40 YEARS OF PLANNED FAMILY PLANNING EFFORTS IN INDIA

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Abstract

This paper carries out an objective assessment of planned family planning efforts in India during the 40 years between 1971-72 through 2010-11 focussing upon the four core dimensions: (1) conceptual foundations of planned family planning efforts; (2) administrative capacity and organisational efficiency of these efforts; (3) outputs of planned family planning efforts; and (4) impact of these efforts. The assessment is based on the official service statistics. The analysis reveals that in recent years, there has been considerable dilution of planned family planning efforts at the policy level which has reflections in terms of organisation of these efforts, their outputs and impact. The paper suggests an integrated population and development approach to sustain family planning as a development strategy.

Key Words

India, family planning, planned efforts, family planning inputs, family planning outputs, impact of family planning

Background

India was the first country in the world to adopt an official population policy and launch an official family planning programme way back in 1952. Since them, planned efforts have been the mainstay of population stabilisation programme in the country under various names. Initially, these efforts were organised under the National Family Planning Programme which was renamed in 1977 as the National Family Welfare Programme. Since 2005, these efforts constitute an integral component of the National Rural Health Mission. During the early years of these efforts, the focus was on the health rationale of family planning rather than its demographic rationale. Family planning as a strategy for population stabilisation received attention at the policy level only after 1971 population census which provided the evidence of an alarming population growth. During 1961 and 1971, India recorded an all time high average annual population growth rate. In order to operationalise the family planning based strategy for population stabilisation and with confidence outrunning the data, specific demographic goals were set in terms of the desired birth rate. The birth rate goal was then translated into the number of new acceptors of different family planning methods to be recruited every year using demographic models. The logic behind assigning specific targets was to communicate some sense of urgency towards reducing birth rate and hence curtailing population growth.

The target-based approach to reduce birth rate and curtail population growth dominated planned family planning efforts in India for more than three decades. It was only in 1996 that this approach was replaced by a decentralized community needs assessment approach which had a very strong orientation towards the health rationale of family planning. With the launch of the National Rural Health Mission in 2005, the demographic rationale for family planning was totally subsumed in the health rationale of family planning so much so that the Department of Family Welfare within the Ministry of Health and Family Welfare was merged with the Department of Health. Today, family planning efforts are just one of the many activities under the reproductive and child health component of the National Rural Health Mission.

It is in the above context, that the present paper makes an objective assessment of official family planning efforts in India during the 40 years between 1970-71 through 2010-11. The assessment is carried out in terms of the four core dimensions of family planning services delivery: (1) the policy context of planned family planning efforts; (2) administration and management of these efforts; (3) inputs, especially expenditure related to the delivery of family planning services; 4) outputs of planned family planning efforts in terms of needs effectiveness, capacity efficiency, goal effectiveness and realised efficiency; and (4) impact of these efforts in terms of the number of births prevented.

The Policy Context

The policy context of planned family planning efforts in India can be traced in country's Five-year Development Plans which constituted the development agenda of the country. India's First Five-year Development Plan (1952-57) recognised that the increase in population and the pressure exercised on India's limited resources had brought to the forefront the urgency of the problem of family planning and population control. The Plan argued that application of medical knowledge and social care had lowered the death-rate, while the birth-rate remained fairly constant which had led to rapid increase in the growth of population. The Plan acknowledge that a lowering of the birth-rate might occur as a result of improvements in the standards of living but such improvements were not likely to materialise if there was a concurrent increase of population. The Plan, therefore, emphasised that population control could be achieved only by the reduction in the birth-rate to the extent necessary to stabilise population at a level consistent with the requirements of the national economy. The Plan advocated that this could be secured only by the realisation of the need for family limitation on a wide scale by the people. The Plan however insisted that the main appeal for family planning was based on considerations of the health and welfare of the family. Family limitation or spacing of the children was necessary and desirable in order to secure better health for the mother and better care and upbringing of children. Measures directed to this end should, therefore, form part of the public health programme.

The Second Five-year Development Plan (1957-61) proposed a programme for family limitation and population control. The Plan suggested that this programme should, among others, make advice on family planning an integral part of government hospitals and public health agencies and called for establishing clinics, one for 50,000 population, in all big cities and major towns. For small towns and rural areas, the Plan proposed to establish clinics in association with primary health units. The Plan also proposed training in family planning to all medical and nursing students and availability of family planning services in all hospitals and an increasing number of dispensaries in due course.

The Third Five-year Development Plan (1961-66) emphasised that the greatest stress should be placed on the programme of family planning and that the objective of stabilising the growth of population over a reasonable period must be at the very centre of planned development. The emphasis during the Plan was on expanding the availability of family planning services, especially sterilisation services within the public health care delivery system.

The Fourth Five-year Development Plan (1969-74) signalled the domination of the demographic rationale of family planning over its health rationale. The Plan, for the first time, set up targets in terms of sterilisation and IUCD insertions and to widen the acceptance of oral and injectable contraceptives in order to achieve the

aim of reducing the birth rate to about 32 per thousand population by 1973-74 from the birth rate of 39 per thousand population that prevailed at that time. The Plan also targeted to increase the number of users of conventional contraceptives 3.24 million persons in 1969-70 and 10 million persons by 1973-74 with the ultimate aim of protecting 28 million couples and averting 18 million births through family planning by the year 1973-74. In order to give a push to planned family planning efforts, the Department of Family Planning was created within the Ministry of Health and Family Welfare at the national level. This was the beginning of the target approach that dominated the planning and implementation of planned family planning efforts in India for the next 35 years.

The Fifth Five-year Plan (1974-79) also gave topmost priority to family planning. The period 1974-79 was also a period of political turbulence in India. Emergency was clamped in 1975 and a major push was given to family planning, especially sterilisation, during 1975-77. This push brought in elements of coercion and force in planned family planning efforts. The defeat of the party in power in the 1977 general elections put planned family efforts on a back-burner. The new government that came into power even changed the name of the Department of Family Planning to the Department of Family Welfare and the name of the National Family Planning Programme to National Family Welfare Programme.

