1 INTRODUCTION

1.1 The tenth session of the Regional Committee for the Western Pacific Region emphasized the importance of the dissemination of information on malaria eradication, information on the experience gained in medicated salt projects; the provision of a training course in malaria eradication for students from French-speaking countries; the collection of information on the economic benefits of malaria eradication programmes; and information on further cases of insect resistance developing in the Region. Progress achieved in these subjects is described briefly below.

1.2 The Executive Board, at its twenty-fifth session,\(^2\) requested a report on the status of the Malaria Eradication Special Account (MESA), particularly on the contributions made by the more economically advanced countries, from industry or the general public. Section 4 of this document deals briefly with the status of this account.

1.3 The Executive Board further urged the governments concerned to take the necessary steps for the training and provision of adequate technical and administrative personnel required for the more effective prosecution of their eradication programmes; to strengthen the supervisory and epidemiological assessment activities of their malaria eradication services; and for WHO to provide increased facilities for the training of national personnel and to make available to governments such technical advisory services as may be required.\(^3\) Efforts made in this direction are summarized under Section 2, "Action Taken by the Regional Office".

2 ACTION TAKEN BY THE REGIONAL OFFICE

2.1 Intra- and inter-regional co-ordination of malaria campaigns

In the two areas of the Region where inter-country co-operation and co-ordination are now well established, it is generally felt that the...
interest shown in this co-operative effort is contributing towards the progress of the malaria eradication programmes being undertaken in the participating countries.

At the fourth meeting of the Antimalaria Co-ordination Board, the speakers expressed their satisfaction at the progress made towards the achievement of malaria eradication but emphasized that co-ordination of efforts was more important than ever before to overcome technical, organizational and financial difficulties. Stress was laid on the need to continue to strive for more efficient administration of malaria eradication projects, the importance of adequate budget, staff training and measures to improve them. In this meeting, Thailand and the Federation of Malaya agreed to undertake early in 1960 entomological surveys to determine the vector in this border area. The Board recommended the extension of research aimed at the use of residual insecticide in combination with antimalaria drugs; the organization of malaria training courses given in the French language; and recommended to Member governments the review of the organization of their eradication services in order to facilitate realistic planning for the eradication of malaria.

The Ninth Borneo Malaria Conference was held in Semarang, Java, Indonesia, from 15-19 December 1959. Although the deliberations particularly emphasized the progress of the large scale Indonesia malaria eradication programme, it was noted that the programme of operations in Kalimantan (Indonesian Borneo) were to proceed as previously planned and called for co-ordination and co-operation with the malaria eradication programmes of North Borneo, Sarawak and Brunei. Work is to start in Kalimantan in 1960-1961. The Conference paid particular interest to the difficulties of supervision under Borneo conditions, the main problems being administrative in nature.

An Inter-territorial Malaria Conference for the South-West Pacific was held in Port Moresby from 23-26 October 1959 with the attendance of representatives from Netherlands New Guinea, Territory of Papua and New Guinea, the British Solomon Islands Protectorate, the New Hebrides and Australia. It is noted that there is already a close liaison between Australia, Territory of Papua and New Guinea, Netherlands New Guinea, and British Solomon Islands Protectorate, and to a lesser degree with these territories and the New Hebrides Condominium. There is also a close liaison between Netherlands New Guinea and Territory of Papua and New Guinea which will be extended to the synchronization of spraying operations on both sides of the border. Negotiations will be commenced between the Territory of Papua and New Guinea and the Australian authorities to combine efforts in an attempt to eradicate malaria from the Torres Straits area and adjacent parts of the Territory of Papua and New Guinea. In its deliberations, the Conference endorsed the opinion that further studies should be made on the application of mass drug administration combined with residual spraying as a means of eradicating malaria in New Guinea. Concern was expressed over the failure to
interrupt transmission completely in any mainland area which has been attempted to date. The Conference also acknowledge the interest taken by the World Health Organization in malaria eradication in this area and thanked the Organization for its active participation in the conference. The importance of an efficient organization in the carrying out of antimalarial operations and the need for full support for continued operations from all branches of government, had been emphasized. The proceedings of this conference are contained in the "Report of the First Inter-territorial Malaria Conference for the South-West Pacific, held at Port Moresby, 23-26 October 1959", Department of Public Health, Port Moresby. It was agreed that further conferences of this nature are desirable and of mutual importance. The Conference recommended that it holds a similar conference in March 1961, if possible in Hollandia.

