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Societal Determinants of The Regional Differentials in India's Family Planning Programme Performance

I. Introduction

THE Family Welfare Planning Programme in India is one of the few Governmental interventions which has taken root in society. The basic aim in its introduction was to reduce the level of fertility. Although its performance has never reached the level projected at regular intervals, the programme has been impressive because of its uniquely early establishment, the subsequent efforts to institutionalise it, and its modest success in the rural areas. The Indian programme, when compared to those in the African continent and in a few South Asian countries, is impressive.

Society in India is by and large regulated by social and cultural norms which limit the rate at which new ideas can penetrate the traditional value systems. Nevertheless, the slow but consistent progress in the acceptance of allopathic or modern medicine has, to a degree, helped the propagation of modern contraception. The acceptance of modern health service, which in India is largely for the curative purpose of avoiding the risk of death due to illness, has spread because of its increasing reputation for saving life. On the other hand, modern contraception has no parallel in terms of mass appeal in attaining ends which are indisputably desirable. It is not surprising that while voluntary acceptance of family planning is highly correlated with (mass) education (Caldwell 1982; Shariff 1984: 237-8), health utilisation appears to depend on the level of income in the absence of free provision of health services (Davis 1951; Banerji 1974).¹

The success of the family planning programme in India, as elsewhere, depends on two main factors: (a) The supply of family planning services, especially the provision of services within easy reach of the people; and dissemination of knowledge about modern contraception, (b) The demand for family planning services, namely the desire of the people to limit the birth of too many children and their reaction to individual family planning methods. The main

¹ Although the government is committed to the provision and distribution of health care services free of charge, one finds a positive relationship between income and health utilisation for various reasons such as the cost involved in travel to service centre, buying medicine through prescriptions, loss of wages while securing medical aid and other incidental expenses.

determinants of supply of services are political will, organisational skills and the establishment of infrastructural facilities; while the demand is determined by socio-economic and cultural factors, especially the ability of society to adopt modern values, and the level of education.

At the national level, in India, almost one-third of the currently married couples had been effectively protected against the risk of future pregnancy in 1984-85, whereas this proportion was only 12 per cent a decade and a half ago. For 1984-85 such couples numbered about 45.2 million while they were only 11.8 million in 1971-72 (Government of India 1987:204). This performance level was, however, far from uniform among the various states in the Indian Union. For example, the proportion in Maharashtra and Punjab was higher than 50 per cent while it was less than 20 per cent in Uttar Pradesh, Bihar and Rajasthan. Such differentials in the levels of family planning performance between states are partly explained by supply side variables. In spite of the programme inputs having an important bearing on performance levels, societal (socio-economic and cultural) influences also contribute substantially to this differential. So far there has been little effort in India to explore the relationship between the family planning performance and the nature of the society.

This paper attempts to explore the economic and socio-cultural determinants of family planning. It draws upon both the macro-level data and various micro—village/community level—studies to establish this relationship. While the data presented help in understanding the regional pattern and relationships, the personal accounts and experiences of social anthropologists and demographers provide insights into the issues. Nevertheless, the absence of data in the required form on social and cultural variables across the Indian states should be noted at the outset.

n. (a) Inter-state Differentials in Economic, Socio-cultural and Demographic Variables

Profound economic, socio-cultural and demographic contrasts are found among the various states in India. Some basic data which reflect these characteristics, drawn from varied sources are presented in Appendix Tables 1 and 2. The per capita income, the percentage urban population and work participation rates are expected to reflect the economic levels of the states. Similarly, literacy of females aged 15 years and above, the percentage of Scheduled Castes and Scheduled Tribes population, married females in the age group 10 to 14 years, practice of purdah, son preference, sex ratio of workers and differential infant mortality adequately reflect a composite socio-cultural picture of a state. Birth, death and infant mortality rates besides the percentage of eligible couples effectively practising contraception are the key demographic variables. The data presented relate to a period between 1981 and 1985 except the figures on son preference and practice of purdah which have reference to a period in the early 1970s. Data on 14 major states are discussed in this paper. All these states put together contain 93 per cent of the country's population.

In the tables presented below, the states are arranged according to the levels of eligible couples effectively practising contraception in 1984-85.² Though there are variations in terms of family planning practice this order was not much different from the one in 1980 and even

2 Lately the service statistics supplied by the Ministry of Health and Family Welfare are suspected both of under-reporting on the one hand and over-reporting on the other. But this fact will not affect the present analysis because even the corrected prevalence of family planning methods is less likely to alter the state level ranking restored to in the subsequent analysis.

in 1970 (Table 1). In 1985 however, Maharashtra, Punjab, Haryana, Gujarat, Kerala, Tamil Nadu and Kamataka had family planning practice levels above the national average of 32.3 per cent. Of that, Maharashtra and Punjab had 51.6 and 50.4 per cent respectively of their eligible couples effectively practising family planning in contrast to only about 17 per cent each in Bihar and Uttar Pradesh. What are the factors that could be responsible for these wide differentials? It is often emphasised that at the household level, the levels of income, female literacy and infant mortality may determine contraceptive practice. It would be necessary to know whether these factors are also important at a macro or state level. Besides, one would expect associations between the family planning practice and various socio-cultural factors.

