

We are very much indebted to Dr. Harmon Craig for making the carbon-13 - carbon-12 analysis for us. Some of the later phases of this work received financial aid from the U.S. Army Signal Corps under Contract DA 36-039 sc-5581.

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WORLD POPULATION CONFERENCE IN ROME

THE World Population Conference which met in Rome during August 31-September 10 of this year was financed jointly by the United Nations and some of its Specialized Agencies, by certain governments, and by private institutions and individuals through the International Union for the Scientific Study of Population. It was the first international conference on this subject to be attended by participants from all over the world since the Paris Conference of 1937. Some four hundred persons participated, each of whom had been invited by the Secretary-General of the United Nations in his private capacity. Even though many held official positions in their own countries, they did not in any way represent their governments, and the Conference confined itself to discussion, and adopted no resolutions. A number of participants attended from the Communist countries, but there was none from the Chinese mainland although invitations had been issued to a number of Chinese known to be interested in the study of population. Prof. Liebman Hersch, professor of demography in the University of Geneva and president of the International Union for the Scientific Study of Population, was elected chairman of the Conference.

Many papers were submitted to the Conference and discussed in thirty-one different meetings. They dealt with a wide variety of topics, ranging from narrowly demographic problems, such as the nature and quality of vital statistics or techniques of projecting population figures, to wide issues such as the probable future development of population in a number of areas and the relation of such population to the available resources. Some meetings were devoted to fields in which a number of disciplines overlapped: thus anthropologists and demographers discussed methods of measuring population-growth in pre-literate societies; a session was devoted to the discussion of population genetics, and in another the relations between intelligence and fertility were studied. One meeting under the chairmanship of Mrs. Alva Myrdal, of the Division of Social Sciences

of the U.N. Educational, Scientific and Cultural Organization, concerned itself with the social aspects of population changes, with special reference to inter-disciplinary studies.

From the wealth of documentary material presented it is difficult to pick out individual contributions, and in the rest of this article I can only comment on a few of the topics that were discussed. It is hoped that the papers submitted to the Conference will be published in the not too distant future.

Population trends and the probable future course of population naturally formed one of the main interests of the Conference, and a number of meetings were devoted to the discussion of these subjects. Mortality and fertility were discussed separately, and different meetings were devoted to the areas of the West in which mortality and fertility are low, and to Africa and Asia where both are high. Finally, in a meeting presided over by Mr. Harold F. Dorn, of the United States, the general prospects for future population changes were discussed.

A good deal of statistical and other information is, of course, available about Western countries. In those areas changes in mortality are unlikely to exert a major influence on total numbers in the near future; the main difficulty here lies in the assessment of the probable future course of fertility. It was pointed out that, in the past, predictions of future population growth have by no means been conspicuously successful, and there was marked predisposition to abstain from detailed forecasts for the future. But there seemed to be some consensus of opinion that although the small-family system has come to stay, the very low fertility-rates experienced by Western countries in the immediate pre-war period were exceptional. It was believed that in the majority of Western countries future growth will be very slow and that the rate of natural increase will not be far from replacement. In spite of the relatively advanced level of statistical development in those areas, the need for further data and continued research into the social factors influencing fertility was stressed. In particular, the lack of comparability between studies in different countries was adversely commented upon.

The position is completely different in Asia and Africa, where in general both fertility and mortality continue to be high and where data are scarce. In those areas the development of mortality is more important in determining likely future growth than are developments in fertility. It was pointed out that, in many of these areas, public health and other ameliorative measures have been successful in greatly lowering mortality and that this process may be expected to continue in the near future. In some areas these reductions in mortality have been achieved without any marked improvements in the nutrition of the people and without any major changes in the economic or social structure. Such reductions will naturally raise the rate of population-growth, and the rise in turn may react back on fertility-rates. It was pointed out that there are large regions of the world—Latin America was mentioned as an example—where an increased rate of population-growth caused by lower mortality might actually increase national welfare; but it was recognized that in some countries which are already densely populated—India and Japan were cited as cases in point—unchecked population-growth would in all probability react adversely on the standard of living.

