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Use of Community Schedule for Rapid Appraisal of Family Welfare Programme: Is the Approach Accurate and Feasible?

THERE is increasing interest in the Third World among policy-makers, development planners and project managers in rapid data collection techniques. Many are disillusioned with techniques currently in use which often provide information after unacceptably long delays. If decisions are to be made in a timely fashion, decision-makers need reasonably accurate information that becomes available rapidly.

One of the more important techniques for rapid data collection is the use of key informants and community questionnaires. Such data are usually collected over several hours and apply to the community as a whole. Key informants (e.g. political and religious leaders, teachers, elders, medical personnel) in the community (usually a village or urban neighbourhood) are asked prescribed questions about the situation in the community such as availability of physical infrastructure (e.g. schools, electrification, medical facilities, approach roads, public transportation, etc.); labour market opportunities (e.g. for men, women and children: number of jobs available by occupation and industry, seasonally of jobs, wage rates, etc.); medical and family planning services available (e.g. health facilities and services); environmental conditions and natural disasters.

Answers to such questions provide important background information on the conditions under which villagers live, their opportunities and problems, and the extent to which governmental and non-governmental programmes are reaching them. Such village- level or neighbourhood-level background information can provide critically important information for decision-makers interested in levels and trends in living conditions and researchers interested in explaining behaviour and the effectiveness of government programmes.

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Despite the obvious usefulness of community-level data, there is very little knowledge on the accuracy of such data when they are obtained from key informants using community questionnaires. This is especially unfortunate, since almost all previous community-level surveys have wrongly assumed that household survey interviewing techniques can be transferred, without change to community surveys. In many cases, different techniques are required. It appears that the quality of information collected on community surveys is improved by group interviewing and discussion whereas the information collected in household surveys is improved when one respondent is asked questions in private. Community surveys need to take special care to guard against the possibility that key informants will indicate how the situation is for themselves and their own social group rather than for the community as a whole, including poor and disadvantage^ groups; household surveys, on the other hand, are improved when they emphasise an individual's own experience. Community surveys are able to make excellent use of Secondary data whereas this possibility is very restricted for household surveys. Community surveys are improved to a greater extent than household surveys when they are conducted by older and better trained interviewers because community surveys involve interviewing groups comprised of informants who tend to be relatively strong-willed, knowledgeable and influential. Readers are referred to an earlier paper by some of the authors which contains a detailed discussion on the collection of community data with special reference to India (Anker, Khan, Prasad and Test-Mason 1990).

There is some evidence that previous community data collection exercises have contained high levels of inaccuracy. For example, in-depth appraisal of World Fertility Survey (WFS) community-level data collected using community questionnaires in 13 countries concluded that these data contain a relatively high level of inaccuracy (Casterline 1985). This conclusion was attributed to a lack of attention and concern to the collection of community data in WFS; these data were usually collected by someone (often the field supervisor for the team collecting the household data) who had relatively little training for, or experience in collecting community data and who saw the community survey as an additional burden and secondary (less important) activity to his/her main job of supervising the household data collection; in addition, the unexpectedly weak associations based on WFS data between community-level variables and fertility/family planning at the household-level was partly attributed to the relatively poor quality of the community data.

Two small methodological studies provide some evidence on the accuracy of community-level data. One reports on results from a comparison of data from community and household questionnaire for three villages in Ecuador (Hubacher and Bilsborrow 1990) and the other reports on results for Egypt where similar community-level questionnaires were canvassed two years apart in 11 villages (Hermalin, Oshebauend Sayed 1988). Even though both of these studies are very small they nonetheless provide some interesting observations.

For example, both studies conclude that data on a village's area and population are subject to considerable measurement error as key informants are not always clear about the boundaries for village land. Especially prone to errors of this type were villages with hamlets (i.e. sub-villages) and villages with several small housing clusters/villages. This problem is not investigated in the present paper. It is important to point out in this regard, however, that the extent to which key informants are able to provide reasonably accurate data is most

probably related to the size of the community and the extent to which its households are dispersed/concentrated. Intuitively, one would expect key informants to be relatively less knowledgeable in very large villages and in villages where households are dispersed across the countryside. This consideration undoubtedly affects results from the Egyptian study (where the average village population size was very large indeed at approximately 10,000 population) and the Ecuadorian study (where households tended to be dispersed across the countryside) as compared to the present Indian study where village populations are concentrated in relatively small village centres and the village size is fairly small with a median village population of only 250 households (about 1,400 persons).

