

**POVERTY,
FAMILY PLANNING AND FERTILITY
VIS-A-VIS MANAGEMENT
OF FAMILY PLANNING SERVICES
IN INDIA.
A CASE STUDY**

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1 - Introduction

Despite intensive research during the last five decades or so on the determinants of fertility transition (see Mason, 1997), researchers have not yet attained a comprehensive understanding regarding the interaction of development, family planning and fertility. The population and development debate which began at the World Population Conference in Bucharest in 1974 has continued over the years even after the 1994 International Conference on Population and Development (ICPD), Cairo. The basic premise of the debate has been that poverty is a major inhibiting factor, nullifying attempts to improve the quality of life which is a prerequisite to achieve the fertility level required to effect the demographic transition. Thus, the argument has centered around the slogan: “*Development is the best contraceptive*”.

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Is broad based development the only way to facilitate reduction in fertility? It has been observed that, sometimes, economic crisis or poverty has also led to lowered fertility levels. For example in Asian and Latin American countries where most of the world's absolute poor live, though their size has declined only marginally over time. A World Bank estimate reveals that in the ESCAP region, which had 77% of the world's poor in 1987, the proportion had declined marginally to a level of 73% in 1993 (Ahuja *et al.*, 1997). As such, it has been argued that socio-economic development is not the only precondition for achieving fertility decline. Even those who believe that "development is the best contraceptive" now concede that several other conditions can expedite fertility decline in low income countries with high fertility. Bangladesh belongs to a group of countries with persistent and widespread poverty in which the beginnings of fertility decline have been recorded. It has been argued that this decline has taken place in spite of the absence of any visibly significant socio-economic changes (Kantner *et al.*, 1995; Egero, 1996; Razzaque, 1996). In Bangladesh with more than 80% of its population classified as absolutely poor in 1975-1976 (Alamgir and Ahmed, 1988), the total fertility rate has gone down from 7 children per woman in 1975 to 3.3 children per woman in 1998 (PRB, 1998). The population growth rate declined from 2.7% per annum during the 1980s to 1.7% during the late 1990s under a democratic regime. A similar phenomenon has been observed in urban Latin America as well (Sadik, 1991). In the 1980s, a significant decrease in birth rates was also observed in the poorer strata and in the most backward areas of Latin America despite the absence of any significant socio-economic development (Cosio-Zavala, 1996). Thus, during the last three decades, the fertility level in many low income countries has fallen significantly. For example, the average total fertility rate in countries with low income economies decreased from 6.3 in 1965 to 3.8 in 1990. The decline was more than average in East and South-East Asian countries, and less than average in African countries. The fertility decline in some of these countries was much sharper than could be predicted from their achievements in income growth and industrialisation (Nag, 1993). In the context of fertility decline in low income countries, some in-depth studies over the last thirty years have enabled us to understand fertility transition amongst the poorest strata of society where fertility, which had remained high so far, is beginning to decline under the effect of economic crises, even in the absence of education, due to

unemployment, decline in the standard of living, and lack of food security, all of which lead to what can be called as "Poverty Malthusianism" (Cosio-Zavala, 1995). It shows, therefore, that it is possible to achieve lower fertility even among people in abject poverty, and deprived of access to basic educational, health and other socio-economic services.

Most of those who believe in such a possibility argue that improved access to family planning services has contributed significantly to this new emerging pattern (Egero, 1996; Adnan, 1998). But, the precise mechanism through which such a shift takes place in various settings is yet to be probed to enhance our understanding of what gives an impetus to fertility change at the micro-level. The IUSSP Seminar on Demography and Poverty (Florence, 1995), which discussed "Demographic Behaviour and Poverty" also admits that family planning within the context of poverty or economic crisis has not yet become a subject of in-depth discussion, while the increasing use of contraceptive methods among the poor is a major determinant of recent decline in fertility in many low income countries. It is, therefore, necessary to examine the determinants in order to understand the conditions under which poverty and economic crisis act to accelerate adoption of family planning, resulting in fertility reduction. This raises an important question: Can sheer poverty or economic crisis by itself push fertility down? If not, what are the other factors which induce the poor to limit their family size? The aim of this paper is to focus on the process of poverty or economic crisis acting as an agent in bringing about fertility decline. This process is discussed in this paper by using the findings of a case study to identify the ways to increase use of contraception among the poor strata of society. Since the main objective of the case study was not to focus on the mechanism of poverty inducing people to adopt the small family norm, secondary data has been used to elaborate the interaction between poverty and fertility in support of the findings of the case study. The following section provides a profile of the study area and how family planning services are being redesigned there to meet clients' needs, Section 3 discusses as to how poverty is measured, Section 4 spells out the findings of the case study on contraceptive use and Section 5 discusses the possible mechanism of the interaction between poverty, family planning and fertility. The last Section summarises the salient findings.

2 – The case study

This paper is based on a case study carried out in the state of Rajasthan located in the north-western part of India. Rajasthan, one of the less developed states in India, has a total land area of 340,000 sq. km. with a population of 44 million (1991), accounting for 10.4% of the total area of the country and 5.2% of its population. Although the rates of growth of population have fallen, absolute numbers are increasing by more than 1.2 million persons annually, with a total fertility rate of 4.5 children per woman - more than double the replacement level fertility. The state had already crossed the 50 million mark by mid-1996.