The Sixth Five-year Development Plan(1980-85) attempted to bring the planned family efforts at the centre stage of the development agenda of the country and aimed at the long-term demographic goal of reducing the net reproduction rate (NRR) to one by 1996 for the country as a whole and by 2001 in all the States from the NRR of 1.67 that prevailed at that time. As a result, the focus of the Department of Family Welfare was no longer confined to family planning alone. Health related issues such as reduction in infant, child and maternal mortality started getting a priority over family planning within the Department. Planned family planning. Planned efforts however continued to be based on the target driven approach.

The Seventh Five-year Plan (1985-90) targeted a couple protection rate of 42 per cent to bring down the birth rate to 29.1 per thousand population along with targets in terms of reduction in the death rate, infant mortality rate and improvements in the coverage of child immunisation and ante-natal care. The Plan stipulated 31 million sterilisations, 21.25 million IUD insertions and 14.5 million conventional contraceptive users. There was however a definite shift in the focus of Department with the launch of Universal Immunisation Programme 1985.

Containing population growth was one of the six most important objectives of the Eighth Five-year Plan (1992-97) which aimed at reducing the birth rate from 29.9 per thousand in 1990 to 26 per thousand by 1997. The Plan stressed the need of a National Population Policy and suggested an inter-sectoral approach supported by political commitment and popular mass movement. During this Plan period, the

target based approach of planned family planning efforts was replaced by the community needs assessment approach. Moreover, increasing attention was accorded to child survival and safe motherhood with the launch of Child Survival and Safe Motherhood Programme. Family planning was just one of the many components of this programme.

During the Ninth Five-year Development Plan (1997-2002), the rationale for planned family planning efforts was confined to meeting the felt-needs of family planning of eligible couples. Planned family planning efforts were completely subsumed in the reproductive and child health efforts resulting in a substantial dilution of family planning efforts.

The Tenth Five-year Plan(2002-07) called for the integration of numerous vertical programmes for family planning and maternal and child health into integrated programme of health care for women and children; a shift from demographic targets to enabling couples to achieve their reproductive goals; and meeting all unmet needs of contraception to reduce unwanted pregnancies. The target regime of planned family planning efforts also staged a comeback in terms of centrally defined targets to community needs assessment. The National Rural Health Mission was launched during the Plan and the Department of Family Welfare was merged with the Department of Health.

The Eleventh Five-year Plan (2007-12) reiterated the goals and objectives of the National Rural Health Mission which also included reduction in total fertility rate to the replacement level. However, at the policy level, the focus explicitly shifted towards universal access to health care rather than universal access to family planning. Planned family planning efforts were conceptualised within the framework of health care and were limited to voluntary fertility regulation only.

The approach paper for the Twelfth Five-year Plan (2012-17) has recognised that the total fertility rate continues to be above the replacement level that was supposed to be achieved by the end of the Eleventh Five-year Plan and that the couple protection rate has stagnated. The papers stresses that the need for population stabilisation is urgent as widely differing rates of population growth in a democratic set-up could potentially generate regional conflicts. The approach paper recommends dedicated funding for family planning services in high fertility states, bundled with reproductive and child health care services under the National Rural Health Mission. It is also recommended that convergence should also be established with programmes that address the underlying factors of high fertility like child mortality, women's empowerment, early age of marriage etc. The approach paper however lacks a comprehensive approach towards population stabilisation. For example, the approach paper is silent about the challenge of population momentum in those State and Union Territories of the country which have either achieved or close to achieve the replacement fertility.

Management and Administration

Planned family planning efforts are essentially directed to meeting the fertility regulation needs of individual couples. To be effective, these efforts must be needs effective as well as capacity efficient. Needs effectiveness means that planned efforts must be able to reach all those couples who want to regulate their fertility. On the other hand, capacity efficiency implies that these efforts must provide full range of family planning services to couples who are within the reach of these efforts. Needs effectiveness and capacity efficiency, in combination, determine the goal effectiveness which, in turn, determines the realised efficiency of planned family planning efforts. In this context, the nature of management and administration of planned family planning efforts gains importance.

The management and administration system of planned family planning efforts in India is known for its normative, bureaucratic, top down approach. At the policy level, decentralisation of the management and administration of planned family planning efforts has repeatedly been stressed but, in practice, implementation of these efforts has always been dictated by the normative guidelines issued from the top with little recognition of grass roots level realities. In recent years, the emphasis has been on assessing community needs but people are rarely involved in this assessment process. A decentralised system that can capture changing family planning needs of the people and create community capacity necessary to meet these needs is yet to evolve in India and there is little effort in this direction.

The current managerial structure of planned family planning efforts in India was evolved more than 30 years ago. Since then, there has been a sea change in the scope and approach of these efforts but there has been little systematic investigation of the appropriateness of the managerial structure. At the national level, Department of Family Welfare within the Ministry of Health and Family Welfare was responsible for organising these efforts. This Department no longer exists. At the same time, there is either no or only a symbolic involvement of other government agencies in promoting family planning as a development strategy. The Ministry of Health and Family Welfare at the national level, does not have a population policy unit that may contribute significantly towards improving the policy environment of planned family planning efforts. In an attempt to improve the policy environment in support of population stabilisation, the National Commission on Population was constituted in the year 2000 on the lines of National Planning Commission but the Commission could not maintain its independent identity and was soon subsumed within the Ministry of Health and Family Welfare. At present, the Commission is largely dysfunctional and contributes little to reinvigorating the planned family planning efforts in the country in the context of hastening the pace of population transition to achieve stable population as stipulated in the National Population Policy 2000 (Government of India, 2000).

Inputs for Planned Family Planning Efforts

The authority and resources for planned family planning efforts are deliberately established to achieve specific goals. Inputs for these efforts, therefore, constitute an important element of the strength and capacity of these efforts. Inconsistency between family planning goals and objectives and inputs necessary for organising family planning activities is often termed as the failure of these efforts.

Inputs for official family planning efforts may be classified into three broad categories - financial inputs, manpower inputs and service delivery infrastructure. The three categories are closely interrelated, yet they need to be discussed separately.