Data

The present paper analyses the accuracy of community-level data from a study in India where both community-level and household-level data were collected using community and household questionnaires. Although these data are very specific to the setting in rural areas of India, the comparisons and analysis reported below are, we feel, of general interest and value.

These data are especially valuable for a methodological analysis of data quality. First, information is available for unusually large samples of communities (267) and households (5,448); this contrasts dramatically with the three and 11 communities included in the studies on Ecuador and Egypt reported above. Second, for some variables a factual basis exists in the present study against which it is possible to assess the accuracy (i.e. validity) of the community data.

The three Indian states covered (Uttar Pradesh, Gujarat and Maharashtra) are large indeed, having populations of approximately 135,42 and 78 million persons in 1991 (Bose 1991). Multi-stage sampling was used. First, villages were stratified according to population size and the availability of government health facilities. Second, within each strata, sample villages were selected with the chance of selection proportionate to size of the village. Third, the approximately 20 households interviewed in each sample village were randomly selected. In fact, twenty randomly selected households were interviewed in 91.8 per cent of the sample villages.

Three different types of questionnaires were used in the present Indian study. There was a: (i) household questionnaire (approximately 5,400 households) which emphasised demographic issues (such as health, fertility and family planning); (ii) community questionnaire (267 villages) that collected wide ranging information on socio-economic and demographic conditions, infrastructure and services along with attached government health facility questionnaires, which were addressed to personnel from government health sub-centres and government health centres servicing sample villages which emphasised questions about the available health facilities and services; and (iii) separate demographic and health-oriented questionnaire addressed to large social groups (caste or religious group) in approximately 160 villages and 2,000 households.

Five types of key informants were identified during the pre-tests:

(1) elected leader (e.g. member of panchayat, other elected body);
(2) government official (e.g. of Talati, Village Level Worker, Munsif, Revenue Collector, Block Development Officer, Agricultural Development Officer);

(3) general opinion leader other than above (e.g. teacher, social worker, other influential person, caste/religious leader);
(4) common person;
(5) health staff personnel (Village Health Worker, subcentre and PHC staff).

The preferred respondent type(s) for each section of the questionnaire (i.e. type of information to be collected) was printed on the first page of the questionnaire. For example, health centre and health sub-centre data were to be collected from the fifth respondent type, while information on the village's setting and infrastructure were to be collected from respondent types 1 and 2. By indicating the preferred respondent type on the questionnaire itself, we hoped to increase the accuracy and comparability of the community data.

Analysis

Three different types of methodological comparisons are possible based on data from the present study.

First, the community-level data can be compared to the household-level data when similar information are available at both levels. Information for five variables is available at both the household-and community-levels:

(a) percentage of households which have electricity;
(b) percentage of households using a modern family planning method;
(c) female age at marriage;
(d) adult female labour force participation rate;
(e) ideal number of sons.

Information on domstic electrification is available for 267 villages and 5,420 households; the four other variables are available for approximately 160 villages, 350 caste/religious groups and 2,000 households (based on the separate caste and religious specific group interviews).

The questions from the community questionnaire concerned with the extensiveness of domestic electrification, family planning and female labour force activity (i.e. percentage of village households) are based on the following response categorisation that was printed on the community questionnaire. It used somewhat ambiguous word categories along with precise percentage ranges as follows:

0 None;
1 Very few (less than 5%);
2 Few (5-15%);
3 Some (16-35%);
4 Many (36-65%);
5 Most (66-85%);
6 Almost all/all (86+%).

An important assumption underlying the analysis of some of the above variables is that the household-level data (or observation data) provide a so-called 'gold standard' against which the validity of the community-level data can be judged. This assumption is made for percentage of households with domestic electrification, percentage of households using modern family planning method and female age at marriage.

