seminar web-edition
THE MONTHLY SYMPOSIUM PO.BOX 338 NEW DELHI 110001
Founder Editors: RAJ & ROMESH THAPAR

Population policy

PRAVIN VISARIA

INDIA, the second most populous country of the world, with more than a billion persons by 11 May 2000 (according to preliminary results of the 2001 Census, India counted 1.027 billion people on 1 March 2001), was the first to initiate a government policy of promoting a family planning programme in 1952. The programme, which began somewhat hesitantly, has been a major effort at social engineering in a democratic polity with an unusually high level of heterogeneity.

Looking back over the past 50 years, the success of the effort far exceeds what is generally recognized in the popular press. At the beginning of the 21st century it is time to review our past record on population, the recently announced national population policy 2000 (NPP 2000), and the population policies announced by the three states of Andhra Pradesh, Madhya Pradesh and Rajasthan. We hope to draw lessons for both state and public action to help achieve social goals on this important subject.

A detailed study of the various documents, relating to and preceding the formulation of successive five year plans of India, has highlighted the following points.

1. The Indian concern with population growth and the need to influence the behaviour of the people with respect to fertility was entirely indigenous. While influenced by the exposure of Indian leadership to western intellectuals, there was no extraneous pressure on the Indian authorities to adopt any particular approach in the late 1940s or early 1950s.

2. The Indian family planning programme has certainly not been a ‘dismal failure’. The contrary statements are based on the use of a wrong yardstick, focused solely on the lack of change in the rate of population growth during successive decades. The latter outcome is a result of the simultaneous operation of two processes of decline in the death rate as well as the birth rate that have neutralised each other. If the change in the average number of children born to women in reproductive ages is used to assess the performance of the family planning programme, India has done reasonably well

according to the data provided by the Sample Registration System (SRS).

3. Despite the promising performance so far, it seems unlikely that India will attain the goal of a replacement level of fertility of 2.1 by 2010, as was projected in the NPP 2000. Some major changes, introduced in the management and approach of the family welfare programme in 1995, augur well, but they are yet to be effectively implemented. There is a large momentum of growth built into the young age distribution of the Indian population. Also, the four large North Indian states with a population of 336 million in 1991 (40% of the total) continue to have a very high fertility, despite the decline that has occurred even there. As a result, the progress towards replacement level of fertility is likely to be slower than desired.

4. The task ahead demands a concerted effort for a substantial improvement in rural infrastructure and levels of health, literacy and education. Also, the large army of health workers, entrusted with the responsibility of 'motivating' millions of rural couples to regulate family size faces an uphill task. If they are to become counsellors of the people, they need to be encouraged and trained to broaden their concerns to include the delivery of a whole package of high quality services to their clients, instead of promoting only particular methods of contraception, such as sterilization.

Concept of a population policy: The size of the population, its characteristics, spatial and rural-urban distribution, rate of growth and its determinants decide the quantum, pattern and distribution of consumption and production. It is, therefore, only natural for the state or the government to be concerned about population. Such concern is most essential for a complex democratic society seeking to eradicate poverty and ensure adequate standards of living for its people. Of course, even an authoritarian leader must consider the actual or potential supply of workers (including army personnel), the requisite equipment and the consumption needs of people. Therefore, the three determinants of population change – birth rate, death rate and migration to or from a territorial unit – have naturally received explicit or implicit attention from rulers or governments since the days of Kautilya.

A policy is defined as a statement of important goals, accompanied by a specified set of means to achieve them.[1] A well-elaborated set of means constitutes a programme. A good policy has to be based on a sound theory linking the means with the ends, although on social issues it is often likely to involve an element of judgement about the connection between inputs and outcomes or the process.

The choice between alternative policies has to be made not just in terms of their prospective contribution to the achievement of goals

but also their legitimacy, cost, potential popularity and, among other things, effect on other goals. Given the large number of variables that are influenced by and that influence population trends, there is a temptation to make it into a comprehensive development plan. Population policy could easily be drowned in an elaborate framework. However, a flexible, broad framework is certainly imperative.

Evolution of India's population policy: The major landmarks in the evolution of India's population policy are listed in Annex I. This list can be expanded if one considers the several inevitable shifts in emphasis of the programme over the past 50 years. However, it is important to reflect on the antecedents of the first steps taken by the Planning Commission during 1951-52.

Unlike in the case of several other developing countries, the Indian concern about the relatively high level of fertility or the number of children born to Indian women rather than the rate of population growth, reflected a genuine desire to improve the living standards of the people. It was not imposed from abroad. The Indian leadership had been exposed to the development in western countries and did not want India to lag behind.

During the 1920s and l930s, some pioneers had set up family planning clinics in Poona and Bangalore. In the 1940s, the Bhore Committee on Health Survey and Development (1946) and the subcommittee on population set up by the National Planning Committee (1940) favoured the involvement of the government in the promotion of family planning. Not surprisingly, therefore, the memorandum submitted by the Family Planning Association of India, set up in 1949 under the presidentship of Lady Dhanvanti Rama Rau, elicited a favourable response from the Planning Commission.

The Health Panel, chaired by Health Minister Rajkumari Amrit Kaur, had appointed a subcommittee on population growth and family planning. R.A. Gopalswami, the Census Commissioner in charge of the first census of independent India, was its convener. There were differences of opinion. The health minister insisted that 'no contraceptives should be used'. But Prime Minister Jawaharlal Nehru supported a more flexible approach and also the idea of state action to promote family planning. It was because of the report of this subcommittee that in 1952 India became the first developing country in the world to adopt a policy of governmental efforts to promote a reduction in the number of children born to Indian couples.

Simultaneously, there was considerable effort to initiate varied programmes to lower the level of morbidity and malnutrition and to raise life expectancy at birth from the then low value of around 32

years. Thus, the early concept of population policy covered both mortality and fertility and did not exclusively focus on fertility. There was also a recognition of the need to improve the quality of life of the people by lowering the burden of disease or morbidity, promoting universal primary education and eradicating illiteracy, exploitation and poverty.

There were references to an urgent need to slow down the pace of rural-urban migration and the growth of major cities where it was proving difficult and expensive to provide basic amenities to people. However, these statements did not constitute a 'policy' on population distribution or urbanization. This was not really surprising because prior to the 1961 Census, the database relating to migration was scanty. Reports of even the 25 'city surveys' commissioned by the Research Programmes Committee of the Planning Commission in the l950s became available later.

The effective date of the adoption and implementation of a clear family planning programme is often put at 1966, when the 'extension approach' to the promotion of family planning throughout the country replaced the earlier clinic-oriented approach. The earlier approach seeking to set up a large number of family planning clinics was based on the experiences of concerned social workers and professionals in urban areas who were trying to initiate a major programme of social engineering without any precedents to follow.

A separate Department of Family Planning was set up in the Ministry of Health during the fourth five year plan period.[2] Around the same time, a 'time-bound' target of reducing the crude birth rate from about 39 to 25 per 1000 population in 10 to 12 years was adopted. In practice, it has been a moving target and was not achieved even by 1999, the last year for which estimates of birth and death rates are available from the Sample Registration System set up in the l960s.

Slippages in the achievement of this goal and the resulting frustration led to the outburst of a special drive during the emergency period of 1975-77 to promote sterilization. The elections following the withdrawal of Emergency led to the fall of the government. The Janata Party government supported a voluntary family welfare programme without any of the alleged excesses of the emergency period. The backlash to the 1975-76 drive continued for several years and was a setback for the programme.

A Working Group on Population Policy, set up by the Planning Commission, recommended in 1980 an unrealistic goal before the country: a net reproduction rate (NRR) of 1.0 by 1996 as a national average and by 2001 in all the states. On the basis of several assumptions about the method-mix of contraception, the presumed

efficacy of different methods, a rise in the age at marriage, and a lowering of the infant mortality rate (IMR) to 60 per 1000 live-births, a simulation exercise was done. An effective couple protection rate (ECPR) of 60% was expected to lead to a birth rate of 21 and a death rate of 9. These estimates were incorporated in the draft sixth five year plan as well as the National Health Policy of 1983 and became accepted national goals.

