

In an attempt to measure accident proneness, a cross-tabulation was made of accident frequency in successive periods of time. The author concludes that there is a correlation between accidents in the first and second biennium. Persons who had a high frequency of accidents in one period tended to have more than the average in a succeeding period of equal length.

MARGUERITE KELLER

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WORLD POPULATION AND PRODUCTION¹

THERE are enough materials on world population to fill a shelf of books and enough on world production to fill a library. The Woytinskys, a husband-wife team, have undertaken to cover both these subjects in a single volume. True, the book is of massive size. In its 1,268 pages are 497 tables and 338 charts and maps. The book weighs over five and one-half pounds.

The structure of the book may be described as follows:

Part One: *Man and His Environment*, begins with a physiographic description of the earth and the remainder of it contains most of the "general demography" that the authors present. There are chapters on the distribution and ethnic characteristics of the earth's population; migration; cities; births, deaths, marriages, and divorces; health; and the future of the world population.

Part Two: *World Needs and Resources*, affords a transition from population to production. In it the authors discuss consumer needs and resources; consumption and standards of living; natural and human resources; abundance and scarcity; and economic patterns.

Part Three: *Agriculture*, contains chapters on agriculture in the world economy; land, farms and farming; food crops; technical crops; livestock and animal products; forests and forest products; and fisheries.

Part Four: *Energy and Mining*, discusses the role of mining

¹ Woytinsky, W. S. and Woytinsky, E. S.: *WORLD POPULATION AND PRODUCTION*. New York, The Twentieth Century Fund, 1953, 1,268 pp. \$12.00.

population in the title of a book on an equal footing with that of production. As already indicated, however, there are strong features of the book and there is little doubt about its usefulness to people concerned with population and resources.

CLYDE V. KISER

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A THEORY OF ECONOMIC-DEMOGRAPHIC DEVELOPMENT¹

IN the field of demography, the appearance of a book on pure theory is an extraordinary event and it should be welcome. In spite of the recent contributions from Sauvy and others, demography still suffers perhaps more than other social sciences from the lack of a strong backbone of theory. Professor Leibenstein himself has not supplied the missing backbone; the scope of his book is too much restricted for that. But he has given an example of what might be accomplished in developing more comprehensive demographic theories by thoughtful deduction from stated premises with the aid of simple mathematics; and this example may turn out to be his most important contribution.

Much of the work is devoted to the question, how to escape from a state of "Malthusian equilibrium" of population, resources, and income: a condition of stationary, low average income per person, high birth and death rates, and stationary population near the maximum that can be sustained with the available resources. The author begins by defining certain conditions which such an equilibrium must satisfy, and in doing so he contributes a useful clarification of the implicit assumptions underlying Malthusian doctrine. He then proceeds to a mathematical analysis of the effects of certain changes in the demographic and economic variables, seeking to discover in what circumstances a given change can be expected to upset the equilibrium permanently so as to permit a continuing rise

¹ Leibenstein, Harvey: *A THEORY OF ECONOMIC-DEMOGRAPHIC DEVELOPMENT*. Princeton University Press, 1954, 216 pp. \$4.00.