For the two other variables noted above — ideal number of sons and extensiveness of adult female labour force activity — the household data cannot act as a 'gold standard' against which to test the validity of the community-level data. For an opinion type variable such as ideal number of sons the group atmosphere and groups dynamics of the community interview setting may affect responses differently as compared to the private one-to-one household interview setting. For female labour force activity, it is well known that household surveys usually produce large under-reporting, especially in the performance of subsistence, farm-related work activities. It will be interesting to observe the extent to which the community questionnaire in the present study also underestimates or overestimates female agricultural labour force activity and how it affects responses for ideal family size.

Mean values for villages and caste/religious groups (where relevant) are reported; those based on the community questionnaire are compared to those based on the household questionnaire (or observation).[4] This is done for all sample villages and for important population sub-groups such as by State, caste and religion when relevant and possible. Student t- tests are used to test the significance of differences between the community survey and household survey based means.

Second, it is possible to check the accuracy of responses across villages when all villages in a given district should have the same value as it is a district-specific value. Such a comparison is possible in the present study for the existence and value of family planning incentives from the district *panchayat* (council) to persons accepting a family planning method (i.e. sterilisation in India).

Third, it is possible to observe the degree of internal consistency between related community-level data. While the first-two aspects have been covered in the present paper, the third aspect, i.e. internal consistency between related community-level data has been examined elsewhere.

Results

(A) Comparison of reporting from community and household questionnaires when household-level data are likely to be correct and so provide a gold standard

Three variables, on which the household-level data should provide accurate estimates, were collected on the community survey. This enables us to use these household data as a so-called 'gold standard' against which to test the validity of the community data. The three variables of this type are: female age at marriage, extensiveness of family planning and extensiveness of domestic electrification. The two former variables were collected in the separate group interviews with large caste/religious groups in the village while the latter variable was collected in group interviews for the village as a whole.

Electrification

Key informants were asked on the community questionnaire about the extensiveness of domestic electrification in the village, (Their answers were recorded in seven broad response categories — as indicated above in the previous section). These answers are compared here to the proportions of households in the village with electrification based on an aggregation of the household survey data on whether or not each sample household had electricity.

Table 1 indicates the rate of electrification for the entire sample and for each state in the study based on our two data sources. Rates based on the community and household survey data are remarkably similar for the entire sample (28.6 compared to 30.1); as well as for each of the three states covered in the study.

TABLE 1: PERCENTAGE OF HOUSEHOLDS WITH DOMESTIC ELECTRICITY BASED ON DATA FROM COMMUNITY(C) AND HOUSEHOLD(HH) QUESTIONNAIRES, BY STATE

State	*Mean (standard deviation)*	
	Cdij/a	*HE data*
UttarPradesh	9.3%	12.3%
(N=145)	(18.1)	(32.8)
Gujarat	64.5%	59.8%
(N=33)	(25.0)	(49.1)
Maharastra	45.4%	45.1%
(N=83)	(29.8)	(49.8)
Total	28.6%	30.1%
(N = 267)	(31.9)	(45.9)

Note: Differences between community and household based estimates are not significant at .05 level based on independent sample /-tests.

When the community-based estimates are compared to the household-based estimates in a village by village comparison (Table 2), we again find considerable agreement. About one-half of villages have roughly the same estimate and 86.9 per cent of villages have estimates within one response category of each other. These are very high rates of agreement given the small sample of households in each sample village (only 20) on which the household survey based estimates are made. Not surprisingly, the key informant estimates and the household-based estimates are especially highly concordant when villages were not electrified or almost completely electrified; the rate of electrification must be obvious in such villages.

In short, key informants were able to provide accurate estimates of how common domestic electrification was in the village. While we had expected these estimates to be reasonably accurate, we were somewhat surprised by the very high level of concordance.

TABLE 2 : PERCENTAGE DISTRIBUTION OF VILLAGE BY VILLAGE COMPARISON OF COMMUNITY(C) AND HOUSEHOLD BASED(HH) ESTIMATES OF DOMESTIC ELECTRIFICATION RATE

Household vlaue (% of HH electrified)	*Same*	*Community value compared to HH value*			
		More		*Less*	
		1 category	*2+ category*	*1 category*	*2+ category*
0% (N = 71)	91.2	7.4	1.5	-	-
1 - 5% (N = 29)	34.5	3.4	10.3	65.6	0
6-15%(N = 49)	33.3	23.8	9.5	23.8	9.5
16-35% (N = 49)	34.7	12.2	10.2	36.7	6.9
66- 85% (N = 32)	43.8	21.9	-	18.8	9.4
85+ % (N = 6)	83.3	-	-	16.7	-
Total (N = 267)	49.1	15.0	6.7	22.8	6.4

