Regulating reproduction in India’s population Efforts, Results and Recommendations. By K. Srinivasan, Sage, New Delhi, 1995.

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India’s population growth is a paradox. In 1952, India became the first country in the world to institute a national policy to limit population, and the central government has pursued population control aggressively. Since 1951, India has spent Rs. 85 billion (roughly US $6 billion) on its family planning program, which receives 13% of the total health budget and has 300,000 employees. Yet the annual rate of population growth has increased from 1.3% in the forties to 2.1% today, and there are now more children being born in India than in China. India’s current population is 940 million, and will reach a billion before the turn of the century. It is the purpose of Professor Srinivasan’s book to examine 20th century Indian demographics and to try to explain this paradox. The desirability of limiting population he assumes to be self-evident, and the reviewer agrees with him; unfortunately political leaders in the United States and other developed countries do not see the importance of assisting poorer countries in making family planning services available,
and external assistance to India’s family planning program has constituted less than 10% of it’s funding.

India is a vast country, with great variability between regions. Between 1972 and 1989, the total fertility rate (expected number of children per female) of the state of Kerala dropped from 4.6 to 1.8 (the lowest in India); whereas in the most populous state of Uttar Pradesh, the rate went from 7.3 to 5.1 (the highest). Yet despite these huge differences between the states, the government tried a one-size-fits-all approach to population control.

The government program has leaned heavily towards sterilization as a method of contraception - first male sterilization until 1977, when the Congress party lost power in part due to anger over the coercive nature of the vasectomy program, and since then female sterilization. In the late eighties, there were about 4.1 million tubectomies being performed annually, and 600,000 vasectomies. There are incentives, in cash and kind, for medical personnel to perform sterilizations, for civil servants to meet or surpass targets for sterilizations, and for individuals to accept sterilization. The cash incentives for acceptors - Rs. 130 in the mid-eighties, or three weeks average wages - seems to provide significant motivation: almost half of a sample surveyed said they would not have accepted sterilization without the cash incentives. Professor Srinivasan points out that this emphasis on sterilization is short-sighted, both because of the lack of flexibility it offers couples who wish to control their family size, and because it is a method chosen largely by older women who already have several children. Thus the bureaucrats running the program can point to high rates of sterilizations, yet the fertility rate of married women under thirty is actually increasing.
Historically, the natural fertility level in the Indian population was only moderately high - lower than in European countries. However, many of the traditional checks on fertility - such as prolonged sexual abstinence for religious or social reasons - have been weakened by modernization. The fertility levels of young married women have consequently risen, despite increased contraceptive use.

Professor Srinivasan devotes a chapter to the differences between various states, and another to case studies of three states that have been relatively successful at reducing the growth rate. Some very interesting conclusions emerge. There is only a very small correlation between the total fertility rate and the per capita state domestic product, belying the claim that economic development of itself will cure all population problems. The most important social factor in reducing the fertility rate seems to be female literacy. This in turn is correlated with higher age at marriage, greater contraceptive use, and lower infant mortality, all of which lead to lower fertility.

The importance of female literacy is borne out in the study of Kerala, a state in South-West India that has the highest population density of any state in the country, and that had, until the seventies, a higher population growth rate than the Indian average. Between 1972 and 1991, the total fertility rate dropped from 4.6 to 1.8, despite Kerala’s average per capita income being only 63% of that of India as a whole. Various hypotheses have been advanced to explain this, and there seem to be three principal causes. The first is that women have a higher status, hence a higher literacy rate (83% compared to 39% nationally) and the consequences of this mentioned in the previous paragraph. The second is that the family planning services are better organized and of a higher quality. The third
is that the Marxist government has achieved a level of egalitarianism unmatched elsewhere in India, higher taxation being used to provide more education and health care, and this has helped the small family norm to spread across all sections of society.

What of the book itself? It is interesting and informative, but does suffer from some defects. The first is that, whilst the book is full of statistics, these statistics often disagree with each other. For example, on page 98, the infant mortality rate in 1991 is given as 96; on page 119 it is listed as 80.0. The sources for these data are different - the first one comes from the 1991 Census of India, the second from the Registrar General of India. But which of these figures is more trustworthy - or indeed how accurate any of the numbers in the text and the numerous tables are - is not something Professor Srinivasan discusses at all. As he devotes Chapter 6 to a statistical analysis of the partial correlation coefficients of various state-by-state data, it is important to know how reliable the data is.

My second quibble is that more of an effort could have been made to make the book accessible to non-experts. There are many acronyms used, and they are defined when first introduced; but if, 40 pages later, you forget what the acronym stood for, you have to leaf back and try and find the definition. A glossary of acronyms would have been helpful. It would also help non-experts to give precise definitions of terms, even if they are standard among demographers: for example, the TMFR (total marital fertility rate) is often used in discussions of fertility, instead of the TFR (total fertility rate), which it exceeds by between 5% and 111% depending on the state and year. How exactly is it defined? One can guess roughly what it means, but interpreting the figures requires knowing exactly what it represents.
Despite these minor complaints, the book is fairly easy to read, and does an excellent job of describing the history of India’s family planning program. It draws no startling conclusions, but the modest suggestions it does make (tailor the programs to the individual states; give less emphasis to sterilization, which has been adopted by three quarters of those couples currently using a modern method of contraception; improve the management of the family planning program; increase female literacy; decrease infant mortality) are buttressed by the wealth of detail the book contains. It should prove worth reading to anyone interested in population growth.