The limitations of the approach adopted by the Working Group are evident in the fact that even in the state of Punjab, where the reported ECPR exceeded 68%, the birth rate in 1996 was 23.7 and the total fertility rate (TFR) in 1997 was 2.7, much above the replacement level of fertility. Of course, Kerala as well as Tamil Nadu reported a below- or near-replacement level of fertility, with a TFR of 1.8 and 2.0, respectively, in 1997. At the time of writing in the middle of 2000, we have a death rate of 9.0 but the IMR has not dropped to 60 and the birth rate of 21 or NRR of 1.0 in the country as a whole is still far away. In fact, in 1992, the eighth plan had recognised that the NRR of 1.0 was likely to be attained only during 2011-16; and the ninth plan accepted the very real possibility that the replacement level of fertility may be reached only by 2021 in the country as a whole and in some states much later.

In the 1980s, Prime Minister Rajiv Gandhi had initiated an effort to revise the strategy of the family welfare programme, but little came of it. In 1992, the Karunakaran Committee, set up by the National Development Council (NDC) partly in response to the 1991 Census results, recommended the formulation of a National Population Policy. A draft prepared by an expert group under the chairmanship of M.S. Swaminathan in 1994 was circulated widely and its successive variants were considered by the cabinets of three different coalition governments. The drafts underwent several revisions until finally the NPP 2000 was announced by the present government in February after its approval by the Cabinet. The policy is now expected to be discussed in Parliament so that a broad political consensus can be evolved on the subject.[3]

In the meanwhile, the state governments have begun to follow the suggestion of the Swaminathan group to formulate state level population policies. Even before the expert group was set up to prepare a draft of the national population policy, the government of Tamil Nadu had formulated a 15-point programme for child welfare, to improve the health and nutrition of women and children in the state. The programme had incorporated in it the goals relating to infant and child mortality and the birth and death rates.

Subsequently, in 1997, the government of Andhra Pradesh prepared a state population policy.[4] At the end of July 1999, the cabinet of Rajasthan state had approved the population policy of Rajasthan.[5] In January 2000, Madhya Pradesh came out with its population

policy.[6] More recently, Uttar Pradesh also drafted a population policy.[7] These state-level population policies are expected to help the departments of family welfare in the states to mobilise greater effort towards population goals and related programmes.

To place the various population policy statements in perspective, it is essential to review the current population scene. There is considerable confusion and misinformation, and the yardsticks being used to assess the contribution of the family planning programme are rather convoluted. The relevant facts need careful review.

India had a population of 846 million at the time of the census conducted in February 1991, with a reference date of 1 March. (If account is taken of the net undercount of population, including the greater under-count of young children, the actual population at the time of the census was 864 million, almost 16 million more than the widely used estimate.) The implicit annual growth rate during the 1980s was 2.1%, only slightly lower than the 2.2% observed during the two decades of 1961-81. This has been misinterpreted as indicating a stagnation in the underlying demographic processes.

The census results have been interpreted as indicating a dismal failure of the family planning programme. Nothing could be further from the truth. The rate of inter-censal growth reflects trends in both mortality and fertility or death rates as well as birth rates. As is evident from the summary data for 1901-91, shown in Table 1, the continuing decline in the death rates from 27-30 during the 1940s to 9 during 1996-98 has compensated for the decline in the birth rate, which has come down to 26 by 1998 (27 during 1996-98) from about 42-45 during the 1940s and l950s.

Recent evidence on decline in fertility: The recent data provided by the SRS suggest a clear decline in fertility throughout the country, including in the large North Indian states (Bihar, Madhya Pradesh, Uttar Pradesh and Rajasthan), where since 1971 TFR has declined by 27-28% (see Table 2). Elsewhere, fertility decline has been faster. Compared to rural fertility, urban fertility has declined at a faster pace. The urban TFR has dropped to 2.1 or to a replacement level or less in urban areas of Kerala, Tamil Nadu, Andhra Pradesh, Assam, Himachal Pradesh, Karnataka and West Bengal.

It is true that we need to be concerned not just with the level of fertility but with the total size of the population or its annual growth. Therefore, we can take little comfort from the observed decline in the TFR, and must recognize the fact that the annual increase in the total population of the country is likely to exceed about 18 million, higher than in China and equal to the total population of several countries. However, if the success of the family planning programme is neutralized by the success of the

health policies, it is certainly not fair to label the former as a failure.[8]

In retrospect, our policy-makers and their advisers were certainly over-optimistic when they proposed in 1963 and repeated later that the switchover to the extension approach would lead to a sharp decline in fertility, such that the birth rate would drop to 25 in 10-12 years. Quite probably, the results of knowledge, attitudes and practice (KAP) surveys indicating a widespread desire to regulate the size of the family induced an excessive faith in what the supply of services by female health workers or the auxiliary nurse midwives (ANMs) might achieve. Also, when respondents reported a desire for 3 to 4 children, they were indicating the number of living children they wanted and not total births, because of their long experience of high mortality, including infant and child mortality.

Mortality trends: The infant mortality rate (IMR) of around 200-225 per 1000 live-births at the time of India's independence in 1947 has declined to about 72 during 1996-98.[9] Admittedly, even this figure far exceeds the IMR in China, which has now declined to around 30. Within India, only Kerala, with about 91% of births in 1991 occurring in institutions and another 6% attended by trained birth attendants, has achieved an even lower IMR of 17. Elsewhere, the IMR ranges between low 50s in Punjab, Tamil Nadu and Maharashtra, and high values between 85 and 98 in Uttar Pradesh, Madhya Pradesh and Orissa. Obviously, there is substantial scope and need for a further decline in the present high IMR (see Table 3).

The interstate differentials are evident in life expectancy as well, which in India has risen from about 32 years in the 1940s to nearly 60 years during 1991-95. The figure for Kerala exceeded 73 years, and Punjab was second with 67 years, whereas Assam and Madhya Pradesh reported nearly 18 years lower than Kerala's life expectancy.

The slow mortality decline may partly be attributed to the fact that the universal programme of immunization was initiated only in the mid-l970s. It now covers the entire country but even during 1995-96, 33% of the rural children aged 0-4 had not received BCG and 56 and 45% of the rural children had not received oral polio vaccine and the DPT doses.[10] There has been some controversy in India that the programme has led to a certain imbalance in the allocation of funds. Critics argue that as a result, the much-needed effort to eliminate malnutrition and to minimize the number and proportion of low birth-weight babies has not received the requisite attention.[11]

The acute paucity of funds for public sector services has indeed been a serious problem since 1991, when India began its

programme of structural adjustment to eliminate the high fiscal deficits and the deficit in the balance of payments. However, the NPP 2000 has recognized the need to raise the allocations for an adequate health programme to lower the current relatively high levels of infant and child mortality as well as maternal mortality. The next few years may witness a strong effort in this direction and might raise the pace of improvement in the level of life expectancy. A major uncertainty is the extent of impact of the AIDS epidemic in India on the level of mortality.

As we look ahead, the key question is whether and how we can accelerate the pace of decline in fertility in states where it continues to be high through some policy actions. There is no doubt that a reduction in the level of infant, child and maternal mortality and an improvement in the availability of prenatal, natal and postnatal care would help to lower the 'high wanted fertility' or the number of living children desired by couples. Unfortunately, the rural infrastructure is so weak that even in 1991 only about 34% of all villages had an all-weather approach road. The possible efforts of pregnant women to access the health care system to meet crisis situations are frustrated by the inadequacies of road transport and communication, which also discourages the teachers of rural schools to attend to their duties.