Family Planning Expenditure. Planned family planning efforts in India are integrated with the health care delivery system. As such, estimating expenditure specific to family planning only is difficult. However, a very crude idea of family planning expenditure may be made on the basis of expenditure incurred by the Department of Family Welfare which no longer exists. The expenditure of the Department of Family Welfare was about Rs 6 per eligible couple in 1974-75 which increased to Rs 718 in 2010-11 at the current prices. At 2004-05 prices, the expenditure of the department increased from Rs 46 per eligible couple to Rs 482 during the same period. Real expenditure per eligible couple increased rapidly between 1974-75 and 1976-77. This was the period of Emergency in India when a lot of emphasis was laid down on family planning. After the defeat of the Congress government in 1977, the neglect of family planning at the policy level is reflected by the decrease and subsequent stagnation in expenditure on family planning per eligible couple. Family planning returned on the priority development agenda after the return of Congress in the power in 1982 which is reflected in the quantum jump in the real expenditure per eligible couple on family planning from Rs 58 in 1980-81 to Rs 134 in 1983-84.

The period from 1983-84 to 1996-97 was the period of stagnation. There has been hardly any increase in the real expenditure per eligible couple on family welfare. This was also the period when the focus of the Department of Family Welfare shifted from family planning to health related issues. The Universal Immunisation Programme was launched in 1985 which was followed by Child Survival and Safe Motherhood Programme and then Reproductive and Child Health Programme. With the launch of the National Rural Health Mission in 2005, real per eligible couple expenditure on family welfare has increased rapidly. It is however not clear how much of this increase is attribute to expenditure on family planning. During 1980-81, more than 80 per cent of the expenditure of the Department of Family Welfare was directly related to family planning services and supplies. This proportion reduced to just around 50 per cent during 1995-96 indicating a decreasing attention to family planning. Although hard data are not available, yet the trend appears to continue even today.

Infrastructure and Manpower. At the time of inception of the official family planning programme in 1952, separate family planning clinics were established in the rural and urban areas for the delivery of family planning services. However, the emphasis on sterilisation to achieve demographic goals necessitated integration of family planning clinics with public health care delivery institutions. It was also conceptualised that integration would help in expanding the family planning services delivery system. Today, there is no dedicated infrastructure and manpower for the delivery of family planning services. Family planning services are delivered through the public health care delivery network which is different in rural and urban areas of the country. In the rural areas, it is a multi-tier system comprising of community health centres, primary health centres and sub-health centres which have been created on a population-based norm. One fall out of these norms is that, with the increase in population, normative requirements for different public health institutions keep on increasing. This results in a perpetual gap in the number of public health institutions required and the number in place that affects family planning services delivery.

According to the official statistics, there were 147069 sub-health centres, 23673 primary health centres and 4535 community health centres functioning in the country as on 31 March 2010. There was a shortfall of 19590 sub-health centres, 4252 primary health centres and 2115 community health centres according to norms. A substantial proportion of existing rural health institutions, on the other hand, do not have adequate infrastructure and facilities. More than one third of the sub-health centres and almost 7 per cent primary health centres are without buildings even today (Government of India, 2010).

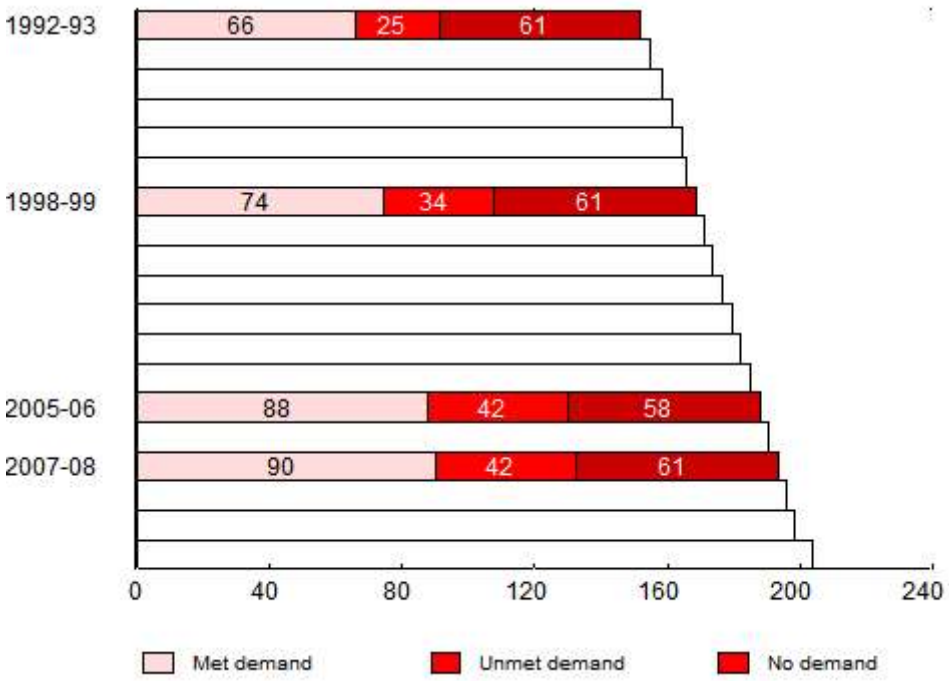
In the urban areas, on the other hand, organised public health services delivery system does not exist. Planned family planning efforts in the urban areas are confined to urban family welfare clinics which are attached to the civil and district hospitals. These clinics are few in number and their reach is extremely limited. Planned family planning efforts do not cover the entire urban population.

Female health worker is the main provider of family planning services other than sterilisation. On the other hand, sterilisation services are provided only by those doctors who are trained for the purpose. Many doctors in the public health care delivery system are not trained to perform sterilisation. There is no information about the average time devoted by different categories of service providers in providing the family planning services. It can however be assumed with a fair degree of certainty that average time devoted by the grass roots level provider in providing family planning services has decreased. The World Bank has observed that family planning services delivery has received a neglected attention in the implementation of the Reproductive and Child Health Programme even in the context of the health of women and children (World Bank, 1997).

Outputs of Planned Family Planning Efforts

The status of planned family planning efforts can be analysed in terms of the administrative capacity and organisational efficiency of these efforts. We measure the administrative capacity and organisation efficiency of these efforts in terms of: 1) needs effectiveness; 2) capacity efficiency; 3) goals effectiveness; 4) realised efficiency; and 5) impact of planned efforts. The five components of the performance are discussed in the following pages.