This case study is based on the field experience of implementing the family planning programme under the *Vikalp* framework (Kothari *et al.*, 1997a). *Vikalp*, meaning “alternative” in Sanskrit, is a system-based service delivery model which provides a comprehensive framework for managing the family planning programme in the broader context of reproductive health to achieve excellence in meeting the needs of clients, thus trying to implement the recommendations of the Programme of Action (PoA) adopted at the 1994 ICPD, Cairo. The PoA specifically states that “the aim of the family planning programme must be to enable couples and individuals to decide freely and responsibly the number and spacing of their children and to have the information and means to do so and to ensure informed choices and make available a full range of safe and effective methods” (UNFPA, 1995). The PoA, thus, rests on the assumption that individuals, even those belonging to the poorer strata of society, will control and limit their fertility when empowered and offered access to quality services, thus helping to achieve the goal of population stabilisation.

The *Vikalp* framework is based on a simple tenet: “Help those wanting to avail themselves of reproductive health services.” There is no compulsion and no top-down targets. It is just a well managed programme, carried out with the help of an appropriate service delivery system in order to serve every couple in the reproductive age interested in spacing or limiting child bearing, and/or enhancing child survival, and preventing maternal mortality and morbidity including RTI and STI. Devised by the Indian Institute of Health Management Research (IIHMR, Jaipur, India), it is currently being implemented by the Government of Rajasthan in two of its districts - Tonk and Dausa - under

the *Vikalp* Project. This was formally launched in April 1995, and since then, the overall performance of family planning has improved remarkably. The quality of services, in terms of client satisfaction, continuation of spacing methods, level of client-worker interaction, etc., has improved (Rai, 1997).

In the *Vikalp* districts, the service delivery was redesigned in such a way that it became client-centered and the quality family planning services were made available to all those who had a need. For this, appropriate changes were made in the service delivery system. A micro-planning procedure, based on client segmentation, was followed to identify those who have a need for family planning and reproductive health services. The client segmentation process enables the worker at the grassroots level to have a clear picture of the service population and the inputs needed, allowing for a bottom-up approach to service delivery that reflects clients' needs. Workers were provided with a Service Delivery Booklet which contains the names and addresses along with other background information of those couples needing a particular service such as antenatal care (ANC), postnatal care (PNC) or family planning. The grassroots level workers known as Auxiliary Nurse-Midwives (ANM) working at the sub-centre level² were asked to contact these couples and provide them necessary information and services. A system of improved supportive supervision to ensure at least two contacts in a year with such couples was introduced with proper follow-ups to improve the rate of retention of spacing methods. An internal monitoring system was introduced to check the reliability of the information provided by the workers at various levels. Thus, the main of the *Vikalp* Project was to how to operationalise existing unmet need for family planning services into demand (Kothari *et al.*, 1997b).

This paper uses the data from one of the project districts, i.e. Tonk. This district shares its boundaries with Jaipur district, in which the capital of Rajasthan is located. It is one of the less developed dis-

2. Mainly, it is the Government or the public sector which provides family planning and maternal and child health services in India. In the rural areas, these services are provided through a tiered network of sub-centres, primary health centres and community health centres. The Government's present policy is to provide for 3,000-5,000 population a sub-centre with at least one female health worker known as Auxiliary Nurse-Midwife (ANM), for every 20,000-30,000 population a primary health centre with at least one doctor, and for around 100,000 population a community health centre with a group of specialists.

districts of the state in terms of both socio-economic and demographic indicators. It is small, rural and densely populated and has high fertility. A sizeable proportion of the population belong to Scheduled Castes (20%) and Scheduled Tribes (12%), who constitute the poorest strata of the society. As per 1991 Census, the population of the district was around one million. Though Tonk has registered a relatively higher birth rate (38 during 1984-1990) compared to the state (37), its annual growth rate was lower than the state average (2.2% per annum as against 2.5% during 1981-1991), due to heavy out-migration to the adjoining district of Jaipur. The literacy level among both the sexes in the district was lower than the state average, and the difference was more pronounced among the females (15% compared to 20% in the state). Per capita income of the district (at current prices) was also lower (Rs. 6,375) against the state average (Rs. 6,958) in the year 1995-1996.

3 – Measuring poverty

The *Vikalp* project was not designed to include specifically a study of the interaction of poverty, family planning and fertility. The main objective was to improve the management of the service delivery system by using the *Vikalp* framework in catering to clients' unmet need by improving access to family planning information and services. Since the study did not collect data on poverty *per se*, caste (*jati*) has been used as a proxy variable since caste and class go together in the rural Indian context. 'Caste' is defined as "a system of rigid stratification characterised by hereditary status, endogamy, and social barriers sanctioned by custom, law or religion" (*Webster's New Collegiate Dictionary*, 1975). Even though the caste system is undergoing some changes in India, there is a strong relationship in rural India between one's position in the caste structure and that in the socio-economic class hierarchy. "There is a broad correspondence between caste and class at the two extremes, because the system as a whole tends to rigidify income differentials by restricting certain assets and skills" (Raj, 1961).

The population of the study area has been divided into three broad categories: Scheduled Castes (SCs), Scheduled Tribes (STs) and

Other Castes³ or Non-SC/ST category. The first two groups could be considered as socially and economically deprived sections of the society, as their average monthly per capita consumption, as compared to that of Non-SC/ST category is very low. The National Sample Survey Organisation (NSSO) periodically collects important information about the levels and patterns of consumption of different socio-economic groups. According to the 45th round, conducted in 1987-1988, among rural households, SC and ST households had a much lower average monthly per capita expenditure (MPCE) than the average for the Non-SC/ST households. The disparity between SC/ST and Non-SC/ST households seems to be of the same order as in urban India, as seen in Table 1. The same pattern was observed in Rajasthan where Non-SC/ST households had a higher average MPCE than SC/ST households.

