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Scientific Research and Tropical Development.

IN the three previous reports on the Colonies for which he was either wholly or partly responsible, Mr. Ormsby-Gore had perforce to deal at length with constitutional and political issues, questions of land tenure and other land problems, and labour problems. But the constitution of British Malaya is not at present a subject of controversy; the constitutional and political problems of Ceylon have been dealt with specifically by the Donoughmore Commission; and the constitution of Java, a Dutch Colony, is obviously not a matter upon which a British Minister should be expected to express opinions. Apparently there are no difficult land or labour problems in British Malaya and Ceylon. Consequently, in his report on British Malaya, Ceylon, and Java (Cmd. 3235, H.M. Stationery Office, 1928; 4s. 6d.), Mr. Ormsby-Gore is able to deal exhaustively with the subject nearest to his heart, the application of science to those public services upon which the physical health and the wealth and intellectual progress of communities depend.

It must be confessed that in this report he shows himself far more critical of the attitude of local governments and non-official Europeans towards their problems than in any previous report. This can be attributed to the fact that he brings to bear upon these problems the knowledge and experience he has gained by his visits to other colonies, and the contacts he has made with scientific workers, educationists, and technicians throughout the whole Empire. During the past five years he has served on every government committee set up in Great Britain for the furtherance of education, public health, and scientific research in the Empire, and he has thrown himself whole-heartedly into the work. Probably no public man, certainly no Minister of the Crown, has ever had such opportunities for making himself personally acquainted with the tasks confronting workers in these three important fields of endeavour, and the workers themselves. Small wonder that his grasp of the essentials of tropical development has developed or that his critical faculty has been sharpened.

There is evidence that the white community, in Malaya at least, is not altogether satisfied with the results of Mr. Ormsby-Gore's visit. He has discovered too much and been too outspoken a critic to earn popularity. Business men in Malaya are probably like business men everywhere, inclined to attribute their successes to their own brains and

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initiative and all their failures to the government; at one moment to cry aloud to the government for protection, at the next to curse the government for its interference; to beg for government assistance in their various enterprises, and then to criticise the government for its increased expenditure in satisfying their demands. We are only too familiar with these moods of 'business' men and farmers in post-War England. We know, too, how bitterly they resent being shaken from their complacent belief in their own super-efficiency by well-informed criticism, with what Micawberish optimistic obstinacy they wait upon events, trusting to luck, instead of courageous reorganisation to meet changing conditions, to bring back prosperity. But heirs to prosperity are notoriously blind to the facts of history. The European planters in British Malaya are no exception to rule. They have acquiesced in the starvation of the research and technical services. In consequence they have lost several of the best officers of the Agricultural Department. They disregarded for fifteen years the advice of the Agricultural Department on the subject of soil erosion on rubber estates. They have disregarded the work being done by the Dutch in Java. The big rubber plantation companies are now seriously threatened by the native small-holder. Naturally, it must be galling to them to be told by Mr. Ormsby-Gore that

"The only justification for the present complicated and expensive mechanism of directors, agent firms, visiting agents, managers, and shareholders is the application of greater intelligence and skill than the native can reasonably be expected to acquire."

Lest this were not sufficient blow to their self-esteem, they are informed also:

"It is to the individual enterprise, industry, and thrift of the Chinese merchant and petty trader, the Chinese craftsman, the Chinese coolie, and above all the small Chinese contractor with his 'Kongsi' or guild, that the great wealth and development of British Malaya are mainly due."

It will be remembered that, when Great Britain was suffering from acute trade depression in 1921-22, the government appointed a commission under the chairmanship of Sir Eric Geddes to inquire into government expenditure with the view of effecting economies therein. Had that commission's recommendations been put into effect, practically the whole of the government's research and technical services would have been crippled, and a severe blow been administered to the education services of the country. British Malaya is now faced with trade depression owing to the fall in price of rubber

and tin, its two chief economic commodities. If his opinion reflects that of the present government, Mr. Ormsby-Gore's comments on the situation indicate the distance and the direction in which his colleagues have travelled since 1922. He says:

"... economies in the public services will no doubt have to be considered. On the other hand, there can be little doubt that further development and expansion depend very largely on an active and progressive policy on the part of the technical departments, such as agriculture, public health, education, forestry, veterinary, railways, and public works. The higher staffs of these services are recruited by the Secretary of State for the Colonies, and Malaya cannot afford other than the best men available."

He states further that

"... the scientific services have not hitherto always received that recognition which can alone ensure an adequate supply of up-to-date technical officers possessed of that training and leadership which are required for modern development."