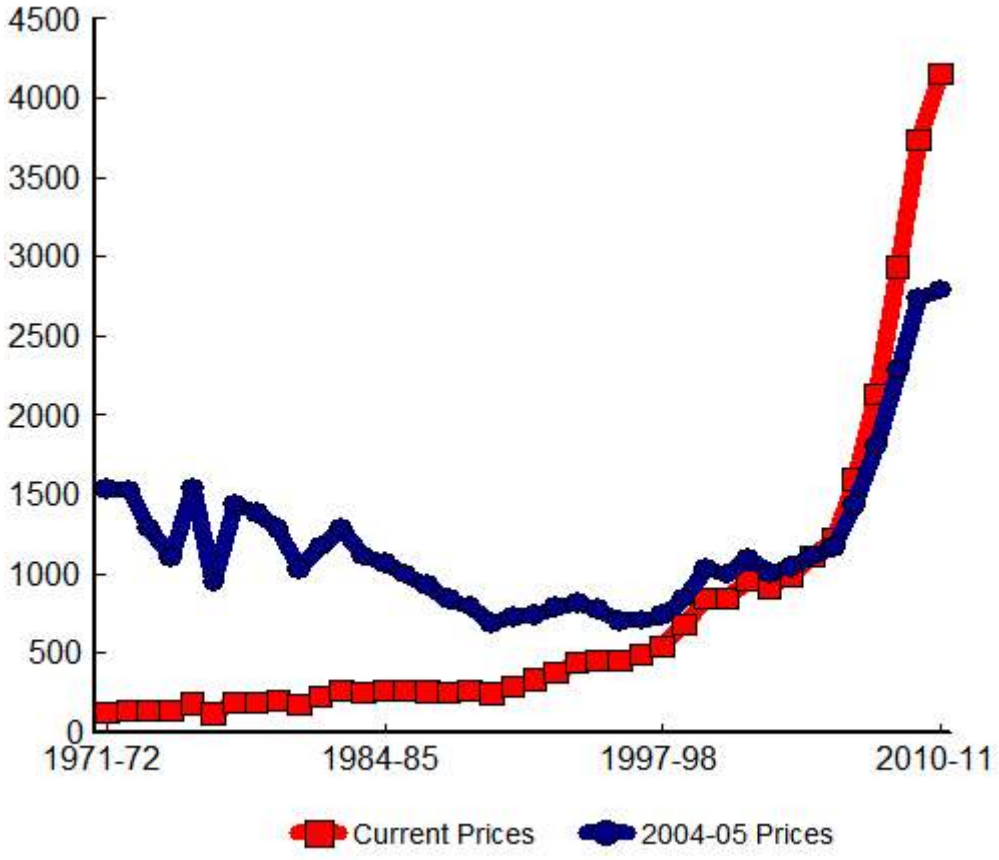
Figure 1
Needs effectiveness of planned family planning efforts in India
(Million couples)



Needs Effectiveness. Direct estimates of needs effectiveness of planned family planning efforts in India are not available. Rather, an indirect assessment of the family planning needs can be obtained on the basis of the estimate of the demand for family planning available from National Family Health Surveys and District Level Household and Facility Surveys (IIPS, 1994; 2000; 2007; 2010). On the basis of these estimates, total number of eligible couples in need of family planning was estimated and compared with the estimated number of eligible couples currently and effectively protected under the official family planning programme. This exercise indicates that the needs effectiveness of the planned family planning efforts in India has remained, at best, stagnant during the 15 years between 1992-93 and 2007-08.

Capacity Efficiency. Like the needs effectiveness, direct estimates of cost efficiency of planned family planning efforts are not available in India. An indirect assessment of the cost efficiency of these efforts can be made on the basis of the average expenditure per new acceptor recruited. This expenditure, at 2004-05 prices, was Rs 1105 in the years 1974-75. It showed a decreasing trend up to the year 1989-90 when it reached an all time low of around Rs 688. After 1989-90, the trend in the average real expenditure per new acceptor was reversed and by the year 2004-05, it is increased to Rs 1106 which was almost the same as in 1974-75. However, after 2004-05, there has been a rapid increase in this expenditure and by the year 2010-11, it reached Rs 2789. The rapid increase in the average expenditure per new family acceptor recruited after 2004-05 is actually due to the fact that the total expenditure is related to the expenditure incurred under the National Rural Health Mission. In fact, because of the integration of family planning services with health services, it is difficult to estimate the average cost of recruiting a new acceptor.

Figure 2
Cost of recruiting a family planning acceptor
(Rupees)



Goal Effectiveness. Traditionally, goal effectiveness of planned family planning efforts has been measured in terms of the targets achieved in terms of new family planning acceptors recruited. The concept of equivalent sterilisations is used for the purpose. Equivalent sterilisations are the sum of all sterilisations, one third of IUD insertions, one eighteenth of equivalent condom users and one ninth of equivalent oral pill users. Information about targets and achievements of planned family planning efforts are however available up to the year 1995 only as the system of allocation of targets was discontinued since 1995 and therefore estimation of the proportion of targets achieved is not possible after 1995. Under the community needs assessment approach that was introduced in 1996, achievement in terms of new acceptors recruited was supposed to be compared with the expected level of achievement but estimates of expected level of achievement are not available to estimate the goal effectiveness of planned family planning efforts.