Table 1
Average monthly per capita expenditure by caste:
India and Rajasthan, 1987-1988 (in Indian rupees)

Residence	Scheduled Castes	Scheduled Tribes	Non-SC/ST Castes	All Caste Groups
<i>India</i>				
Rural	133	123	169	157
Urban	185	201	256	245
<i>Rajasthan</i>				
Rural	160	125	190	173
Urban	207	252	272	245

Source: National Sample Survey, 45th Round (July 1987-June 1988), *Sarvekshana*, vol. XVIII, no. 2, NSSO, 1993.

Agriculture being the mainstay of rural India, land is the most important asset. According to the National Sample Survey (NSS) data, the

3. The Government of India has identified certain castes and tribes as socially and economically backward, and recognised the need to protect them from all forms of violence, social injustice and exploitation; they are categorised as Scheduled Castes and Scheduled Tribes. According to the 1991 Census, they account for 17% and 8%, respectively, of the total population of India.

distribution of households by land holding is generally a good indicator of the level of living of rural households since there is a rising trend in the monthly per capita expenditure with the increasing size of land holding. The NSS data on land ownership by caste as shown in Table 2 indicates that a larger proportion of SC population was in the lowest size category than the other groups, and thus possessed a much lower average land area per household than the ST and Non-SC/ST households. The average land possessed by an SC household is less than 0.5 hectare, whereas an ST household has more than twice that of an SC household, which can be explained by the fact that ST populations live in the relatively most inhospitable terrain, which naturally inflate the average size of the land holding. Table 2 also indicates that more than 62% SC households as compared to 24% among the Non-SC/ST, possess less than 0.4 hectare. In the land size category of 1 hectare or more, there are more Non-SC/ST households as compared to SC and ST households. On the basis of the above, it is safe to conclude that SC and ST groups belong to the poorer strata of the society, and most of them can be classified as absolute poor.

Table 2
Distribution of households by size of land holding by caste:
Rural India, 1991-1992

Size of land holding (in hectares)	Scheduled Castes	Scheduled Tribes	Non SC/ST Castes	All Caste Groups
Nil	8.1	7.3	10.8	8.2
< 0.40	61.7	33.7	24.3	43.2
0.41-1.00	16.5	25.4	19.2	20.5
>1.00	13.7	33.6	45.7	28.1
All classes	100.0	100.0	100.0	100.0
Average land per household	0.48	1.0	1.2	1.0

Source: National Sample Survey, 48th Round (June 1991-July 1992), *Sarvekshana*, vol. XX, no. 2, NSSO, 1995.

The head count ratio (HCR) in the population group gives the prevalence of poverty, also known as absolute poverty. This is simply

expressed as the percentage of population living below the poverty line. The poverty line, cut off at current prices for 1987-1988 was Rs 131.60 for rural areas and Rs 151.83 for urban areas respectively (NSSO,1993). As such, most of the SC and ST households can be classified as belonging to the poorest strata of the society based on the data on MPCE presented in Table 1. As per another source, estimated poverty head counts for SCs and STs are 51 and 57% respectively for the year 1983-1984 as shown in Table 3. Further, according to a survey conducted in rural West Bengal, by using official definition of poverty (i.e. intake of less than 2,250 calories and 45 grams of protein per person per day), it was concluded that Scheduled Caste and Scheduled Tribe populations have much more than their proportionate share in the poor section (Maitra, 1988). Thus, the use of caste as a proxy variable for poverty is justified.

Table 3
Population below poverty line by caste: India, 1983-1984

Residence	Scheduled Castes	Scheduled Tribes	All Castes
Rural	53.1	58.4	40.1
Urban	40.4	39.9	28.1
All	50.9	57.1	37.4

Source: Government of India, Indian Economy - Statistical Year Book, 1997.

The study population under the *Vikalp* project covered all eligible couples (15-49 years of age) residing in the rural areas of Tonk district, and in April 1995, the beginning of the project, it stood as revealed by the Eligible Couple Survey, at 150,816. This survey is repeated at the beginning of each financial year. These eligible couples are classified under three major groups: Scheduled Castes, Scheduled Tribes and 'Other Castes' or Non-SC/ST castes. The distribution of all eligible couples in the district by caste is given in Table 4. Around 35% of the total population of the study area have been classified as SCs (21%) and STs (14%). Out of the total eligible couples, there were 56,000 belonging to SCs and STs together and most of them were agricultural labourers, artisans and casual workers. Some of them were cultivators,

but most of them were small and marginal farmers. Average land holding among them was less than 0.5 hectare and quite a good number of the households had at least one person working in an urban area.

Table 4
Distribution of population and eligible couples by caste:
Rural Tonk, 1995-1997 (in '000)

Caste	Population			Eligible Couples		
	1995	1996	1997	1995	1996	1997
Scheduled Castes	177.3	180.0	182.7	32.5	33.2	33.3
Scheduled Tribes	123.4	125.3	126.4	23.5	23.8	24.1
Non SC/ST Castes	549.0	557.5	567.3	94.7	96.0	96.7
Total	849.7	862.8	876.4	150.7	153.0	154.1

Source: Eligible Couples Survey, Tonk District, 1995, 1996 and 1997.