TABLE 1 : PERCENTAGE OF COUPLES EFFECTIVELY PRACTISING FAMILY PLANNING METHODS, 1970-1984 FOR SELECTED STATES

| | 1970 | 1980 | 1981 | 1982 | 1983 | 1984 |
|----------------|------|------|------|------|------|------|
| Maharashtra | 14.8 | 34.6 | 36.7 | 40.0 | 48.1 | 51.6 |
| Punjab | 15.3 | 24.9 | 27.4 | 34.5 | 42.9 | 50.4 |
| Haryana | 11.9 | 28.7 | 28.6 | 31.5 | 40.2 | 47.2 |
| Gujarat | 11.9 | 33.3 | 34.9 | 36.9 | 39.7 | 44.3 |
| Kerala | 14.7 | 30.9 | 32.0 | 33.5 | 36.3 | 40.0 |
| Tamil Nadu | 12.7 | 27.6 | 27.7 | 28.4 | 32.1 | 36.2 |
| Kamataka | 7.6 | 23.2 | 24.7 | 26.7 | 29.2 | 32.5 |
| Andhra Pradesh | 9.6 | 26.2 | 27.2 | 28.4 | 30.5 | 32.2 |
| Orissa | 12.6 | 25.4 | 26.1 | 27.5 | 29.8 | 31.0 |
| Madhya Pradesh | 8.1 | 21.3 | 21.8 | 23.6 | 27.2 | 29.4 |
| West Bengal | 9.7 | 23.5 | 24.4 | 25.7 | 28.0 | 29.0 |
| Rajasthan | 4.2 | 13.5 | 14.5 | 15.7 | 17.9 | 19.5 |
| Bihar | 4.0 | 11.9 | 12.2 | 13.7 | 15.8 | 16.8 |
| Uttar Pradesh | 5.6 | 10.8 | 11.3 | 13.1 | 15.5 | 16.7 |
| India | 9.0 | 22.7 | 23.7 | 25.9 | 29.2 | 32.3 |

SOURCE: Unless otherwise specified the source of the data presented in all the tables is Government of India, 1985.

(b) The Regional Pattern

To have a clear understanding of the regional pattern a simple indexing procedure is used in which the basic data relating to eight important variables are converted into indices. Six of the selected variables, namely proportion of married females, female literacy, practice of purdah, son preference, sex ratio of infant mortality and sex ratio of workers are expected

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TABLE 2 : SOCIETAL INDEX FOR SELECTED STATES

| Index of Marriage | Index of Female Education | | Index of the Practice of Purdah | Index of Son Preference | Index of the Sex Ratio of Infant Mortality | Index of Sex Ratio of Workers | Average Column 1 to 6 | Index of Per Capita Income | Average Column 1 to 6 and 8 | Index of Infant Mortality | Societal Index Scores (Average of Column 6, 8 & 10) |
|-------------------|---------------------------|---------------|---------------------------------|-------------------------|--|-------------------------------|-----------------------|----------------------------|-----------------------------|---------------------------|---|
| | Lowest = 100 | Highest = 100 | | | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| Maharashtra | 84 | 38 | 99 | 58 | 71 | 92 | 74 | 56 | 71 | 63 | 70 |
| Punjab | 94 | 35 | 41 | 0 | 0 | 0 | 28 | 100 | 39 | 71 | 43 |
| Haryana | 63 | 16 | 0 | 47 | 28 | 11 | 28 | 64 | 33 | 43 | 34 |
| Gujarat | 91 | 36 | 45 | 47 | 55 | 38 | 52 | 50 | 52 | 39 | 50 |
| Kerala | 100 | 100 | 100 | 63 | 84 | 67 | 86 | 23 | 77 | 100 | 80 |
| Tamil Nadu | 99 | 39 | 82 | 88 | 84 | 84 | 79 | 21 | 71 | 61 | 70 |
| Karnataka | 81 | 28 | 98 | 90 | 88 | 71 | 76 | 27 | 69 | 64 | 68 |
| Andhra Pradesh | 65 | 14 | 92 | 100 | 94 | 100 | 78 | 26 | 70 | 61 | 69 |
| Orissa | 96 | 16 | 66 | 70 | 100 | 37 | 64 | 57 | 19 | 57 | 52 |
| Madhya Pradesh | 29 | 7 | 44 | 42 | 69 | 84 | 46 | 10 | 41 | 27 | 39 |
| West Bengal | 89 | 36 | NA | 58 | 73 | 17 | 55 | 32 | 51 | 58 | 52 |
| Rajasthan | 0 | 0 | 15 | 0 | 45 | 32 | 15 | 14 | 15 | 26 | 17 |
| Bihar | 42 | 3 | 63 | 31 | 63 | 32 | 39 | 0 | 33 | 48 | 35 |
| Uttar Pradesh | 39 | 3 | 38 | 28 | 4 | 14 | 21 | 9 | 19 | 0 | 17 |

NA. Information not available.

source : as in Appendix Tables 1 and 2.

to reflect the socio-cultural dimensions of the states. Per capita income is an economic indicator. Data on infant mortality are utilised because of their apparent association with the family planning practice.

Table 2 presents the individual index numbers and the average index number for all the socio-cultural variables, the socio-cultural and economic variables and a final average index which includes figures on infant mortality. It is interesting to note that five states namely, Kerala, Tamil Nadu, Andhra Pradesh, Karnataka and Maharashtra have scored average index values ranging over 70 from out of the six cultural variables considered in this analysis. Orissa, West Bengal and Gujarat have values ranging between 50 and 70. While the remaining six states namely Madhya Pradesh, Bihar, Punjab, Haryana, Uttar Pradesh and Rajasthan have poor scores of less than 50, the least being 15 for Rajasthan. Although the scores substantially improve in the case of the Punjab and Haryana when the index of income is also included in averaging, the distribution of states in terms of scoring does not change at all. There is only a marginal improvement when a final index averaging all the eight variables (including the index of infant mortality) is made. The state of the Punjab moves over into the middle block of states with scores ranging from 40 to 60. As in the previous occasions, the four South Indian states and Maharashtra retain their relatively better positions as reflected in the average index scores of over 60.