Figure 3
Proportion of family planning targets achieved
(Per cent)

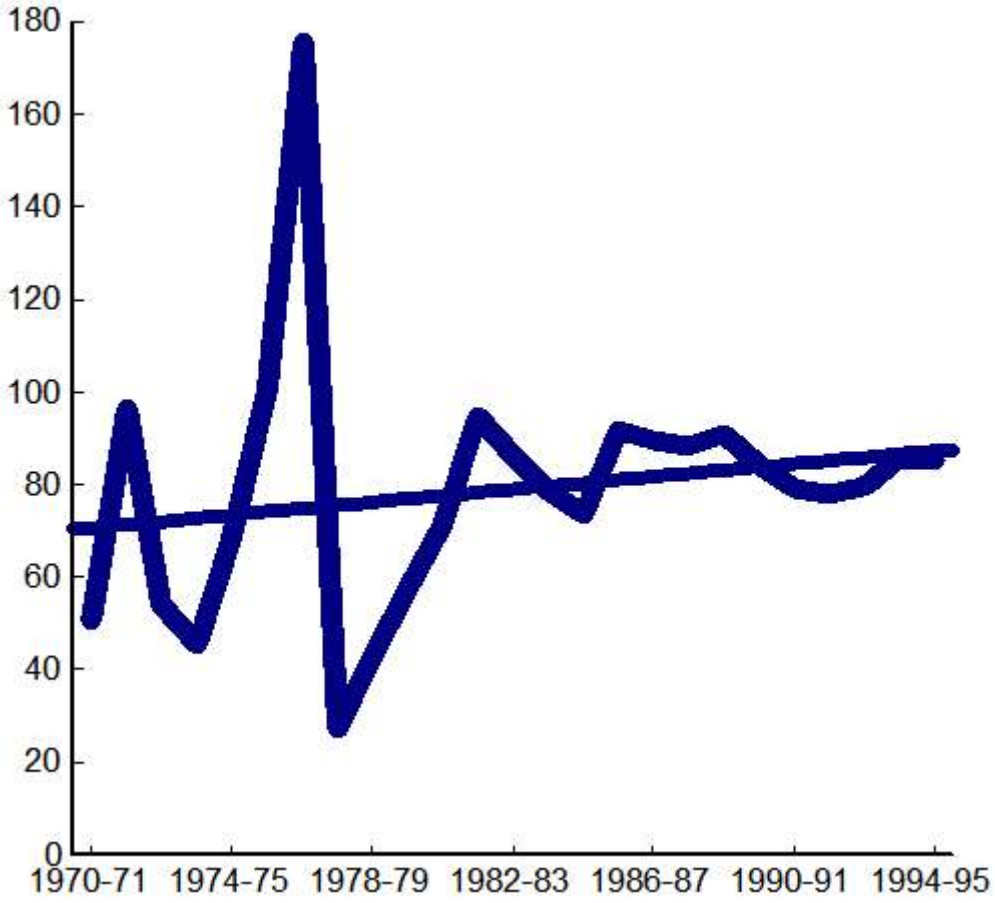
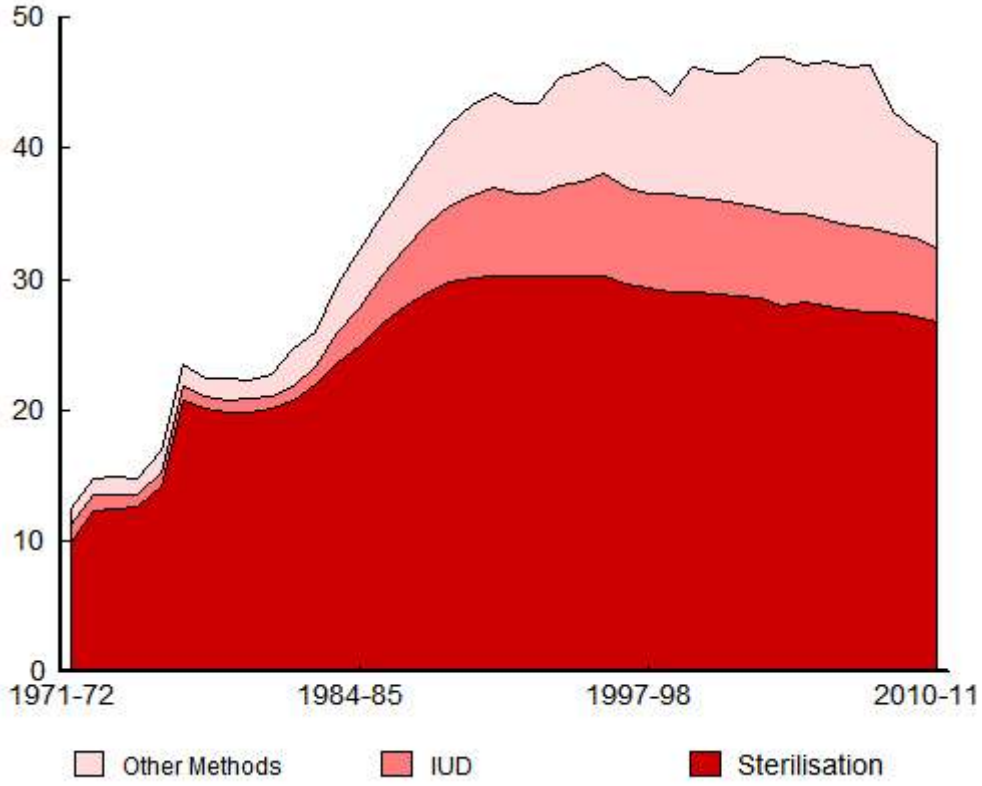