4 - Findings

This section describes the salient findings from the study area. Table 5 provides data on eligible couples with unmet need for family planning services and contraceptive prevalence rate (CPR, i.e. percentage of total eligible couples practising some modern method), by caste, during the first two years of the *Vikalp* project. When this project began in April 1995, the CPR among the SC/ST couples in the district, as obtained from the Eligible Couple Survey, was low as compared to Non-SC/ST couples (27% as against 36%). Most of the SC/ST couples had adopted sterilisation (80%) and the remaining were using spacing methods. The survey also revealed that the level of unmet need for family planning services among these two low socio-economic groups was sizeable. A standard definition, developed principally by Charles Westoff (1988) and later adopted by the National Family Health Survey 1992-1993 (NFHS, 1995), was used to estimate the level of unmet need for family planning services in the district. In 1995, in all, 17% of currently married women in the reproductive ages in the rural areas of Tonk district had an unmet need for family planning ser-

vices, i.e. they were not using any contraception even though they did not want any more children, or wanted to wait at least for two years before having their next child. The table also reveals that there was very little difference across caste groups, despite SC couples reporting a slightly higher unmet need as compared to others. Of the total unmet need couples, 40% were from SC/ST castes, and their share among the total population was around 35%. Thus, out of a total of 26,000 eligible couples having unmet need in the district, about 10,000 were from SC/ST castes.

Table 5
Eligible couples by unmet need for family planning services
and contraceptive prevalence rate: Rural Tonk, 1995-1997

Caste	Number of couples with unmet need for family planning services			Contraceptive prevalence rate ^a (per cent)		
	1995	1996	1997	1995	1996	1997
Scheduled Castes	6015 (18.4) ^b	4534 (13.6)	4300 (12.9)	27.5	34.9	41.8
Scheduled Tribes	4229 (16.60)	3376 (14.2)	3626 (15.0)	26.6	35.3	42.7
Other Castes	15574 (16.4)	11980 (12.5)	11241 (11.6)	36.1	42.7	47.6
Total	25818 (17.10)	19890 (13.0)	19167 (12.4)	33.1	39.7	45.6

a. Contraceptive prevalence rate: per cent of total eligible couples using some modern method.

b. Figures in parentheses show percentages of total eligible couples in the respective caste groups.

Source: Eligible Couples Survey, Tonk District, 1995, 1996 and 1997.

By the end of the first year, i.e. 1996, the CPR in these two groups - SCs and STs - had increased remarkably, and a significant improvement was observed in the following year. Though an increasing trend was observed in the Non-SC/ST category also, the rate of increase among the poorer strata was much higher, especially during the second year of operation (1996-1997). This is seen in Table 5. The use of

modern family planning methods (including male and female sterilisation, IUD, pills and condoms) among SC/ST castes increased from 27% in 1995 to 42% in 1997, and the corresponding figures for Non-SC/ST castes were 36% and 48% respectively. Thus, the gap between the SC/ST and the Non-SC/ST categories in the use of contraception had narrowed down, thereby indicating the tendency of the poor strata to follow the mainstream.

During the period under consideration, there was a decline in fertility in the project area. Table 6 shows that when the programme was launched in 1995, the total marital fertility rate (TMFR: mean number of children that would be born to a married woman if she experienced the current fertility pattern throughout her reproductive span, i.e. 15-49) in the district was 5.7, and the corresponding figures were 6.5 among SCs and 7.0 among STs, which were much higher than among the Non-SC/ST category (5.0). Thus, the pace of fertility decline was higher among the SC/ST castes as compared to the Non-SC/ST category.

Table 6
Trends in total marital fertility rate by caste groups:
Rural Tonk, 1995-1997 (as of April 1st)

Groups	1995	1996	1997
Scheduled Castes	6.5	6.0	5.2
Scheduled Tribes	7.0	5.9	5.3
Non SC/ST	5.0	4.8	4.3
Total	5.6	5.2	4.6

Source: Based on information obtained from Eligible Couple Surveys, Tonk District, 1995, 1996 and 1997.

5 – Discussion

How did this turn around in the fertility level among the poor strata in the project area come about? Historically, there is no demonstrated evidence to show that sheer poverty by itself is a sufficient condition to induce the poor to adopt the small family norm. On the contrary, evidence which suggests that poverty generates high fertility has been put forward (Cain, 1977; Arthur and McNicoll, 1978; Adnan,

1998). Obviously, there is a certain threshold to be reached before people from the poor strata of society perceive that high population growth and large family size have adverse effects on their standard of living. The threshold here refers to the value of children, especially its economic dimension, to the household. When children become less worthwhile economically, parents would want fewer children, a process that Caldwell calls "reversal of intrafamilial wealth flow" (Caldwell, 1982a). Once this threshold is reached, the poor will begin the process of internalising the perception that the small family norm is good for them. This, in turn, would generate unmet need for family planning services. At this juncture, if the service delivery system is moulded in such a way that it is pro-poor, especially pro-women, and is capable of helping them to achieve their desire for the small family norm, the greater chances of their going in for family planning are generated. This means that reaching the threshold in itself will not trigger fertility decline, but will have to be supplemented by an effective client-oriented service delivery system. This is what precisely has happened in the study area. In the discussion that follows, an attempt is made to describe this process in detail.

The analysis of poverty and inequality has a long history in India (Srinivasan and Bardhan, 1988). Long before the analyses of poverty became fashionable, the Planning Commission of India in the early 1960s, advanced a measure of absolute poverty. This was based on the consumption basket of the poor, and led to the target of ensuring for them a daily supply of 2,250 calories per capita. Based on this definition, Ahluwalia estimated that more than 55% of India's population were below poverty line in the mid-1960s⁴ (as quoted in Bhalla and Vashistha, 1988), and most of them belonged to the disadvantaged sections of society. Elimination of poverty has therefore been the primary objective of India's developmental efforts from the very beginning, and they have been aimed at conferring income and employment benefits on the disadvantaged. For this purpose, a number of schemes which have "safety net" features were introduced. Thus, India's anti-