2.2 Administrative assistance

Staff members of the World Health Organization from the Regional Office and in the country programmes have been very active in assisting governments in the preparation of plans of operations for malaria eradication programmes. From the Regional Office, the regional malaria advisers, the regional sanitary engineer and the regional entomologist paid a number of visits to various countries and territories of the Region to render advisory services on matters pertaining to malaria eradication. Project staff members gave similar services to their respective country programmes. Assistance has been given in the preparation of plans of operations for Cambodia, the Federation of Malaya, Viet Nam, the Philippines, Sarawak and North Borneo. In these activities, many difficult problems have been encountered and it is realized that the prerequisite to a successful programme is the preparation of a properly conceived plan of operations which has taken into consideration and resolved such problems as financing the project, providing trained personnel and developing an effective administrative organization.

A newly-appointed administrative officer, especially trained in the administrative problems of malaria eradication, is now available to assist in this important aspect of malaria projects. He has already visited two projects and made suggestions for administrative improvements.

2.3 Training

The World Health Organization joined with the Government of the Philippines and the United States International Cooperation Administration (ICA) in sponsoring the organization of international malaria eradication training courses at the Institute of Malariology, Tala, Rizal. This centre has trained four groups of students: one senior course, two junior courses in English, and one course from May to August 1960 in the French language for the benefit of junior students from the French-speaking countries of this region.

/2.4 Information ...
2.4 Information and health education

Information on the progress of malaria eradication in the Region and in the world and information on technical advances has been disseminated by an even wider distribution of the Malaria Information series and of reports of meetings and of field visits made by the malaria advisory staff.

The Inter-territorial Malaria Conference for the South-West Pacific, at its first meeting, recognized the importance of full co-operation of the population in a malaria eradication campaign and emphasized the need for the extensive dissemination of health education and propaganda by all available media, including existing school organizations. Towards this end, China (Taiwan) conducted villagers' meetings before local spraying operations, or before making blood surveys and in preparation for mass drug administration; posters were placed in conspicuous places; and mobile audio-visual teams did health education work in many villages. Workers in malaria eradication in the Region also contributed to the preparation of a document entitled "Educational Approaches in the Malaria Eradication Program". One of the main uses of this document will be in the training of malaria eradication personnel.

3 MALARIA PROGRAMMES IN THE WESTERN PACIFIC

The status of malaria eradication programmes receiving assistance from WHO in this region is described in the Regional Director's report.1

In China (Taiwan), the malaria eradication project has now reached a far advanced stage. A WHO short-term consultant and a staff member from Headquarters Division of Malaria Eradication had visited Taiwan and reported that China may well claim to be the first country to achieve malaria eradication in the Western Pacific Region. Intensified surveillance operations are in progress and in the small foci where transmission persists, aggressive measures, such as spraying thrice a year with DDT with small quantities of gammexane, are being applied to achieve complete eradication. Assistance from MESA is scheduled to continue until 1963.

In Korea, the WHO malaria team has recently reported the finding of seventeen malaria cases in Yong-ju (Gum of Kyong-song Pukto Province). The Regional Malaria Adviser recently paid a visit to this country with the objective of further studying the malaria situation.

It is understood that the Government of Laos intends to request technical assistance from WHO. This will form another example of co-operative efforts between ICA and WHO to assist countries in this region to achieve malaria eradication. It is hoped to carry out spraying operations in 1960 along the entire border with Thailand.

1 Unpublished document WP/RC11/3
In the Federation of Malaya, the malaria project is now underway with the initial assignment to the project of a WHO malarialogist, entomologist and a sanitary engineer. In the eastern section of the border with Thailand, Malaya is carrying out spraying operations to coincide with the spraying operations on the Thai side. Based on the knowledge gained from the operation of the pilot project, a country-wide malaria eradication programme will be prepared.