A district-level analysis of the family planning performance also confirms this regional pattern. By the end of March 1985, 67 per cent of the districts in the four South Indian states had contraceptive prevalence rates above 30 per cent and 29 per cent of the districts had crossed 40 per cent. In Maharashtra 31 out of 34 districts had reached levels above 40 per cent of which as many as 23 districts had contraceptive prevalence rates higher than 50 per cent. On the other hand, only 16 per cent of the 173 districts from Bihar, Uttar Pradesh, Madhya Pradesh, Orissa and Rajasthan had rates between 30 and 40 per cent and only four districts had reached 40 per cent.

How does this regional pattern in family planning performance emerging out of the index scoring and district-level analysis relate to societal factors? The four South Indian states along with Maharashtra form a region which appears to have a homogeneous socio-cultural structure and also a consistent relationship with contraception. The Punjab and Haryana are unique in that they have acquired low scores but have performed relatively better in family planning practice. On the other hand West Bengal records lower acceptance than one would expect after looking at the index scores. Thus, with the exception of Haryana, the four contiguous states namely Uttar Pradesh, Madhya Pradesh, Bihar and Rajasthan have very poor index scoring and record very low family planning practice as well.

(c) Determinants of Family Planning Practice

To understand what sort and how much of a relationship societal factors have with family planning practice, a multiple regression analysis was attempted. Table 3 presents the correlation and beta coefficients along with 'R' square values. All the variables used in index analysis were included in the regression analysis as independent variables. The percentage of eligible couples using family planning methods is treated as the dependent variable. The index of per capita income is an economic variable and the infant mortality rate a

demographic variable while the rest are treated as cultural variables. Note that the sex ratio of workers is also treated as a cultural factor. Only four variables namely, per capita income, female literacy, female marriage and infant mortality rate have significant associations with the dependent variable as is found from the simple correlation coefficients (Table 3).

TABLES: RESULTS OF MULTIPLE REGRESSION ON PERCENTAGE OF ACCEPTORS WITH SELECTED CULTURAL ECONOMIC AND DEMOGRAPHIC VARIABLES

| Independent variables | Correlation Coefficient | Beta Coefficients | | |
|-----------------------------|-------------------------|--------------------|------------------------|--|
| | | Cultural Variables | Eco-cultural Variables | Demog, Economic and Cultural Variables |
| Sex Ratio of Workers | 0.116 | 0.75400** | 0.38694** | 0.35761** |
| Female Literacy 15+ | 0.535 | 0.07448 | 0.19343 | 0.35248* |
| Married Females 10-14 Years | -0.650** | -1.11101*** | -0.31322 | -0.17681' |
| Female Practice of Purdah | -0.078 | 0.58741* | 0.39489** | 0.30158* |
| Son Preference | -0.135 | 0.33659 | 0.03715 | 0.00076 |
| Sex Ratio of IMR | 0.056 | 0.28812 | -0.19314 | 0.26008 |
| Per capita Income | 0.841*** | NA | 0.78213*** | 0.92875*** |
| Infant Mortality Rate | -0.535* | NA | NA | 0.21766 |
| Adjusted R2 | | 0.581 | 0.920 | 0.925 |
| F | | 4.01 ** | 22.32*** | 21.14*** |

*P<0.10, **P<0.05, ***P< 0.01.

NA — Variable not included in the regression.

A regression of the cultural variables with contraceptive practice yields an adjusted 'R' square value of 0.58 with a high level of significance. Nevertheless, only three variables namely, percentage of married females in the age group 10-14 years, sex ratio of workers and percentage of married females practising purdah, show significant relationships with family planning practice after controlling for all other variables. While the first two variables mentioned above have the expected positive and negative relationships respectively, there is a positive relationship between the practice of purdah and family planning practice. This unexpected relationship appears to point to the fact that on the whole the family planning

decision-making may still lie with the males, in which case the female deference as expressed in the incidence of purdah may act in consonance with male dominance. This may be true of Punjab and Haryana where the practice of purdah is very high and family planning acceptance also is high.

How do these cultural factors respond if the economic variable, namely the index of per capita income is introduced into the regression? Besides this economic index showing a highly significant and positive relationship with family planning practice, it strengthens the relationship of the practice of purdah with the dependent variable, retains the effect of female work but eliminates the role of early marriage. This regression equation explains as much as 92 per cent of the variance with a high level of significance. If the demographic variable, namely the infant mortality rate is also included into a regression equation along with all other variables, the variance explained does not change much. But, in this regression, besides per capita income, sex ratio of workers and practice of purdah, female literacy also assume a significant relationship.

This exercise suggests that the cultural variables do have important relationships with family planning practice and their importance becomes even greater if studied along with the economic and demographic indicators. Thus, this analysis does substantiate the fact that at the macro-level, socio-cultural factors determine the acceptance of family planning to a large extent.

(d) Programme Inputs and Family Planning Performance

Since the concern of this paper is to investigate the reasons for the differential performance of the family planning programme, it is also relevant to ask: Can this differential be explained in terms of programme inputs? There is only limited evidence for this (see Table 4). The figures for family planning expenditure per eligible couple for 1984-85 suggest that, on average the populations of these states which did better also have a better access to programme inputs (especially in Kerala, Haryana and Gujarat), while Bihar, West Bengal and Rajasthan have a relatively low per capita availability of family planning services. Although Orissa and Uttar Pradesh had better access to inputs, the practice was low.