4. According to the Expert Group on Estimation of Poverty and Number of Poor, about 52% of the population in 1977-1978 were living on meagre resources, barely adequate to meet daily individual nutritional requirements, and therefore classified as absolute poor. The poverty levels have shown a marginal decline. In 1993-1994 about 38% of the population was classified as living below the poverty line as against 48% in 1977-1978 (Government of India, 1993).

poverty strategy relied mainly upon increased expenditures on schemes such as Integrated Rural Development Programme (IRDP), National Rural Employment Programme (NREP), Rural Landless Employment Guarantee Programme (RLEGP), Minimum Needs Programme (MNP), etc. All these were initiated before the 1970s, and a sizeable amount has been spent on them⁵ (World Bank, 1989). Thus, long before international agencies started focussing on poverty alleviation, it was recognised in India that policies explicitly targeted at the poor would be needed along with the strategy of all-round development, if poverty were to be eradicated within a reasonable time span. The poverty alleviation schemes were launched with the objective of giving the poor strata access to assets, enhancing productivity of meagre assets, and providing them gainful employment have both short and long term positive effects (Vyas, 1998).

Among the various pro-poor programmes initiated by the Government of India, the Minimum Needs Programme (MNP) started in 1962, has had a relatively far reaching impact. It improved access to basic services, including health and education. The minimum needs basket included essential items of consumption such as food, fuel, lighting, clothing and shelter, as well as services such as health, sanitation, safe drinking water, and adult literacy and primary education to be provided by the Government to the entire poor population of the country (Lakdawala, 1988). In addition to MNP, supply of essential consumer goods on subsidised terms through the Public Distribution System (PDS), and the various child health care activities encompassed in the Integrated Child Development Services (ICDS) scheme were also aimed at reaching the poor. These schemes were implemented throughout India, including the *Vikalp* districts. The existence of such schemes reflects the prominent position accorded to poverty eradication efforts in India. Though it may be argued that the impact of these schemes leaves a lot to be desired, they have resulted in improving the standard of living of the poor to a large extent. "The success of these efforts has been seen in a rise in real agricultural wages and in con-

5. For example, during 1987-1988, over Rs 7.3 billion was spent through IRDP, enabling some 4.3 million beneficiary households to undertake subsidised investment valued at Rs 19 billion (Rs 4,475 per household). Another Rs 17 billion was spent on NREP and RLEGP to create the equivalent of 2.1 million man-years of work on various community infrastructure projects. The outlay on MNP, which makes public services available to the poor, was Rs 28 billion (World Bank, 1989).

sumption levels of people at the lower end of the income distribution in the 1970s and the first half of the 1980s” (World Bank, 1989). The most immediate impact of these schemes, therefore, appears to be on improving the level of nutrition among the poorest strata of society, resulting improved quality of life, as can be seen in the rapid decline in the level of mortality in general and infant and childhood mortality in particular in the early 1980s, as seen in Table 7. The table reveals that infant mortality has declined sharply in rural India from 151 infant deaths per 1,000 live births in 1975 to 78 in 1996. This is significant, though the level of infant mortality is still very high. At the same time, other developmental schemes, including MNP, leading to an increase in primary school enrolment and retention level, and the supply of consumer goods through the Public Distribution System have made child rearing more expensive now than ever before.

Table 7
Trends in infant mortality (‰): India, 1975-1996

Year	Rural	Urban	Combined
1975	151	84	140
1980	124	65	114
1985	107	59	97
1990	86	50	80
1996	78	46	72

Source: Sample Registration Bulletins, Registrar General of India.

To understand the changing value of children in the study area, a select sample of respondents belonging to Scheduled Castes and Scheduled Tribes were contacted. The sample consisted of 60 households belonging to these categories from six villages,⁶ and these were selected randomly from the Eligible Couple registers. Due to shortage of resources and available time, only the heads of the households were

6. Tonk district is divided into six blocks or *tehsils*. From each block, one village was selected. From each of these villages 10 eligible couples with husband aged 45 years or more belonging to Scheduled Caste and Scheduled Tribes were randomly selected from the Eligible Couple Register which provides information on every eligible couple of the village.

contacted for collecting the required information, using the anthropological technique of informal interviews which employed a standard check-list. Out of the 60 households, 40 were from SCs and the remaining 20 from STs. It was found that the perceptions on the value of children among these groups were changing. Their responses are summarised below:

- Improvement in the level of child survival, which used to be much lower in the past, thereby implying that they need not have any more children;
- Realisation that a joint family imposes a strain on the physical capacity of the household and other resources in providing reasonable living standards, and a general feeling that one married son together with his wife and children can satisfy the parental needs;
- Disintegration of caste based occupation, reducing the food security they used to enjoy in the past under the *Jajmani* system (patron-client system);
- Increasing number of children attending school, imposing direct and indirect costs on the parents, further aggravating the family economy since the children cease contributing to the family income due to withdrawal from labour to a large extent; and
- Increasing number of children becoming less and less interested in the families' meagre land or traditional trades for employment since the non-farm labour market is available in the easily accessible city of Jaipur forcing the offspring to migrate, which has recently become significant in the study area. The offspring, with passage of time show little interest in the parental family. One of the respondents working as an agricultural labourer described the phenomenon in a telling manner: "Children now are like birds, which fly away from their nests, as soon as they are in a position to fly."