As noted above, in 1974, the Indian delegation to the World Population Conference held at Bucharest had coined the slogan: 'development is the best contraceptive'.[12] More recently, however, Karan Singh has argued that while he had called development the best contraceptive, he had not considered it to be the only contraceptive but also proposed a new slogan that 'contraception is the best development'.[13] However, quite apart from scoring debating points, both slogans overlook the reality of rural India, which is most strikingly evident in the size of population in a majority of villages.

According to the 1991 Census, 65% of Indian villages had a population of less than 1000 persons and 42 had less than 500 persons each. The average population of a village in Kerala and Tamil Nadu, the two states with a below replacement level of fertility, was 15476 and 2325, much higher than the national average of 1061. The size class of population of a village is an excellent indicator of the size of the rural market, the extent of diversification of economic activities of the population and also the level of development. The road network integrates villages into the mainstream of the economy and increases the options to access social and economic opportunities and services in the rest of the country.

According to the broad experience of the fertility transition that has occurred in developed countries as well as in the newly industrialized economies of Southeast and East Asia, it is

modernization or westernization that helps to lower the traditionally high levels of fertility. The process includes high levels (exceeding 75%) of literacy, urbanization and industrialization, and a rise in the status of women. Some recent reviews of the subject have added to these variables the spread of communications and transport as key factors influencing fertility decline.

In an analysis of change in the level of fertility between 1970-72 and 1989-91, the various socioeconomic variables (female literacy, urbanisation, infant mortality, per cent of male workers engaged in non-farm activities) in the 16 major states showed no statistically significant association, except for female literacy. However, the values for Kerala seem to contribute a great deal to the association. Otherwise, one essentially observes two clusters of states. One of the clusters includes the four large North Indian states (Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh) with both a high TFR and low female literacy and the second cluster having moderate levels of both TFR and female literacy.

The sharp decline in the level of fertility in Tamil Nadu without anything like the high level of literacy and low levels of infant and child mortality observed in Kerala, attests to the difficulty of identifying preconditions for fertility decline. Fertility has declined by more than 50% and reached almost three-fourths of the way towards a replacement level of fertility in at least three districts of Gujarat state where the IMR continues to be high and female literacy rates are much lower than even in Tamil Nadu.[14] These findings do not imply that universal literacy and low infant and child mortality are not worthwhile goals for a society to pursue or that societies can divert resources from the pursuit of these objectives to other issues. They do confirm, however, that it is difficult or impossible to specify the threshold levels of progress in social goals or modernization that would usher in a sharp fertility decline.

In several discussions, Kerala's experience is cited as a model to suggest that universal female literacy, low infant mortality and a high status of women, summarized as social development, would help to accelerate fertility transition. However, the important role of international migration to the Gulf countries as demonstrating a means of escaping the poverty trap and the associated rise in the aspirations of living desired for the family and the children is often underestimated.

Likewise, the history of matriarchal tradition in Kerala is often cited as indicating the high status enjoyed by Kerala women. However, the evidence on the subject is by no means clear. The key word at the International Conference on Population and Development (ICPD) at Cairo was empowerment of women. However, the concept of empowerment is difficult to translate into

specific policies and programmes.

The NPP 2000 has stressed the need for ending discrimination against girls during childhood and early adolescence and against women during the childbearing period in order to improve their health and nutrition. However, it is difficult to influence the intra-household allocations of food and purchasing power except through the demonstration effect and education, that seems to be working in urban India. Legal action is certainly not enough. Many laws enacted by our progressive legislatures continue to be violated with impunity in large parts of India.

The role of targets: A major bane of the Indian family planning programme since 1966 has been the pressure of targets on all functionaries. When the government accepted the goal of reducing the birth rate to 25 in 10 years, the targets about the expected number of acceptors of different methods of contraception were worked out on the basis of the desired level of decline in the birth rate. The targets prescribed, almost arbitrarily and indiscriminately, an identical method-mix for different states, irrespective of the local conditions and preferences and the prevailing level of contraceptive use.

Every health worker was assigned the target number of sterilizations, IUD insertions, and users of condoms (and later also the oral pills) to be recruited each year. The achievement of these targets at the state, district and sub-district level was monitored by the supervisors at successive levels to judge the extent of success of the grassroots workers in performing the task assigned to them. While many policy-makers considered such targets as essential and feared serious consequences of abandoning them, their assessment of the dependability of the statistical system of reporting of performance was totally unrealistic.

A study in four districts of Gujarat clearly showed that the use of reversible methods was substantially overstated in the service statistics[15] due to the pressure exercised at various levels of administration to achieve targets and the adverse consequences of the failure to achieve them. It meant widespread falsification of statistics and wastage of commodities that had partly been purchased with scarce foreign exchange. It also compromised the credibility of the programme among grassroot level workers as well as the people at large. Therefore, in 1994, the Expert Group recommended the abandonment of the system of method-specific targets.

Yet, many administrators, professionals and social scientists, who agreed that the method-specific targets were counter productive, found the idea of abolishing them too radical. They feared that such a step would remove the only tool of monitoring the performance of

grassroot level health workers. When the experience of Tamil Nadu under India Population Project (IPP) V was cited as having demonstrated that the programme performance did not decline after the removal of method-specific targets, it was argued that the other states did not have an equally good administrative system.

Yet, after the Cairo Conference on Population and Development, the method-specific targets were removed in April 1995 on an experimental basis from some 17 districts of different states and from Kerala and Tamil Nadu. In April 1996, however, even without a proper appraisal of how the target-free system worked in practice, the centrally prescribed targets were removed from the entire country.[16] It led initially to a drop in the reported number of acceptors of different methods of contraception in most of the states during 1996-97 and to some extent in 1997-98. The common refrain was that the workers interpreted the removal of targets as an abandonment of all pressure to work.

Fortunately, the senior decision-makers recognised the fact that the drop may well be a statistical artifact, a result of the absence of any falsification of statistics. Also, an alternative system of ascertaining the local or community needs relating to the adoption of different methods and the recording or registration of all pregnancies and for prenatal, intra-natal and postnatal care has been worked out to assess the workload of all health workers.[17]

Of course, it is difficult to monitor the exact implementation of the centrally prescribed policies in different states and districts. It is often reported that the targets continue to be a part of the ground realities, although the method-specific details may not be emphasised as much as before. India is too large a country to identify the situation prevailing in different states.[18] Yet, it is reassuring that the NPP 2000 has affirmed the 'commitment of government towards voluntary and informed choice and consent of citizens while availing of reproductive care services, and continuation of the target free approach in administering family planning.'[19]

Goals of National Population Policy: The NPP 2000 has distinguished between immediate, medium-term and long-term policy objectives. The immediate objective is to address (*a*) the unmet needs for contraception, (*b*) health care infrastructure and health personnel, and (*c*) to provide integrated service delivery for basic reproductive and child health care. The past history suggests, however, that the questions of health infrastructure and health personnel can hardly be addressed in the short run. The resource requirements are so large that the funds will hardly be mobilised immediately or even over a period of five years. The integration of the service delivery is also a longstanding goal that has been

difficult to achieve.

The specification of the fertility reduction goal in terms of the replacement level of fertility or a total fertility rate of 2.1, to be achieved by 2010, is better than the earlier goal of a Net Reproduction Rate (NRR) of 1.0, noted in the National Health Policy of 1983 and the sixth five year plan. The NRR is a function of both fertility and mortality. A rise in mortality, which clearly cannot be a policy objective, can also lead to an NRR of l.0.

As suggested by the Expert Group in 1994, the target year for the achievement of a replacement level of fertility has been advanced by five years relative to the eighth five year plan. However, what seemed feasible in 1994, is probably not so in 2000. At that time, the SRS data for 1992 indicated an acceleration of the decline in fertility. Subsequently, as the SRS sample units were replaced during 1993 and 1994, the TFR during 1993-95 remained steady at 3.5; and only during 1996-97, the decline appears to have been resumed.

