

Dr. Leighton's knowledge of psychiatry, sociology and cultural anthropology, and his broad interests in and activity with individuals and groups in rural and urban society, and in intercultural relations, should make his future contributions most valuable. We should therefore expect him to increase our fundamental knowledge about the etiology of psychiatric disorders and their prevention.

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## PEOPLE, JOBS AND ECONOMIC DEVELOPMENT<sup>1</sup>

THE title of this volume, which is a case history of Puerto Rico, has been most happily chosen. It exactly describes the author's interests and the kinds of material that he presents for this particular underdeveloped area. His basic tenet is that "the most significant economic growth is that which affects the individuals of the Nation" (p. 5). It is essential, therefore, that the increase in national product be reflected in the improved position of significantly large numbers of individuals, specifically in terms of more and better job opportunities in nonfarm employment. To what extent the Puerto Rican "Operation Bootstrap" has accomplished this objective and what the future prospects are the reader can determine on the basis of a wealth of material on economic changes, population growth, working force changes, industrial and occupational changes, wages and productivity, and school attendance.

In addition to the compilation of this demographic and economic history of Puerto Rico, Jaffe regards as an essential purpose of his study provision of guide lines for other underdeveloped areas on the threshold of economic development. But, as he is forced to point out again and again, Puerto Rico is a special case. Her close connection with the mainland United States has given her many advantages, among them investment capital, social welfare payments and other individual cash benefits, and a home for unlimited numbers of her

<sup>1</sup> Jaffe, A. J.: *PEOPLE, JOBS AND ECONOMIC DEVELOPMENT*. Glencoe, Illinois, The Free Press, 1959. 381 pp. \$6.00.

surplus people. Thus, the grave problem of capital accumulation for economic development in a democracy which must also furnish social services to a growing population if it is to maintain political stability has probably been at a minimum in Puerto Rico. What other underdeveloped areas can learn from the Puerto Rican experience seems to be (1) that they cannot go it alone; (2) they must not fear social and economic change; (3) they must face a task far greater than they at first realized; (4) they cannot expect immediate reductions of unemployment and underemployment; (5) they must therefore be prepared to create some new jobs by government action—school and road building, recreation facilities, etc.; (6) they must encourage private investment, by both domestic and foreign interests; (7) they must be ready for many problems whose solutions call for conflicting programs.

If the author has not fully accomplished the objective of constructing useful guidelines for other areas, he has certainly successfully analyzed what happened to people and to jobs during the years of planned economic development in Puerto Rico. This must be the most complete account of the changing structure of the Puerto Rican population and its labor force. Much of the material consists of hitherto unpublished statistics, some from the sample population survey which the author helped to redesign so that it would better meet the Island's needs. These data, together with those from the various censuses of the area and from current establishment reports, are woven together in a skillful way, to give us our case history.

After several introductory chapters sketching the settlement and recent history of the Island, Jaffe has a chapter on trends in population growth which present measures of fertility, the death rate, rate of natural increase, and net outmigration. The rate of natural increase in the mid-1950's at just under 3 per cent a year would double the population in less than a generation. However, since 1950, population growth has almost ceased, thanks to net outmigration. There is little hope of further improvement in the standard of living if the population is allowed to increase, for the economy is not growing fast enough. For all practical purposes, stability depends upon continued high outmigration; the official effort to promote popu-

lation control through birth control or sterilization programs is far from vigorous.

Developments in employment and unemployment again reflect the beneficent influence of net outmigration. The size of the labor force, particularly the male labor force, has decreased since 1950 and as a result it has not been necessary to stretch the resources of the development program to create substantial numbers of new jobs. Instead, nonagricultural employment has grown by means of a shift of men out of agriculture and a substantial increase in the number of women employed outside the home rather than in home needlework. Hence a major finding of the study: that economic development can take place and national income can increase sharply (i.e., by 50 per cent) without an increase in the number of people at work, if population does not grow. Unemployment has remained about the same, at a rate two to three times that on the mainland. Underemployment in the form of subsistence farming, other marginal self-employment, and part-time work is chronic in Puerto Rico, but has probably decreased slightly over the past decade.

