or bad, villagers naturally could think of different aspects of that presence,

Finally, there were matters the villagers felt were private (such as their sex practices) or about which they were apprehensive might lead to loss (such as reporting their true financial status). Thirty per cent of the households' initial responses seem to have been in error on matters connected with family planning and income receipts, but the authors also argued that there were important errors elsewhere,

Landholdings and the quality of land were under-reported. Eighteen per cent of the households misreported their holdings by more than 12 per cent in terms of the official records, but those records themselves were highly inaccurate. These under-reportings led, naturally enough, to under-reporting of

agricultural and income figures. In the one village where no cadastral survey had been taken, a survey by the irrigation department of a part of the village showed that the official record under-reported landholding by 800 per cent.

Loans from non-institutional sources and expenses over the last year, were also felt to be systematically under-reported.

In more general terms, in-depth micro-studies can provide a view of development, or the lack of it, from below... from the vantage point of its projected low-income clientele. It is a view that casts in bold relief the problems, prospects and costs of obtaining government services. It provides a perspective that shows the way low-income people perceive their problems and the strategies by which they pursue their interests — that reveals the strengths as well as the weaknesses of existing institutions and technologies.

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One example of an effort to use this sort of "anthropologic" data was sponsored by the Marga Institute in Sri Lanka: sub-professionals were trained and sent to live in villages to familiarise themselves with them — and then return to the same villages at intervals, either to update themselves on village developments or report to Marga on various changes which were occurring there, as well as reactions to proposed policy initiatives.

In addition to the census effort, one wonders if the network of voluntary organisations involved in village work whose cadres form a comparable group to these Marga workers, might not use them to generate a data base to sense what changes are occurring in the

village and how their own and the government's policy interventions were affecting village society.

For a full specification of village level social change we need census, survey, and participant-observer "anthropologic" observations at different points in time tied into a broader historical framework — both as regards the village and national community and region.

Notes

- 1 One should add that the late emergence of much census data and especially the village surveys is a considerable handicap by itself in using this data to address current issues. If the Government of India lacks the resources, one wonders whether the figures might not be released to private publishers who could bring them out on their own account.

In addition, the very mass of material is difficult to handle. One is extremely thankful to the Institute of Development Studies in Sussex for the preparation of an index of village studies which in-

cludes the 500 or so Studies which were done for the 1961 Census of India — and hopes that the index will be extended to include the 50 or so scheduled to emerge from the 1971 Census. But the index simply notes topics; what we need is something which indicates what the studies show on a range of general issues. We recently went through a large number manually to see how their reported interest on debt jibed with those reported in the RBI's rural credit data, but that was time-consuming in a way it need not be* (For the curious, the rates do seem confirmed for the "general" villages, though a notable feature of tribal villages was the overall paucity of credit of any kind. The Andhra studies proved particularly forth* coming on this point)

- 2 A Draft by Robert Chambers, "Rural Poverty Unperceived: Problems and Remedies", makes this point quite effectively.
- 3 Linda Stone, Ramesh Shrestha, Gabriel, Campbell, "The Use and Misuse of Social Science Research Methods in Nepal", Draft, August 1978, The Piece has been published Kathmandu, but we do not have the citation.

World Food Crisis

NEXT YEAR the world faces a potential global food crisis and "a truly alarming position in Africa" according to Edouard Saouma, Director General of the UN's Food and Agriculture Organisation (FAO).

Addressing the organisation's governing council in Rome, he said that in 1980 the world food situation had deteriorated for the second year in succession. Population growth of 1.8 per cent far outstripped an expected 0.2 per cent increase in food and agriculture production.

The FAO forecast that cereal stocks will again have to be drawn down, bringing them "considerably below the margin of safety needed for world food security". This bears out the gloomy conclusions of the US Department of Agriculture that world grain Stocks could fall by 20 per cent to 155 mn tonnes. This would be the lowest stocks level since before 1960 and represent a mere 16 per cent of world consumption. Prices, especially for maize, are expected to continue to rise.

In the "State of Food and Agriculture 1980", a report prepared for its council, the FAO draws particular attention to the plight of more than 150 mn people in sub-Saharan Africa. This area amounts for many of the 27 countries suffering "abnormal" food shortages; a year ago, 22 countries were in

that class, according to the FAO. The report says that, hit by drought and burdened by refugees, the people in sub-Saharan countries have seen their situation seriously deteriorate in recent months. According to the FAO Director General, the response following a meeting of donor countries in September was "still far from adequate".

He stressed the spiralling debt problems of many developing countries' The FAO is backing efforts to develop a "food facility" at the International Monetary Fund; fund staff say that the exact shape of this is now being determined. The FAO is also proposing that the international emergency food reserve operated by the World Food Programme should be brought under a legally binding convention; at present this reserve stands at a modest 03 mm tonnes of cereals.

The FAO Director General dismissed criticism that he was being alarmist as "complacent and cheap". He said: "The fact is that the level of 1981 production is absolutely critical. Only if farmers plant to the maximum, the weather is kind, the crops are good, the bottlenecks in freight and transport resolved, and the necessary financing forthcoming, will we be able to avoid a world food crisis of grave proportions in 1981-82".