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THE WORLD POPULATION CONFERENCE, ROME, 1954

POPULATION growth probably formed the subject of international discussion before Malthus began a controversy which, though bearing little resemblance to its initial formulation, still rages in almost every country of the world. Organized international discussion may perhaps be said to have begun in 1853, when the first International Statistical Congress (forerunner of the International Statistical Institute) was inaugurated by Quetelet in Brussels, population questions receiving prominence on the agenda. The first International Demographic Congress was organized by Bertillon and Chervin in 1878 in Paris as an independent organization. The first World Population Conference as such was held in 1927 at Geneva with twenty-seven countries participating, and this led to the formation of the International Union for the Scientific Study of Population, which assisted the United Nations Secretariat to organize the latest conference of 1954. Although other such conferences have been held (for instance in Paris, 1937), this is the first to be able to claim almost world-wide representation (of all major countries only the Chinese Peoples' Republic and Korea not being represented).

The Rome Conference which met from 31 August to 10 September 1954 was noteworthy in several other respects. It was, for example, the first international conference on the subject of population to be held under the auspices of the United Nations. It was called at the request of the Economic and Social Council and, as the Secretary-General put it, was proof of the importance which members of the United Nations attached to the development of demography, the scientific study of population, as an aid in dealing with fundamental problems in the social and economic spheres.

But to actuaries the Conference was of very special interest, for it was the first time that the actuarial profession throughout the world had been represented as such, at a United Nations meeting, or indeed, it is believed, at any international conference. This had come about upon the initiative of the Institute of Actuaries, supported by the Faculty of Actuaries. When it became known, in 1952, that the United Nations were organizing a conference on population, representations were made that the topics to be discussed at the Conference were 'subjects in which actuaries generally and particularly those actuaries who have undergone the course of training required for the Fellowship of the Institute of Actuaries or of the Faculty of Actuaries in Scotland are not only interested but are professionally equipped to make a scientific and expert contribution to any discussion'. In the upshot, the Permanent Committee of International Congresses was, like a number of other international non-governmental scientific organizations 'concerned with population in varying degree', invited by the Secretary-General to put forward the name of an 'individual expert' to attend the Conference, and F. A. A. Menzler was nominated accordingly.

Member governments of the United Nations were also invited to nominate representatives. The four United Kingdom nominees included two fellows of the Institute, namely, B. Benjamin (General Register Office) and P. R. Cox (Government Actuary's Department), the other representatives being Dr W. P. D. Logan (General Register Office and Mr A. E. Hogan (Registrar General for Scotland). Other actuaries whose presence at the Conference was

noted were A. K. Das Gupta, S. P. Jain and K. B. Madhava (India); L. Féraud (Switzerland); C. Gini (Italy); and R. J. Myers and M. Spiegelman (U.S.A.). All of them made contributions to the debates.

The wide scope of the Conference will be gathered from the following selection from the subjects discussed:

Mortality Trends with special attention to areas of (*a*) Lower Death-rates and (*b*) Higher Death-rates.
Fertility Trends with special attention to areas of (*a*) Lower Fertility and (*b*) Higher Fertility.
Demographic Aspects of Economic and Social Development:
I. Population in Relation to the Development of Non-biological Resources.
II. Population in Relation to the Development of Agriculture.
III. Population in Relation to Capital Formation, Investment and Employment.
IV. Interrelations of Population, Economic Development and Social Change (with special reference to planning, social and economic development programmes in under-developed countries).
Migration and Industrialization.
Design and Control of Demographic Field Studies.
Methods of Research on Relations between Intelligence and Fertility.
Relation of Population Changes to Distribution of Genetic Factors.
Recruitment and Training of Personnel for Demographic Research and Teaching.
Economic and Social Implications of Population Trends.
Economic and Social Consequences of Ageing of Population.
Outlook for World Population Growth and Distribution.

Thus, in the course of its thirty working meetings, the Conference discussed virtually every aspect of population relevant to the problems of mankind today, problems that are important not only to the way of life of the human race but also for its very survival. Naturally, emphasis was given to the central question of numbers in relation to resources, but in a more technical series of meetings the main elements of population change were examined analytically. The contrast between modern industrialized countries, with their generally low fertility and mortality, favourable resources and effective collection of demographic data, and the less developed countries with high fertility and mortality and limited data was too great to permit the inclusion of both types together in the analytical discussions, and accordingly there was a second subdivision of the meetings, broadly into East and West. A few of the salient points from the various fields of inquiry are mentioned below.

Among the many contributions made on the subject of mortality in areas of low death-rates, that of the American actuary M. Spiegelman was outstanding. Particular emphasis was laid on the need for a better classification of data on medical causes of death, with special reference to the need for reducing mortality in old age. Considerable interest was also expressed in losses at the other extreme of life, before and shortly following birth. The prospects for still further reductions in infantile mortality were considered to be good, although some intricate problems of causation have yet to be solved. British studies in occupational mortality were much admired and are at present unique; it is hoped that they will serve as a model for other countries. On the subject of the projection of death-rates into the future, it was accepted that the method of analysis by causes deserves further study and research.

