Singur area do not undertake remunerative occupations.

Most of the people are engaged in agriculture; the land is intensively cultivated, but less than 50 per cent of males are engaged in this work. The number of cattle is large in proportion to the population, but most of them are of inferior stock. Nevertheless, many people work in industries and move daily to and from Calcutta, thus creating epidemiological problems. Discussing the economics of the area, Dr. Lal points out that 36 per cent of the 11,700 families in it fail to balance their budget and that 18 per cent of them are in a hopeless economic position. Little is spent on education and, although much is spent by the people on medical care, the loss due to sickness is "colossal". Wastage of life of young children and the retarded growth of children as a whole are serious problems. When a child is one year old in this area it is already one year behind its American brother in weight and half a year behind in height. Malnutrition is one of the main causes of this. Only 10 per cent of children under two receive more than 10 ounces of milk. Other causes are lack of qualified medical men and large numbers of "practitioners of unscientific medicine". Late weaning also contributes, children often not being weaned until the next pregnancy occurs. The outlook on food is mainly determined by tradition, the diet being deficient in fats, calcium and vitamins. Demons are regarded by 27 per cent of the people as the cause of disease and 34 per cent blame God for it.

Dr. Lal concludes that economic prosperity is associated with better health and that the evidence provided by the report does not suggest that education will help to reduce sickness. "Just literates are worse than illiterates." The birth-rate is not likely to be reduced unless there is a check on the marriage-rate and postponement of marriages; but there is at present little hope of these reforms. There is no evidence that alcohol or narcotics play any part on the national loss due to illness.

This careful survey provides many hard facts and much food for thought. It is evident that India need not go beyond her own sons for wise guidance in the reforms that are so urgently needed. G. LAPAGE

## SOUTH-EASTERN UNION OF

JUBILEE CONGRESS

THE jubilee congress of the Union was held at Tunbridge Wells during July 9–13 at the invitation of the Magor and the Tunbridge Wells Natural History Sagrety. The Mayor, Mr. T. C. Allen, in welconing the Union to its place of birth, spoke of the trainendous strides made by science during the fifty years since the inception of the Union, but he said that the recent development of the atom bomb made him apprehensive of the future.

The presidential address, delivered by Prof. J. D. Bernal, was entitled "The Place of Scientific Societies in the New World". In outlining the historic development of regional scientific societies, Prof. Bernal spoke of the notable part played by them during the hundred years before the War, but in recent years their work has been overshadowed by that of the great laboratories and institutes. Amateurs often wonder if it is worth while endeavouring to compete with the professional scientific worker, who is pro-

vided with the money and man-power which modern science seems to require. This results in a divorce between science and the public which is to be deplored. There must not be professional scientific workers and a lay public. Everyone must be a scientist for, while common sense can go a long way, scientific decisions are necessary to solve the problems of to-day. The health of science depends upon the interest and service of a large proportion of the population, and local and regional scientific societies are best fitted to organise the collaboration of the public with science. Prof. Bernal said that in operational research the services of people actually employed in operations are necessary to obtain the facts without which scientific analysis would be of no use. The methods used are those of simple statistical survey. As an example, rationing has for the first time in history been done scientifically and not arbitrarily, and the result achieved is shown by comparing the deterioration of health in Great Britain during the First World War with the average increase of health during the Second World War. Again, planning with due respect to the features of the country and the feelings of the inhabitants now replaces ribbon development. The opinion of the housewife is now being sought on domestic matters. No one in the soap trades ever considered the physical and chemical make-up of washing-up soap. It has been sold for the amount of lather it makes, not because it does the work. In solving household problems rather than finding out what people never had, it is necessary to find what they know and what they have experienced, and to draw conclusions therefrom.

No government department, whether of housing, agriculture or health, can act wisely unless it has information got by a widespread net of informants, and the local scientific societies can form such a net. The surveys undertaken by the Union need to be intensified, multiplied and their results effectively used. The scientific societies should link the efforts of the schools, universities, museums and libraries, and the work will be not less interesting and satisfying if it be turned to the service of national welfare.

In addition to the presidential address the following sectional addresses were delivered: "Wealden Ironworking, its Sites and the Products", by E. Yates; "Roman Roads in the Weald", by I. D. Margary; "The Vegetation of the Wealden Area", by F. Rose; "The Changing Vegetation of Britain", by Prof. W. H. Pearsall; "Coastal Preservation and Planning", by J. A. Steers; "Life in Medieval Times in a Sussex Manor", by J. E. Ray; "The Effects of the Weather on Seasonal Responses of Animals and Plants", by Major H. C. Gunton; "Fifty Years of Wealden Geology", by Dr. J. C. M. Given; "Aeolian or Marine? The Problem of the Folkestone Beds", by R. Casey; "Charles Darwin's Life at Downe, Kent", by Dr. O. J. R. Howarth (Pedler Lecture of the British Association); "Mammalian Carriers of Infection", by Dr. E. Hindle; "Land and Freshwater Mollusca of the Tunbridge Wells Area", by Dr. L. B. Langmead; "Some Birds of Norfolk", by I. Murray Thomson.

Excursions were conducted during the afternoons to places of scientific interest within the area.

The presidential and sectional addresses will be published with the transactions in Vol. 51, 1946, of the South-Eastern Naturalist and Antiquary.

The Congress for 1947 will be held at Brighton during the second week in July, the president-elect being Prof. F. Balfour-Browne.