The efficiency of the state programme is reflected in the figures of average expenditure per effectively protected couple. Except Kerala and Haryana, other high-performance states show a favourable cost-benefit balance while Uttar Pradesh, Orissa, Rajasthan and Bihar exhibit much lower efficiency in family planning expenditure. Thus, it appears that (a) the programme effort in different states has not been proportional to the population, and (b) it has also not been equally effective among different states. The most cost-efficient states are Tamil Nadu, Punjab and Maharashtra with the marginal cost of protecting a new couple in 1984-85 less than Rs. 500; Uttar Pradesh followed by Rajasthan had a higher cost. Though it is expected that as family planning practice increases, the cost of newly protected couples would increase, the increase may be highest in those states where current family planning practice is low. On the whole, the relationship between programme inputs measured in terms of expenditure and family planning practice is still vague and unclear.

TABLE 4 : EXPENDITURE ON FAMILY PLANNING BY VARIOUS CATEGORIES OF ELIGIBLE COUPLES FOR SELECTED STATES

| | Estimated Number of Eligible Couples (thousands) | Number of Couples Effectively Protected (thousands) | Family Planning Expenditure per Eligible Couple (rupees) | Family Planning Expenditure per Effectively Protected Couple (rupees) | Family Planning Expenditure per Newly Protected Couple (rupees) |
|----------------|--|---|--|---|---|
| | 1984-85 | 1984-85 | 1984-85 | 1984-85 | 1984-85 |
| Maharashtra | 11,607 | 5,995 | 32.8 | 63.5 | 492.3 |
| Punjab | 2,591 | 1,307 | 30.8 | 61.0 | 383.5 |
| Haryana | 2,272 | 1,073 | 52.5 | 111.2 | 778.3 |
| Gujarat | 6,089 | 2,699 | 47.8 | 87.8 | 847.9 |
| Kerala | 3,800 | 1,519 | 50.7 | 126.9 | 849.8 |
| Tamil Nadu | 8,683 | 3,146 | 23.6 | 65.3 | 368.4 |
| Karnataka | 6,620 | 2,152 | 28.8 | 88.6 | 606.8 |
| Andhra Pradesh | 10,384 | 3,349 | 34.6 | 107.4 | 876.4 |
| Orissa | 4,934 | 1,530 | 37.4 | 120.7 | 1128.8 |
| Madhya Pradesh | 10,059 | 2,960 | 28.5 | 96.9 | 883.9 |
| West Bengal | 8,450 | 2,590 | 21.0 | 72.5 | 643.3 |
| Rajasthan | 6,759 | 1,315 | 25.0 | 128.7 | 1035.4 |
| Bihar | 14,118 | 2,377 | 19.0 | 117.2 | 840.3 |
| Uttar Pradesh | 21,264 | 3,543 | 30.8 | 100.6 | 1295.0 |
| All India | 126,073 | 45,143 | 33.5 | 86.4 | 803.8 |

SOURCE: As in Table 1.

III. (a) Nature of India's Family Planning Programme

The Indian family planning programme has passed through many phases since its introduction in 1952. The first decade of the official programme was a stage when the political will was being consolidated. Thus, in effect the programme took off only from the early 1960s. An overall evaluation of the conduct of the Indian programme even before the Emergency was based on the response to offers of cash incentives and was handicapped

3 For a detailed account of the history of the Indian family planning programme see Desai (1980) and Reddy (1984).

4 In the 19-month period between late June 1975 and mid-January 1977, India was governed in a state of national Emergency. For a detailed account of the family planning programme during the Emergency see Panandiker et al. (1978) and Gwatkin (1979).

TABLE 5 : PERCENTAGE ACCEPTANCE OF FAMILY PLANNING METHODS DURING 1976-77 AND 1971-73 TO 1975-77 OF THE TOTAL ACCEPTANCE RATE DURING 1969-70 TO 1984-85 FOR SELECTED STATES

| | Total acceptance 1969-1970 to 1984-2985 (Sterilisation Equivalent) Percentage | Acceptance during 1976-77 (Peak Emergency Period) as percentage of total acceptance (Sterilisation Equivalent) | Acceptance from 1971-73 to 1975-77 as Percentage of Total Acceptance (Sterilisation Equivalent) |
|----------------|---|--|---|
| Maharashtra | 53.0 | 17.2 | 52.0 |
| Punjab | 38.4 | 20.6 | 43.7 |
| Haryana | 47.7 | 30.5 | 57.0 |
| Gujarat | 49.9 | 13.7 | 39.4 |
| Kerala | 45.7 | 14.9 | 45.0 |
| Tamil Nadu | 38.8 | 20.0 | 50.9 |
| Karnataka | 32.8 | 25.3 | 45.6 |
| Andhra Pradesh | 42.1 | 26.4 | 50.0 |
| Orissa | 38.4 | 20.6 | 43.7 |
| Madhya Pradesh | 32.2 | 38.1 | 61.6 |
| West Bengal | 33.1 | 36.5 | 59.7 |
| Rajasthan | 21.7 | 32.4 | 53.2 |
| Bihar | 18.2 | 32.3 | 62.5 |
| Uttar Pradesh | 17.8 | 32.4 | 59.0 |

SOURCE: As in Table 1.

by the limited knowledge about family planning methods. An emphasis on permanent methods along with offers of cash incentives restricted the people's choice and led them to undergo vasectomies. Only vasectomies were publicised through mass camps and success was achieved by involving other government agencies such as the revenue and development department officials with whom the rural population wish to maintain a good relationship. These departments are powerful and influential administrative arms of the government and are responsible for assessing land tax, acquiring surplus land and redistributing governmental land to the landless and providing rural credit. The head of the revenue department at the block or taluka level also has judicial powers. It is, therefore, very well understood that in rural India people could put up little resistance and were in effect under pressure to undergo vasectomies. The famous mass vasectomy camps of Ernakulam and the Gujarat state mass vasectomy campaign (Thakor and Patel 1972: 57-64) are examples of the extensive involvement of district collectors and revenue officials in propagating family planning. It is, nevertheless, not difficult to understand how those who were not trained in family planning promotion could achieve such startling success if one realises that the