Admittedly, given the momentum for continued growth built into the age structure of India's existing large population, an earlier attainment of the replacement level of fertility will imply a lower ultimate population.[20] The ninth plan had conceded that the attainment of replacement level of fertility may slip beyond 2011-16 to 2021. The diffusion of fertility decline may well be faster than has been the case so far, particularly as the continuing decline in the size of land holdings brings home to the people the gap between their aspirations and the reality. The rising levels of literacy and education, partly associated with the attrition of the survivors of cohorts born when the schooling facilities were limited, will also help to accelerate fertility decline.[21] Much will depend, however, on the implementation of programmes to achieve other socio-demographic goals, incorporated in the NPP 2000.

The specified 'long-term objective' of a stable population by 2045, 'at a level consistent with the requirements of sustainable economic growth, social development and environmental protection' does not seem a feasible goal. If the replacement level of fertility is attained by 2010, the momentum of growth will make continued positive growth of population for the ensuing 60 years almost inevitable.

Just as the Chinese have not been able to prevent their population from growing beyond the specified figure of 1200 million in 2000, India's population will continue to grow for about 50 to 60 years after the attainment of a replacement level of fertility. The only way to attain a stable population by 2045 may be to aim at a below replacement level of fertility after 2010, which will lead to a declining population some 40 years later.

Despite the importance of a long-term goal, few persons are likely to be concerned about what will happen in 2045 or later. Therefore, greater attention needs to be paid to the other socio-economic goals, which include the attainment by 2010 of:

* Free and compulsory school education up to age 14 and lowering of the dropout rates at primary and secondary level to 20% for both boys and girls. (The task is particularly difficult in rural areas of backward states and among the scheduled tribes and agricultural or rural labourers.)

* Lowering IMR to 30 and maternal mortality rates to below 100 per 100,000 live births.

* Universal immunisation of children against all vaccine-preventable diseases.

* Promotion of delayed marriage among girls to after age 18, and preferably after 20 years of age. (The rule of law and the perceptions about the safety of unmarried women are the critical issues.)

* Raising the institutional deliveries to 80% and those by trained persons to 100%. (The rural infrastructure is the main bottleneck here.)

* 100% registration of births, deaths, marriages and pregnancies. (While the goal is laudable, its attainment is not likely to be easy even over a 15 to 20 year period.)

* Containment of AIDS and treatment of RTIs and STIs.

* Prevention and control of communicable diseases.

These are ambitious goals in view of the past history of tackling such tasks. An achievement of these goals will certainly require a major improvement in the functioning of several social sector programmes. The removal of the tyranny of targets should enable the health workers to concentrate on the delivery of services according to their job descriptions and a reorientation of their approach to their clientele should be possible. If all pregnancies can be registered along with an assessment of the local needs, the provision of requisite prenatal, natal and postnatal care to pregnant women and their children should be possible. The extent of provision of these services can be monitored and serve as a valuable substitute for numerical targets. Accordingly, the NPP places the question of quality of services at centrestage and seeks to achieve ‘universal access to information/counselling and services for fertility regulation and contraception with a wide basket of choices.’[22]

Incentives: The payment of incentives to couples undergoing sterilization or getting an intrauterine device (IUD) inserted has been debated at length in India. Eminent persons such as J.R.D. Tata and K.S. Sanjivi were persuaded that the payment of sizeable incentives to prevent births would be in the national interest. Such incentives seemed justifiable on grounds of their cost-benefit ratio relative to alternative investments or public expenditures. Some argued that since these payments go to the poor, there is no reason to dispense with them. However, the experience of Kerala and Tamil Nadu leads one to believe that couples begin to accept contraception or sterilization out of their own personal calculations and not because of incentives.[23]

In a four-district survey in Gujarat during 1989, 5429 sterilized persons were asked whether they would have accepted sterilization even if no incentives had been given. Almost 4.5% reported that incentives were not given to them in their area. Of the rest, 89% reported that they would have undergone sterilization even without any incentive.[24] The validity of responses to a hypothetical question can always be doubted. Yet, the lesson clearly seems to be that incentives probably influence only about 10% of the acceptors or users of contraception.

The money spent on incentives can be used to improve the 'quality of services', although the concept of quality is sometimes criticised as elitist and conditioned by the previous experiences of the population. The incentives given to the acceptors of sterilizations and IUDs (intrauterine devices) led to widespread petty corruption and adversely affected the fundamental orientation of the entire programme, and absolved the service providers of their responsibility to ensure a high quality of service. The Expert Group had, therefore, proposed a discontinuation of incentives in cash or kind given by the central and state governments for the acceptors of contraceptives as well as to motivators and service providers.

The NPP 2000 refers to five schemes that involve incentive payments. For individuals, these include: (1) The Balika Samridhi Yojana run by the Department of Women and Child Development to promote survival and care of the girl child, with a cash incentive of Rs 500 given at the time of birth of a girl child of birth order 1 or 2. (2) The Maternal Benefit Scheme run by the Department of Rural Development awards an incentive of Rs 500 for the birth of the first child after 19 years of age and is limited to the first and second births only. The cash award is now to be linked to 'antenatal check up, institutional delivery by a trained birth attendant, registration of birth and BCG immunisation.'

(3) A Family Welfare-linked Health Insurance Plan is to be established to offer health insurance (for hospitalisation, not exceeding Rs 5000) to couples (and their children) below the

poverty line, if the couple undergoes sterilisation with no more than two living children. The spouse undergoing sterilisation is also to get a personal accident insurance cover. (4) Couples below the poverty line, who marry after the legal age at marriage, register the marriage, have their first child after the mother reaches the age of 21, accept the small family norm, and adopt a terminal method after the birth of the second child, are to be rewarded.

A fifth scheme provides for group incentives that will reward panchayats and *zila* (district) parishads for 'exemplary performance in universalising the small family norm, achieving reductions in infant mortality and birth rates, and promoting literacy with completion of primary schooling.' While it would be a mistake to judge these schemes from the point of view of small sums of money they provide for, the real costs of proving one's eligibility and actually receiving the awards far exceed what is recognised in our metropolitan centres. The proof of age and of the fulfilment of prescribed conditions is difficult to obtain in most areas.

Also, the group incentives can generate misreporting of the level of fertility as well as mortality and it would be a mistake to award them until a system of complete registration of births and deaths, marriages and pregnancies is actually established. Overall, it is difficult to believe that the incentive schemes will make any material difference to the promotion of fertility decline.

Disincentives: The question of disincentives for a large family has often been discussed. Neither couples with large families nor localities that have a high birth rate or a high level of fertility can be penalised, because more often than not, on grounds of equity, they need greater support to ensure the welfare of the future citizens of the country. It is argued, however, that they have a symbolic role in communicating to the people what is in the social or national interest.

During the past few years, Haryana and Rajasthan have passed laws that prospectively debar persons who do not adopt the two-child norm from contesting elections for panchayats, zila parishads and nagarpalikas. In Rajasthan, the High Courts have upheld the rationale of the laws. The population policy document of Rajasthan proposes to consider an extension of the law making candidates with two or more children ineligible to contest elections to 'other elected bodies like cooperative institutions.' It may also be made a 'service condition' for state government employees.[25]

The Population Policy of Madhya Pradesh also states that, 'Persons having more than two children after 26 January 2001 would not be eligible for contesting elections for panchayats, local bodies, mandis or cooperatives in the state. In case they get elected, and in the meantime they have the third child, they would be disqualified for

that post.'

The policy for Rajasthan proposes 'legal registration of marriage,' compulsory observance of minimum age at marriage for availing of 'government facilities and services' and 'stiffer penal provisions for violation of the legal age at marriage.' Madhya Pradesh also lays down that, 'From 26 January 2001, persons marrying before legal age at marriage will not be eligible to seek government employment.'

Madhya Pradesh also proposes to enact a Compulsory Marriage Registration Act to increase the age at marriage for women and to conduct campaigns to inform the public with the help of government departments, non-governmental organizations, and panchayati raj institutions. In addition, the legal age at marriage is to be made 'a criterion for those seeking jobs especially public jobs, getting admission in educational institutions, applying for loans, etc.'