We are informed that the Malayan Agricultural Department at Kuala Lumpur has not been properly supported. At the present time, in spite of the signal proofs its officers have given of their capacity to improve the crops of the country, "its present accommodation in the way of offices is overcrowded and inadequate." The large field station initiated at Serdang in 1921 has no laboratories, the nearest being the Kuala Lumpur laboratory, seventeen miles away, which makes it difficult to maintain any close or continuous touch with it. Again, since there is no agricultural school in Malaya—in marked contrast to Java, which has an admirably co-ordinated system of agricultural education—"the liaison between the work of the Department and European or native agriculturists is still very imperfect. The Department has in fact worked in isolation under grave disadvantages and often neglect." There is now a Rubber Research Institute at Kuala Lumpur, but this was started only in 1925. Mr. Ormsby-Gore says he is convinced that "on research rather than restriction depends the prosperity of the rubber industry," but there are still many plantation companies which look to the government to fix prices on the basis of what the least efficient estates consider a reasonable level, and ignore scientific research. Animal industries in Malaya, due to the fact that there is no real veterinary department, are not being developed.

The agricultural situation in Ceylon is much more hopeful. "Public opinion in Ceylon is now very much alive to the need for furthering research in agriculture." At Peradeniya, there are the headquarters

of the Agricultural Department, the Botanic Gardens, a central experimental station, central laboratories and library, a farm school, and the head office of the Ceylon Rubber Research Institute. Agriculture now forms part of the curriculum of two of the voluntary secondary schools, each of which has its own farm, namely, Trinity College, Kandy, and Richmond College, Galle. 748 Government and 100 assisted schools have school gardens. There is a separate Tea Research Institute, financed by a cess on all tea exports, at present located in temporary quarters at Nuwara Eliya. There is also a separate Veterinary Department with a Central Laboratory at Colombo at which "some excellent research work has been done." The Government Dairy Farm in Colombo and the branch farm at Ambepusa, under the control of the Veterinary Department, provide facilities for breeding and feeding experiments.

"Ceylon," Mr. Ormsby-Gore reminds us, "is, after India, the largest tea-producing country in the world. It is the chief exporter of coconuts and coconut products in the Empire. It ranks third in the world as a producer of rubber. It is the principal producer in the world of cinnamon and citronella. It produces the highest grade and highest priced cocoa." Coffee was once an important crop, but this industry was practically wiped out by disease, particularly *Himeleia vastatrix*. In the opinion of experts, however, modern Java *robusta* coffees, highly resistant to disease, would do well in Ceylon and prove commercially profitable. The rice area could also be extended with advantage, particularly if more research were directed towards increased yields per acre. Mr. Ormsby-Gore also suggests that sisal might profitably be introduced into the dry zone and the natives be encouraged to grow tobacco as a rotation crop to sesame (locally known as 'gingelly').

While the Ceylon Agricultural Department is ahead of the corresponding service in British Malaya, the reverse aspect is presented by the respective forestry services. The Malayan Forestry Department is well staffed, it has achieved a uniform policy throughout the peninsula, and its research, experimental planting, conservation and commercial development sections, are all doing admirable work in accordance with a properly co-ordinated plan. It is true that British Malaya, in spite of the fact that four-fifths of the territory is under forest, still imports large quantities of timber from the neighbouring Dutch colonies, but it is hoped that it will not be long before it is entirely self-supporting in this respect. The need for a well-defined

forestry policy with regulations directly enforced by the administration is emphasised by the fact that the Conservator of Forests estimates that 75,000,000 tons of timber in the most accessible areas have been wasted by the ruthless burning out of forests to make room for rubber plantations or to mine for tin.

As regards Ceylon, we are informed that there was no effective forestry control or policy until 1907. For generations before that the best and most valuable trees had been cut out indiscriminately. "The export of satinwood from Ceylon was very extensive in the early years of the nineteenth century, and little or nothing was done until quite recently in the way of conservation, regeneration, and improvement of forests by scientific clearing or planting. Even when the Forestry Department was first established (in 1907), the policy then adopted was wrong, uneconomic, and unscientific." Not until 1921 was any attempt made to rectify matters. In that year a report was made by a visiting forestry officer, after which a Commission was appointed to make an exhaustive inquiry. This Commission took five years to complete its work, and "*the putting into force of its many proposals is still under consideration.*" (Italics ours.)