TABLE 6 : PERCENTAGE VASECTOMIES OF THE TOTAL STERILISATIONS FROM THE INCEPTION OF THE PROGRAMME UNTIL 1982 AND 1985

| | 1982 | 1985 |
|----------------|------|------|
| Maharashtra | 57.1 | 51.1 |
| Punjab | 37.0 | 27.4 |
| Haryana | 64.8 | 48.2 |
| Gujarat | 44.7 | 38.5 |
| Kerala | 50.7 | 40.6 |
| Tamil Nadu | 65.4 | 49.0 |
| Andhra Pradesh | 51.2 | 41.7 |
| Orissa | 62.8 | 51.9 |
| Madhya Pradesh | 71.9 | 57.4 |
| West Bengal | 69.0 | 57.4 |
| Rajasthan | 60.7 | 43.7 |
| Bihar | 74.6 | 54.2 |
| Uttar Pradesh | 74.8 | 52.9 |

SOURCE : As in Table 1.

programme was not totally voluntary.⁵ This view of the involuntary nature of the vasectomy programme is further supported by the sterilisation figures for 1976-77 (See Table 5), the period during the Emergency when family planning was pushed to the extreme; when the proportion of tubectomies to vasectomies was 1 :3. This is the oddest proportion of all years except 1971-72 when it was about 1:6.

This discussion of the nature of the Indian family planning programme is necessary because the role of societal factors can be understood only when the programme works on a voluntary basis. Nevertheless, the early popularisation of vasectomies was also influenced by cultural factors. In the early stages, because of the paucity of infrastructural facilities and trained personnel, the programme was highly centralised, which meant the distance between services centres and the acceptors was longer. It is well known that culturally women in India are less likely to travel long distances. Further, it was not only easy to reach men but it was much easier to transport them to the service centres. Thus, in the early stages the emphasis on vasectomies was essentially guided by cultural considerations.

5 A good discussion about the involuntary nature of India's family planning programme is found in Vicziany (1982a)and(1982b).

6 During the early period of vasectomy programme through mass camps the adopters were even transported from across the district boundaries, often as far as 100 km. and more.

When one looks into the characteristics of the population at district level it appears that family planning acceptance (especially vasectomies) is relatively better in the tribal districts. There is a relatively high proportion of tribal population in the central Indian districts where the performance levels have been the highest. This is partly due to the vulnerability of the tribal population to the pressure tactics employed by the government agencies. The favourable attitude of the local leadership and low levels of son preference have also helped in better family planning acceptance by the tribal population. The extraordinary capabilities of the tribal leaders to influence their followers in matters of social change are well recognised. There are reports from Bihar that tribal leadership is transferred on the rules of succession; they participate in birth, death and marriage ceremonies (Troisi 1978) and they approve of the practice of family planning. Secondly, the sex ratio among the tribals of Madhya Pradesh is very favourable to the female (Jaiswal 1984: 87). Tribal female participation in the labour force is also relatively more than that of other women, especially in Madhya Pradesh and Orissa.

In Uttar Pradesh, Bihar, Madhya Pradesh and Rajasthan, where literacy rates are low, the role of the local leaders appears to be important because they may even influence public opinion and assume the role of custodians to guarantee continuance of social norms. The local leaders in these states are reported to be against the family planning programme. The South is strikingly different. The impact of the local-level leadership is not very great in the South but most of the elite regard family planning as an essential precondition to the betterment of the masses so that in public they are morally bound to be sympathetic towards the family planning programme. This phenomenon can also be viewed from a broader framework of relatively greater male dominance in the states above the Vindhyas.

(b) Family Planning Administration

Cultural factors may also determine the differential family planning administration between the states. Although the family planning programme is a state responsibility, it is fully funded by the central government and is subject to policy guidelines which are uniform across the states. Outstanding examples of this are the introduction of the 'multipurpose' health worker scheme in the late 1970s and the 'health guide' scheme which has been recently introduced in the better part of the country. Yet there can be certain administrative differences between states. These are due to differences in the public administrative structures which existed before independence. In this regard the major administrative centres of Bombay, Calcutta and Madras are better endowed with smoothly functioning systems than the rest of the country. The areas which were under princely administration, such as Mysore, Kerala and Punjab, also appear to have a good administrative structure. Such states continued to exist under the British rule partly because of their demonstration of administrative skills. For example, in Tamil Nadu the village-level female health workers are administratively controlled by the village councils which have better appeal and greater public support than in Karnataka. Adequate machinery to achieve this appears to be slight and inactive in Uttar Pradesh and Bihar. Another example is that the village-level health workers

were until recently chosen on a hereditary basis and were less under the direct control of the local and block-level administration. Thus, many of the differences in the health and family planning administration are of historical origin. The most recent example of this sort is of the health guides who are more likely to be descendants of those who were involved in traditional healing, herbalists and practitioners of indigenous medicine, apart from those who were influential.