In effect, the proposals of Rajasthan/Madhya Pradesh go beyond any that have been thought of so far. The case for raising the age at marriage is certainly undeniable; but for a society in which compulsory registration of births and deaths is yet a distant goal, the verification of age is difficult. Further, in our hierarchical society, any such rule or legislation becomes a tool for harassing the disadvantaged and collecting an illicit tax from them. The legal system is so involved and has such a large backlog of pending law suits to be decided by the judiciary that enactment of more laws that cannot be enforced is likely to be counterproductive.

The linking of family size to the right to contest elections is presumed to demonstrate a degree of political commitment that is considered essential in a country likely to become the most populous nation on earth within the next 50 years. The argument that it would adversely affect the interests of women or the disadvantaged sections of society does not seem convincing, particularly in a setting where people themselves have realized the need to regulate family size. However, feminists have been vociferous in their opposition to this bill and it is unlikely to be passed.

System for monitoring population dynamics: A suggestion is sometimes made to reward the performance of field workers on the basis of the quality of services and information they provide to individuals to help them use the methods of their choice and reduce unwanted childbearing in a healthy manner. While experimentation with alternative approaches to monitoring and evaluation is certainly necessary, one must recognise that the Indian system of service statistics is cumbersome, difficult to maintain and of dubious value. The system can be used effectively at the local level to anticipate the demand for and order supplies of commodities and

information materials. It can also be used to track or follow up individuals who avail of contraceptive supplies from a particular service facility.

If the programme structure is made friendly for grassroots workers, local data can be used to plan and monitor their work schedule in terms of home visits. Aggregation of data from service statistics kept at local levels to a higher level of administration is fraught with problems, especially when the data are utilized to monitor the output of service delivery programmes. The monitoring can be best served by well-designed periodic surveys to provide estimates of contraceptive use and fertility at different levels of aggregation – country, state and district.

These periodic cross-sectional surveys need to be supplemented by panel studies or follow-up surveys to assess the impact of service delivery systems on the reduction of unwanted childbearing. In effect, our concern needs to shift from the measurement of inputs to the assessment of outcome in terms of the level of contraceptive prevalence and fertility. The SRS and special surveys, such as have been launched over the past two years, can help to meet this need.

In the long run, as proposed in the NPP 2000, civil registration of vital events, i.e. births, deaths and marriages, must be strengthened. These data for Kerala and Tamil Nadu are already near completion. The authorities must initiate a careful evaluation of their completeness and the level and nature of omissions. Judicious use of these data can help in understanding whether and how far couples who give birth to a third or higher order child are responding to (*i*) the prior experience of infant or child mortality, or (*ii*) a sex composition of living children that is different from what they desire. Their problems would merit appropriate counselling by field workers at various levels beginning with local health workers.

Population Commission: Following the announcement of NPP 2000, a large Population Commission was constituted on 11 May. The Department of Family Welfare serves as the Secretariat to the Commission, which is expected to 'oversee and review' the implementation of NPP 2000. Similar commissions are envisaged at the state and union territory level. The performance of these commissions will be clear only over time.

It has often been cynically argued, without convincing reasons, that the Department of Family Welfare/Planning should be abolished and its functions partly transferred to the Directorate General of Health Services (DGHS) and partly to other departments of the government. However, the DGHS does not have a much better record of performance and the cosmetic change would only make it unwieldy, with no gain in efficiency. The important task is to ensure that the Population Commission is properly briefed to make the best

use of the talent and advice it seeks to mobilise.

It is true that individual behaviour is solely or primarily guided by self-interest and changes in reproductive behaviour result essentially from the recognition by couples of the disadvantages of a large family size. However, there is little doubt that the organized family planning programmes of governments have lowered the costs of obtaining the relevant information and have also provided a modicum of services at an affordable price. Those who denigrate the contribution of the much-maligned family planning programme to the decline in fertility in India are closing their eyes to an important agent of change.

The technology of contraception: Several feminist groups are opposed to the idea that Indian women should have access to all the safe and effective methods of contraception available to women in the rest of the world. The 1994 report of the Expert Group had emphasized the need for a careful ethical clearance of all contraceptives, but it also elicited adverse comments. Many scientists of impeccable integrity hold the view that the fears about certain hormonal methods of contraception lack adequate basis. An impartial assessment of all the related issues is necessary. The injectable contraceptives or Norplant are unlikely to be introduced in the national family planning programme in the foreseeable future. However, it would be a mistake to deny these methods to individual women who are willing to pay for them and find them convenient for their particular situations.

All evidence clearly suggests that societies without access to modern methods of contraception can also significantly reduce fertility. However, many of these methods (such as abortion or infanticide) can be harsh and scientific advances must be availed of to facilitate acceleration of the process of transition.

State level population policies: The preceding discussion has noted the formulation of state level population policies in Andhra Pradesh, Rajasthan and Madhya Pradesh over the past three years. In some sense, the pioneer in this respect was Tamil Nadu, even though it did not release a separate document called state population policy. However, all the states have been ambitious in their targets with respect to decline in fertility and mortality.

(a) Andhra Pradesh: Andhra Pradesh, which has attracted considerable attention over the past few years because of its rapid fertility decline from 4.7 during 1970-72 to 2.5 during 1995-97, seeks to lower its TFR to 2.1 in 2000 and 1.5 by 2010. (In fact, in Himachal Pradesh also, TFR has dropped from 4.7 during 1970-72 to 2.5 during 1995-97.)

The chief minister’s Foreword describes the policy document as a statement of resolve by the state government to ‘bring about a

change in the size, structure and distribution of the population' to improve 'the standard of living and quality of life of the people in general' and to extend the benefits of such change and development to 'the most vulnerable and disadvantaged.' 'Fertility reduction' is said to be 'at the heart of the development of the state.'

Interestingly, the minister for medical health and family welfare affirms that the state must 'accept ownership for the (population stabilisation) programme, which is a crucial factor for its successful implementation.' The state's ownership of the programme is reflected in the commitment that while the programme is entirely funded by the central government, the 'state will contribute additional amounts, as required, from its own resources for this vital programme.' The policy is inspired by the faster progress in Tamil Nadu and Kerala with respect to various demographic indicators.

The policy statement broadly follows and extends the recommendations of the Expert Group with respect to the setting up of institutional structures at the state, district and sub-district level (down to mandals[26] and village and town panchayats or nagarpalikas). It proposes a state council for population stabilization, chaired by the chief minister; a corresponding cell in the state secretariat chaired by the chief secretary; district population stabilization societies and their counterparts at the mandal and lower levels.

Their mandate will be to evolve population stabilization plans for the area under their jurisdiction, taking due account of the differentials in the prevailing demographic and socio-economic conditions. These plans will include demographic goals, the expected levels of achievement for each year and a charter of social actions for achieving population stabilization. 'The campaigns for these purposes will follow the models of Total Literacy Campaign and the Pulse Polio Immunization Campaign.

An interesting feature of the policy is its emphasis on 'marketing the population stabilization programme' at the 'state level' through contracted 'professional services' for 'information, education and communication' or IEC activities. Emphasis is laid on improving the quality of services to 'the cutting edge level' and making 'primary health service a special category service, with provision of better salaries/perks and service penalties like dismissal for absence from duty.' Local recruitment and control are also proposed, along with an effort to involve the NGOs and women's groups in the programme. All the common prescriptions to promote the use of spacing methods, late marriage, higher female literacy and better status of women, and safe abortions as well as safe deliveries are incorporated in the policy document.

The proof of the pudding is, however, in the eating. When state finances are already overstretched, one does not really know about the scope for supplementing the central allocations for population stabilization. Andhra Pradesh has traditionally been able to mobilise funds from private and public sector industrial firms for its family welfare camps or programmes. Also, the proposals for administrative reorganisation may not be easy to implement, although efforts in that direction must be welcome. Perhaps, the key factor contributing to better performance in the state is the monthly monitoring of the performance by the chief minister, which encourages the dynamic and ambitious officers such as collectors to pay special attention to the family welfare activities. Obviously, the management of the programme in Andhra Pradesh cannot be compared with that in Uttar Pradesh or Bihar.

