WORLD HEALTH ORGANIZATION

ORGANISATION MONDIALE DE LA SANTÉ

EIGHTEENTH WORLD HEALTH ASSEMBLY

A18/P&B/Min/2 Corr.1
15 May 1965

ORIGINAL: ENGLISH

COMMITTEE ON PROGRAMME AND BUDGET

PROVISIONAL MINUTES OF THE SECOND MEETING

CORRIGENDA

Page 2, fifth line

delete Professor GARCIA ORCOYEN

insert Professor CLAVERO DEL CAMPO

Page 3, first line

delete twenty

insert twelve

Page 19, fifth line

delete Mrs ABRAHAM

insert Dr Widad KIDANE-MARIAM

Page 19, fourteenth line

delete mainly due to lack of funds.

insert not only because of lack of adequate funds but also on account of shortage of professional personnel, especially the limited resources to train the auxiliary staff required.

Page 24, third line from bottom

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Page 25, eighth to eleventh lines

delete the paragraph beginning "His delegation . . ."

insert His delegation had particularly appreciated the statement made by the representative of Saudi Arabia regarding the eradication of malaria from the holy cities area. It was very important for Moslem countries that the importation of malaria into such areas should be prevented, and it was to be hoped that attention would be paid to that matter.

WORLD HEALTH ORGANIZATION

ORGANISATION MONDIALE DE LA SANTÉ

EIGHTEENTH WORLD HEALTH ASSEMBLY

A18/P&B/Min/2
10 May 1965

ORIGINAL: ENGLISH

COMMITTEE ON PROGRAMME AND BUDGET

PROVISIONAL MINUTES OF THE SECOND MEETING

Palais des Nations, Geneva
Monday, 10 May 1965 at 9.30 a.m.

CHAIRMAN: Dr A. L. MUDALIAR

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Note: Corrections to these provisional minutes should be submitted in writing to the Chief, Records Service, Room A.843, within 48 hours of their distribution.

1. REPORT ON DEVELOPMENT OF THE MALARIA ERADICATION PROGRAMME: Item 2.4 of the Agenda (Document A18/P&B/2) (continued)

The CHAIRMAN invited the Committee to resume its consideration of agenda item 2.4.

Professor GARCIA ORCOYEN (Spain) said that despite the progress indicated in the Director-General's report, there was still much to be done and many obstacles to overcome, particularly in the larger regions. The World Health Assembly at Mexico had perhaps been a little over-optimistic. Careful planning was now essential, particularly in the regions where eradication was not complete, and WHO should set an example to the countries which were expected to plan their programmes.

In connexion with the attack phase, he endorsed the comment in paragraph 2.1.3 of document A18/P&B/2 on the need for the large-scale use of drugs as well as insecticides. Drugs were easier and cheaper to administer and, as indicated in the report, had been the sole means of interrupting transmission in a number of American countries.

Regarding the maintenance phase, the report had shown that a few countries, among them Spain, had obtained certificates of eradication. Some countries had received certificates for part of their territory and he questioned whether it was practicable or advisable to divide a country into parts that were free from malaria and parts that were not. Eradication was difficult to achieve and difficult to maintain. It could never be assumed that malaria had been eliminated once and for all, for the threat was ever present and was liable to increase in the event of political or other disturbances. Malaria was often imported, usually through the seaports, since ships frequently lacked drugs and facilities for diagnosis. In Spain there had been

twenty cases of imported malaria in 1964, most of them from members of ships' crews from Africa. More study of the disease was required and countries that had achieved eradication should pursue such study for the benefit of their own and other countries.

It had been stressed, both in the report under consideration and in the reports of the Expert Committee, that the malaria services should be part of the public health services, as was the case in Spain. It should not be forgotten, however, that the study of malaria was a specialized subject which should be given the same independence and the same prestige as the study of other diseases, such as tuberculosis. The importance of the subject could be judged from the fact that the Expert Committee on Malaria had had to meet twelve times since 1955.

Professor GONZALEZ TORRES (Paraguay) said that malaria was an important health problem in his country, with periodic epidemics causing high morbidity and mortality, particularly among the rural population. Since 1955 the Government had made every effort to combat the disease and in 1956, on the recommendations of the XIV Pan American Health Conference and the Eighth World Health Assembly, had transformed its programme of attack into a programme of eradication. In September 1957 an initial malaria eradication service had been set up, and implementation of the eradication plan had started in October 1957 with assistance from the Organization of American States, UNICEF and the AID programme of the United States of America.

Once the programme was under way, it had been found that the malarious region was far greater than the 42 286 square kilometres originally estimated. At the end of the third year of the attack phase, although the incidence of malaria had

been reduced in the areas sprayed, it had not been possible to secure interruption of transmission owing to lack of sufficient staff and funds to deal with the original area and the new areas discovered as the programme developed. The Government had therefore decided, with the agreement of the technical adviser of the Pan American Health Organization, to stop spraying activities temporarily and to concentrate available resources on studying the epidemiological and entomological aspects of the disease and ascertaining the exact extent of the malarious region.