(c) Attitudes towards Family Planning

There are closer similarities throughout India in terms of the attitudes about the idea of a family planning programme and with regard to specific modern contraceptives. Family planning is usually associated with the termination of reproductive capacity and is not normally regarded as a means also for spacing births. This view is supported by evidence of the unsatisfactory performance of programmes to promote the IUD and other temporary methods. It was found that in the city of Chandigarh, a majority of IUD and oral pill users had accepted these methods to stop future birth permanently (Kakar and Chopra 1984). Reports that the IUD leads to extra-menstrual bleeding, causes backache and leads to general weakness are common all over India. It has been reported in Meerut that menstruating Muslim women do not enter the kitchen until menstruation is over. In such a situation, prolonged menstruation is bound to cause inconvenience. This practice is very commonly found among the rural peasantry of south India. The Vokkaliga women in Karnataka, for example, were found to spend their time outside their homes during menstruation. Wherever such practices are prevalent, if a family planning method such as the IUD extends the duration of menstruation, it is likely to become unpopular.

Vasectomy is widely equated with castration leading to impotency (see Misra et al. 1982). This misconception has emerged not because of any actual experience after vasectomy, but as a common attitude and many sayings with regard to the dignity of man or manhood. Vasectomy appears to challenge the values associated with manhood in India. There are, however, many studies reporting a favourable opinion toward vasectomies. Such opinions seem to emerge from cultural and religious values. For example, in a village near Meerut, people said vasectomy would add to one's health as a vasectomised man would not lose any of his semen, the vital fluid that causes men's healthiness and virility' (Marshall 1972:162). In a south Indian village where the author of this paper conducted research, a vasectomised man related his vasectomy to the castration of cattle. He said that even if vasectomy is castration, it must help a man to improve his ability to work, as in the case of cattle. A castrated animal becomes docile and is easily manageable. Nevertheless, the shame associated with vasectomy is universal and even educated and urbanised men are reluctant to talk about their vasectomies.

Tubectomy is free from such problems. Nevertheless, there is apprehension with regard to women's reproductive capabilities. Reproductive capacity is often held to be synonymous with her pride and power. Thus, tubectomy is likely to be unpopular among low-parity women. This is to some extent true in India. Low-parity women, especially those with few sons, do not readily accept tubectomies. The proportion of women having three or fewer living children has only marginally increased from 51.4 per cent in 1980-81 to 57.0 per cent

in 1984-85 for tubectomy and from 60.2 per cent to 65.3 per cent for vasectomy in the same period.

In a survey on the socio-psychological effects of sterilisation in rural Uttar Pradesh 77 per cent of the 296 respondents in four districts said that sterilised persons would concentrate more on their work, while 17 per cent could not give their opinion (Rastogi 1983: 19). It also appears from the results presented in this report that between 20 and 30 per cent of the respondents did not agree or were indifferent towards the benefits of social gains like a happier family, better education for children and fewer future family problems. An equal proportion of the respondents could not give their opinion on the health- and sanitation-related gains of sterilisation. The same report revealed that 34 per cent of the respondents underwent the operation because of fear of stoppage of salary, pressure from authorities, or the assurance that they would get land and money (besides regular incentives). It is also reported that most of those who underwent sterilisation due to such fear, pressure and incentives were motivated by staff members of the revenue department and officials other than those of the health and family planning department. This survey reports that only 6.5 per cent of the respondents stated that they were motivated by the health and family planning workers.

Another study of nine districts in Uttar Pradesh found that 41 per cent of the vasectomised cases belonged to the Scheduled Castes and Scheduled Tribes though they constituted only 29 per cent of the total population (Elder 1972). This information related to vasectomies performed between 10 December 1963 and 14 January 1969. In this study it has also been revealed that the revenue and planning departments motivated more Scheduled Castes and Scheduled Tribes cases overall than family planning workers. In this case the Scheduled Castes and Scheduled Tribes acceptors were over-represented by two times their share in the population of study districts.

(d) Medical Termination of Pregnancy

To supplement the discussion about the family planning performance it is necessary to look into the Medical Termination of Pregnancy (MTP) programme which is becoming popular in India. MTP has been legal in India since April 1972 and according to official statistics by 1976 there were about 0.4 million MTPs done. But, by about 1985, over 4 million MTPs were registered. Although it was introduced as a health care measure, there are demographic consequences of the MTP's role as a family planning method. One half of the 573,000 MTPs performed during 1983-84 were due to the failure of other contraceptives, especially temporary methods. Thus, it appears that MTP has the potential to meet the unmet demand for reliable temporary family planning methods in India. In fact, in the urban areas induced abortions are becoming popular to terminate unwanted pregnancies.

The cumulative MTP rates per 1,000 eligible couples by 1985 were substantially higher in Kerala, Punjab, Tamil Nadu, Maharashtra, Uttar Pradesh and Gujarat than the national average of 32.1. It is difficult to attribute this to any specific societal influence, but two reasons can be put forward: (a) there appears to be a considerable demand for temporary methods rather than sterilisation; and (b) it also appears that because of the legalisation of MTP services a large proportion of those who were previously resorting to illegally induced

abortions now came forward to accept MTP. Nevertheless, it is in Kerala that the MTP services are used to substitute other family planning methods; 80 per cent of the MTP users in Kerala during 1983-84 did not opt to use either the IUD or sterilisation compared with percentages of 67 in Uttar Pradesh, 50 in Punjab and 64 in Maharashtra. On the other hand, during the same period in Tamil Nadu 91 per cent of the MTP acceptors did accept a family planning method; as many as 95 per cent of such couples underwent tubectomies. A similar trend is found among the MTP users in West Bengal. Emphasis on propagating IUDs after MTP acceptance was found in the states of Punjab, Karnataka, Madhya Pradesh and Maharashtra.

