

Moni Nag

## The Kerala formula

Although many of Kerala's socioeconomic indicators have lagged considerably behind those of India as a whole, this state has the lowest fertility and mortality levels in the country. With a view to explaining this paradox, the areas of land reform, social equity, education, women's status, and health care—among others—have been examined in both Kerala and West Bengal. Equity in health care and education are undoubtedly important, but underlying factors also have to be taken into account, notably the development of political awareness and action among the masses.

The Indian state of Kerala, with a population of about 28 million, presents a paradox to many population theorists, as described earlier in *World Health Forum* (1, 2). Its mortality and fertility rates have declined faster than those in the rest of India. Yet, in contrast to what has been observed elsewhere, Kerala has lagged behind the other Indian states in industrialization, income, and urbanization. How is it, then, that Kerala has the lowest mortality and fertility levels in the country?

Kerala and West Bengal, the two most densely populated states of India, are well known for their traditional emphasis on education and for left-orientated political activities. However, whereas West Bengal has always been more advanced than Kerala in economic development, its mortality level has been higher than that of Kerala.

The infant mortality rate (number of babies dying up to the age of one year per

1000 births) in 1982 was 32 in rural Kerala, 93 in rural West Bengal, and 114 in rural India as a whole. The figures were lower in urban areas: 24 for Kerala, 52 for West Bengal and 65 for the entire country. The crude death rate (number of deaths annually per 1000 population) in 1982 was 7 in rural Kerala, 12 in rural West Bengal and 13 in rural India (3). Rural Kerala's mortality level has been lower than that of rural West Bengal and rural India as a whole, at least since the third decade of the twentieth century.

### Economic development

Per capita income has always been lower in Kerala than West Bengal. It has been argued that the comparatively equitable distribution of income and assets in Kerala has been a major factor affecting the state's demographic trends. However, empirical evidence does not suggest that this has been so, at least until the end of the 1970s. A survey has indicated that inequality in rural household incomes was greater in Kerala than West Bengal (4). Furthermore, surveys conducted by the Reserve Bank of India in 1961 and 1971 showed that the distribution

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The author is Senior Associate with the Center for Policy Studies, The Population Council, 1 Dag Hammarskjold Plaza, New York, NY 10017, USA.

of land and total assets in rural households was less equitable in Kerala than in West Bengal.

Since economic factors apparently cannot explain the lower mortality in rural Kerala, some other possibilities are considered below.

### **Climate and water**

Climatic conditions are not significantly different between these states. However, rural Kerala has a safer water supply than does West Bengal, and the Kerala tradition of drinking water that has been boiled with cumin seeds (*jeerampani*) and the water remaining after rice has been boiled (*kanji*) may have contributed towards lower morbidity and mortality.

### **Nutrition**

Surveys conducted in the 1960s and 1970s suggested that both calorie and protein intake were consistently lower in rural Kerala than in West Bengal. However, large amounts of staple foods consumed in rural Kerala, including coconut, tapioca, fish and banana, are available from sources likely to be overlooked in responses to survey questions. It is often argued that more effective land reform, the extensive public distribution of food through fair-price shops, and successful free school-feeding programmes in Kerala are likely to have made food consumption more equitable there than in other states, but the available data do not support this hypothesis.

### **Health services**

As regards the number of beds per 100 000 population in hospitals and dispensaries, there has been no consistent difference

between the two states. West Bengal has always had the higher doctor/population ratio, whereas Kerala has always had the higher nurse/population ratio. Kerala and West Bengal differ little in per capita government expenditure on health, but a more equitable distribution of health services in Kerala is reflected in its proportionally higher spending on primary health centres and subcentres. West Bengal has always had more difficulty than Kerala in finding doctors for the primary health centres because of greater reluctance to serve in rural areas.

In both Kerala and West Bengal, local medical facilities are popular, particularly in rural areas. They are aided to some extent by the state governments but depend mainly on the support of the general public. There is clear evidence that people in Kerala use their health facilities much more than do people in West Bengal. This is reflected in the figures for institutionalized births and births attended by trained personnel. In 1978, for example, institutionalized births amounted to 49% of the total in rural Kerala, whereas in rural West Bengal and

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rural India as a whole the corresponding figures were 29% and 16% respectively. In the same year, 13% of births were attended by trained personnel in rural Kerala, compared with only 3% in rural West Bengal and 9% in rural India as a whole (5).

A major reason for the greater use of health facilities in rural Kerala is their easier accessibility, which depends to a considerable degree on the geographical area covered by each of them and on the availability of transport. Since the population density is higher and the number of primary subcentres per centre is larger in Kerala than in West Bengal, the area covered by each facility is smaller in Kerala. Road and water transport is more extensive in Kerala than in West Bengal. Furthermore, there are more public service vehicles per unit of population in Kerala.

### Educational services

Education contributes towards better health, not only by imparting knowledge and encouraging the use of modern health facilities but also by inducing people to adopt sound habits of hygiene and sanitation and to give adequate attention to children's welfare. Rural education, women's education, and primary education are especially important in the fight to reduce mortality rates.

In 1971, 76% of Kerala's urban population aged five years and above were literate, compared with 62% in West Bengal. For the rural populations the corresponding figures were 69% and 31%. In the same year, 61%

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of Kerala's rural females were literate, compared with 18% in West Bengal. In 1981, 74% of children aged 5-9 years in

rural Kerala were enrolled in primary schools, whereas only 32% were so enrolled in rural West Bengal (6).

