

the universities adopt and develop their own Indian languages, India will not succeed either in the dissemination of knowledge among the Indian people or in the stimulation of research and the creation of new ideas. There was no desire to minimize the importance of the English language and for keeping abreast of science and technology; where knowledge of a foreign language was essential, English was particularly convenient in India. Dr. Shrimali also stressed the importance of the university's function to seek truth and to advance the frontiers of knowledge. This function of research gave substance to teaching and brought the student into contact with the process of discovery, and he welcomed the recent decision of the Indian University Grants Commission to meet the major part of expenditure on the establishment of schools of advanced studies at universities. He also thought it might be necessary to re-group or federate some existing departments in order to strengthen research.

Dr. D. S. Kothari, chairman of the Indian University Grants Commission, who also referred to the medium of instruction, insisted that it was important that the introduction of regional languages should not exclude the use of English in university life and work. More and more instruction would be through the medium of English as the undergraduate proceeded, but it was also important to produce books and literature, particularly scientific

and technical, in the regional languages. Dr. Kothari suggested that the central problem in higher education in India was to raise standards and reduce wastage, and for this energetic steps to improve the quality and strength of the teaching staff, to make good books available at reasonable prices, and to provide reading seats in libraries and hostels were essential. As regards expansion, an increase was needed not so much in pure science as in medicine, engineering and especially in agriculture and veterinary science. Other matters which received attention at the Conference and were discussed briefly in this address included the shortage of teachers, staff appointments, assistance to outstanding teachers, standards of education, the establishment of new universities and centres of advanced study and collaboration between universities and other institutions.

Sri Jawaharlal Nehru also welcomed the use of regional languages as the medium of instruction, but emphasized the desirability of at least one other foreign language besides English if the student was to be in touch with modern thought. He insisted especially on the need to maintain quality, which should never be sacrificed to quantity, and finally referred to the importance of the scientist having some understanding of the humanities and of the non-scientist having some understanding of science.

FREEDOM FROM HUNGER CAMPAIGN: COMBATING DEFICIENCIES OF PROTEIN

MORE than a half the world's population lives in the Far East on a quarter of the total food produced. This is made up of only one-fifth of the world's animal and fish protein and less than one-half of land crops. In contrast to this, 29 per cent of the world's population living in Europe, Oceania and North America has available to it 57 per cent of total supplies, 69 per cent of animal and fish protein and 38 per cent of land crops. The situation in other less-developed regions is also unsatisfactory. These are among the broad conclusions reached in the *Third World Food Survey** recently published by the Food and Agriculture Organization, Rome.

So far as the position in Africa, the Near East and Latin America is concerned, the survey points out that these regions share of the total available food is approximately in proportion to their share of the world's population. It stresses, however, that diets there are low in all-important animal protein and the population is growing at a faster rate than food supplies.

The Food and Agriculture Organization's short-term targets for the developing regions provide for an increase of 5-6 g of animal protein to a total of 15 g per person per day, amounting to 22 per cent of total proteins. The long-term target is 21 g, which is equivalent to 28 per cent of the total.

In the preface to the survey, Mr. B. R. Sen, director-general states "If we are to achieve a reasonable improvement in the level of nutrition, then world food supplies will have to be increased by more than 50 per cent. . . .

By the year 2000 it is expected that the world population will be at least double the present figure, while the population in the less-developed countries will have increased by 150 per cent. . . .

"These figures give some indication of the magnitude of the task confronting us, and indicate how timely and urgent is the Freedom from Hunger Campaign".

The annual report for 1961-62 of the Central Food Technological Research Institute of Mysore, India†, refers to a vigorous programme being pursued in the production and development of protein-rich foods. The Institute's work in this field, based on high-protein low-fat oil-seed meals which are plentiful in India, has been recognized by the joint Protein Advisory Group of the World Health Organization, the Food and Agriculture Organization and the United Nations International Children's Emergency Fund. This has led to the offer by the U.S. National Institutes of Health of the PL 480 funds for the intensification of work on vegetable protein supplements. The report summarizes the research carried out at the Institute in a large number of fields, including biochemistry and nutrition, engineering, processing and storage, infestation control, microbiology, sanitation and packaging.

* Food and Agriculture Organization of the United Nations. Freedom from Hunger Campaign—Basic Study No. 11: *Third World Food Survey*. Pp. vi+102. (Rome: World Health Organization; London: H.M.S.O., 1963). 7s. 6d.; 1 dollar.

† Central Food Technological Research Institute, Mysore. Annual Report 1961-62. Pp. ix+153. (Mysore: Central Food Technological Research Institute, 1963).

APICULTURAL RESEARCH

AS research into bees and beekeeping has expanded and become progressively more scientific it has grown increasingly obvious that a new journal in English was needed for research work which was too technical for the popular beekeeping Press. The Bee Research Association has for some years past published *Bee World*, which contained a mixture of scientific and more popular

articles, plus news items and the very valuable *Apicultural Abstracts*; but the Association has, however, recognized that a separate journal could usefully be devoted to scientific work alone. As a result it has now commenced the publication of the *Journal of Apicultural Research**.

* *Journal of Apicultural Research*, Vol. 1. (Southall, Middx.: Hon. Treasurer, Bee Research Association, 60 North Road, 1963.) 40s. per annum.