IV. Social Influences on the Pattern of Family Planning Decision-Making

The acceptance of family planning methods in recent years is essentially a function of service availability and the pattern of decision-making at the family level. It appears that especially after the Emergency period, family planning practice has been resorted to on a voluntary basis and most of the sterilisations are tubectomies. This supports the hypothesis that women are now increasingly becoming involved in matters related to their families and are more concerned about the health and welfare of themselves and their children. This apparent shift from a male-dominated decision style to that of an egalitarian style is the result of changing intra-family relationships and influences of the modernising processes. Nevertheless, 'the significant family changes that bear on decision-making are not those of family structure but of changing relations between the generations' (Caldwell et al. 1982:701), and those between the husband and the wife (Shariff 1984:269). It is in this sphere that the northern family system differs from the southern one with only a few exceptions (see Dyson and Moore 1983).

People in Kerala have been described as very different in their demographic behaviour from their counterparts in other parts of India. This has been attributed largely to the better status and autonomy that Keralite women enjoy. The best educated women in India, they are also reported to be playing a central role in caring, rearing and educating their children. This pattern appears to have originated from the matrilineal family system on the one hand and a sound tradition of education on the other. Women in Kerala, normally possess property rights and inherit ancestral wealth. Thus, historically, Keralite women were reported to be emancipated which in the contemporary period enabled them to decide independently about family size and choice of contraception. In other parts of south India a similar pattern has begun to emerge in recent years where women are increasingly involved in family planning decision-making. This pattern has emerged in spite of the continuation of the patrilineal family system. Village studies in Karnataka (Caldwell et al. 1982; Shariff 1984), Tamil Nadu (Guruswamy 1986) and Andhra Pradesh (Raju 1988), support this emerging trend of an increasing participation by women in the choice of family planning acceptance. This phenomenon is the result both of a relatively great adaptability of the socio-cultural superstructure and of the force of modernisation emerging from increased education and secularisation which is enabling women to become vocal, participative and assertive.

The family system in south India, including Maharashtra, is one based on village and kin endogamy. The commonest marriages are between cross cousins and the alliance between a man and his sister's daughter is the most preferred. In such an alliance the girl has only to change her residence to that of another close relative and her status changes little from that which she possessed in her own parental family. In contrast, the north Indian family system is based strictly on village and kin exogamy. Often, a married woman can maintain only fleeting and fragile contacts with her natal kin (for more on north Indian kinship, see Jeffery et al. 1984). The families of origin (kin and affines) are therefore more likely to be closely related and socio-economically more homogeneous in the South than in the North.

This cultural variation in the family system has a profound effect on the status of women. It is little wonder that female seclusion through veiling and avoidance practices is higher in the northern and western states. A newly married woman starts her married life with much greater confidence in the South than in the North. These fundamental differences in the family system have far-reaching effects on family planning programme performance, which is heavily dependent on both the mass media and interpersonal communication. In the South married women have relatively easier access to the outside world and information than their north Indian counterparts. Although family planning information has exclusive channels of flow, in the South women have better access to information while at work outside the home, while at school or in a dispensary, and during their visits (which are relatively more frequent in the South) to the natal homes. Their contact with the health and family planning worker is also frequent and easy. It is in this respect that the north Indian women are disadvantaged because of low school attendance, lower level of work participation, restricted access to dispensaries and infrequent visits to the natal homes. Evidence also suggests a low level of interpersonal communication between the health worker and the rural women in the North. It must be noted that the regular reports of the almost uniform proportions of people who have family planning knowledge across the country are based on surveys which gather information in simple dichotomous replies of 'yes' or 'no'. The quality of such knowledge, however, has to be assessed using factors such as the details of contraceptive methods, their after-effects and side-effects, follow-up criteria, precautions and knowledge of self-medication and similar issues. Evidence exists to suggest that the south Indian women are exposed to qualitatively better information about contraceptives than women in the North.

In the south Indian villages we have observed two kinds of cluster patterns of family planning acceptance (Shariff 1984a). The first is territorial by nature, based on village or neighbourhood clustering of the acceptors. The second is non-territorial and is based on kin and affine clustering; both types are the results of selective and restricted communication channels. The second type is more important for our discussion. Virtually all the sterilised women in the four villages studied had one or more siblings, or husband's siblings, and other immediate relatives sterilised. It was also found that there was a nucleus within these clusters which was responsible for diffusion of information and helped in reaching decisions leading to the choice of a contraceptive. But it is less evident from the research that such patterns exist in the North, especially with regard to the kin cluster pattern. This is essentially because of the weak continuing relationship with the wife's kin. Nevertheless, there are a few studies pointing to the increasing responsibility women are acquiring in family matters even in the northern parts of the country. In one district of Orissa, a study shows women beginning to

assume new responsibilities about family administration, although family planning decision-making still remains with the husband. Another study reports an increase in the woman's role in voluntary choice of acceptance of family planning methods in western Uttar Pradesh (Jeffery et al. 1984). It appears that the acceptance of family planning is becoming popular in many parts of the North although at a slower pace. Nag and Kak (1984) revisited a village 12 years after Mamdani's investigation (Mamdani 1972). They found a remarkable increase in the use of modern contraception and an emergence of new and favourable attitudes towards smaller families,

V. Conclusion

India's family planning programme is essentially a social programme to meet both national and social needs. But in a developing country the programme heavily depends upon service availability and cultural and economic factors. Nevertheless, after 36 years of planned development India has reached a stage where service availability is reasonably good although not complete and there are appreciable gains in economic well-being. In such a situation social and cultural factors appear to play a vital role in the promotion of family planning. Although the annual or short-term variations in performance cannot be adequately explained by socio-cultural factors, they help in establishing the long-term association between the two.

