complex, but in all the areas we are designating as underdeveloped, population is found as a component in practically all problems.⁴

Works such as this one are valuable because they arouse a wider interest in the demographic factors that lie at the root of so many modern political problems.

A. F. K. Organski

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POPULATION AND ECONOMIC DEVELOPMENT IN CEYLON¹

O THER than of value to persons interested in the area, these two books from Ceylon are of more general significance to persons working with the issues they raise in regard to the problems of economic stagnation in non-industrialized countries. They also indicate that the scholars of Ceylon's own University are beginning to contribute to the literature of social science with analyses of their country's problems.

THE DISINTEGRATING VILLAGE reports on a University project directed and written by an economist, N. K. Sarkar (Ph.D., University of London) and a sociologist, S. J. Tambiah (Ph.D., Cornell University). The plan of the study called for the use of modern research techniques to empirically document one of the country's much discussed problems: land tenure and the village economy. Limited to the central up-country or Kandyan area, nine villages were randomly selected from a Revenue District, from which 20 per cent samples of households were similarly selected, making a total of 525 households that were surveyed with pretested questionnaires.

Beginning with the historical and cultural setting—a juxtaposition of the plantation and village economies—the analysis

4 P. 258.

¹ The University of Ceylon: THE DISINTEGRATING VILLAGE. REPORT OF A SOCIO-ECONOMIC SURVEY (PART 1). Colombo, The Ceylon University Press Board, 1957 (paper bound), xvi+83 pp., diagrams, tables, n. p.; and Sarkar, N. K.: THE DE-MOGRAPHY OF CEYLON. Colombo, Ceylon Government Press, 1957 (paper bound) 288 pp., diagrams, tables, Rs. 10.45.

Annotations

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 proceeds to statistically describe what is happening to the latter and the village population which formerly based its living wholly on paddy cultivation. This leads to a discussion of the distribution of land and forms of land holding by occupation, population pressure, intensive cultivation and optimum size of holdings, concluding with evidence on the grave problem of land fragmentation that develops from inheritance practices in a nonexpanding economy. In Part II of THE DISINTEGRATING VILLAGE, to be subsequently published, the authors propose to discuss the employment pattern of the rural population.

Land arrangements are complicated by traditional customs, unintended consequences of government programs, as well as by indigenous commercial interests. Directed at the need for land reforms, a paragraph from the "Introduction" (p. xiii) states the thesis of the book: "What we wish to emphasise is that the rural society in the Kandyan areas, and perhaps in other areas too, under the dual pressure of population rise and a stagnant exploitative economy, is fast disintegrating and approaching a critical stage." The main ingredients of the problem are three: some holdings of village cultivators have been absorbed by the commercial plantation, population imbalance, and share cropping. Under these conditions, the poor get poorer and more numerous while paddy land is more and more held by non-operative owners.

THE DEMOGRAPHY OF CEYLON by N. K. Sarkar is a bold attempt to present a comprehensive report on trends in the characteristics of the country's population, applying statistical and social science techniques for arriving at estimates for early years and for corrections of available official census figures. For an Asian country, the volume and period of census data are truly impressive: previous to the Island-wide census of 1827 and the regular decennial censuses since 1871, there were censuses of various districts beginning with one in 1789; death registration has continued since 1867 and that of births since 1893.

One of the more interesting and original contributions of the latter work is the estimate of the "ancient" population of Ceylon. The flowering of the ancient Sinhalese civilization, at its height ca. 1000 A.D., is sometimes a matter of exaggerated

comment under present-day nationalism. Assuming certain reasonable estimates for the amount of arable land, production per acre, and per capita consumption of rice, the author concludes that the *maximum* possible population in ancient times was between 7 and 8 million—more modest than some estimates based on ancient ruins or the assumption that all irrigation tanks were ever simultaneously in use.

Taking available census data, Dr. Sarkar has applied six techniques for estimating underenumeration of population: growth rates tests, sex ratio tests, comparisons based on inflow and outflow of births and deaths, comparison of generation movement through successive censuses, estimate of immigration balance, and estimating population for first years of life from life tables. Illustrations of mathematical applications of these tests to arrive at age and sex categories of the corrected population are given. Other chapters on population deal with trends in marriage, fertility, mortality, health, foreign-born, race, religion, and literacy. "Race" as used here is confused with ethnic groupings of the population; and recent events show that the Tamil-Sinhalese rivalry goes deeper than the author formerly believed.

Of single interest, however, this latter book takes considerable pains to put the demographic variables into a context of the socio-economic environment, wherein lies the perennial problem of population pressure in underdeveloped countries. This reviewer would agree that in industrialization exists the only known way to cut the vicious circle of greater agricultural production and increased population, but that the prospects for such a breakthrough, depending as they do on technological and social developments, cannot be as easily assumed.

Taken together these books show, respectively, in microcosm and macrocosm the nature of the broad social processes that are underway in such underdeveloped areas. Although each has been written to affect in a practical way governmental policies, they are based on the facts as they exist and sound research techniques. The books themselves are manifestations of the creative, restless spirit which is today so clearly indicative, for those who will see, of the changes to come in an area such as Ceylon.

ARTHUR L. WOOD