The foregoing findings reveal that the parents from the study area feel that the economic contribution from children has been declining as compared to the preceding generations due to three major reasons: children's contribution to the family income has declined; the cost of bringing up the children has increased; and their future potential to contribute to the family income is doubtful. Thus, in the changed situation, the children have become less economically worthwhile.⁷

7. Caldwell *et al.* (1982*b*) also observed a similar situation regarding the declining value of children in rural South India: "...the testimony of older persons in the study

This finding supports Caldwell's Theory of Wealth Flow (Caldwell, 1982a, 1993) which attributes fertility decline to the emotional nucleation of the family, a change that may be triggered by economic forces. At the heart of the theory is the idea that nucleation makes children, not parents, the net economic beneficiaries of family life, a process that Caldwell calls "reversal of intra-familial wealth flow", as noted earlier. It has also been observed that, in India, a reverse process of wealth flow has already taken place in middle class families since the sixties and the seventies (Kothari, 1989). And it has now started taking place amongst the poor strata of the society as well.

The declining 'economic' value of children to the family is seen here as one of the main conditions that induce couples even from poor strata to change their perception about the value of children. This means that large families that used to be advantageous in the past do not appear to be so in the present context. The poor are beginning to realise that large family size has an adverse effect on their savings and asset accumulation, and thereby on income growth and distribution and the economic status of the household. They also seem to feel that many among the Non-SC/ST households have been able to achieve a better standard of living by having lesser number of children. This has made SC/ST couples realise that they too have to limit their family size if they are to improve their lot.

All these developments appear to make fertility depressing forces stronger than fertility raising forces. This could motivate them towards the small family norm and thereby creating unmet need for family planning services. This is essential to bring about a change in the fertility behaviour of couples from the poor sections of the society. However, this situation is still not conducive enough to convert such unmet need for family planning services into actual use. It cannot be achieved unless it is supported by a user-friendly service delivery system. By and large, the family planning programme in India has remained provider-driven since its very inception (Kothari and Gulati, 1992; Conly and Camp, 1992). Wherever the service delivery system was made effective

area is that the value of children ceased rising linearly with their number for three reasons: value of their work declined; cost of keeping them rose; and the maximum return from a child necessitated more investment in each than most parents could afford for large numbers of children."

by making it pro-people, the results were impressive as was the case in Bangladesh and the state of Tamilnadu in India.

Figure 1
The interaction between poverty and fertility decline

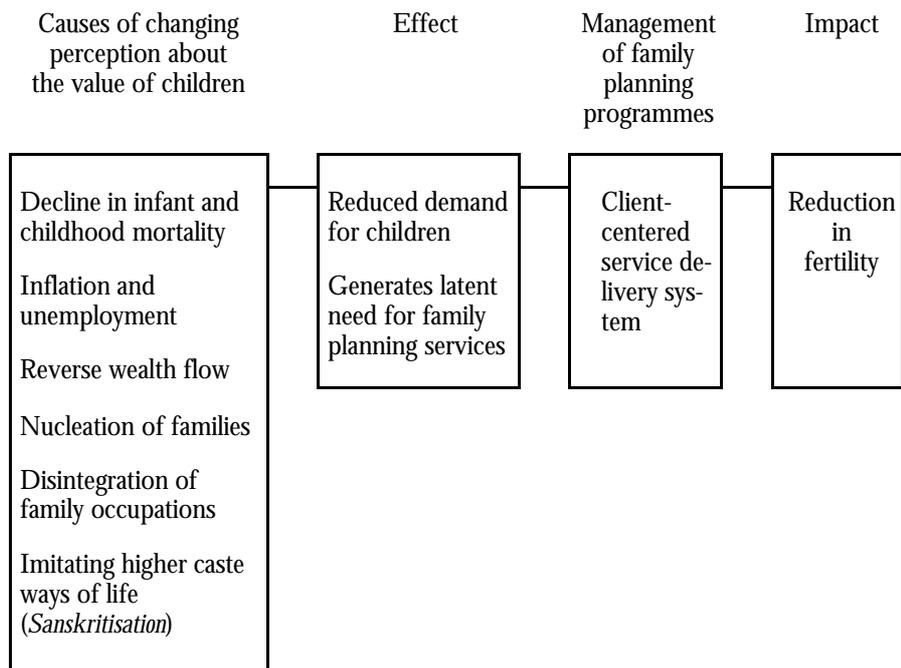


Figure 1, based on the above observation, attempts to present the possible linkages which make poor people realise the importance of the small family norm, thus generating a need for family planning services. The figure also shows that, in this situation, if the management of the service delivery system is pro-poor, it would facilitate conversion of their unmet need into demand, thus paving the way for lower fertility.

The left hand box in the figure enumerates those conditions causing changes in the perception about the value of children in the society due to several reasons: improved child survival, increasing cost of bringing up children, inflation and unemployment, reduction of the value of children due to changing net flow of wealth from parents to children caused by nucleation of families, disintegration of caste-based

occupations, increased monetisation of the economy (for example, disappearance of the patron-client system), etc., and above all, an increasing desire among poor people to imitate the way of life of people belonging to higher classes. This was borne out by the realisation by the poor that by having a small number of children the upper and middle classes could improve their own quality of life as well as that of their offspring. As such, the poor people have also started thinking that, by having a small family, they too can improve their lot. This phenomenon is known as “*Sanskritisation*”, meaning communities belonging to the lower socio-economic strata trying to imitate the practices of people from higher socio-economic strata (Srinivasan, 1966).

All these conditions enumerated in the left hand side of the box mainly increase the perceived cost of children and thereby reduce the demand for children, which, in turn, generates a latent need for family planning services as shown in box 2 entitled “Effect”. At this stage, if the family planning service delivery system is not pro-poor, such couples would resort to post-natal practices such as migration, infanticide, abortion, etc., to reduce the pressure on the household resources which will have limited impact on population growth. If the management of the service delivery system at this state is geared to meet the unmet need of the couples, especially from the poor strata of society, they are most likely to resort to prenatal measures, i.e. use of modern contraception, in larger numbers. This would have a significant impact on reducing fertility as shown in boxes 3 and 4 of the figure. In fact, that precisely is what has happened in the *Vikalp* districts, resulting in higher use of contraception among the poorer strata in the rural areas of Tonk district.