Another actuary took a prominent part in the meeting devoted to the areas of high death rates; S. P. Jain, of India, showed where the data in his country

were most deficient and how they could be improved. Owing to a general lack of statistics, the Conference was unable to examine in detail the trend of mortality in under-developed countries, in spite of the greater importance of this topic; in many of these countries falling mortality and sustained high fertility have resulted in mounting population pressure.

When it turned to a consideration of the measurement of fertility, the Conference took a very practical approach, and it was generally realized that there is at present no summary presentation that effectively epitomizes the complex interplay of factors involved. The net reproduction rate received scant attention. Many methods of statistical analysis were mentioned, and some emphasis was laid on the importance of studies of birth-spacing, the important question being the probability that a woman who has had x children will have a further child within a specified interval of time; the data for such analyses hardly exist in most countries at present, but it should not be too difficult to arrange for their collection. As a pointer for the future, some speakers advocated the ascertainment by means of sample surveys of the number of children in the family that women thought to be desirable. Other delegates were more concerned to stress the limitations of such surveys. Among countries of higher fertility the experience of India and Japan was of particular interest. The desire for family limitation exists in both countries—probably more strongly than had been thought likely—but in India is not matched by a general ability to carry out the effective practice of birth control. In Japan attempts at limitation have taken the form of abortions, which occur on a massive scale, and so far it has not been possible to encourage sufficiently the use of a more satisfactory method of control. The Russian delegates expressed themselves as being in favour of an increase in family size. Opposition to family limitation was also expressed by Roman Catholic delegates. Both the latter groups argued that resources and productivity could be and must be expanded to support natural population growth. The Russians regarded the problem simply as a matter of the proper mobilization of resources.

Population projections and the prospects they reveal were discussed with a healthy scepticism, particularly in respect of areas for which the method of projection by separate age-groups cannot be applied owing to lack of sufficient data. Having regard to the rapid and increasing rate of growth of world population during the first part of the present century, there can be little doubt that substantial further growth will occur during the next few decades. In view of this expansion of the human race it is obviously important to consider the extent to which present physical and agricultural resources can be developed. To some extent the aim must be to fit the resources to the population, as it appears impossible to limit the population entirely to the resources. The reactions of the one on the other are not fully known, and consequently there was a tendency to discuss the outlook for resources separately from that for population. Three broad groups of requirements were distinguished, namely agricultural, manufacturing and financial, or, to use the more comprehensive terms employed, biological, non-biological and capital resources.

If, as seems possible, the population of the world expands during the next few decades by as much as 40%, the question arises whether agricultural resources can be correspondingly improved or, preferably, developed even faster so as to reduce the malnutrition that exists in many areas today. The Conference found that lack of adequate information precluded any attempt at

exactitude, but it was felt that large new areas could be brought into cultivation and crop yields greatly raised in countries such as India. One of the major obstacles is to overcome inefficient methods of cultivation that have become part of the peasants' way of life and are deeply rooted in tradition and superstition. Another difficulty is to find the capital necessary for the development of more efficient exploitation of agricultural resources.

In the world as a whole, the view was that there is no foreseeable shortage in materials or energy that could inhibit the growth of population in the third quarter of the century, but these resources are not evenly distributed and there are acute problems in some regions. Nuclear fuels, for instance, are expensive and need much capital for their development; they are thus unlikely to be available in under-developed lands. Disparities are too great to be overcome by the processes of international trade unless the rule of the market is adapted to a far-sighted policy of assistance. The difficulty of capital formation in under-developed countries is that the poverty of the inhabitants is too great to permit them to make adequate savings. Some speakers thought that by means of social reorganization part of the needed capital could be raised locally and so reduce the scale of international aid.

It will be apparent from this very broad account of the discussion that the action of the United Nations in sponsoring the Conference was amply justified. In the discussion on the training of demographers opportunity was taken to remind the Conference of the pioneer work of actuaries in the measurement of mortality, fertility and sickness. It is pleasant to be able to record that the contributions of the profession in these respects were not questioned, but were indeed handsomely acknowledged. It was, however, discreetly hinted that actuarial interest in the large questions discussed at the Conference had not latterly been evident, and that a continuing interest of the profession in the wider problems of population policy with which the Conference was mainly concerned would be warmly welcomed. It is, indeed, evident that there are important areas in the field of demography in its widest sense to which actuaries with their scientific training in statistical measurement should be able to make, as they have done in the past, their distinctive contributions.

As indicative of the wide perspectives of the founder members of the Institute it is of interest to recall that Samuel Brown attended each of the first seven International Statistical Congresses held between 1853 and 1869 and contributed reports on the proceedings to *J.I.A.* As already noted these Congresses were specifically concerned with population. It is not surprising therefore that Brown should have reported to the International Congress, held in London in 1860, upon the objects of the Institute of Actuaries. After his time the overt interest of the profession in these wider matters appears to have ceased, for there are no other references in the *Journal* to these Congresses, to the later Congresses on hygiene and demography, to the meetings of the International Statistical Institute, or to the international Congresses on population. There is here a wide field for research worthy of the attention of the younger generation of actuaries with their comprehensive training in the methods of statistical analysis.

B.B.
P.R.C.
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