Family Planning

Information on family planning was collected from key informants who were asked to indicate the proportion of couples in the village who plan family. Information was also collected in the household survey from married women on whether they had planned family. Since sterilisation is *the* method used in rural India (approximately 80 per cent of all ever-users in our sample were sterilised), there is little or no confusion between ever-use and current use of family planning in the present study. As for electrification above, community-level based estimates from key informants using community questionnaires are compared to estimates based on an aggregation of responses from the household survey (Table 3). Different from electrification, however, the family planning data were provided by key informants in separate group interviews with each of the large social groups (caste Hindus[7], scheduled caste Hindus, scheduled tribe Hindus and Muslims) in about two-thirds of our sample villages. For this reason, results shown in Table 3 are reported separately for caste Hindus, scheduled caste Hindus, scheduled tribe Hindus and Muslims.

The community and household survey based estimates for the percentage of couples who plan family are quite similar overall (41.8 compared to 39.1). They are also similar for caste Hindus, scheduled caste Hindus and scheduled tribe Hindus. In contrast, Muslim key informants reported unrealistically low rates of family planning (13.1 per cent compared to the 22.1 per cent actual rate calculated from the household data). One possible explanatiaon for these results for Muslims (although statistically insignificant due to a small sample size) is that Muslims in India are generally perceived by laymen to be resistant to family planning,

and this may have caused even Muslim key informants to understate the extent of their family planning. A more likely explanation is that family planning being a sensitive issue in rural India for Muslims caused Muslim key informants — in open, group discussions — to understate the extent of family planning acceptance. Such an interpretation implies that the use of public, group interviewing for completing community questionnaires may cause an under-reporting of socially sensitive behaviour (family planning for Muslims in this case).

TABLE 3 : PERCENTAGE OF HOUSEHOLDS PLANNING FAMILY BASED ON DATA FROM COMMUNITY(C) AND HOUSEHOLD(HH) QUESTIONNAIRES, BY CASTE AND RELIGIOUS GROUP

Caste/Religon	*Mean (standard deviation)*	
	Cdata	*HHdata*
Hindu, caste (N=139)	*46.1* (27.4)	41.8 (26.7)
Scheduled caste (N = 97)	34.3 (27.9)	33.2 (28.8)
Scheduled tribe (N=18)	43.9 (24.9)	47.5 (30.5)
Muslim (N = 34)	13.3 (21.7)	22.1 (27.3)
Total (N = 160)	41.8 (27.0)	39.1 (23.2)

were married years ago, the consistent (and sometimes significant) overestimate by key informants can be seen as bogus. In short, results from the present study indicate that community questionnaires can collect reasonably accurate information on the usual female age at marriage in a country such as India where there is an early female age at marriage.

TABLE 4 : FEMALE AGE AT MARRIAGE BASED ON DATA FROM COMMUNITY(C) AND HOUSEHOLD(HH) QUESTIONNAIRES, BY CASTE AND RELIGIOUS GROUP

Caste and religous group	*Mean (standard deviation)*	
	Cdata	*HHdata*
Hindu, caste (N = 139)	18.2 (1.4)	16.6 (1.3)
Scheduled caste (N = 97)	17.1 (1.8)	15.9 (1.4)
Scheduled tribe (N=18)	16.8 (1.3)	17.7 (1.7)
Muslim (N = 33)	17.1 (1.8)	16.4 (1.6)
Total (N = 160)	17.7 (1.6)	16.5 (1.4)

Note : Differences between community and household based estimates are significant at the .01 level for caste Hindus, scheduled caste Hindus and total sample. Differences are not significant at the. 10 level for scheduled tribe and Muslims based on independent sample /-tests.

(B) Comparison of reporting from community and household questionnaires when there is no basis to judge which response is correct

There are two variables that were collected on both the community and household questionnaires — but whose values from the household survey do not provide a 'gold standard' against which to judge the community survey responses. These variables are analysed in the present subsection. Ideal number of sons is an opinion question for which there is no such thing as a 'correct' answer.[9] And, female labour force activity[10]4s known to be greatly under-reported on household surveys. The objective in the present subsection is to analyse how responses for ideal number of sons and female wage labour force activity differ when they are obtained from a community questionnaire as compared to a household survey.