(b) Rajasthan and Madhya Pradesh: The policy documents of both Rajasthan and Madhya Pradesh have been prepared with the Futures Group International and the Population Resource Centres set up in the two states.

Rajasthan proposes to lower its TFR from 4.1 in 1997 to 3.1 in 2007 and 2.1 in 2016. Madhya Pradesh aims to lower its TFR from the current level of 4.0 to 3.0 by 2005 and 2.1 by 2011. Rapid declines are also planned in the level of infant, child and maternal mortality in both states. The need for rapid progress is stressed by reference to what has already been achieved in states such as Kerala or even Gujarat, and the inter-regional diversity within the two states. The minister in charge of family welfare in Rajasthan describes the policy as ‘practical as well as ethically sound and culturally appropriate holistic approach,’ with ‘an emphasis on ending gender discrimination’ and ‘ensuring popular support’ for its objectives. The document for Rajasthan also stresses the fact that the state has ‘less than one per cent of available water resources in the country;’ and that tremendous pressure of population on natural resources leads to environmental degradation.

The policy documents for both the states carry endorsements by their chief ministers and emphasise the need for interdepartmental coordination as well the expected contribution of each department. Rajasthan has constituted a State Population Council and proposes to set up district family welfare coordination and monitoring committees. Madhya Pradesh proposes to call its apex body the State Population and Development Council, to be supported by the state population policy implementation committee and district population and development coordination committees. The institutional structure proposed to be set up follow the recommendations of the Expert Group chaired by M.S. Swaminathan. However, questions persist as to whether and how far these policies represent careful assessments of what is feasible, backed by a resolve to make the necessary effort.

Both the policy documents highlight the potential role of the non governmental organisations. But they also recognise the small number of NGOs and their concentration in a few districts of the state. Two-thirds of the 360 volunary organisations active in various development fields in Rajasthan are located in only seven districts (Ajmer, Bharatpur, Bikaner, Jodhpur, Sawai Madhopur, Udaipur and Jaipur). Madhya Pradesh has more than 650 NGOs, but many of them are likely to be concentrated in the developed districts. In any case, these organisations must help to ensure that these documents do not remain, as so often happens, a statement of the desirable goals whose fulfilment is allowed to recede in time along with the movement of the key actors and decision-makers.

(c) Experience of Tamil Nadu: The prospects for these states may be illustrated by some aspects of the policy adopted by Tamil Nadu, which had (as noted above) prepared an ambitious early statement of its goals about fertility and mortality. Tamil Nadu has done extremely well in lowering its TFR to the below-replacement level during 1996-97. With an IMR of 53 per 1000 live-births (40 in urban areas and 60 in rural areas), it has already achieved an NRR of 1.0. There is still substantial scope for a further decline in the level of infant and child mortality as well as adult mortality. The life expectancy at birth in Tamil Nadu during 1991-95 was 63.3 years, 3 years above the national average of 60 years but more than 9 years below the high of 72.9 years achieved by Kerala.

The 15-point programme for child welfare, adopted by the Government of Tamil Nadu in the early l990s, had aimed to reduce the IMR to less than 30 per 1000 live-births and the birth rate to 15 by the year 2000. The goals for 2010 are an IMR of 20 and a birth rate of 10. The population was expected to reach a stationary level of around 65 million by 2010. These ambitious goals overlooked the momentum of growth built into the age distribution.

Prima facie, the goal with respect to the IMR should not have been impossible to realise, particularly if the state had succeeded in ensuring that 90% of all births are delivered in institutions by 2000 (100% by 2010), and malnutrition among children as well as pregnant women is eliminated. But given the record upto 1997, there is no hope of such an outcome. According to past international experience, an IMR of 30 would have meant a life expectancy at birth of the order of about 68.5 years or an increase of more than 5 years relative to 1993. An acceleration of the pace of decline in mortality becomes progressively difficult to achieve as the life expectancy at birth crosses 60 or 65 years.

As for the birth rate, in 1991 Tamil Nadu had almost 31% of its population in the age group of 0-14. (The corresponding figures for Kerala and India as a whole were 30% and 36%, respectively.) Again, the TFR would have to drop to 1.8 by 1998, 1.7 by 2003 and

1.6 by 2008. Once again, such changes are not impossible, as has been illustrated by Kerala's low TFR of 1.7 in 1992 and even lower TFRs seen in several European countries. Some couples would need to adopt a one-child family.

With such a sharp decline in fertility, the crude birth rate would be around 15 in 2003 and 13 in 2008; but Tamil Nadu would not have attained a stationary population by 2010. Positive population growth would continue for several more decades, at a pace decided mainly by the level of fertility. Given the associated ageing of population, it is a moot point whether and how far the government of Tamil Nadu should try to lower the level of wanted fertility below the replacement level.

These issues need dispassionate discussion on the basis of intensive studies on the preferences and priorities of the people, their goals and aspirations and the desired and desirable means to achieve them. Unfortunately, there has hardly been any research in Tamil Nadu on the implications of alternative trends in the rate of population growth. In fact, we do not know the extent to which the decline in fertility in Tamil Nadu so far is a result of the rise in the age at marriage, abortion and contraception.

The National Family Health Survey has reported a contraceptive prevalence rate of 58% in Tamil Nadu. The mean age at marriage among women in Tamil Nadu in 1991 was probably already around 21.5 years and thus the target of raising it to 21 has indeed been achieved. Some 15% of women aged 15-19 years were married, but there may not be many violations of the law relating to minimum age at marriage.

In any case, the implementation of such policies needs people's participation and confidence in the leadership. Credibility of the leadership probably plays a critical role in such bold experiments in social engineering. The state needs to encourage monitoring and evaluation by genuinely autonomous scholars and institutions with the necessary analytical skills to provide an imaginative portrayal of the shape of things to come under alternative scenarios.

Actual and prospective population has a decisive impact on all facets of development planning. All development policies aim to cater to the actual and potential consumers and producers. As a result, in the short or medium term, they tend to be pro-natalist, particularly if there are any economies of scale in the management of a household. In the long run, successful development policies alter the preferences of the people and thereby promote the small family norm.

Unfortunately, it is difficult to judge the timing of these long-run effects. These changes do not necessarily occur because of equitable distribution of the gains of development. The gap between

aspirations and the actual level of living and the resulting dissatisfaction are often a more potent driving force. The change in behaviour then follows as a means of eliminating the gap. There is temptation to describe such changes as 'poverty-induced', but it involves double standards. If the relatively well-off and the educated alter their fertility behaviour and opt for a small family in order to meet their aspirations for a better standard of living, that is somehow considered different from identically motivated actions of the poor.

To conclude, India has already witnessed some remarkable shifts in the pattern of reproductive behaviour. The community of scholars must together ensure that these momentous changes are carefully documented and their implications are properly analysed. However, the ongoing changes constitute a revolutionary change in a centuries-old civilization, and merit multi-disciplinary studies by scholars with a mature and balanced judgment.

It is also essential to recognise that irrespective of the radical rhetoric, state efforts to promote lower mortality and fertility are legitimate and (despite the occasional superficial signs of resistance) basically popular. They are also consistent with the goals of a welfare state, that seeks to eliminate illiteracy, disease, poverty and want in order to build an India that can compare with the developed countries of the world.

The apparent aberrations from this central fact are a result of the temptations for short-term gains that the elite in positions of power and decision-making are unable to resist. It is important to separate wheat from chaff and to focus on the long run concerns and interests of the people, whose lives are affected by the delays in the attainment of these ends and goals.