After extensive and detailed investigations the authorities were now fully informed on the situation concerning malaria in Paraguay - incidence, vector, epidemiology, entomology, the fact that it was endemic, the effect of climate and movement of population - and was ready to start on eradication. Unfortunately, the Government had not sufficient means, but it was hoped that they would be obtained as a result of negotiations now in progress with certain international organizations.

Dr HAMDI (Iraq) said that as a result of the epidemiological situation in 1964, it had been decided in the current year to revise the entire plan of operations in all parts of his country. The whole of the northern region was in the early attack phase, the southern region in the late attack phase and the central region under active surveillance with focal spraying. The resistance of A. stephensi was a problem in the south as the vector was resistant to dieldrin and had a high tolerance to DDT. An amount of Iraqi dinars 700 000 (US$ 1 960 000) had been

allocated to carry out the programme in the year 1965-1966. The Regional Office was helping in the implementation of the plan of action and the Regional Director had wisely included an entomologist in the malaria assessment team.

Malaria was still a major public health problem in many countries and every effort should be concentrated on eradicating the disease. The studies and research on different aspects of the problem, as described in the report, were a source of optimism for the future.

Dr HUDSON (United States of America) emphasized his country's interest in malaria eradication and its support for the high priority given to the subject by WHO. While he was glad to note from the Director-General's report that increasing numbers of people were being protected by the eradication programmes, there were countries, particularly in Africa, whose people did not receive the benefit of WHO's work. It was essential for eradication programmes to extend to all Member States where malaria existed. It was also important to intensify efforts in some areas, particularly where there were problems with insecticides or drugs or through social conditions.

International programmes had accomplished a great deal, and special appreciation was due to UNICEF for its long-standing work and support. But the real responsibility, and in most cases most of the cost, should be borne by the countries themselves. The greatest success was being achieved in the countries that had established minimum criteria for malaria programmes. It was unfortunate

that in some countries successful operations had been hampered by lack of political and financial support. The United States accepted as valid the criteria established by WHO for the success of malaria eradication and considered it vital that there should be no compromise on international standards.

In connexion with the need for countries to review their eradication programmes or their plans for programmes, he drew attention to the International Malaria Eradication Training Centre recently established in Manila under the auspices of the Philippines, the United States of America and the World Health Organization. A wide variety of advanced and refresher courses was provided in the various disciplines.

The United States would continue to support the malaria eradication programme and to urge that it should be given the highest priority.

Dr MARTINEZ JUNCO (Cuba) said that the antimalaria campaign was one of the outstanding examples of WHO's work. In Cuba the programme was progressing satisfactorily and no difficulties had arisen with insecticides. It was anticipated that by the end of the current year there would be scarcely any cases of malaria. The number had dropped from 3230 in 1961 to 624 in 1964 and the number so far for 1965 showed a decrease of 50 per cent. on the number for the corresponding period in 1964.

One of the most interesting features of Cuba's eradication programme was the implementation of the recommendations of the seminar held in Cuernavaca, Mexico, in March 1965, concerning the need to incorporate the antimalaria programmes in the general health services. An interesting result was the increase in the number of blood slides collected - from 126 330 in 1963 to 276 470 in 1964, 84.9 per cent. of

them having been collected in the course of passive case-detection, not only in the malarious area but also from the rest of the country. Of the slides found to be positive, 98.9 per cent. had been obtained from passive case-detection.

Dr TRUONG (Viet-Nam) said that after ten years of implementation of its programme for the eradication of malaria from the world, WHO was in a position to assess progress achieved and difficulties encountered and to know the best ways of resolving the various problems. The programme was very costly and the most careful preparation was essential. The figures given in the report showed that definite progress had been made and that the programme was based on sound principles and techniques. On the basis of the experience gained it would be possible to draw up programmes better adapted to particular countries and particular circumstances. He hoped that research would produce new material and knowledge which would lead to the effective eradication of malaria from the world.

The programme in Viet-Nam was now starting its seventh year of operation. Owing to the special conditions in his country the eradication programme had been changed in 1962 into a pre-eradication programme, the objects being to maintain the existing antimalaria service and improve technical possibilities, to obtain increasing support from the national health services, to continue protecting the population against malaria and to start up eradication operations again as soon as the situation allowed. The parasite rate had decreased considerably between 1958 and 1964, although it was considerably higher in the mountain regions than in the coastal regions, owing to a certain instability caused by floods and other disasters.

Nevertheless, in 1964 1 500 000 houses had been sprayed and 6 000 000 inhabitants protected in the malarious region. The programme had progressed normally during 1964 except in certain regions. Special attention had been paid to financial, staffing, training and other administrative problems. There had been only minor difficulties and no resistance to DDT had been observed.

Owing to the situation in the rural regions the Minister of Health had prepared a new programme for health development to combine the malaria and rural health programmes so that better use could be made of the general health service. At present the programme was controlled by a general administrator with the assistance of two deputies concerned respectively with the pre-eradication programme and the rural health programme. The programme was directly responsible to the Ministry of Health.

