Myths of Reproductive Profligacy of Poor Evidence from Mandya District

Mohan Rao

Evidence from a small study in the Mandya district of Karnataka reveals the empirical hollowness of the 'common sense' assertions regarding the reproductive profligacy of the poor, which underlie much of the country's family planning policy.

Literature is replete with images of the reproductive profligacy of the poor in India. In much popular understanding, this is frequently adduced as the cause of the poverty of the poor and indeed of the country. From travelers such as Abbe Dubois early in the 19th century, to the Census Commissioner of 1891 and indeed to even the Bhore Committee Report, this motif is constantly refurbished. For instance, as it went on to recommend a family planning program for the country, the Bhore Committee noted:

"The classes, which possess many of these undesirable characteristic are known to be generally improvident and prolific. A continued high birth rate, among these classes, if accompanied by a marked fall in the rate of growth of the more energetic, intelligent and ambitious sections of the population, which make much the largest contribution to the prosperity, of the country, may be fraught with serious consequences to national welfare [GoI 1946] .

But is this 'commonsense' assertion based on sound empirical evidence? Krishnaji has drawn attention to its empirical fallacy in a number of publications.[1]* Reviewed briefly here is the empirical evidence on family size, child survival and fertility by socio-economic categories followed by the findings from a small study carried out in the Mandya district of Karnataka in south India.

I

Although the issue of family planning has dominated concerns in health policy in India and although this is an area where perhaps most field research has been conducted, there is an unforgivable dearth of data on family size and its determinants, fertility and mortality by socio-economic categories. Early in the 1950s, a large and pioneering study was carried out by the United Nations in south India [UN 1961]. The Mysore Population Study investigating the relationship between mortality, fertility and socio-economic variables found that

in rural areas, the families of agricultural laborers and temporary tenants had the highest infant mortality rates. What was even more significant was their finding that there was a relatively low birth rate in the same groups. Indeed higher birth rates were associated with higher socio-economic status.

These are remarkable findings, going against the grain of most 'common sense' assertions. They did not, however, receive the attention they deserved in the welter of data generated by the study. The Mysore Population Study, it should be noted, does not provide data on family size and child survival in relation to the socio-economic categories identified, which itself was rather idiosyncratic.

Djurfeldt and Lindberg (1980) in their study of a village in Tamil Nadu found that the number of births per wife was inversely related to class status among the agricultural population. In other words, fertility among the landlord and rich peasant classes was higher than among the poor peasants and agricultural laborers. However, they do not examine infant and child survival by class, nor do they offer data on family size. Further, the classification of the peasantry that they employ is based on the inadequate index of land ownership.

A large-scale study conducted by Misra et al. (1982) in five districts of Allahabad division of Uttar Pradesh sought to understand the functioning of the family planning program and the reasons for the poor response it received. The study utilizes in open systems framework and a massive sample of 45 primary health centers and client population of 3,000 couples. The most significant findings concerning us are that the mean household size and landownership are positively related, with the landless having the smallest household size. However, this study does not provide data on family size, fertility and child survival in relation to the stratification they employ. Again for purpose of stratification, they rely on the criterion of landholding which has been empirically demonstrated to be misleading [Patnaik 1987].

The National Sample Survey (1960, 1961, 1962, 1965) also offers data on household size, fertility and mortality by socio-economic categories. As per the 15th round the infant mortality rate is found to rise progressively with the increase in per capita monthly household expenditure. The data collected during the course of the 16th, 17th and 19th rounds confirm this baffling finding. The estimated annual birth rate per monthly household expenditure indicates that the birth rates declined with the increase in monthly per capita household expenditure. The annual death rate per month per capita expenditure shows that the death rate in the households with a per capita expenditure of more than Rs 21, was slightly higher than in households with a per capita monthly expenditure below this. Again, these astonishing findings about the death rate in the 15th round are repeated in the 16th round. Regarding household size, the data reveal

that "the size of the household increased with increasing (land) holding size. The finding is certainly surprising given the lower birth rate and higher infant mortality rate and death rate in households with a higher per capita monthly expenditure which could be expected to belong to higher landowning strata. It is thus not surprising to note scholars remarking that "the NSS data do not inspire much confidence" [Cassen 1978]. Indeed Krishnaji concludes that the NSS data only conjure up a statistical mirage [Krishnaji 1980].

In short, then, we have a situation where there is "unfortunately little reliable information differential fertility, mortality and family size by socio-economic groups" [Cassen 1976]. What little information exists is by patently inadequate criteria such as landholding or per capita monthly expenditures, both of which, demonstrably, are conceptually and empirically inadequate [Patnaik 1987; Krishnaji 1980].