In order to understand the factors responsible for the more equitable distribution of educational services in Kerala it is necessary to analyse the educational structures in the two states.

By the second half of the nineteenth century there was a considerable demand for primary education in Malayalam, the vernacular language of Travancore and Cochin states, now comprising the major part of Kerala. This arose mainly because official communication was in Malayalam and because of increasing economic development and trade. The caste organizations, formed in response to the exceptional rigidity of the caste system in Travancore and Cochin, agitated for increasing government educational facilities and often opened their own schools. Some indigenous rulers were interested in the spread of education among the rural masses and were often influenced in their endeavours by the British administration as well as by Christian missionaries. The matriarchal tradition in Kerala, particularly among the Nayar caste, helped the spread of female literacy and education.

The educational history of Bengal was, to a major extent, shaped by a land tenure system introduced by the British administration at the end of the eighteenth century. This gave rise to a class of landlords (*zamindars*) and their agents who had very little interest in educational and other advancement among those who worked the land. The new class was attracted to Calcutta, and, along with a growing middle class of urban professionals, became strong advocates of secondary education in the English language in urban areas rather than primary education in the vernacular in rural areas.

The resources allocated to education have always been greater in Kerala than in West Bengal. The proportions of expenditure on different sectors of education in the two states reflect their different priorities. Thus in 1969–70, 59% of Kerala's educational funds were spent on primary education, compared with 38% in West Bengal. In the same year, the proportions going to university were 5% and 16% respectively. During the 1980s the priorities in West Bengal have changed considerably in favour of greater equity in educational services, but at least up to the end of the 1970s, these were more equitable in Kerala — an important factor contributing to the lower mortality in this state.

### Political awareness

It has been suggested, with good reason, that the progress of literacy and education has not only increased the awareness of the rural population in Kerala about the need to use health facilities but has also made the people aware of their rights in this field (7).

People's realization that they have the right to health facilities is an aspect of political awareness, something for which the inhabitants of Kerala and West Bengal are well known. However, political awareness seems to be greater in Kerala than in West Bengal, apparently because of more effective caste organizations, peasant movements, and educational structures.

The caste organizations of Kerala, which grew up since the beginning of the twentieth century with the objective of raising the spiritual, social and political status of the lower castes, succeeded in creating awareness among caste members of their rights and in motivating them to agitate for their fulfilment. By the 1930s, political parties of various colours were attempting to win the support of these

organizations. In West Bengal the caste system has been more fluid than that of Kerala. A few organizations of lower castes developed but they were mainly concerned with winning higher social status from the census authorities. They did nothing that could generate political awareness among their members.

During the 1920s and 1930s, left-wingers in the Kerala branch of the Indian National Congress gradually became dominant in this most influential of political parties. They also strengthened their base among the industrial, transport and plantation workers, as well as among the peasants. Since the late 1940s, the main pressure for land reform in Kerala has come from peasant movements. The first trade union of agricultural labourers in India was organized in Kerala. The eagerness of the political parties, both left and right, to win the favour of the peasants has been a very important factor in generating their political awareness.

The formation of the British Indian Society, precursor of the Indian National Congress, in 1843, reflected early political awareness among the landed gentry and urban intelligentsia of West Bengal, but for the most part the Bengali leaders were not interested in forging links with peasant movements. In 1936 one of the political parties in Bengal formed a separate organization for peasants but its achievements were rather limited because the rural base of the party was very weak. In the late 1960s, another party started giving priority to the organization of peasants and landless labourers. Political awareness in rural West Bengal probably increased significantly during the 1970s but as yet this has not affected mortality indices or demands for health services.

With regard to education, newspapers have perhaps been the most effective medium

through which political awareness and openness to change have been generated. Indian newspapers, particularly those published in vernacular languages, have a long tradition of mobilizing public opinion on social, economic and political issues. In terms of the circulation of daily newspapers in the vernacular, Kerala has always been far ahead of West Bengal. Village schoolteachers have also played an important role in this connection. The main radical party in Kerala has, since the late 1930s, had a policy of using schoolteachers to strengthen its rural base: in 1939, for example, it organized a strike of schoolteachers in the Malabar area. It is not easy to find a parallel in West Bengal.

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Kerala provides a good example of good health at low cost, relative to other Indian states. The relatively rapid decline in mortality in rural Kerala, in comparison with that in West Bengal, can be attributed mainly to Kerala's more equitable distribution of health facilities and to their better utilization. This has been possible because of their greater accessibility, the more equitable distribution of educational services, and a higher degree of political awareness among the people in rural Kerala.

The more equitable distribution of educational services in Kerala can be traced to the relatively greater primary, rural and female-orientated educational structure in this state during both the British and post-independence periods. In West Bengal, at least until the late 1970s, there was an elitist, urban, male-orientated educational structure. The higher degree of political awareness in rural Kerala seems to have developed because of the peasant movements, stronger caste organizations, and a more equitable educational structure in this state.

The above analysis suggests that in countries or regions with large proportions of economically and socially deprived people, interventions aimed at reducing mortality should give higher priority to social equity, i.e., in the fields of education, health, transport and so on, than to economic equity. A decline in the mortality rate can be expected to contribute towards equity in economic development.

The specific circumstances that led to a high degree of equity in social development and political awareness in rural Kerala are not likely to be found elsewhere. Nevertheless, similar analyses to the present one could contribute towards the creation of alternative strategies for the achievement of these objectives in other regions and countries and towards the formulation of general theories of demographic transition and development. □

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