Ideal number of sons

According to the household survey data (provided by reproductive age female respondents), the ideal number of sons is generally two (Table 5). This is a strong mean indeed. Almost 90 per cent of respondents on the household survey gave this answer and this norm was found in all caste/religious groups (although it was strongest among caste Hindus and

weakest among Muslims) as well as all age groups (with the mean ideal number of sons being 1.91,2.02 and 2.64 for 15-24,25-34 and 35-44 year old sample women respectively). This two son norm has also been observed on many other household surveys in India.

TABLE 5: COMPARISON OF IDEAL NUMBER OF SONS AS REPORTED ON COMMUNITY AND HOUSEHOLD QUESTIONNAIRES

Caste and religon	*Community data* *Mean(S.D.)*	*Household data* *Mean (S. D.)*
Hindu, casted (N=139)	2.41 (0.70)	1.57 (0.43)
Scheduled caste (N = 97)	2.91 (0.89)	2.13 (0.54)
Scheduled tribe (N=18)	2.50 (0.62)	1.92 (0.34)
Muslim (N = 34)	3.09 (0.87)	2.48 (0.59)
Total (N = 160)	2.60 (0.75)	2.04 (0.43)

Note : All differences between community and household based estimates are significant at .01 level based on independent sample (-tests.

According to the community data, in comparison, the ideal number of sons is much higher (Table 5). The mean ideal number of sons is 2.6 according to key informants as compared to 2.0 based on the household data, and similar differences are found in each caste/religious group. All of these differences in mean values between the community and household data are significant at the .01 level.

It is interesting to speculate on why the ideal number of sons is consistently higher based on community survey data as compared to the household survey data. It is also interesting to speculate on which data are more realistic.

Given that completed family size in rural India for women who get married is over five births on average and so exceeds that implied by the two sons ideal, we feel that the community data are more realistic. Perhaps the nature of the group interviewing used for collecting the community data helped elicit more realistic and less normative responses as compared to the household survey where the socially accepted norm of two sons may have been given more often in order to please the interviewer.

Female labour force activity rate

We now turn our attention to a comparison of community and household data on female labour force activity. According to the household survey data, 23.1 per cent of sample women usually work for cash or kind. This result is very sensitive to the questions used in the household survey. Based on the first question on "usual main occupation" only 9.3 per cent of sample married women aged 15-44 were reported to be in the labour force. This

percentage increased to 16.2 per cent when responses on "other secondary occupation" were included and to 23.1 per cent when responses to the follow up question "Apart from these activities [main and secondary occupation] do you or does she work for wage or salary and earning in cash or kind?" were included.

According to the community data, however, female labour force activity rates are higher at about 39 per cent, with reported rates ranging from about 21 per cent for caste Hindus and Muslims to about 70 per cent for scheduled caste and scheduled tribe Hindus (Table 6). The extent to which these community survey based rates are higher than the household survey rates is striking when one considers that the community survey question asked only about agricultural activities and in fact its wording would appear to have emphasised wage labour. The overall community-based rate is a little above those reported by the Indian National Sample Survey (NSS) of 26, 33, 33 per cent for the 1961, 1971 and 1981 surveys respectively. Even still, the community survey based rates are well below those found when improved and very explicit questions were asked about work. For example, according to this earlier study about 10, 37, 71 per cent of adult rural women in Uttar Pradesh engaged in agriculture for others, agriculture for family, or animal husbandry respectively.

TABLE 6 : COMPARISON OF ADULT FEMALE LABOUR FORCE PARTICIPATION RATES AS REPORTED ON COMMUNITY AND HOUSEHOLD SURVEY, BY CASTE AND RELIGION

Caste and religon	*Community data Mean (S. D.)*	*Household data Mean (S. D.)*
Hindu, caste (N = 139)	21.5 (30.8)	13.0 (21.4)
Scheduled caste (N = 97)	62.4 (31.9)	19.9 (26.4)
Scheduled tribe (N=18)	71.4 (35.4)	24.1 (24.2)
Muslim (N = 34)	20.9 (30.4)	9.7 (16.0)
Total (N = 288)	38.9	23.1

Note : Differences between community and household based estimates for total sample, caste Hindu, scheduled caste and scheduled tribe only are significant at the .01 level based on independent sample /-tests.