The realignment of the industrial and occupational structure of employment is an interesting story that unfortunately can be traced only in terms of broad groups. Among the industries growing between 1947 and 1956 are first manufacturing, and second government including medical and related services. Transportation, communication, and other public utilities, and other services except domestic have also grown. Construction and trade have fluctuated but on the whole have risen. Agriculture, domestic and personal service, and home needlework, all areas of underemployment, have declined. In terms of occupations, the greatest increases have been in white collar occupations; one-third of the nonagricultural workers in 1955 were in white collar jobs. Jaffe has devised a system of classification of occupations into three groups: *modern* (requiring scientific knowledge or technology or associated with modern business enterprises); *traditional* (not requiring scientific knowledge or the use of machinery, e.g., straw weavers, street peddlers); and *classical* (largely outside of manufacturing and distribution, which do not necessarily involve technology—e.g., clergy-

men, government officials, policemen). Using these classifications within certain standard major census groupings, he finds that employment in "modern occupations" has increased from 9.0 per cent to 12.3 per cent of the nonagricultural total between 1930 and 1955. The comparable percentage for the mainland United States in 1950 was 23 per cent. The largest change in the opposite direction was a drop in traditional occupations among craftsmen and kindred workers from 15.1 per cent to 8.0 per cent. These findings relate only to men.

For various reasons the output per worker in Puerto Rico is still quite low, about one-fifth of the mainland output, but productivity is rising, with the shift of workers from less productive to more productive activities. Even in the traditional industries, sugar cane grinding, cigar making, distilling, however, there have been substantial gains.

One of the most encouraging aspects of the Puerto Rican program is the great emphasis on extending free education to all children. With the high birth rate and the net outmigration of the young adult population, the number of persons 7 to 24 years of age attending school constitutes 26 per cent of the civilian population of the Island. On the mainland, this proportion is only 19 per cent. But if Puerto Rico were to enroll in school as many young people, proportionately, as on the mainland, the government would have to provide education for about 31 per cent of the population—obviously a terrific burden on the economy. Nevertheless, it is largely through raising educational levels that fertility will be reduced and the earnings of the working force increased, the author believes. Not only will the better educated women of the future be able to practice birth control, but they will also tend more often to be members of the labor force, and therefore have fewer children. The demand for trained and educated workers of all kinds is great, while the prospects of shifting the large numbers of uneducated and "undesirable" workers from the marginal jobs to the expanding, higher-paid sectors are virtually zero.

The study concludes with a chapter on Mexico whose economic growth has been at about the same rate as in Puerto Rico, but where the creation of additional jobs has not kept pace with the rapidly growing population. Government pro-

grams, particularly for education, have not been as broad as in Puerto Rico.

An extensive bibliography and several appendixes which bring together some of the author's previously published articles on labor force definition, measurement, and classification add to the usefulness of this timely study.

GERTRUDE BANCROFT

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### ELEMENTS OF VITAL STATISTICS<sup>1</sup>

**I**N 1889, Sir Arthur Newsholme first wrote *THE ELEMENTS OF VITAL STATISTICS* for "medical officers of health and medical practitioners studying for a diploma in public health." Rewritten in 1899, and again in 1923 when Newsholme lengthened the title to read *THE ELEMENTS OF VITAL STATISTICS IN THEIR BEARING ON SOCIAL AND PUBLIC HEALTH PROBLEMS*, this book long enjoyed great popularity in the United States as well as in Great Britain. No recent book has been written with the same general approach to the subject matter until publication of *ELEMENTS OF VITAL STATISTICS* by Bernard Benjamin. As Mr. Benjamin explains in his Preface, he was asked to revise Newsholme's book but found "that developments in the fields of public health and population as well as the statistical methods associated therewith necessitated a complete rewriting of the text." He states further that "Newsholme's teaching of vital and health statistics was based on the narrative account of the available sources of statistics and of their use in every day conditions. . . . I have tried to copy this method."

In this new *ELEMENTS OF VITAL STATISTICS*, the author gives a concise description of sources of data relating to population, marriages, births, deaths, and disease. Official publications and special reports on these data are cited for both the United States and Great Britain. Considerable attention is given to the errors, limitations, and biases to be looked for in the data,

<sup>1</sup> Benjamin, Bernard: *ELEMENTS OF VITAL STATISTICS*. London, George Allen and Unwin, Ltd., and Chicago, Quadrangle Books, Inc. (\$10.00) 352 pages.