Landmarks in the Evolution of India's Population Policy

1940 The subcommittee on Population, appointed by the National Planning Committee set up by the President of the Indian National Congress (Pandit Jawaharlal Nehru), considered 'family planning and a limitation of children' essential for the interests of social economy, family happiness and national planning. The committee recommended the establishment of birth control clinics and other necessary measures such as raising the age at marriage and a eugenic sterilization programme.

1946 The Health Survey and Development Committee (Bhore Committee) reported that the control of disease and famine and improvement of health would cause a serious problem of population growth. It considered deliberate limitation of births desirable.

1951 The draft outline of the First Five Year Plan recognized 'population policy' as 'essential to planning' and 'family planning' as a 'step towards improvement in health of mothers and children'.

1952 The final First Five Year Plan document noted the 'urgency of the problems of family planning and population control' and advocated a reduction in the birth rate to stabilize population at a level consistent with the needs of the economy.

1956 The Second Five Year Plan proposed expansion of family planning clinics in both rural and urban areas and recommended a more or less autonomous Central Family Planning Board, with similar state level boards.

1959 The Government of Madras (now Tamil Nadu) began to pay small cash grants to poor persons undergoing sterilization as compensation for lost earnings and transport costs and also to canvassers and tutors in family planning.

1961 The Third Five Year Plan envisaged the provision of sterilization facilities in district hospitals, sub-divisional hospitals and primary health centres as a part of the family planning programme. Maharashtra state organized 'sterilization camps' in rural areas.

1963 The Director of Family Planning proposed a shift from the clinic approach to a community extension approach to be implemented by auxiliary nurse midwives (one per 10,000 population) located in PHCs. Other proposals included: (*a*) a goal of lowering the birth rate from an estimated 40 to 25 by 1973; and (*b*) a cafeteria approach to the provision of contraceptive methods, with an emphasis on free choice.

1965 The intrauterine device was introduced in the Indian family planning programme.

1966 A full-fledged Department of Family Planning was set up in the Ministry of Health. Condoms began to be distributed through the established channels of leading distributors of consumer goods.

1972 A liberal law permitting abortions on grounds of health and humanitarian and eugenic considerations came into force.

1976 The statement on National Population Policy, made in the Parliament by the Minister for Health and Family Planning, assigned 'top national priority and commitment' to the population problem to bring about a sharp drop in fertility. The Constitution was amended to freeze the representation of different states in the lower house of Parliament according to the size of population in the 1971 Census. The states were permitted to enact legislation providing for compulsory sterilization.

1977 A revised population policy statement was tabled in Parliament by a government formed by the former opposition parties. It emphasized the voluntary nature of the family planning programme. The term 'family welfare' replaced 'family planning'.

1982 The draft Sixth Five Year Plan adopted a long term goal of attaining a net reproduction rate of 1.0 on the average by 1996 and in all states by 2001. It adopted the targets for crude birth and death rates, infant mortality rate and life expectancy at birth and the couple protection rate, to be achieved by 2001. (The numbers were based on the illustrative exercises of a Working Group on Population Policy set up by the Planning Commission during 1978.)

1983 The National Health Policy incorporated the targets included in the Sixth Five-Year Plan document. While adopting the Health Policy, the Parliament emphasized the need for a separate National Population Policy.

1993 A Committee on Population, set up by the National Development Council in 1991, in the wake of the census results, proposed the formulation of a National Population Policy.

1994 The Expert Group, set up by the Ministry of Health and Family Welfare in 1993, to draft the National Population Policy recommended the goal of a replacement level of fertility (a total fertility rate of 2.1) by 2010. Other proposals of the expert group included (*i*) removal of method-specific targets down to the grassroots level; (*ii*) an emphasis on improving the quality of services; (*iii*) a removal of all incentives in cash or kind; (*iv*) a National Commission on Population and Social Development under the chairmanship of the prime minister. The draft statement was circulated among the members of Parliament and various ministries at the centre and among the states for comments.

1997 The cabinet headed by Prime Minister I. K. Gujral approved a draft National Population Policy, to be placed before the Parliament. With the dissolution of the lower house of Parliament, the action was postponed.

1999 Another draft of National Population Policy, placed before the cabinet, was remitted to a Group of Ministers (GOM) headed by the Deputy Chairman of the Planning Commission, to examine the scope for the inclusion of incentives and disincentives for its implementation. The GOM consulted various academic experts and women's representatives and finalised a draft, which was discussed by the cabinet on 19 November 1999, and which was revised further for re-submission.

2000 National Population Policy was adopted by the cabinet and announced on February 2000.

TABLE 1

Key Population Statistics of India, 1901-1991

Census Year	*Total population (million)*	*Average annual growth rate (per cent)*	*Density (persons per sq km)*	*Sex ratio (males per 100 females)*	*Per cent of urban population*
1901	238.3	0.3	77	1029	10.8
1911	252.0	0.6	82	1038	10.3
1921	251.2	N	81	1047	11.2
1931	278.9	1.1	90	1953	12.0
1941	318.5	1.3	103	1058	13.9
1951	361.0	1.3	117	1057	17.3
1961	439.1	2.0	141	1063	18.0
1971	548.2	2.2b	178	1075	19.9
1981	683.3	2.2b	221	1071	23.3a
1991	846.6	2.1	267	1076	25.7
2001	1027.0	1.9	324	1072	27.8

Notes: a – Includes only an estimate for Assam; b – Growth rates for 1961-71 and 1971-81 take account of the fact that the reference data of the 1971 Census was 1 April, whereas that of the 1981 Census (like the 1951 and 1961 Censuses) was 1 March; N – Negligible.
Sources: Census of India, 1961, Vol. 1, India, Parts II-A(i) General Population Tables, 1961 and II-C(i), Social and Cultural Tables, 1964; Census of India, 1971, Series I, India, Parts II-A(i), General Population Tables, 1975, and II-C(ii), Social and Cultural Tables, 1977; Census of India, 1981, Series 1, Paper 1 of 1982, Final Population Tables; Part II – Special Report and Tables based on 5% Sample Data, 1984, Part II-B(i), Primary Census Abstract: General Pupulation 1983; Census of India, 1991, Series I, India, Paper 2 of 1992, Final Population Totals, Brief Analysis of Primary Census Abstract; Census of India, 2001, Series I, India, Paper 1 of 2001, Provisional Population Totals.

TABLE 2

Vital Rates per 1000 Population, India, 1901-1990

	Birth rate	*Death rate*	*Rate of natural increase*

1901-10	49.2	42.6	6.6
1911-20	48.1	47.2	0.9
1921-30	46.2	36.3	9.9
1931-40	45.2	31.2	14.0
1941-50	39.9	27.4	12.5
1951-60	40.9	22.8	18.1
1961-70	40.0	17.8	22.2
1971-80	37.8	15.4	22.4
1980-82	33.8	12.3	21.5
1988-90	30.8	10.3	20.5
1991-93*	29.1	9.4	19.4
1994-96*	27.4	8.9	18.5
1996-98*	27.0	9.0	18.0

* Excluding Jammu and Kashmir.
Sources: Davis (1951); India, Registrar General (1954); Office of the Registrar General (1998b).

TABLE 3

Mortality Indicators for All India, 1971-1998

Year	*Crude Death Rate*			*Infant Mortality Rate*			*Life Expectancy at Birth*		
	All	*Rural*	*Urban*	*All*	*Rural*	*Urban*	*All*	*Males*	*Females*
1971-75	15.5	17.1	9.8	134	144	83	49.7	50.5	49.0
1976-80	13.8	15.0	8.9	124	134	74	52.3	52.5	52.1
1981-85	11.0	11.9	7.5	90	98	56	55.5	55.4	55.7
1986-90	10.6	11.6	7.3	91	99	59	57.7	57.7	58.1
1991-95	9.9	10.4	6.6	76	83	50	60.0	59.4	60.4
1996-98	9.0	9.7	6.5	72	77	45	NA	NA	NA

Note: Estimates for 1998 are provisional. The state of Jammu and Kashmir is excluded from estimates beginning 1991.