In summary, female labour force activity rates based on the community survey data are significantly higher than those from the household survey; this is especially striking when one takes into consideration differences in the questions used in these two surveys. Interestingly, the community survey based estimates are somewhat above those from the Indian National Sample Survey but still well below rates observed in earlier work by some of the authors which indicated that accurate information on female labour force activity can only be obtained by asking informants specifically about important activities such as work on the family farm, work with livestock, work in petty business, etc.

Discussion and Conclusion

The study thus shows that, in general, key informants were found to provide reasonably accurate information on those aspects of behaviour which we were able to corroborate by comparing responses to results from the matching household survey. Thus, the domestic electrification rate, female age at marriage and family planning acceptance rate indicated by key informants were found to be very similar to estimates based on an aggregation of responses from the household survey. The only exception to this strikingly strong congruen-cy of community and household estimates was that Muslim key informants indicated an unrealistically low rate of family planning acceptance (compared to the actual rate that we knew from the household survey data). It seems that for questions on sensitive issues (family planning among Muslims in this case) the use of key informants and group interviewing employed in community surveys is not conducive to obtaining accurate information.

For the two variables we analysed where the household data are not necessarily accurate (female labour force activity due to problems related to ambiguous definition and questionnaire wording; ideal number of sons due to its non-factual/opinion nature), results indicated some interesting differences. Key informants reported that the ideal number of sons was over one-half son more as compared to married reproductive age women who were interviewed in the household survey (2.6 compared to 2.0). Although it is impossible to know which responses are correct, it is quite interesting that the very strong two son norm frequently observed in household surveys in India is not replicated in our community survey. Although speculative, we feel that the open group interviewing atmosphere used in the community survey led to a more honest reporting on ideal number of sons. For female labour force activity, key informants reported higher rates as compared to an aggregation of responses from the household survey. However, given the sensitivity of labour force estimates to questionnaire differences and definitions we are reluctant to make too much of community-and household-level differences from the present study.

For the researchers and policy makers who want to use community level data for understanding behaviour or making rapid assessment of Programme, the findings of the present study are encouraging. For the first time, based on a large data set it has been demonstrated that on various aspects of social realities, data collected from' Key informants' using community questionnaire are fairly accurate. However, the conclusion should be taken with care as still much more methodological and evaluative work needs to be done. Still it is hoped that this paper will help in improving the collection of community level data using community questionnaire in future studies and data gathering exercises.

Notes

1. Researchers are increasingly recognising that the behaviour of individuals and households is significantly affected by the macro-community environment in which people live. For a detailed discussion of how community-level factors may affect demographic behaviour (particularly fertility and family planning), see Bilsborrow and Anker, forthcoming.

3. In the study reported on in the present paper, interviewers for the community questionnaire were specially trained for conducting community surveys and collection of community information was their only responsibility. For both these reasons (as well as other reasons such as use of an improved community questionnaire, group

3. A social group in a village to be eligible to be interviewed separately had to have at least 20 households and be one of the three largest groups in the village. This minimum number of households criterion was used in order to increase the efficiency of study funds and to ensure the meaningfulness of the distinction between community-and household-level data.

4. Unweighted averages for communities and households are used. Strictly speaking, these two averages are not completely comparable, since the number of households per village varies slightly. We decided to ignore this complication, because the number of households per village varies so little having a mean of 19.97 with 91.8 per cent of villages having a sample of 20 households.

5. The questions from the community survey for age at marriage, family planning, and domestic electrification are as follows:

"Generally at what age does a girl in your [caste/religious group] get married and start cohabitation with her husband?"

"How common is the use of family planning in your caste ?

0 None;
1 Very few (less than 5%);
2 Few (5-15%);
3 Some (16-35%);
4 Many (36-65%);
5 Most (66-85%);
6 Almost all/all (86>%)".

"How many households (or what proportion of households) have domestic electricity connection [in the village] ?

0 None;
1 Very few (less than 5%);
2 Few (5-15%);
3 Some (16-35%);
4 Many (36-65%);
5 Most (66-85%);
6 Almost alVall (86+%)".