It became clear in the discussion that many of the governments of the Asian countries are fully alive to the dangers of population-growth and are encouraging research on these topics. Such research has the aim of providing better data to help in the understanding of these problems and also in devising measures which would help to slow down the rate of increase. A number of important and interesting communications described field-studies in population in progress in India, Indonesia, Burma and Japan and in some parts of Africa. The application of sampling techniques to demographic research in particular has proved very fruitful. In India, the government is encouraging research on methods of birth control, and also conducting a field-survey, with the technical assistance of the United Nations, on the efficacy of the 'rhythm' or 'safe-period' method of birth control as a check on population in some Indian villages. It was clear that in societies in which there is a high degree of illiteracy, the introduction of even the simplest methods of birth control would be fraught with difficulty, although there was considerable evidence of a latent demand for it on the part of parents who have already had three or more children.

In contrast there were Prof. Y. Koya's findings in Japan. There, the dissemination of contraceptive information in a number of fishing villages has had the effect of reducing the general fertility-rate in those areas by about one-third within a fairly short space of time. The population of Japan is, of course, more literate than that of India; but the success of the experiment astonished the Japanese themselves, who were surprised by the absence of a demand for large families which they thought implicit in the Japanese system of values. Interesting facts were also presented regarding the response to the recent Japanese law which has legalized abortion on socio-medical grounds. Recent Japanese experience was cited in support of the views of those participants who believe that increasing industrialization would *ipso facto* bring with it lowered fertility. It was made clear, however, that even if fertility in the Eastern countries were to decrease as a consequence of industrialization and economic progress, the present age-structures of those populations are such that in any event considerable increases may be expected in the near future.

A forecast of the U.N. Population Division for the population of the world as a whole estimated that by 1980 the figure would lie between 3,300 and 4,000 million people, against an estimate of 2,500 million in 1950. This estimate was put forward with all due caution. There are many areas of the world for which the data are still rudimentary, and if recent reports putting the population of China at 630 million prove correct, even the basic estimate for 1950 may be in error by as much as 7½ per cent. In spite of this, it was considered valuable to have an extrapolation of present trends in different areas prepared by an impartial and expert body like the United Nations.

A word or two may be said about the attitude of participants from Communist countries. The absence of Chinese demographers has already been commented upon and was keenly felt in view of recent reports in the Press on the results of the latest Chinese enumeration. It was clear that there are considerable differences between the points of view of the Communist demographers and their Western and Asiatic colleagues. The Communists regard

continued population-growth as a sign of a healthy society and refuse to be perturbed by the prospect of continued pressure of population upon resources. In a communication to the Conference, Mr. Ryabushkin, of the U.S.S.R., wrote: "The Neo-Malthusians proposed to bring the number of population into conformity with the level of production. But an elementary logic suggests that on the contrary levels of production should be brought into conformity with the number of population, because it is production that exists for population, but not population for production. And that production can be repeatedly increased in a relatively short period of time is evident from the historical experience of the Soviet Union."

This point of view, which implicitly assumes that natural resources are unlimited, has in practice aligned the Communists with the Roman Catholic Church in their attitude towards birth control. Neo-Malthusianism is a term of abuse, contraception is discouraged and it is not clear to what extent contraceptives are made available to those who desire them on other than medical grounds. Maternity and child-welfare services are available to mothers and high fertility is encouraged. But it is by no means clear from the addresses delivered at the Conference to what extent the right of individuals to decide on the size of family that they would like to have is recognized in Communist countries.

In concluding, tribute should be paid to the success of the administrative arrangements for the Conference, which was held in the building of the Food and Agriculture Organization, and to the skill of the interpreters, who were successful in providing simultaneous translation of addresses which were frequently highly technical into English, French, Russian and Spanish.

E. GREBENIK

POST OFFICE ENGINEERING RESEARCH STATION, DOLLIS HILL OPEN DAY

THE Post Office Engineering Research Station, Dollis Hill, was open to visitors from the universities, industry and government departments on September 24, the Press having been invited the previous day. The functions of the Station, its staffing and its relationships with the telecommunications industry remain much the same as on the last open day (see *Nature*, 168, 1022; 1951), though the buildings have since been increased, notably by one which provides a ground floor of nearly twenty thousand square feet devoted mainly to machine shops, an upper floor for drawing offices and part of another floor to a suite of laboratories devoted to thermionics. The individual problems being undertaken, whether basic studies or the development of new techniques or equipments to meet specific requirements, have, however, changed considerably, as the following descriptions of a few of the eighty exhibits presented will show.

The application of electronic techniques to telephone switching was shown in a private automatic branch exchange, devoid of electromechanical parts; it has an ultimate capacity of ninety-nine lines, exchange and extension, of which forty are now being connected. The switches use time-division-multiplex transmission, each line being allocated a fixed