

*Study Abroad*¹

AN international handbook published by U.N.E.S.C.O. gives full information on all available opportunities for trans-national study, including scholarships, fellowships, and international training programmes.

Lists of fellowships and scholarships are given, with details of subjects, locality, conditions of tenure, &c., together with an index of fields of study and beneficiary countries. An introductory chapter describes the development of international fellowship and travel study programmes, with notes on the programmes initiated by various member states of U.N.E.S.C.O. and by other agencies.

Lugard Memorial Lecture

THE Executive Council of the Institute, at its meeting in Paris, resolved to invite Miss Margery Perham, Fellow of Nuffield College, Oxford, and member of the Executive Council, to give the Lugard Memorial Lecture in 1950.

Miss Perham has accepted the invitation, and has suggested as the subject of her lecture some aspects of the life and work of Lord Lugard. The lecture will probably be given at the meeting of the Institute's Executive Council in 1950.

Current and prospective field researches in Nigeria

MR. and Mrs. D. P. L. Dry, of Oxford University, awarded a Horniman Field Studentship by the Royal Anthropological Institute of Great Britain, are engaged in an intensive study of the social organization of a series of Hausa communities in the Zaria Province, including Soba.

Mr. M. G. Smith, of University College, London, has been awarded a Colonial Office Studentship for socio-economic studies in Zaria Province, and will make a comparative study of social and economic organization and levels of economic development in both Hausa and 'pagan' areas. Mr. Smith is proceeding to the field in May for a period of eighteen months.

Mr. W. B. Schwab, of the University of Pennsylvania, is undertaking a preparatory period of study at University College, London, before proceeding to Nigeria to undertake a study of social and economic conditions in an urban community among the Yoruba.

Mr. D. P. M. Morton-Williams, of University College, London, has been awarded a Horniman Studentship for a field study of Yoruba social organization and will proceed to Nigeria in 1950 after a period of preparatory training.

A Nutritional Survey of the Republic of Liberia

DR. Flemmie P. Kittrell of Howard University, Washington, D.C., visited the Republic of Liberia between December 1946 and June 1947 to undertake a survey of native diet and nutrition. Her report, entitled *A Preliminary Food and Nutrition Survey of Liberia, West Africa*, has recently become available. The data on which the report is based include an examination of the dry-season diet of about 4,500 individuals from various parts of the Republic, supplemented by clinical information from the laboratory of the Firestone Plantations Company, its hospitals at Harbel and Cape Palmas, from the Samuel Grimes Maternal and Child Welfare Centre at Kakata, and the Ganta Health Mission at Ganta. The 1945 revision of the National Research Council's Nutrition Yardstick was used to assess the adequacy of diets.

Although Liberians use a wide variety of foods, at certain seasons the number of foods

¹ *Study Abroad*, International Handbook, vol. i. U.N.E.S.C.O., Paris, 1948. U.N.E.S.C.O. publication 234.

consumed is very limited. 'The staple foods for Liberian people in general are rice, cassava, eddoes, palm oil, yams, potatoes, various vegetable greens, and occasionally fish. Rice and cassava are the two foods available to nearly everyone.'

The total calorie content of the energy-giving foods consumed is very small, the daily average for men being 1,400 and for women 1,350. The proportion of fat is usually about 25 per cent. Protein intake is low and almost entirely of vegetable origin. Reports from Harbel Hospital show further that about 90 per cent. of the natives are infected with hookworm and over 50 per cent. with roundworm. These parasites rob the body of much of the protein consumed, thus aggravating the deficiency.

Calcium intake is low for all age-groups, the average for men and women being 0.3 grammes daily and 0.25 grammes for children. The Liberians habitually use many condiments and spices, such as chillies, ginger-roots, peppers, mace, mustard seed, nutmeg, and garlic, all containing calcium and iron. These condiments might be nutritionally significant over a long period, as also the customary lavish use of fish-bones in the preparation of soups. The agriculturalists of the U.S. Economic Mission maintain that the soil in Liberia is calcium-poor. This factor contributes largely to the general deficiency. Surprisingly, the teeth of almost all natives of all age-groups are well shaped and free from decay. Clinical records show that mission school-children do not have as good teeth as children not in school.

Iron intake is seriously deficient, the average for men being only 4 milligrammes and for women 6 milligrammes. Red blood counts are consistently low, and the incidence of anaemia is high. Again, malaria, roundworm, and hookworm aggravate the position.

There is inadequate intake of vitamins A, thiamin, riboflavin, and niacin. Vitamin A deficiency exists in more than 90 per cent. of the diets studied. Firestone Hospital records show increasing incidence of tuberculosis and respiratory diseases, a tendency probably general throughout the Republic. Foods rich in vitamin A are abundant but are rarely used in sufficient quantities to satisfy requirements. The people of the hinterland get enough ascorbic acid, although local cooking methods tend to destroy much of this vitamin. Owing to constant exposure of the body to the sun vitamin D deficiencies are not apparent.

Dr. Kittrell concludes that Liberia 'does not produce enough food for its people at the present time'. Ninety per cent. of the people live on diets below the safety-line. Two-thirds are not getting one-half enough calories, while, owing to the general lack of protective foods, any major epidemic would have disastrous results. Few people now have an optimum diet. Even the diets of the privileged Americo-Liberian ruling class are nutritionally inadequate.

Dr. Kittrell's 'immediate action points' include the following: the Liberian Bureau of Agriculture and the United States Economic Mission are advised to take immediate steps to produce more food, especially rice, palm-oil, legumes, and animal protein. Fishing should be encouraged and processing and storage depots established so that fish foods may become generally available, thus breaking the present dependence on high-priced imported fish. All mission schools should have a nutritionist on their staffs and a nutrition section should be added to the U.S. Public Health Mission. The Mission should initiate the further research that will be needed. As 'long-time goals' the following measures are advocated: a vast expansion of educational provision for children and for adults is the vital need for Liberia. Agriculture and nutrition should be included in all courses and efforts made at the college level to ensure a steady flow of teachers qualified in these subjects. Scholarships should be made available for advanced study in the U.S.A. and other countries. The Liberian Bureau of Agriculture should be enlarged and should undertake nutrition teaching and research. Additional health clinics, similar to the one at Kakata, should be established.

Throughout her report Dr. Kittrell stresses the essentially preliminary character of her findings and emphasizes the need for further research.

(Communicated by H. G. A. HUGHES)