II

The data presented in this paper were collected during the course of a study in three villages of Mandya district in Karnataka [Rao1995]. The villages were selected on the basis of their being primarily agrarian, in an area of advanced agricultural techniques, with an average performing primary health center in easy access. For purposes of stratification of the agrarian population, Patnaik's Labor Exploitation Ratio was utilized [Patnaik 1987]. This is an index of the labor hired in or hired out in relation to family labor in self-employment. On the basis of the labor exploitation ratio, the following peasant classes were identified: (1) Classes primarily exploiting labor - (a) landlord and (b) rich peasant, (II) Classes primarily self-exploited - (a) middle peasant and (b) small peasant, (III) Classes primarily exploited - (a) poor peasant and (b) landless labor.

The study was carried out over a period of 22 months between 1985 and l987. A detailed household schedule was utilized to obtain data on both the demographic and socio-economic features of the household in addition to data on health and family planning variables. In addition to quantitative data efforts were made to obtain qualitative data through unstructured, in-depth interviewers. Table 1 presents the data on the distribution of the study of households and population by class.

Table 1: Distribution of Households and Population by Class

Classes	No. of Households	Population
Primarily Exploiting Labor		
Landlord	41(7)	270(8.3)

Rich peasant	229 (39.2)	1360(42)
Primarily Self-Exploited		
Middle peasant	61(10.4)	385(11.9)
Small peasant	24(4.1)	143(4.4)
Primarily Exploited		
Poor peasant	96(16.4)	491(15.2)
Landless labor	109(18.7)	473(14.6)
Non-peasant	24(4.1)	116(3.6)
Total	548(100)	3238(100)

Note: Per Cent in parentheses + Proportion of total households and population

The data reveal that of the 584 households, the largest proportion belonged to the rich peasant class followed by landless laborers and poor peasants. In this primarily agrarian population, in an area of advanced agricultural techniques and production, there has indeed occurred a polarization of classes as attested to by Epstein's (1973) work in the same area. The idealized, primarily family labor based, supposedly self-sufficient peasant household of Chayanovian middle peasants comprised merely 10 percent of the households.

While household size is usually what is enumerated in studies, we sought to study the differentials in family size. A family is defined, at a point in time, as a co-residence domestic group comprising the reproductive unit of husband and wife and their offspring either natural or adopted, who commonly shared the same kitchen. The study population comprised 670 such families. Table 2 presents the data on the distribution of families by size in relation to class.

TABLE 2:

Classes	Family Size (No of Members)			Total Households
	1-4	5-9	10-14	
Primarily Self Exploited				
Middle Peasant	40 (6)	37 (5.5)	1 (0.1)	78 (11.6)
Small Peasant	18 (2.7)	11 (1.6)		29 (4.3)
Primarily Exploited				
Poor peasant	63 (9.4)	48 (7.2)	2 (0.3)	113 (16.9)
Landless Labor	66 (9.9)	47 (7)	3 (0.4)	116 (17.3)

Non-peasant	15 (2.2)	10(1.5)	1(0.1)	26 (3.9)
Total	335 (50)	325 (48.5)	10 (1.5)	670 (100)

Note: Per Cent in Parentheses = Proportion of total families

Some 50 per cent of the families in this primarily agrarian population comprised-up 10 only four members. This challenges common-sense assertions regarding the family size of agrarian populations. The second significant finding is that its in the primarily exploiting classes, viz., the landlord and the rich peasant, that a larger family size of five to nine individuals was more prevalent. Table 3 presenting the proportionate distribution of families by size in each class and the mean family size serves to highlight the differentials. The data presented in this table reveal that in general with declining class status, the proportion of families with a smaller size increases. The primarily exploited classes, viz., the poor peasants and the landless laborers, had the largest proportion of families comprising up to four members. The difference in the proportion between these classes and the landlord and rich peasants was statistically significant. It is interesting to note that the landlord class has the largest mean family size. The mean family size declines as we go down the class hierarchy; it is lowest among the landless laborers. The size of a family, it is well known, is dependent upon the following factors; selective migration, fertility and mortality. A striking finding of the 1991 Census is that there is a dampening of rural-urban migration; indeed dependence on agricultural employment may well have increased over the previous decade [Kulkarni 1994]. This attests not so much the absence of push factors in the rural economy as perhaps the weakening of pull factors in the urban. Nevertheless the import of this finding is that we may, discount selective out-migration as a factor to explain these observed differentials in family size. A number of mechanisms have been postulated through which the comparative fertility of the poor would be lower. These include a higher age at menarche, a larger number of anovulatory menstrual cycles, longer post-partum amenorrhoea due to prolonged breast feeding, pregnancy wastage, still births and so on [Gopalan and Naidu 1972]. An index of fertility that can be utilized, albeit as a proxy for fertility rates, is the children ever-born ratio. This is given by the following formula:

Children ever-born = ratio	No.of Children ever-born to married women in an age cohort ´ 100
	No of married women in the age cohort

Table 3: Proportionate Distribution of Families by Size and Mean Family Size in Relation to Class

Class	Family Size			Mean
Landlord	37.04	65.95	-	5.02
Rich peasant	44.82	54.02	1.14	4.76
Middle peasant	51.28	47.43	1.28	4.55
Small peasant	62.06	37.93	-	4.66
Poor peasant	55.75	42.47	1.76	4.42
Landless labor	56.95	40.51	2.58	4.33
Non-peasant	57.69	38.46	3.84	4.38

