

THE DEVELOPMENT OF FERTILITY RESEARCH IN INDIA

SHRI M. V. RAMAN

*(Officer-in-charge, Demography Unit, Indian Statistical Institute,
Calcutta)*

Introduction

With the attainment of political independence, the Government of India has, in all earnestness, set about the task of planning for the economic and social development of the country. However, it has been realized that the desirable and much needed improvement in the levels of living of the people cannot be speeded up in the face of a rapidly growing population. The Planning Commission observes that "the object of stabilizing the population has certainly to be regarded as an essential element in the strategy of development" (*Third Five Year Plan: A Draft Outline—New Delhi, Planning Commission, Government of India, 1950*).

The increasing realization of the adverse implications of a rapidly growing population in a developing economy has stimulated interest in demographic studies and this is evident from the spurt in research activities, particularly in the field of fertility in recent years.

The significance of fertility research in the developing countries where the rate of population growth is incompatible with the rate of economic growth cannot be minimized. In some developing countries like Ceylon, there has already been a spectacular decline in the death rate with practically no change in the basic economic features. This was obviously due to the introduction of improved medical and public health measures like antibiotics, insecticides, etc. This is probably a 'perverse' development as it might even prove to be a temporary phenomenon unless counter-acted by adequate improvement in the economic situation. (It might, however, be observed that the scope of a direct comparison between the crude death rates of the modernizing countries on the one hand, and industrialized countries on the other, will be somewhat restricted if there exists disparity in the age structure of the populations).

In some of the neighbouring countries also, the recent trend of modern disease control methods has produced a rapid decline in the

death rate with the birth rate having shown little or no tendency to adjust to the declining mortality. Consequently, the rate of population growth has been increasing and this process is expected to continue for some time. The aim of the successive five-year plans initiated by the Government of India is to improve the national welfare but the generated gains largely go to meet the needs of the growing population. The situation, thus, calls for determined action to achieve the desired equilibrium between economic development and population growth. This might be realized either by increasing the tempo of economic development or by controlling fertility. It is the latter consideration that has chiefly acted as a stimulus to fertility studies in this country in recent times. But which one—economic development or fertility control—should get precedence over the other may be mooted. Some believe that fertility regulation speeds up economic progress while others subscribe to the view that economic development helps in creating a suitable climate for fertility reduction. A third school, however, seems to favour a middle course. Their strategy is to fight the problems of poverty and growing numbers at the same time as they fear that any attempt to restrict the growth of population alone, without parallel attempts to improve the level of well-being, would lead to results that might not be found self-sustaining in the long run. Especially in the conditions prevailing in India, it might even be desirable to achieve a certain minimum level of economic and social development before the population could be motivated to take effective steps to regulate fertility. Experience all over the world has also shown that the 'take-off' point for family planning and limitation requires a critical level of education and prosperity which has yet to be realized in our country.

The beginnings of fertility research in advanced countries

Interest in fertility studies in some of the Western countries had developed more than a century ago. It is, however, noteworthy that the stimulus for fertility research was afforded by diverse situations in the countries now termed as 'developed' and those in the process of development. This interest in fertility studies among the Western nations including the United States of America was incidental to other considerations and did not as a matter of fact arise out of any serious demographic situation. Prior to this, there was no obvious reason for any widespread concern about variations and trends in fertility from a purely economic, social and political point of view, and fertility in the European countries was generally not so high

as in Asia. Advances in production compared favourably with the growth of population. Further, the possibilities of emigrating to the New World were considered immense. However, with the passage of time the pattern of fertility gradually changed and by the end of the nineteenth century, fertility began to decline and class differentials in fertility were observed in some of the large European cities. This turn in the demographic situation generated a certain amount of interest in fertility studies, particularly in the countries of Europe.

In America, fertility was quite high during the early part of the nineteenth century. After this, there was a progressive decline in fertility but this did not draw sufficient attention because of the initial high level of fertility, a parallel decline in mortality and rising immigration. However, the persistence of these trends gave rise to a contrasting fertility picture among the native and immigrant population. The concern caused by the situation stimulated considerable interest in studies relating to fertility. With the gradual development of tools and techniques of research, this has now become a major field of population research in the United States of America.

In Great Britain, interest began to shift from the study of mortality to the study of fertility in the twentieth century. The main reasons for this shift in emphasis were the declining birth rate and the significant social class differentials in fertility which eugenicists thought might lead to biological deterioration.

In France, the initial development of fertility research owed much to political considerations. Fertility had started declining as early as the end of the eighteenth century and continued well into the nineteenth century. Consequently, there was a widening of the differences in the rate of growth of population between France and the other adjoining European nations. As it was feared that the continuance of this trend was likely to weaken the military prowess of the nation, the question of fertility became one of intense concern to the government.

In contrast to what has been observed above, the development of demographic research in India took place in a totally different context. The growing imbalance between economic resources and population began to exercise the minds of the administrators and of students of population while no such demographic situation marked the beginning of fertility research in the Western countries.