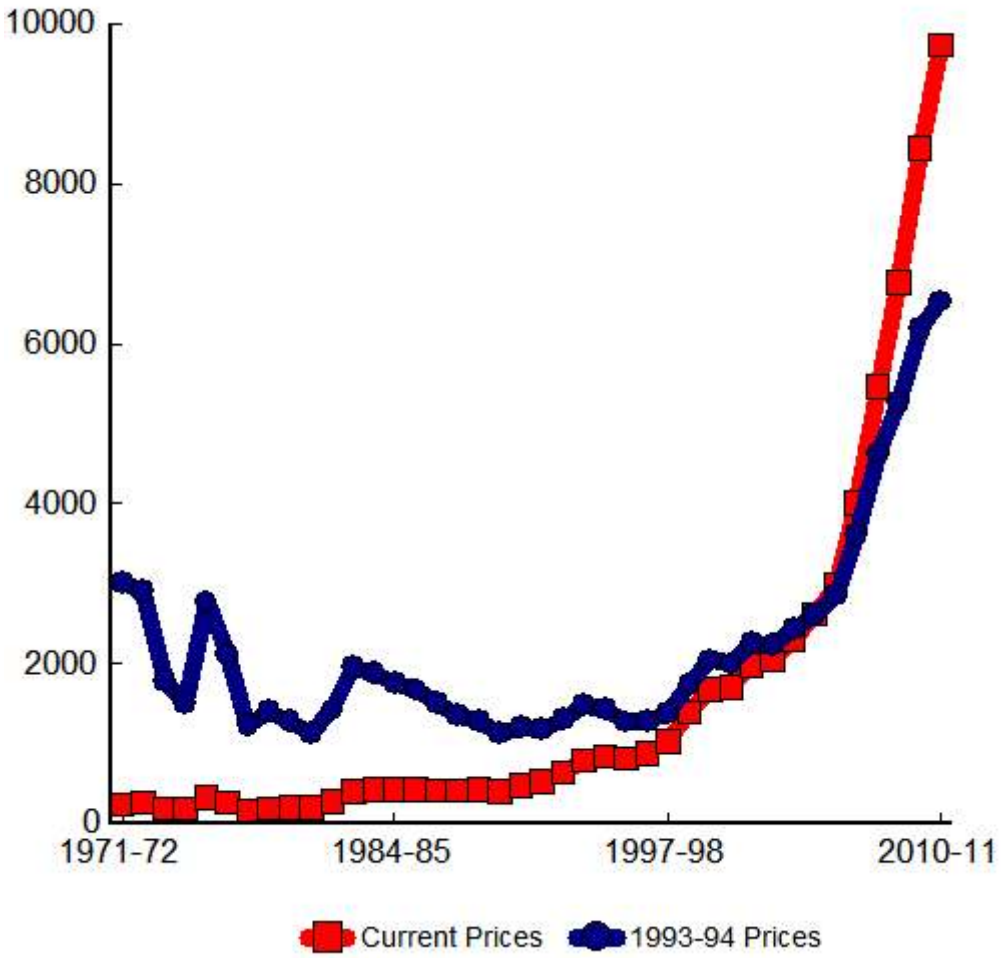
Figure 4
Couples effectively protected through planned family planning efforts
(Per cent)



Estimates of the goal effectiveness of planned family planning efforts for the period 1974-75 through 1994-95 suggest that the long term trend in the goal effectiveness has been around 80 per cent. What is more important is that the goal effectiveness of these efforts appear to have virtually remained unchanged during the 20 years under reference.

The trend in the goal effectiveness of planned family planning efforts can also be judged in terms of the trend in the proportion of couples effectively protected. In 1974-75, around 15 per cent of eligible couples in the country were effectively protected through planned family planning efforts. This proportion increased to around 44 per cent during the period 1990-91 and 46 per cent during 1995-96. Between 1995-96 and 2007-08, this proportion remained more or less unchanged but decreased rapidly after 2007-08. The proportion of eligible couples currently and effectively protected through the planned family planning efforts in the year 2010-11 was just around 40 per cent which is very similar to the proportion of eligibles currently and effectively protected in the year 1987-88. Obviously, the goal effectiveness of these efforts may be classified as low.

Figure 5
Cost of averting a birth through planned family planning efforts
(Rupees)



Realised Efficiency. An idea about the realised efficiency of the planned family planning efforts can be made from the average cost of averting a birth. In 1974-75, the cost of averting a birth through planned family planning efforts increased from Rs 190 in 1974-75 to Rs 8970 in 2010-11. However, at 2004-05 prices, the cost of averting a birth increased from Rs 1571 to Rs 6022 during this period. The increase in the real cost of averting a birth after 1996-96 may be attributed to increased expenditure in reproductive and child health rather than in family planning. Similarly, expenditure under the Department of Family Welfare after 2004-05 includes expenditure under the National Rural Health Mission. As such and like capacity efficiency, there is little information available to analyse the realised efficiency of planned family planning efforts in the recent past.

Impact of Planned Family Planning Efforts

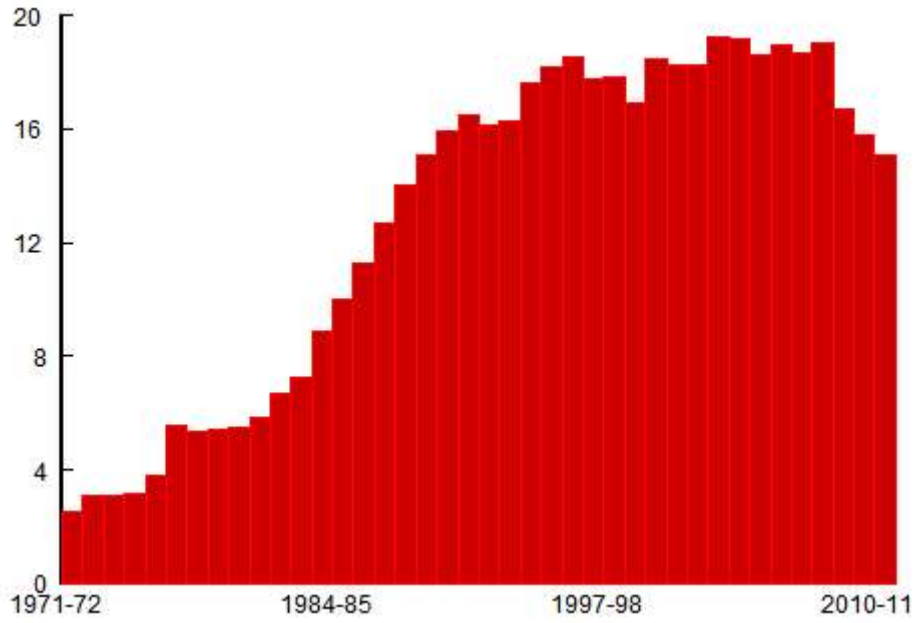
The proportion of couples effectively protected through planned family planning efforts can be used to assess the impact of these efforts by estimating the number of births averted. Following Bongaarts (1985), the crude birth rate in the absence of planned family planning efforts is calculated as

$$PCBR = CBR/(1 - 0.90*u)$$

where *PCBR* is the potential crude birth rate in the absence of planned family planning efforts, *CBR* is the observed crude birth rate and *u* is the proportion of couples effectively protected through planned family planning efforts. Once *PCBR* is estimated, the number of births averted as a result of planned family planning efforts can be estimated by subtracting the observed crude birth rate from the potential crude birth rate and multiplying the difference by population size:

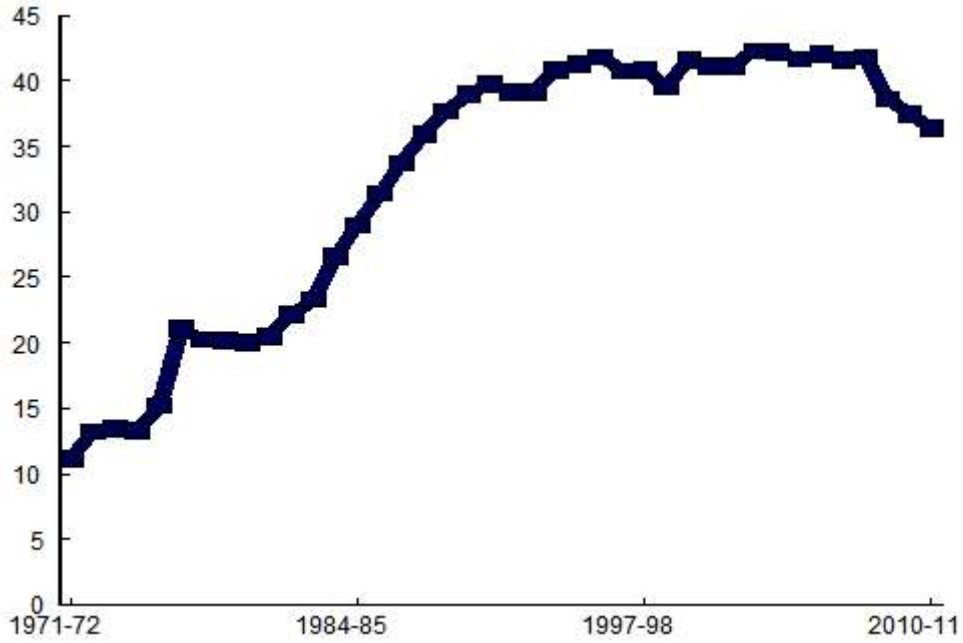
$$BA = (PCBR - CBR)*POP$$

Figure 6
Births averted through planned family planning efforts
(Million)



The above exercise suggests that, during the year 1971-72, planned family planning efforts in India averted around 2.56 million births. This number increased to more than 19 million during 2002-03 and 2003-04 but decreased subsequently to 15 million during 2010-11. Alternatively, planned family planning efforts averted, on average, averted around 26 births per 1000 eligible couple in the year 1971-72 which

Figure 7
Proportion of births prevented to total potential births
(Per cent)



increased to 115 births per 1000 eligible couples in the year 1994-95 and 1995-96 but decreased to 74 births per 1000 eligible couples in the year 2010-11. It is important to observe that since 1995-96, when the community needs assessment approach was introduced, total number of births averted as a result of these efforts has decreased almost regularly. In the year 1970-71, planned family planning efforts in the country are estimated to have prevented around 12 per cent of the potential births that would have occurred in the absence of these efforts. This proportion increased to an all time high in the year 2002-03 when these efforts are estimated to have prevented more than 42 per cent of the potential births that would have occurred in the country in the absence of planned family planning efforts. This proportion, however, decreased after 2002-03. During 2002-2008, this proportion remained almost stagnant but, after 2007-08, it decreased rather rapidly. In 2010-11, planned family planning efforts in India are estimated to have prevented just around 36 per cent of the total potential births that would have occurred in the absence of these efforts. In any case, the observed decrease in the effectiveness of planned family planning efforts in preventing births indicates that these efforts appear to have lost direction in recent years as far as the demographic rationale of family planning is concerned. On the other hand, there has never been any effort to analyse the health impact of these efforts.

Conclusions

Planned family planning efforts in India were conceived to accelerate the 'normal' process of population transition through reducing birth rate under the assumption that social and economic development processes would automatically induce an accelerated decrease in the death rate. These efforts appear to have fallen short of expectations. The total fertility rate in the country is yet to reach the replacement level and there is little possibility that the population of the country will stabilise by the year 1941 as stipulated in the National Population Policy 2000. The latest population projections prepared by the United Nations (2013) indicate that India's population will continue to increase at least up to the year 2065. Obviously, the planned family planning efforts have not succeeded in accelerating birth rate reduction and hastening population transition.

In any case, planned family planning efforts continue to be the need of the time for India's development. A married couple in India still produces, on average, more than 4 children during the entire reproductive span (Government of India, 2013). In Uttar Pradesh, the most populous State of the country, the total marital fertility rate hovers around 5.6 live births per married women even after 40 years of planned family planning efforts. In States where the replacement fertility has been achieved or close to be achieved, the challenge for planned family planning efforts is to mitigate the effect of population momentum. This requires a renewed wisdom about planned family planning efforts as these efforts have traditionally been directed towards birth limitation rather than birth planning.

Implications of rapid population growth to the quality of life and well-being of the people have repeatedly been stressed in India's development discourse right since independence. However, it has rarely been pointed out how these implications will be addressed through planned family planning efforts (Chaurasia and Gulati, 2008). From the development perspective, planned family planning efforts must have underpinnings in the broader population and development framework. This is a major challenge as family planning, in India, has always been visualised as an intervention either to prevent births or to promote reproductive and child health. If family planning is to be sustained as a development strategy, then planned family planning efforts must be based on an approach that integrates population factors with social and economic development processes. Integration with the health care delivery system may be necessary but definitely not sufficient. A broader integrated population and development approach needs to be evolved and institutionalised. This approach may involve integrated population and development planning and integrated evaluation of population and development programmes.