Table 4 presents the data on the distribution of this ratio in the study population. Although the differences among the class groups are not statistically significant, given the nature of this study and the sample size, it is indeed quite arresting that women among the classes primarily exploited have lower level of fertility than the other peasant classes as revealed by the children ever-born ratio. Indeed in the age cohort of women 36-45 years, towards the end of the reproductive life span, the difference in the ratio between the classes primarily self-exploited and the primarily exploited assumes statistical significance. An index of the mortality of infants and children, again as a proxy for infant and child mortality rates, is the child survival ratio. This is given by the following formula:

Child Survival Ratio =	Total No of infants and children ever-born surviving among married women in an age cohort ´ 100
	Total No. of married women in the age cohort

Table 4: Distribution of Children ever-Born Ratio in Relation to Class Groups

Age Class	11-15 Years	16-25 Years	26-35 Years	36-45 Years	Total
Class I	61.53	201.85	395.78	556.52	333.55
Class II	66.66	184.00	420.00	625.00	322.23
Class III	93.75	206.66	375.00	503.92	315.13
Non-peasant	-	144.44	290.00	533.00	296.00
Total	72.54	192.99	386.02	548.66	324.86

Table 5 provides the data on the distribution of this ratio in the study population. What this reveals is that among the peasantry as a whole, the child survival ratio decreases with decreasing class position. The differences in the ratio between the

primarily exploiting classes and the primarily exploited in the age of women 26-35 years is statistically significant as indeed is that between the primarily self-exploited classes and the primarily exploited. In the age cohort of 36-45 years also the differences between the latter classes assumes statistical significance.

Table 5: Distribution of Child Survival Ratio by Cohorts of Married Women in Related to Class

Age Class	11-15 Years	16-25 Years	26-35 Years	36-45 Years	Total
Class I	61.53	184.25	344.21	443.47	284.56
Class II	66.66	170.00	360.00	504.16	275.72
Class III	93.75	178.88	291.80	374.50	250.30
Non-peasant	-	144.44	290.00	533.00	296.00
Total	72.54	192.99	386.02	548.66	324.86

In other words, the poor peasants and the landless laborers in these age cohorts had the least chances of child survival among the peasant classes.

To sum up, the data presented here, from an admittedly small study, reveal that the poor in India (which in rural India is largely synonymous with the landless agricultural laborers and poor peasants) who constitute close to 40 percent of our population, have the smallest family size. This is governed by higher loads of infant and child mortality and thus lower child survival; it is also governed by lower levels of fertility, as measured by the index of children ever-born ratio. This calls for further large-scale studies, even as it reveals the empirical hollowness of the 'common sense' assertions regarding the reproductive profligacy of the poor, which underlie indeed much of India's family planning policy. The findings presented here although emanating from a modest study, not only challenge-received wisdom but also come imbued with profound policy implications.

Note

1 See Krishnaji, N, 'Agrarian Structure and Family Formation: A Tentative Hypothesis'. Economic and Political Weekly, Vol. XV, No 13. 1980; 'Poverty and Family Size', Social Scientist, Vol. 9, No 4, 1980; `Poverty and Fertility: A Review of Theory, and Evidence', Economic and Political Weekly, Vol. XVIII, Nos. 19-21, 1983.

References

[1]Cassen, R (1976): 'Development and Population', Economic and Political Weekly, Vol. XI, Nos. 31-33.

[2]- (1978): India: Population, Economy, Society, Macmillan, Hong Kong.

[3] Djurfeldt, Goran and Staffan, Lindberg, Pills Against Poverty: A Study of the Introduction of Western Medicine in a Tamil Village Macmillan, New Delhi.

[4] Epstein, Scarlett T (I 973): South India: Yesterday, Today and Tomorrow, Macmillan, London.

[5] Gopalan, C and A M Naidu (1972): 'Nutrition and Fertility', The Lancet, November 18, 1972.

[6] Government of India (1946) : Report to the Health Survey and Development Committee, Government of India Press. New Delhi, 1946.

[7] Kulkarni, Sumati (1994): 'Dependence on Agricultural Employment', Economic and Political Weekly, Vol. XIX, Nos. 51-52.

[8] Misra, B D, A Ashraf, R Simrnons and G B Simmons (1982): Organization for Change: A Systems Analysis of Family Planning in Rural India, Radiant Publishers, New Delhi.

[9] Patnaik, Utsa (1987): Peasant Class Differentiation: A Study in Method with Reference to Haryana, Oxford University Press, Delhi.

[10] Rao, Mohan (1995): `An Investigation into the Differential Behavior of Economic Classes in Relation to the Family Planning Program in Mandya District, Karnataka'. Unpublished Ph.D. thesis, JNU, New Delhi

[11] United Nations (1961): The Mysore Population Study; New York.