The sections of Mr. Ormsby-Gore's report dealing with the public health services of the two British Colonies are informative, illuminating, and suggestive. In attaching the greatest importance to preventive as compared with curative medicine, he is following the best precepts of our time. "There is no part of the Empire where the progress of medical and sanitary science can be studied with greater advantage than in British Malaya," he informs us. For climatic and ecological reasons Malaya is naturally highly malarious, and "malaria is still the disease responsible for the highest mortality in both the Straits Settlements and those Federated Malay States where vital statistics of sufficient scientific value are obtainable." In addition to high mortality, "malaria is the main indirect cause of debility, suffering, and death from other causes." Again, the tropical peoples of Malaya, like those in other parts of the tropics, possess very little resistance to pneumonia and tuberculosis. As in other tropical countries also, helminthic and venereal diseases cause much debility and loss of efficiency among the peoples of Malaya. The venereal disease problem of Singapore is aggravated by the fact that Singapore city "is one of the main ports of the world visited by vessels of every flag from every country."

Mr. Ormsby-Gore pays tribute to the public

health authorities in British Malaya for the work which has been and is being done to cope with these many difficult problems. He also commends the public health work which has been undertaken by private enterprise on the part of rubber and mining companies, and the pioneer work of such private practitioners as Sir David Galloway and Sir Malcolm Watson. In particular, he says the anti-malarial work of the Malay States is rightly held up as an example among the countries of the world. Again, he states that the medical research services and the provision made for medical education are alike excellently conceived and efficiently carried on. It is in no spirit of carping criticism that he suggests the existing dichotomy in the public health services in Malaya should be ended, that every medical practitioner in a tropical climate should be a sanitarian, that the financial rewards available to the public health worker as compared with those obtainable in ordinary medical private practice should be reconsidered, and that more liberal leave should be given to the officers of the public health services of Malaya to enable them to take refresher courses at the London School of Hygiene and Tropical Medicine.

A different note is struck on the Ceylon public health services. Ceylon has the most extensive and expensive hospital system of any British possession, but "medical research, modern medical practice, public health services, and preventive medicine in Ceylon are not up to modern standards and are below the public need." It is Mr. Ormsby-Gore's impression "that in medical education and practice the community as well as a large section of the medical profession in Ceylon are still living in the nineteenth rather than the twentieth century." Accordingly, he throws out a series of important suggestions for consideration by the government and the public in Ceylon, in which he emphasises the need for a new central medical research institute, an overhaul of the medical education work, improved status and conditions of service for public health officers, and the teaching of personal and public hygiene in all schools.

We have dealt extensively but by no means exhaustively with this report by Mr. Ormsby-Gore. His views on other subjects connected with the economic development and intellectual progress of the peoples of the East Indies and Ceylon for whom Europeans have assumed responsibility will repay the most careful study by all interested in the development of the British Empire, and in particular by those who wish to understand what science has done and still can do for our subject

peoples. There is a certain unenviable forbidding notoriety attached to blue-books printed for the special edification of members of Parliament, which militates against their wide distribution among all classes of the population. This is unfortunate, because the reports of Mr. Ormsby-Gore are full of accurate information, presented in easily assimilable form, which would be invaluable to students in all our secondary schools. They are a liberal education in themselves, and free copies might with advantage be distributed by the Board of Education to all schools in the country. The expense would be negligible in comparison with the interest they would awaken. One thing is certain: all scientific workers with a regard for the profession to which they belong should take the first opportunity to make themselves acquainted with the contents of this last report on Malaya, Ceylon, and Java. They will not only find there a complete justification for themselves and their special studies, but also will be made more fully aware of their responsibilities to the world at large and their potentialities for good. In the Under-Secretary for the Colonies they have a firm friend and doughty and authoritative protagonist.

In congratulating Mr. Ormsby-Gore on his signal achievement, we are conscious of the debt of gratitude we owe to his labours on behalf of science.

British Folklore.

- (1) *English Folklore*. By A. R. Wright. (Benn's Sixpenny Library, No. 33.) Pp. 80. (London: Ernest Benn, Ltd., 1928.) 6d.
- (2) *Folklore of the British Isles*. By Eleanor Hull. (Methuen's Anthropological Series.) Pp. xii + 318. (London: Methuen and Co., Ltd., 1928.) 7s. 6d. net.

BOTH these books appeared opportunely. Their date of publication falling near the jubilee congress of the Folklore Society, they served to supplement the proceedings of that congress in demonstrating to the general public a broader conception of the aims and methods of the study of survivals. It is patent from incidental references and the occasional correspondence in the daily press that there is a widespread interest among the public in the vestiges of our popular custom and belief; but there is little evidence of appreciation of the fact that these queer practices are worthy of serious study or that their collection or record has any object other than the satisfaction of a curiosity about the past. The collection of facts is indeed of paramount importance, especially