6 - Conclusion

Fertility transitions occur under a variety of institutional, socio-cultural and environmental conditions. In recent years, it has been observed that economic hardship or poverty is also forcing people to adopt the small family norm. However, it was not clear how poverty works towards that end. An attempt has been made in this paper to explain the interaction of poverty, family planning and fertility by using data generated by the *Vikalp* project which is currently being implemented in two districts of Rajasthan, India, by using the public system.

Vikalp is a service delivery model which provides a comprehensive framework for implementing family planning programme in the broader context of reproductive health to achieve excellence in meeting the needs of clients.

It appears that poverty *per se* does not provide a sufficient condition to motivate people to have small families, but a certain threshold has to be reached before poor people perceive that a small family is advantageous, and that they must go in for it. The threshold here refers to the value of children, especially its economic dimension, to the household. In other words, when children become economically less advantageous to the family, it will make fertility depressing forces stronger than fertility raising forces. This seems to have resulted in the realisation among the poor that high fertility and large families have an adverse effect on their standard of living. This could motivate them towards the small family norm, thereby creating a need for family planning services. At this juncture, if the management of the service delivery system is moulded in such a way that it is pro-poor, especially pro-women, and is made capable of helping them achieve their desire for a small family, the chances of their going in for family planning are greater. This means that reaching the threshold in itself will not trigger fertility decline; it will have to be supplemented by an effective client-oriented service delivery system. This precisely is what has happened in the study area. Such instances have also been seen in several other low income countries. It is found that poor people in most of these countries have already reached such crossroads, that is, they feel that “the younger generation has become less economically worthwhile”. The mechanism to trigger a turn around in their fertility behaviour is to make the management of the service delivery system responsive to the poor.

Some recent Demographic and Health Surveys conducted in different parts of the world indicate a growing unmet need for family planning services, indicating that a majority of the poor have already reached this cross-roads. For instance, the National Family Health Survey (NFHS, 1995) conducted in India in 1992-1993 revealed that 20% of eligible women in India have unmet need for family planning services. If the level of unmet need indicated by NFHS is assumed to reflect the needs of all currently married women in reproductive ages in the country, then about 30 million eligible women have an unmet need for family planning, and most of them are from the low socio-

economic strata. If all the women who say that they want to space or limit their births were to use family planning, the contraceptive prevalence rate in India would jump from the current level of around 40% of married women to 60% and that is what is needed to achieve the replacement level of fertility. Some recent studies have also shown that the unmet need, though based on subjective assessment, is real and that around 70% of it can be converted into demand with a proper service delivery system (Kothari *et al.*, 1997b).

It has been observed that in the changed situation, most of the couples belonging to the poor strata in low income countries like India do not want more children, but that they have them is all too often true. It is not because the poor wish it so, but it is because they have been caught in poverty, and face non-availability and inaccessibility of quality family planning services. Some thirty years ago, a similar situation was also observed in USA among "millions of less fortunate Americans living in poverty" (Rossman, 1970). Thus, most of the poor people in the low income countries have been trapped in a vicious circle. Being poor has brought them many children and having many children has doomed them to continue to be poor. In order to enable them to come out of this vicious circle of poverty and unwanted children, there is an urgent need to intervene. The mechanism to trigger a turn around in their fertility behaviour is to make the management of the service delivery system responsive to the poor. This ground reality has to be understood by the policymakers and programme managers, especially the international donor agencies working in this area. It should be their objective to help poor people to have children by choice and not by chance. This could be another way of expediting the demographic transition in low income countries.

In short, the foregoing analysis reveals that the prevailing notion, that socio-economic development is an essential precondition for fertility decline, needs re-examination, since it provides only a partial explanation for the monumental changes taking place in fertility behaviour, in the low income economies especially. Evidence suggests the importance of the management variables as well. In the recent past, these have occupied a more prominent place in the explanations of fertility decline.

References

- ADNAN, Shapan (1998), "Fertility Decline under Absolute Poverty: Paradoxical Aspects of Demographic Change in Bangladesh", *Economic and Political Weekly*, vol. 33, no. 22, pp. 1337-1348.
- AHUJA, Vinod, *et al.* (1997), *Everyone's Miracle?*, Washington D.C., The World Bank.
- ALAMGIR, M., and AHMED, Sadiq (1988), "Poverty and Income Distribution in Bangladesh", in: T. N. Srinivasan and P. K. Bardhan, eds., *Rural Poverty in India*, New York, Columbia University Press, pp. 11-38.
- ARTHUR, W. Brian, and MCNICOLL, Geoffrey (1978), "An Analytical Survey of Population and Development in Bangladesh", *Population and Development Review*, vol. 4, no. 1, pp. 23-80.
- BHALLA, Surjit S., and VASHISTHA, Prem S. (1988), "Income Distribution in India", in: T. N. Srinivasan and P. K. Bardhan, eds., *Rural Poverty in India*, New York, Columbia University Press, pp. 39-68.
- CAIN, Mead (1977), "The Economic Activities of Children in a Village in Bangladesh", *Population and Development Review*, vol. 3, no. 3, pp. 201-227.
- CALDWELL, J. C. (1982a), *Theory of Fertility Decline*, London, Academic Press.
- CALDWELL, J. C. (1993), "The Asian Fertility Revolution: Its Implication for Transition Theory", in: R. Leete and I. Alam, eds., *The Revolution in Asian Fertility: Dimensions, Causes, and Implications*, Oxford, Clarendon Press, pp. 219-316.
- CALDWELL, J. C., REDDY, P. H., and CALDWELL, Pat (1982b), "The Cause of Demographic Change in Rural South India: A Micro Approach", *Population and Development Review*, vol. 8, no. 4, pp. 689-727.
- CONLY, Shanti R., and CAMP, Sharon L. (1992), *India's Family Planning Challenge: From Rhetoric to Action*, Washington D.C., Population Action International (formerly The Population Crisis Committee).
- COSIO-ZAVALA, M. E. (1995), "Two Models of the Demographic Transition in Latin America", *Perfile Latinoamericanos*, vol. 4, no. 6, pp. 29-47.
- COSIO-ZAVALA, M. E. (1996), "The Demographic Transition in Latin America and Europe", in: J. M. Gurzmoan *et al.*, eds., *The Fertility Transition in Latin America*, Oxford, Clarendon Press, pp. 95-109.
- EGERO, B. (1996), "Poverty and Fertility: Reproductive Change under Persistent Poverty" in: *Yearbook of Population Research in Finland*, no. 33, pp. 218-242.
- GOVERNMENT OF INDIA (1993), *Report of the Expert Group on Estimation of Proportion and Number of Poor*, New Delhi, Planning Commission, Government of India.

