

Population and Food Supply: Essays on Human Needs and Agricultural Prospects Edited by Sir Joseph Hutchinson. Cambridge University Press, Cambridge, 1966.

This book is a collection of lectures on population and agricultural prospects delivered in Cambridge University, England, during 1966 and 1967 by a group of scholars with diverse backgrounds. Some of them are demographers and economists, some others are nutritionists and physiologists. Probably because of the specific nature of the population problem and food supply or perhaps because these lectures were not originally prepared with the intention of publishing them together in a book form, there appears to be a lot of repetition of ideas by the individual lecturers. The book is, however, interesting as it covers all the important aspects of the population problem and the problem of keeping up food supply.

It consists of eight chapters, each containing one lecture (or article). Mr. J. M. Thoday, the author of the first article, "The Problem", points out that there are two basic problems: *i*) food supply per head, the problem

of developing countries; and *ii*) space per head, the problem of both developing and developed countries. The author observes that the recent high growth of population is caused by the falling death rate unaccompanied by any fall in the birth rate. The problem of food will become acute in the near future unless soil conservation practices are vigorously pursued along with population-control programmes. He asks the developed countries to give large-scale economic aid to developing countries for population control and for increasing production of food.

Mr. A. S. Parker, in his "Human Fertility and Population Growth", points out the dire consequences of population explosion. One of the three choices we have is to "control our reproductivity to the potentialities of our environment". According to him, personal motivation is going to be the decisive factor in population control.

Mr. R. T. F. King, in his "Population, Food Supplies and Economic Growth", predicts the inevitability of Malthusian checks on population unless production of food is increased along with a reduction in the fertility rate in developing countries. He points out that in the immediate future only the United States of America can increase production of food substantially. He also discusses the problems of increasing food production in the developing countries and the limitations of food aid. Unless population growth is checked, it will slacken the rate of accumulation of capital which in turn will reduce the rise in productivity of the labour force.

All these authors basically talk about the same thing. The styles of presentation are different among different authors. People who are concerned about the population problems and the food supply may not find any new ideas from these articles; however, for others these are informative and useful.

Mr. A. Leslie Banks, in his "Catastrophes and Restraints", talks mainly about the relationship between pestilence and famine and between malnutrition and disease. He cites examples of famines from past famines and epidemics. The recent medical advances have reduced the incidence of epidemics and, hence, the death rate, while the fertility rate has remained unchanged. The problem, according to him, is that the modern medical advances are introduced in developing countries on a massive scale where people are still living within their ancient traditions. Education of the masses, then, is one of the essential factors in bringing a check on population growth.

Mr. K. J. Carpenter, in his "Man's Dietary Needs", discusses the problems involved in precise estimation of dietary needs. He thinks that as far as mineral and vitamins are concerned, there is no problem of supply for the increasing world population. Deficiency in these things arises because of ignorance and illiteracy. Shortage of protein and low-caloric intakes will continue to be a big problem with population expansion.

Mr. B. H. Farmer, in his "Available Food Supplies", seeks "to provide a link between the theme of human need in a period of expanding populations and that of available resources, physical, biological, technical and social". He raises questions about the accuracy of population-growth figures but opines that it cannot be denied that there is a serious food problem in many countries and that given the current population growth rate, serious measures are needed to be undertaken for increasing agricultural productivity and controlling population growth. The "distribution of other countries' surpluses through trade or through aid, is an insufficient answer, and appears to be growing less and less of an answer". Though the article is informative, there is hardly anything new that has been said here. For the readers of the first few articles, this one will appear as a mere repetition of ideas.

Mr. William Allan, in his "Land Tenure and Productivity", discusses the varying relationships between men and land on the productivity of agriculture and on the problems of development under four groups of countries: *i*) developing countries with communal forms of tenure; *ii*) developing countries with private ownership of land; *iii*) economically advanced countries with private ownership of land; and *iv*) countries with centrally planned economies. He presents a very enlightened and interesting discussion on the relationship between land-tenure systems and agricultural productivity. The distribution of population between agriculture and the rest of the economy is one of the principal indicators of a country's level of economic development. "National living standards", he continues, "are inversely proportional to the ratio of employment in agriculture and in other sectors. This ratio is decreasing in developed and centrally planned countries but increasing in underdeveloped countries. Once the critical point has been passed, the agrarian structures crumble under the impact of continuing pressure of population on the land. In these circumstances, population growth itself produces conditions which make the problems of agriculture development and food supply almost disparingly difficult. This is one of the main reasons why agriculture has so often failed to play the part it should in the transition from stagnant to expanding economies".

The last article, "The Resources of Agriculture", by the editor of the book, Sir J. B. Hutchinson, also provides good reading material. He describes the time and places where the major plants and animals were domesticated. The author believes that it is not difficult to anticipate further domestication if need arises. He thinks such need has not arisen yet. There is, according to the author, only a limited possibility of increasing the world's crop land and, as such, the prospect of feeding the increasing numbers of the human race depends on an increase in the productivity of land already under crop. Potential for improvement is there. With the proper application of available knowledge and technology, the world food output can be increased considerably.

The general conclusion was that the "population growth at anything like the current rate cannot be supported for many generations". The consensus was that the population growth should be stabilised "before the point is reached that food production can no longer keep pace with human multiplication, and readjustment by catastrophe becomes inevitable".

The years 1966 and 1967 were lean years as far as world food productions were concerned. India was almost facing famine conditions, Russia also had bad crops and the US food stocks were rapidly being disposed off to meet food crises in some major food-consuming countries. During that period, worldwide concern was shown on the future prospects of keeping balance between population growth and food supply. Gloomy predictions were made about the future. It was during this time that most of these essays were written. Though subsequent improvements in food supplies temporarily eased the situation, the general conclusions of these authors still remain very realistic. The world is experiencing a phenomenal growth in population whereas the increase in food production is still meagre. It is time that most people realise the magnitude of the problem. This small book, on the whole, successfully depicts the problem of population growth and food supply which not only will interest the professional economist, but the interested general reader as well.

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