6. In order to be able to aggregate community survey responses across Hindu caste groups within a village or across villages for caste and religious groups, weighting procedures needed to be applied to these community data. For Hindu caste groups in a village, group responses were weighted by the proportion of households in the village from each of Hindu caste group; this provided a village-level estimate for caste Hindus. The following hypothetical example describes this weighting procedure for an example with three villages and three Hindu castes in each village:

Village	*% Family Planning*			*Number households*				*Percent Family Planning for all caste Hindus*
	Hindu #1	*Hindu #2*	*Hindu #3*	*Hindu #1*	*Hindu #2*	*Hindu #3*	*Total*	*(8) = [(1)*(4)]+[(2)*(5)]+[(3)*(6)]/7*
	(1)	*(2)*	*(3)*	*(4)*	(5)	*(6)*	(7)	
1	50%	25%	40%	100	80	20	200	39.0%
2	40%	10%	10%	200	100	50	350	27.1%
3	45%	30%	10%	100	50	10	160	38.1%

For aggregating data for caste Hindu, scheduled caste Hindu, scheduled tribe Hindu and Muslim responses across sample villages a similar procedure was used. The following hypothetical example describes this weighting procedure, for caste Hindus and scheduled caste Hindus assuming that information is available for three villages:

Village community	*% Family Planning from file*		*Households interviewed from household file*		*% Family Planning*	
	Caste Hindus	*Scheduled Caste*	*Caste Hindus*	*Scheduled Caste*	*Caste Hindus*	*Scheduled Caste*
1	50%	30%	15	3	(.50)(15) = 7.5	0.9
2	40%	25%	10	8	(.40)(10) = 4.0	2.0
3	45%	40%	8	5	(.45)(8) = 3.6	2.0
			33	16	15.1/33 = 45.8%	30.6% =49/16

7. Information for caste Hindus was collected separately for each of the largest Hindu caste groups in the village. For the analyses in the present paper, these caste specific data are aggregated into one caste Hindu group.

8. Female age at marriage is defined as age at gauna (cohabitation) in the household survey. This effectively puts a lower limit of 13 on age at marriage as women in India do not begin to cohabit with their husband until after menarche.

9. The questions on ideal number of sons in the community and household surveys are similar but not identical:

Community survey "How many sons are generally considered essential by members of your community?"

Household survey

"In your opinion, how many children should a couple have? How many sons and how many d aughters?"

10. The question on the community questionnaire asked how common agricultural labour is among women in the caste (or religion). Both the household and community questionnaires used the usual labour force concept since no reference period was mentioned.

"About how many households from your community (i.e. caste or religion) are there in the village where at least one woman works as an agricultural labourer to earn income in cash or kind? (IF APPROXIMATE NUMBER IS NOT POSSIBLE TO OBTAIN, USE FOLLOWING CODES:)

0 None;
1 Very few (less than 5%);
2 Few (5-15%);
3 Some (16-35%);
4 Many (36-65%);
5 Most (66-85%);
6 Almost all/all (86+%)."

The question on the household survey asked about:

(1) "usual mam occupation"; (2) "other second occupation"; and (3) "(IF OCCUPATION IS HOUSEWIFE OR WORKS ON OWN FARM)". "Apart from these activities, do you or does she work for wage or salary and earning in cash or kind?"

These community and household survey questions are similar (although only the household survey specifically mentions non- agricultural wage employment, which in fact is relatively unimportant for women in rural India) but not completely comparable since they use different wording and both are ambiguous about whether unpaid work on the family farm is included as a labour force activity — and an earlier study in India by some of the authors indicates how very sensitive responses are on female labour force activity to the wording of the household survey questions— especially for subsistence type unpaid family work. Nonetheless, it is interesting to observe how results on female labour force activity from these community and household survey questions differ.

11. The sensitivity of female labour force activity rate estimates to the question used to elicit responses is similar to findings from an earlier methodological study in India by some of the authors where reported adult female labour force activity ranged from about 16 per cent to 93 per cent depending on how the labour force questions were asked.

Rereference

Anker, R., Khan, M. E., Prasad, C. V. S. and Test-Mason, K., 1990, *Collection of Community-level Data and their Accuracy. Results from an Indian Study,* Working Paper No. 181, International Labour Office, Geneva.