The WHO malaria staff in North Borneo has been strengthened by the assignment of a sanitary engineer in place of a sanitarian. More effective spraying operations are being developed and there should be greater progress towards the interruption of malaria transmission. The assistance of UNICEF continued during the year.

In the Philippines, the revised plan of operations has been signed by the Government and the Organization. Staff members of WHO have been active in assisting the Government to put the new plan of operations into effective implementation. Some defective procedures, duly recognized, have been changed to improve operations in the field. The use of dieldrin has been discontinued because of the development of resistance of the vector to this insecticide and DDT is now being used. Thorough and full coverage in spraying operations is aimed at. This project continues to receive considerable assistance from both the ICA and WHO.

Cambodia is well advanced in the attack phase and plans to institute surveillance in some areas in 1961. Most of the operations planned in 1959 were carried out, although some difficulties were encountered with regard to providing funds and personnel. Further researches were conducted in areas where it had not been possible to interrupt transmission, with a view toward possible alteration in spraying technique, use of drugs in medicated salt or other mass treatment procedure, or a combination of such attacks on vector and parasite. The results of the tests on the use of medicated salt (in Cambodia and in Netherlands New Guinea) are of greatest importance as it is hoped this method may solve problems of continuing malaria transmission in several areas in the Region. Both projects are in operation and the preliminary results are promising, although difficulties have risen with regard to the preparation of the salt mixture in Cambodia and the probable development of resistance of one parasite to pyrimethamine in Netherlands New Guinea.

The project in Sarawak proceeds favourably and transmission of malaria is now limited to a few fairly well demarcated areas. A plan for eradication has been prepared. The main problems are the financing of the project and the provision of a national counterpart. It may be noted that the Sarawak project has reached a stage where delay of full implementation would require repeating unnecessarily the years in which both spraying and surveillance took place: an extremely expensive proposition.

/The experimental ...
The experimental use of WHO staff as executive malariologists (Sector Chiefs) in field operations was initiated in the Viet Nam malaria eradication project pending the training of national staff. Two junior malariologists have been appointed and this number will be increased to six when the scheme proves to be workable. In 1960, it was planned to cover all border areas by spraying operations. One serious problem encountered was that of shifting cultivation in jungle areas. The population involved is approximately 781,000 and their dwellings in a rugged topography are accessible only with difficulty. A plan of operations to co-ordinate the present antimalaria activities into a sound eradication campaign is being prepared. ICA continued to assist the project very substantially.

Malaria has been eradicated from the principal islands of the Ryukyus. It exists only in the Yaeyama Gunto where a programme of malaria eradication is being carried out. Surveillance operations have now been started.

Students from Jordan, Korea, North Borneo, Philippines and Sarawak have attended the junior international malaria eradication training courses at the Institute of Malariology, Tala, Rizal, Philippines. A senior course was attended by students from Afghanistan, Japan, Korea, Malaya, North Borneo and Pakistan. One staff member attended the malaria eradication training centre in Jamaica. Twenty-one trainees attended the junior course in French.

The Chief, Vector Control and Pesticides of the Headquarters Division of Environmental Sanitation, visited the Region, with stop-overs in Japan, the Regional Office at Manila, Australia and New Zealand. To the regional staff, he spoke on insecticide resistance and of programmes of research now being undertaken on the various aspects of vector control.

No new cases of resistance of anophelines to residual insecticides have been detected during the year in the Western Pacific Region.

4 MALARIA ERADICATION SPECIAL ACCOUNT

Notwithstanding the apparent limitations in the availability of MESA funds, malaria eradication activities in the Region showed a considerable increase. The MESA budget for the year 1959 had an allotment of US$925,797 for the Western Pacific Regional Office. A second regional malaria adviser has been appointed to the Regional Office. He is assisting governments in the preparation of their programmes and plans of operations. Regional advisers in the malaria eradication unit have undertaken extensive travel within the Region in order to provide the necessary advice to governments and to WHO field staff in the countries where malaria eradication projects are being undertaken. Funds from MESA made possible the assignment of WHO staff to the pilot project in the...
Federation of Malaya and the strengthening of the project staff in North Borneo and Viet Nam. MEEA funds continue to assist programmes in Cambodia, China (Taiwan), Korea, Philippines and Viet Nam.