The development of fertility research in India

A perusal of the ancient administrative reports seems to suggest that some form of demographic activity was being pursued in India even in those early days. But these activities could not be strictly termed as 'research', and the political instability that soon followed wiped off even the vestiges of such demographic pursuits. However, the initiation of the decennial census operations in the latter half of the nineteenth century provided a real basis for the subsequent development of demographic studies in this country. The inclusion of a few questions relating to fertility in the 1931 Census questionnaire slightly enlarged the scope for fertility studies. Further, the rapid growth of population observed during 1931-40 drew the attention of the demographers to the implications of a rapid population growth in the context of social and economic planning. But the inadequacies in the basic demographic data, particularly those related to the available vital statistics from the reporting system, largely impeded the progress of fertility research. This was no doubt realized by the government which set up expert committees from time to time to examine the question. Despite all these steps, it would appear as though it might take some time before we can hope to achieve the degree of perfection attained in some of the more advanced nations of the world in the matter of recording vital data.

Nevertheless, with the gradual development of modern statistical science in this country, there was also a growing interest in demographic research. The acquired statistical skill could be fruitfully employed for designing sample surveys for the collection of demographic data. It is held that "scientifically planned sample surveys could adequately meet the needs of demographic research, provide estimates of population growth and furnish useful information for the study of differential fertility and mortality" (*A Note on Demographic Research* in the Annual Report of the Indian Statistical Institute, 1961-62). The Indian Statistical Institute started collecting data on fertility in this manner as early as 1937. The National Sample Survey was started in 1950 with the object of obtaining comprehensive and continuing information relating to social, economic and demographic particulars on a country-wide basis. In some of the rounds of the National Sample Survey, detailed information on the fertility history of the couples and the associated demographic characteristics have been collected on an all-India scale. On the basis of these data a number of studies, some of them of methodolo-

gical importance, have been carried out. In particular, they relate to fertility trends, differential fertility, age specific fertility rates, family planning, under-reporting of vital events due to recall lapse and other factors, and the techniques for the adjustment of such under-reporting, etc. The nature of demographic research carried out in the institute has been summarised in a note on demographic research given in the Institute's Annual Report for 1961-62.

Besides, the lively interest taken by other institutions in India also contributed substantially to the development of demographic research in the country. For instance, to mention only a few, the All-India Institute of Hygiene and Public Health has carried out a number of important investigations which include, among others, a survey on the effect of economic and social factors on the reproductive pattern of women in certain selected areas in Bengal and a rural population control study in Singur. The Gokhale Institute of Economics and Politics has undertaken extensive demographic studies in both the rural and urban areas of Western India which have given a variety of information on essential demographic aspects. The population survey jointly sponsored by the Government of India and the United Nations Organization in Mysore State in 1951, for studying the inter-relationships of economic, social and population changes, reflects the recognition of the importance of demographic research as an aid to social and economic planning. The report embodying the results of the survey is a work of great significance in the demographic literature of the country. More recently, the Indian Institute of Population Studies at Madras has made a number of useful studies particularly with reference to fertility. The institute publishes *Population Review*, a bi-annual journal of Asian demography.

The Planning Commission had come into being by this time and in the context of the developmental schemes formulated by the Commission, various aspects of the population problem began to receive greater attention. This led, among other things, to the inclusion of family planning in the First Five-Year Plan which was elaborated in the subsequent plans. The programme emphasized the need to obtain an accurate picture of the factors contributing to the rapid population increase in India.

Further, the government is giving financial assistance to training and research institutions to carry on demographic studies. A network of demographic research centres has been established for the promotion of demographic work and training. Commendable work

not only in the area of fertility but also in several other demographic spheres is being pursued by the Registrar-General's office which also publishes a journal—*Indian Population Bulletin*. Besides, there are other institutions whose contributions to the advancement of demographic research in this country cannot be construed as small.

Above all, the keen and healthy interest shown by the government in the promotion of demographic research is an encouraging sign for the future progress of fertility research in this country which will tend to accelerate the process of adjustment between population growth and economic development.

Summary

The realization that a fast growing population tends to nullify the benefits accruing from economic development has acted as a stimulus to fertility research in this country in recent years. However, it was in totally different demographic situations that fertility research in the advanced nations of the West developed about a century or so ago.

The desired equilibrium between population and economic growth may be achieved by simultaneous action on both the fronts, but in view of the fact that motivation to regulate fertility comes only after the attainment of a certain degree of education and economic prosperity, it might appear that considerations of economic development should get precedence over those of fertility regulation.

A number of institutions and agencies have made substantial contributions to the development of fertility research in this country, thanks to the initiative and keen interest evinced by the government in this field. With increasing participation of the institutions and the government in this field, the tempo of fertility research will be accelerated and this is expected to indicate more clearly suitable lines of action for population control.

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