Footnotes

* The author passed away in 2001. See, In memoriam, *Seminar* 500, April 2001.

** This paper is an extensively revised version of the author's Dr. K.S. Sanjivi Lecture delivered at the Voluntary Health Services, Chennai in August 1994. Its

revision has been facilitated by a generous award of the Well-come Trust to the London School of Economics and Political Science for a research project on 'The Future of India: Population, Human Development and Environment', undertaken jointly by a team of British and Indian scholars, including the author. It is dedicated to the memory of Dr. K.S. Sanjivi who passed away a few weeks after this lecture was delivered. Unfortunately, in 1998, the cruel death prematurely ended the life of his distinguished son, S. Guhan, who had invited me to deliver this lecture. As a result, this revised version of the lecture has missed the benefit of his usual incisive comments. For the full text, see the *National Medical Journal of India*, 2002.

1. I. Mayone Stykos, 'Population Policy: Overview' in John A. Ross (ed.), *International Encyclopedia of Population. Vol. 2*. New York: The Free Press, p. 530-533.

2. The Report of the Commissioner for Family Planning for 1962-63, prepared by B.L. Raina, proposed the ambitious goal of lowering the birth rate to 25 in 10 years. Its recommendations envisaged a separate department and a large network of auxiliary nurse midwives, financed by the central government, as a part of the rural health infrastructure.

3. The earlier population policy statements presented to Parliament in 1976 and 1977 were not really discussed and adopted by Parliament. In a sense, this is a narrow technical interpretation. The adoption and implementation of a family planning/welfare programme since 1952 or at least since 1966 cannot be said to be without a policy. As mentioned before, programmes usually follow the adoption of policies. However, the recent national population policy, to be approved by the NDC and the Parliament, is seen as a means to strengthen the family welfare programme by evolving a broad political consensus.

4. Government of Andhra Pradesh, Department of Family Welfare. Andhra Pradesh State Population Policy: A Statement and a Strategy. Hyderabad, 1997.

5. Government of Rajasthan, Department of Family Welfare. Population Policy of Rajasthan. Jaipur, 1999.

6. Government of Madhya Pradesh, Department of Health and Family Welfare. Population Policy of Madhya Pradesh. Bhopal, 2000.

7. Government of Uttar Pradesh, Department of Health and Family Welfare. Population Policy of Uttar Pradesh. Lucknow, 2000.

8. Unfortunately, the SRS did not provide any estimate for Bihar during 1970-72. However, between 1981 and 1995-97, the TFR for Bihar had also dropped by 21%. The TFR in Rajasthan has declined even faster from 6.3 in 1971 to 4.3 during 1995-97, i.e., by 32%. The argument presented above relies on the dependability of SRS data on fertility. Quite likely, the SRS in urban Assam may not be free from the effects of disturbed conditions prevailing in the state. Also, careful research by P.N. Mari Bhat of the Institute of Economic Growth has suggested a detereoration in the level of coverage of vital events by the SRS during 1991-97, relative to the 1980s. He has estimated the omission from the SRS of adult deaths of the order of 13-18% and of births of the order of 5-8%. While the omissions of births and deaths compensate for one another, and the rates of natural increase might be close to the actual, TFR values are under-reported and the extent of decline is over-stated.

The problem is not limited to SRS. The National Family Health Survey of 1992-93 had generally confirmed the broad validity of SRS values of TFR, except for Madhya Pradesh and Rajasthan. However, the Second Round of NFHS has

reported for Uttar Pradesh an implausible drop in the TFR of the order of 0.8 births (17%) between 1990-92 and 1996-98 (from 4.82 to 3.99). Since even the SRS is more likely to miss vital events than to over-report them, there is need for great caution in interpreting the recent NFHS data for Uttar Pradesh. See, P.N. Mari Bhat, 'Recent Trends in Fertility and Mortality in India: A Critical Reappraisal of Data from SRS and NFHS.' Paper presented at the Millennium Conference of the Indian Association for the Study of Population (IASP) and the Population Foundation of India, New Delhi, February 2000.

9. The gain in IMR is under-reported by the NPP 2000 (and in most reports of the Government of India), because it indicates an IMR value of 146 for 1951. In fact, the figure was based on a NSS survey estimate for rural India for 1957-59; and consistent with the tendency of most surveys to understate the level of mortality, almost certainly it was an underestimate. See, Pravin Visaria, 'Mortality and Fertility in India, 1951-61', *Milbank Memorial Fund Quarterly*, January 1968.

10. Government of India, National Sample Survey Organisation, Report No. 445, Maternal and Child Health Care in India. NSS 52 Round, July 1995-June 1996, New Delhi, December 1998, p. 19-22.

11. See, for example, Debabar Banerji, 'Politics of Immunisation Programme', *Economic and Political Weekly* 25(14), 7 April 1990, pp. 715-718.

12. This discussion occurred between the present author and Dr. Karan Singh in New Delhi during 1995.

13. Karan Singh, 'Population: The Forgotten Factor', *Indian Journal of Public Administration*.

14. Pravin Visaria, Leela Visaria and Anrudh Jain, *Contraceptive Use and Fertility in India: A Case Study of Gujarat State*. New Delhi, Sage Publications, 1995.

15. Ibid.

16. At the meeting convened by the central ministry of health and welfare to discuss the proposed change in policy, several state government representatives had reportedly raised serious objections. However, the central government announced the abandonment of targets for the entire country.

17. Initially, the post-1996 family welfare programme was described as having adopted a 'target-free approach' to the promotion of fertility reduction. Later, it has been termed as 'community needs assessment approach', with an emphasis on taking due account of the local variations in the situation.

18. Even during 1996-97, Andhra Pradesh is reported to have re-introduce the targets, with intensive efforts to hold sterilization camps and to offer new incentives in some districts. The same policy evidently continues even now.

19. Government of India, Ministry of Health and Family Welfare, Department of Family Welfare, National Population Policy 2000, New Delhi, p. 4.

20. NPP 2000 reports that the momentum for growth is likely to account for about 58% of the high current growth and the unmet needs for contraception and the 'high wanted fertility' for about 20% each of growth. The latter estimates were made, however, on the basis of the model developed by John Bongaarts for the prospective population increase during 1991-2101. See Leela Visaria and Pravin Visaria, *Prospective Population Growth and Policy Options for India 1991-2101*,

New York: The Population Council, 1997.

21. According to a recent analysis by P.N. Mari Bhat, the 1991 Census data indicate that the TFR among matriculate women was 2.2, only slightly above the replacement level, and that of college graduates and higher educated was 1.7 or below the replacement level. Also, the decline in the fertility of the illiterate women accounted for almost 49% of the total decline in TFR (from 4.7 in 1980 to 3.9 in 1990) during 1980-90. The fertility decline among the educated women contributed 31% of the decline whereas the change in the educational composition of women accounted for the remaining 20%. See, P.N. Mari Bhat, 'Returning a Favour: Changing Relationship between Female Education and Family Size in India'. Paper presented at a conference on Fertility Change in Developing Countries, King's College, Cambridge, 25-26 May 2000.

22. Government of India, NPP 2000. pp. 2-3.

23. It is appropriate to recall, however, the relatively larger incentives were paid in cash and kind at the 'mass vasectomy camps' held in Ernakulam in Kerala in 1971. The Planning Commission was not in favour of such camps, but accepted them in view of the 'urgency of the problem'. See, Pravin Visaria and Vijaylaxmi Chari, 'India's Population Policy and Family Welfare Program: Yesterday, Today and Tomorrow', in Anrudh Jain (ed.), *Do Population Policies Matter? Fertility and Politics in Egypt, India, Kenya and Mexico*, New York: Population Council, 1998, p. 53-112.

24. Ibid.

25. Government of Rajasthan, op cit., p. 20, para 6.6.3.

26. A mandal is a group of viilages with an approximate population of 30,000 and a primary health centre (PHC) or a community health centre (CHC). It is equivalent to a block or a taluka in other states of the country.