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Table 1
Need effectiveness of planned family planing efforts in India

Year	Total eligible couples (000)	Eligible couples who are either using or want to use family planning (000)	Eligible couples effectively protected through planned family planning effort (000)	Need effectiveness of planned family planning efforts (000)
1992-93	177.532	65.946	25.238	60.536
1998-98	191.278	74.221	33.656	60.681
2005-06	187.959	87.702	42.178	58.079
2007-08	193.46	89.884	42.443	61.133

Source: Authors' calculations

Table 2
Couples effectively protected and births averted
through planned family planning efforts

Year	Couples effectively protected through				Births averted	
	Sterilisation	IUD	Other methods	All methods	Number	Proportion to potential births
	(Per cent)	(Per cent)	(Per cent)	(Per cent)	(Million)	(Per cent)
1971-72	9.9	1.4	1.1	12.4	2.56	11.16
1972-73	12.3	1.2	1.2	14.7	3.08	13.23
1973-74	12.4	1.1	1.4	14.9	3.10	13.41
1974-75	12.6	1.0	1.2	14.8	3.17	13.32
1975-76	14.2	1.0	1.7	16.9	3.78	15.21
1976-77	20.7	1.1	1.7	23.5	5.59	21.15
1977-78	20.1	0.9	1.5	22.5	5.33	20.25
1978-79	19.9	0.9	1.6	22.4	5.42	20.16
1979-80	19.9	1.0	1.4	22.3	5.51	20.07
1980-81	20.1	1.0	1.7	22.8	5.86	20.52
1981-82	20.7	1.1	2.9	24.7	6.68	22.23
1982-83	22.0	1.4	2.5	25.9	7.24	23.31
1983-84	23.7	2.2	3.7	29.6	8.85	26.64
1984-85	24.9	2.9	4.4	32.2	10.04	28.98
1985-86	26.5	3.7	4.7	34.9	11.29	31.41
1986-87	27.9	4.5	5.1	37.5	12.69	33.75
1987-88	29.0	5.2	5.7	39.9	14.02	35.91
1988-89	29.8	5.9	6.2	41.9	15.08	37.71
1989-90	30.1	6.3	6.9	43.3	15.91	38.97
1990-91	30.3	6.7	7.2	44.2	16.51	39.78
1991-92	30.3	6.3	6.9	43.5	16.14	39.15
1992-93	30.3	6.3	6.9	43.5	16.23	39.15
1993-94	30.3	6.8	8.3	45.4	17.62	40.86
1994-95	30.2	7.2	8.5	45.9	18.18	41.31
1995-96	30.2	7.8	8.5	46.5	18.56	41.85
1996-97	29.6	7.4	8.3	45.3	17.74	40.77
1997-98	29.3	7.3	8.8	45.4	17.83	40.86
1998-99	29.1	7.4	7.5	44.0	16.90	39.60
1999-00	29.0	7.3	9.9	46.2	18.45	41.58
2000-01	28.9	7.2	9.6	45.7	18.22	41.13
2001-02	28.7	7.1	9.9	45.7	18.26	41.13
2002-03	28.5	7.0	11.5	47.0	19.24	42.30
2003-04	28.0	7.0	11.9	46.9	19.13	42.21
2004-05	28.2	6.8	11.3	46.3	18.63	41.67

Year	Couples effectively protected through				Births averted	
	Sterilisation	IUD	Other methods	All methods	Number	Proportion to potential births
	(Per cent)	(Per cent)	(Per cent)	(Per cent)	(Million)	(Per cent)
2005-06	27.9	6.7	12.1	46.7	18.98	42.03
2006-07	27.6	6.5	12.1	46.2	18.66	41.58
2007-08	27.5	6.4	12.5	46.5	19.01	41.85
2008-09	27.4	6.1	9.4	42.9	16.66	38.61
2009-10	27.2	6.0	8.3	41.6	15.76	37.44
2010-11	26.7	5.7	8.0	40.4	15.05	36.36

Source: Authors' calculations

Table 3
Cost of recruiting a family planning acceptor and preventing a birth through planned family planning efforts
(Rupees)

Year	Current prices		2004-05 prices	
	Cost of recruiting a new acceptor	Cost of averting a birth	Cost of recruiting a new acceptor	Cost of averting a birth
1971-72	122.8	241.35	1528.89	3004.87
1972-73	135.73	259.27	1527.71	2918.21
1973-74	133.78	186.64	1282.96	1789.88
1974-75	133.79	181.75	1105.04	1501.16
1975-76	179.32	322.82	1538.31	2769.31
1976-77	117.70	263.73	947.42	2122.81
1977-78	190.01	161.56	1437.50	1222.31
1978-79	185.93	188.79	1384.89	1406.17
1979-80	197.67	196.61	1278.00	1271.15
1980-81	177.85	196.86	1028.61	1138.59
1981-82	223.15	270.53	1170.39	1418.84
1982-83	266.26	405.63	1288.57	1963.03
1983-84	248.56	422.92	1108.04	1885.3
1984-85	258.53	423.46	1067.86	1749.11
1985-86	258.27	433.02	998.66	1674.39
1986-87	254.96	414.57	922.17	1499.47
1987-88	252.46	408.93	833.83	1350.61
1988-89	259.34	418.99	793.68	1282.25
1989-90	243.55	399.20	688.46	1128.48
1990-91	283.86	473.68	723.64	1207.55
1991-92	329.56	525.09	741.22	1180.98
1992-93	380.68	633.86	786.60	1309.74
1993-94	434.68	791.74	814.10	1482.8
1994-95	453.05	843.85	772.08	1438.07
1995-96	448.50	813.77	699.28	1268.79
1996-97	487.97	880.63	705.63	1273.42
1997-98	542.26	1022.23	735.22	1385.98
1998-99	675.49	1386.65	843.78	1732.11
1999-00	845.15	1679.77	1027.95	2043.09
2000-01	843.76	1695.82	993.38	1996.52
2001-02	961.59	1979.11	1097.85	2259.56
2002-03	915.14	2035.39	1004.67	2234.51
2003-04	984.12	2304.46	1041.90	2439.74
2004-05	1106.58	2610.74	1106.58	2610.74

Year	Current prices		2004-05 prices	
	Cost of recruiting a new acceptor	Cost of averting a birth	Cost of recruiting a new acceptor	Cost of averting a birth
2005-06	1217.46	2988.98	1167.4	2866.08
2006-07	1592.69	4013.13	1432.49	3609.49
2007-08	2127.87	5461.1	1801.64	4623.82
2008-09	2934.17	6757.36	2285.00	5262.32
2009-10	3733.59	8441.30	2736.77	6187.58
2010-11	4155.61	9733.02	2788.93	6532.05

Source: Authors' calculations