- KANTNER, A., LERMAN, C., and YUSUF, M. (1995), "What Can We Say about Fertility Trends in Bangladesh? An Evaluation of the 1991 Population Census", *Asia Pacific Population Reports*, no. 5, Honolulu, East-West Center.
- KOTHARI, Devendra (1989), *Family Welfare Programme in Rajasthan: Beyond the Existing Approach* (Study sponsored by the Department of Family Welfare, Ministry of Health and Family Welfare, Government of India, New Delhi), Jaipur, Indian Institute of Health Management Research.
- KOTHARI, Devendra, and GULATI, Anuja (1992), "Recent Government Policies and Strategies to Control Population Growth in India: A Critique" [based on the presentation given at Population Action International (formerly The Population Crisis Committee), Washington, D.C., June 1992,] *IIHMR Working Paper*, Jaipur, Indian Institute of Health Management Research, pp. 1-26.
- KOTHARI, Devendra, *et al.* (1997a), "Vikalp: Managing the Family Planning Programme in the Post-ICPD Era: An Experiment in Rajasthan, India", *IIHMR Occasional Paper*, no. 2, Jaipur, Indian Institute of Health Management Research, pp. 1-54.
- KOTHARI, Devendra, KHANNA, Anoop, and ABBASY, Shameem (1997b), "Operationalising the Concept of Unmet Need for Family Planning Services", *IIHMR Policy Brief*, no. 1, Jaipur, Indian Institute of Health Management Research, pp. 1-4.
- LAKDAWALA, D. T. (1988) "Planning for Minimum Need", in: T. N. Srinivasan and P. K. Bardhan, eds., *Rural Poverty in India*, New York, Columbia University Press, pp. 389-401.
- MAITRA, Tares (1988), "Rural Poverty in West Bengal", in: T. N. Srinivasan and P. K. Bardhan, eds., *Rural Poverty in India*, New York, Columbia University Press, pp. 402-452.
- MASON, Karen O. (1997), "Explaining Fertility Transitions", *Demography*, vol. 34, no. 4, pp. 443-454.
- NAG, Moni (1993), "Impact of Population Growth", *Seminar*, no. 410, pp. 18-23.
- NFHS (1995), *National Family Health Survey, India, 1992-1993*, Bombay, International Institute for Population Sciences.
- NSSO (1993), "A Note on the Fourth Quinquennial Survey of Consumer Expenditure", NSS 45th Round, *Sarvekshna*, xviii (2), Sample Survey Organisation.
- PRB (1998), *1998 World Population Data Sheet*.
- RAI, Usha (1997), "Bringing Hopes to Rajasthan", *Populi, The UNFPA Magazine*, vol. 24, pp. 4-5.

- RAJ, K. N. (1961), "Regional and Caste Factors in India's Development", in: J. C. Daruvala, ed., *Tensions of Economic Development in South Asia*, Bombay, Allied Publishers, pp. 1-15.
- RAZZAQUE, A. (1996), "Reproductive Preferences in Matlab, Bangladesh: Levels, Motivation and Differences", *Asia-Pacific Population Journal*, vol. 11, no. 1, pp. 25-44.
- ROSSMAN, Isadore (1970), *Two Children by Choice*, New York, Parents' Magazine Press.
- SADIK, N. (1991), *Population Policies and Programs: Lessons Learned from Two Decades of Experience*, New York, UNFPA.
- SRINIVASAN, M. N. (1966), *Social Change in Modern India*, Berkeley, California University Press.
- SRINIVASAN, T. N., and BARDHAN, P. K., eds., *Rural Poverty in India*, New York, Columbia University Press.
- UNFPA (1995), *Programme of Action Adopted at the International Conference on Population and Development, Cairo, 5-13 September, 1994*, *Population and Development*, vol. 1, New York, United Nations Population Fund.
- VISARIA, Pravin (1980), "Poverty and Living Standards in Asia", *Population and Development Review*, vol. 6, no. 2, pp. 189-223.
- VYAS, Vijay S. (1998), "Liberation and Poverty Alleviation in Asia: Experiences and Lessons of Last Decade", Jaipur, Policy Research and Action Group, pp. 1-38.
- WESTOFF, Charles F. (1988), "Is the Kap-Gap Real?", *Population and Development Review*, vol. 4, no. 2, pp. 225-232.
- WORLD BANK (1989), *India: Poverty, Employment, and Social Services*, A World Bank Country Study, Washington D.C, The World Bank.