

THE INDIAN STATISTICAL CONFERENCE, BARODA, 1942

THE Indian Statistical Conference held its fifth session at Baroda from the 3rd to the 6th January 1942. As in previous sessions, the Conference was conducted this year in co-operation with the Indian Science Congress. It will be remembered that the Statistical Conference owes its origin to and is still organised by the Indian Statistical Institute which functions with a research staff at the Statistical Laboratory, Presidency College, Calcutta, and has branches at Bombay, Poona, Mysore, Madras, Lucknow and Lahore. The first session of the Conference (Calcutta, 1938) was presided over by Prof. R. A. Fisher of the University of London. Subsequent sessions were held at Lahore (1939), Madras and Mysore (1940), and Benares (1941). The Statistical Conference now provides an annual meeting-ground for those engaged in statistical research in this country, as well as for administrators and others interested in the collection and interpretation of statistics.

The session was opened by H. H. the Maharaja Gaekwad of Baroda on the 3rd January 1942. In his address Sir T. Vijayaraghavacharya, the General President of the Conference, dwelt on the application of statistical methods in Agriculture. The importance of statistical methods was realised by the Imperial Council of Agricultural Research, when in the very first year of its existence, an examination of the manurial experiments made by the agricultural departments in the past revealed that the bulk of the enormous number of experiments that had been performed, yielded no results of general value as they were not statistically valid. The experiments were conducted under conditions which made it impossible to draw from them inferences applicable to other fields. The Council had now laid down a rule that all applications for grants for agricultural schemes from Provincial Departments of Agriculture should be accompanied by information regarding the proposed design and layout of the experiments for scrutiny by the Council's statisticians.

In the matter of collection of Agricultural statistics the method of random sampling survey, Sir T. Vijayaraghavacharya went on, was being employed with success. The fundamental principle of the random sampling process was that every unit in the aggregate should have an equal chance of being included in the enquiry. By means of the mathematical theory of probability it was possible to calculate the margin of error in the sampling estimate. The inaccuracy of statistics relating to forecasts was notorious. The yield of a crop in any given year was the product of three factors, namely, the area under the crop, the normal yield per acre and the season factor. There was much confusion even among officers in the superior grades in the matter of the annual valuation of a year crop. The determination of the per acre yield was a difficult problem which was now being tackled with the help of methods developed by the Statistical Laboratory, Calcutta.

Prof. P. C. Mahalanobis speaking on behalf of the Indian Statistical Institute gave a brief review of the work of the Institute. Among a large number of applied projects carried out during the current year, special mention was made of a new development in the application of the Sample Survey method, namely the "Sample Survey of Public Preference". Several such sample surveys had been carried out recently among middle class Indian families living in Calcutta. A large variety of questions were dealt with, political, social, religious and cultural. To take a few concrete examples of an uncontroversial nature, very interesting and valuable information was obtained on the habits of going to cinema, listening to the radio, preferences in music, interest in Astrology and Palmistry and on social questions like widow remarriage, inter-caste marriages, marriages between different communities, and marriages between persons of different nationalities. Used under proper statistical guidance, the sample survey supplied a most flexible and powerful tool for ascertaining public opinion. Its utility was not confined to politics alone. It could also be of great value in framing policies of social reconstruction.

Discussions on the following subjects were held during the session: (1) The use of Factorial and Incomplete Block Designs in Agriculture, (2) Problems of Discrimination, (3) Administrative Statistics, (4) Factor Analysis, (5) Census and Vital Statistics, (6) Teaching of Statistics.

The discussion on Teaching of Statistics was a sequel to a similar discussion held during the fourth session of the Conference held at Benares in 1941. As a result of that discussion a questionnaire dealing with various aspects of the teaching of Statistics had been drawn up and circulated among those interested. The answers received were considered during this session and in the discussion which ensued, university teachers from all parts of India took part.

In addition to the discussions a large number of papers bearing on both theoretical and applied statistics were read at the meeting.

The following resolutions were passed:—

(1) The Indian Statistical Conference welcomes the proposal to inaugurate an Indian Congress of Social Sciences which will hold its session along and in co-operation with the Indian Science Congress and commends this proposal to the Indian Science Congress Association, the Indian Economic Conference, the Indian Association for Agricultural Economics, the Indian Political Science Conference and the Associations and Institutions interested in this matter.

(2) The Indian Statistical Conference recommends to the Government of India: (a) the creation in the immediate future, of a standing Advisory Board for the Indian Census to give advice in regard to the technical aspects of census operations; and (b) the creation of a permanent Bureau for Census and Vital Statistics.