

of cotton pests in Central Africa; the discovery in East Africa of improved vaccines for control of rinderpest in cattle in the tropics; increased banana production in the Windward Islands from new fertilizer treatment; and effective agronomic and pest control work on cocoa in Sabah. In medicine, progress had been made in field trials on trachoma vaccines; work on schistosomiasis in East Africa pointed to the possibility of a pilot control scheme; and study of the epidemiology of a tumour prevalent among children in Uganda had aroused wide interest among workers on cancer research. Studies by the Road Research Laboratory had led to an improved method for designing roads in the tropics offering savings of up to 20 per cent in construction costs.

#### Barrage Schemes in Britain

IN answering questions in the House of Commons on March 22, Mr. W. Rodgers, the Joint Under-Secretary of State for Economic Affairs, announced that, after considering all information at present available about the economic and social benefits which the Morecambe Bay Barrage project and other barrage schemes might create and about their likely costs, the Government had concluded that no final assessment of these ambitious and imaginative proposals could be made without further technical investigations. The work already done had shown that the justification for a barrage across Morecambe Bay or the Solway Firth rested primarily on the conservation of water on a scale large enough to meet the long-term needs of north-west England and south-west Scotland: any advantages for communications, generation of power and amenity would be subsidiary. The Government had decided to commission further technical work with the view of determining the feasibility and probable cost of constructing barrages, and more precisely the quantity and quality of water each scheme might make available. The Minister of Land and Natural Resources was asking the Water Resources Board to take charge of these investigations, and the Scottish Office would work jointly with the Board on the Solway project.

The Government welcomed the initiative which local authorities in the area had already shown in initiating investigations into the possibility of constructing a new crossing of the lower Dee estuary which might take the form of a barrage. They were considering, in consultation with the Dee and Clwyd River Board and the Cheshire and Flintshire County Councils, whether the hydraulic examination of such a crossing already commissioned by the River Board might usefully be widened in scope. Such a scheme, by substantially improving communications between Merseyside and North Wales, might allow part of the conurbation's future population and industrial growth to be accommodated in Flintshire, and some land reclamation might be possible. All three schemes were expensive, and long-term proposals and subsequent steps would be decided in the light of the feasibility investigations, which would take some time to complete. The first results of the Morecambe Bay and Solway studies were expected within two years.

#### Natural Resources

IN a written answer on March 25, Mr. F. Willey, the Minister of Land and Natural Resources, stated that he was appointing a Committee, with Sir Dudley Stamp as chairman, to advise on problems associated with the availability and use of natural resources in Great Britain. In agreement with the Secretary of State for Education and Science, the new Committee would take over and continue the work of the Natural Resources (Technical) Committee of which Sir Solly Zuckerman had been chairman. Profs. J. N. Black, W. Ellison, Neville George, F. H. Hare, O. R. McGregor, G. P. Wibberley and B. R. Williams, Lord Llewelyn-Davies and Dr. A. A. L. Caesar had agreed to serve as members.

#### Registrar General's Quarterly Return for England and Wales

*The Registrar General's Quarterly Return for England and Wales* for the third quarter of 1964, which has recently been published, shows no slackening in the upward trend of the birth rate (Pp. 28. London: H.M.S.O., 1965. 2s. 6d. net). The total number of births during the year is likely to have been of the order of 875,000, or 20,000 higher than in the previous year. The seasonally corrected live birth rate for the third quarter was 18.7—an increase of 0.7 over the corresponding quarter of the previous year. Mortality in the first three-quarters of 1964 was low, deaths numbering 40,000 fewer than in the corresponding period of the previous year. An interesting new feature of the *Return* is an account of the occupations of long-term migrants to and from the United Kingdom in 1963, based on 280,000 interviews with inward and 500,000 with outward migrants, long-term migration being defined as lasting for more than a year. It is estimated that 2,000 doctors emigrated but 1,700 immigrated to Britain; the net loss being of the order of 300. Surprisingly, physicists and metallurgists show a small net gain (400 physicists in, 300 out, the corresponding figures for metallurgists being 500 and 200, respectively). There was a net loss of 600 professional engineers, and a net loss of 6,100 in the total category "professional and technical workers". The total net emigration in 1963 was 58,200. It is to be hoped that this most interesting analysis will be continued permanently.

#### The Gulbenkian Foundation

THE second report of the Chairman of the Gulbenkian Foundation covers the years January 1, 1960–December 31, 1962 (Pp. xx+203+37 photographs. Lisbon: Calouste Gulbenkian Foundation, 1964). Despite the restricted distribution policy adopted by the Board, the scale of distributions rose considerably during that period, averaging more than 60 per cent annually. Of grants totalling some £7 million distributed during the period, just less than £800,000 was in science and rather more than £1.4 million in education. Grants made to the United Kingdom and British Commonwealth totalled £863,941. The main distribution of £2.9 million was in Portugal, where a Gulbenkian Institute of Science has been created. At present this consists of three research centres dealing with agricultural economics, computer studies and biology, of which the first two are already in operation and the last-mentioned is being organized. In accordance with the recommendations of the Foundation's Science Committee, constituted in January 1961, the objectives of the computing centre are research into pure and applied mathematics, assistance to outside non-commercial research and assistance to teaching institutions. The biology centre will include departments of microbiology, of experimental pharmacology, of physiology and of cellular biology. A report on *Grants 1956–62* (Pp. 134) and a report of the *Accountancy Checking* (Pp. 23) Commission for 1963 are issued separately. Grants to the United Kingdom and British Commonwealth included £2,000 to the University College of Rhodesia and Nyasaland for the equipment of a radiocarbon dating laboratory; £50,000 for the endowment of Gulbenkian scholarships for students from overseas for Churchill College, University of Cambridge; £4,500 to the Science Masters Association for revised syllabuses for science teaching in schools; £2,500 to the Institute of Community Studies for an investigation into educational research; £10,000 to the Centre for Educational Television Overseas for research on the television needs of newly developing countries and provision of material.

#### Smithsonian Institution, Washington

THE annual report of the Board of Regents of the Smithsonian Institution for the year ended June 30, 1963,