A substantial improvement in education (both formal and mass education), and decentralisation of family planning promotional strategy are suggested as selective interventions to achieve the desired goal of reducing fertility in India. The family planning programme is based on the community extension approach emphasising door-to-door interaction with the people. But an evaluation of this approach has confirmed that the sheer size of the community has made it impossible to achieve this aim. The fact which has so far been ignored and which has a bearing is that the rural social setting offers an easy way to reach the community through influential relatives who may not necessarily be the community leaders. Nevertheless, the sub-regional approach to family planning extension has great potential and promise for Indian planners and administrators alike in meeting the national goals.

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APPENDIX

TABLE 1 : SOME SOCIO-ECONOMIC INDICATORS FOR SELECTED STATES

| | Population in Mil- lion 1985 (Medium Projection) ¹ | Per capita Income Average, 1980-81 (constant prices in Rupees) ² | Per cent Urban Population (1981) ³ | Work Participation Rates for Women of all ages (1981) ³ | | Percentage Literates Among Females Aged 15 Years and over 1981 ³ | Percentage of SC & ST Population (1981) ³ |
|----------------|---|--|--|---|------------------|---|---|
| | | | | <i>Rates</i> | <i>Sex Ratio</i> | | |
| Maharashtra | 68.4 | 1013 | 35.0 | 24.0 | 428 | 34.6 | 16.3 |
| Punjab | 18.2 | 1473 | 27.7 | 2.3 | 38 | 32.4 | 26.9* |
| Haryana | 14.4 | 1101 | 21.9 | 4.7 | 83 | 21.6 | 19.1* |
| Gujarat | 37.0 | 951 | 31.1 | 11.0 | 199 | 33.2 | 21.4. |
| Kerala | 27.4' | 674 | 18.7 | 12.8 | 321 | 70.8 | 11.0 |
| Tamil Nadu | 51.7 | 650 | 33.0 | 22.4 | 391 | 34.7 | 19.5 |
| Katnataka | 40.5 | 709 | 28.9 | 19.0 | 338 | 28.3 | 20.0 |
| Andhra Pradesh | 57.8 | 705 | 23.3 | 27.0 | 461 | 20.0 | 20.8 |
| Orissa | 28.4 | 554 | 11.8 | 10.7 | 193 | 21.2 | 37.1 |
| Madhya Pradesh | 57.0 | 536 | 20.3 | 22.4 | 393 | 15.9 | 37.1 |
| West Bengal | 59.1 | 758 | 26.5 | 5.8 | 109 | 33.3 | 27.6 |
| Rajasthan | 38.2 | 584 | 21.1 | 9.3 | 172 | 12.0 | 29.2 |
| Bihar | 76.1 | 434 | 12.5 | 9.1 | 174 | 13.2 | 22.8 |
| Uttar Pradesh | 120.6 | 531 | 18.0 | 5.4 | 95 | 13.9 | 21.4 |
| India | 745.8 | 734 | 23.3 | 14.0 | 253 | 25.6 | 23.6 |

• No Scheduled Tribe population present in the state.

source: 1. Government of India, 1985.

2. Centre For Monitoring Indian Economy, 1986.

3. Government of India, Registrar General, 1981.

TABLE 2 : SOME CULTURAL AND DEMOGRAPHIC INDICATORS FOR SELECTED STATES

| | <i>Percentage Married Females in Ages 10-14</i> | <i>Percentage of Married Women Practicing Purdah²</i> | <i>Index of SON₃ Preference³</i> | <i>Birth Rate¹ (1982-1984) Average</i> | <i>Death Rate¹ (1982-1984) Average</i> | <i>Infant Mortality Rate¹ (1984)</i> | <i>Ratio of Male to Female IMR⁴ (1968-1971)</i> |
|----------------|---|--|--|---|---|---|--|
| Maharashtra | 3.2 | 4.9 | 18.4 | 30.1 | 9.1 | 76 | 1.02 |
| Punjab | 1.3 | 44.6 | 31.3 | 30.3 | 9.0 | 66 | 1.38 |
| Haryana | 7.0 | 72.6 | 20.7 | 36.6 | 9.7 | 101 | 1.24 |
| Gujarat | 2.0 | 41.8 | 20.8 | 34.0 | 11.4 | 106 | 1.10 |
| Kerala | 0.3 | 4.3 | 17.2 | 24.6 | 6.6 | 29 | 0.95 |
| Tamil Nadu | 0.4 | 16.7 | 11.5 | 27.8 | 11.2 | 78 | 0.95 |
| Karnataka | 3.8 | 5.4 | 11.2 | 29.1 | 9.4 | 74 | 0.93 |
| Andhra Pradesh | 6.6 | 9.6 | 8.9 | 30.6 | 10.6 | 78 | 0.90 |
| Orissa | 1.1 | 27.7 | 15.7 | 33.3 | 13.3 | 131 | 0.87 |
| Madhya Pradesh | 13.1 | 42.9 | 21.9 | 37.9 | 14.5 | 121 | 1.03 |
| West Bengal | 2.3 | N.A. | 18.4 | 32.5 | 10.6 | 32 | 1.01 |
| Rajasthan | 18.4 | 62.2 | 31.3 | 39.3 | 13.3 | 122 | 1.15 |
| Bihar | 10.8 | 29.6 | 24.3 | 38.1 | 13.9 | 95 | 1.06 |
| Uttar Pradesh | 11.3 | 46.4 | 25.0 | 38.6 | 16.2 | 155 | 1.36 |
| India | 6.6 | N.A. | 20.2 | 33.8 | 12.1 | 104 | 1.09 |

SOURCE: 1. Government of India, 1985
2. Government of India, 1974.
3. Bhatia, 1978.
4. Dyson and Moore, 1983.