Dr BOZO (Albania) said it was clear from the report that malaria was still a serious disease and that great efforts were still needed to eliminate it from the areas where it was rife.

In Albania the eradication programme had made satisfactory progress in 1964. Owing to climatic conditions favourable to mosquitos and malaria, to economic and social conditions, the backwardness of the people and the indifference of earlier regimes, Albania had formerly been the most malaria-ridden country in Europe. Thus, in the early years of liberation, half the population suffered from the disease. Tropical malaria was the chief form and its mortality rate, particularly among children, was one of the chief factors contributing to the general rise in mortality in Albania. The situation had deteriorated during the Nazi and Fascist occupation and the people's government in power after the liberation in November, 1944, had inherited an extremely serious situation in respect of endemic malaria.

Following the country's liberation, urgent attention had been devoted to the campaign against malaria, and the draining of the marshy regions had resulted in a progressive decrease in the incidence of malaria. The eradication programme had been launched in 1958 and its success could be seen from the following figures: in 1964, out of a total population of 1 762 375, 200 000 were in the non-malarious region, 697 375 were under the maintenance phase, and 865 000 under the consolidation phase. In that year 134 051 plasmodium tests had revealed sixty positive cases compared with ninety-eight in 1963. The positive cases comprised fifty-four of P. vivax, two of P. falciparum and four of P. malariae.

The existence of a wide network of health centres in towns and villages, attended regularly by the inhabitants and providing free medical services, placed the emphasis on passive rather than active detection. Passive detection was extended to the regions under maintenance as well as those under consolidation, in order to prevent the recurrence of malaria in the areas from which it had been eradicated. Active detection was carried out in the consolidation area, and partially in the maintenance area.

Malaria cases were all treated in hospital and were given periodic checks for a period of two years after leaving hospital. In the epidemic seasons they were given pyrimethamine once a month.

In the foci of infection, measures involved epidemiological investigation of each case, blood tests for the population and dosage with pyrimethamine in the epidemic seasons, and spraying of houses with DDT.

In January 1965, as a result of a well-organized campaign, the number of people in the maintenance phase had risen to 1 142 375 and the number in the consolidation phase had fallen to 420 000. In the first part of the current year there had been only one case of malaria - P. malariae. It was hoped that the country would be in the maintenance phase in 1967.

Dr GERIĆ (Yugoslavia) said that he had carefully read the report, which was a very useful one for all countries. He emphasized the importance of supervision during all phases of the programme. Sixty-seven new cases of malaria had been reported in Yugoslavia in 1964, compared with 44 cases in 1963. Spraying operations and other measures had been neglected in 1963 in one rather isolated commune of Macedonia, possibly because supervision had not been as strict as in previous years. Nineteen cases had been reported from that area, and seventeen cases had been imported from it into other parts of the country. Nineteen cases had been imported from other countries, and twelve had been induced following blood transfusion. Local authorities had had to apply stricter measures to deal with the problem, and the greater attention given to supervision, in addition to spraying and chemoprophylaxis, had yielded good results. No new cases had been registered since 1 July 1964 and there was good reason to hope that the entire country would have entered the maintenance phase by 1966.

Dr ALDEA (Romania) said that the report reflected the noteworthy success achieved in the world-wide eradication programme that had followed the efforts of individual countries, although some difficulties remained.

The report mentioned that new areas in Romania had entered the maintenance phase. He pointed out that with the passing into the maintenance phase in 1964 of the last of the originally endemic areas, eradication in his country had in fact been realized. The last indigenous case - an isolated case in a mountainous area - had been registered in 1961. The absence of indigenous cases had enabled spraying

operations to be discontinued in 1962. Regular evaluation of the programme in Romania had been carried out since 1957 and the results communicated to WHO by means of quarterly epidemiological statistics. The existence of a well-developed network of health units that had from the outset carried out all epidemiological surveillance measures and treatment of cases had made it possible to move from the consolidation to the maintenance phase without the need for special organizational measures. The integration of the antimalaria units into the public health service had enabled the services of those units to be maintained in such spheres as laboratory examination and treatment of cases.

He emphasized the importance of courses on malaria and parasitic diseases in the training of medical staff, of the constant co-ordination of activities, and of health education of the public.

The final stage of eradication gave rise to new epidemiological problems. The results of recent research into the infective capacity of asymptomatic parasites in local vectors had shown that they could constitute a decisive factor in the maintenance of infection. Infections by Plasmodium malariae, particularly post-transfusional infections, had for some time called for increasing attention in his country's efforts to achieve an advanced phase of eradication, and it was applying radical measures to reduce such infections.

Efforts had to be concentrated on the prevention of reintroduction of imported malaria. Romanian citizens travelling in malarial countries were given chemo-prophylaxis to cover the duration of their travel. He proposed that countries where

the disease existed should consider the possibility of introducing haematological control, and, where appropriate, radical cure of intending travellers before departure. It was also desirable that the results of epidemiological inquiries should be communicated to other countries, either direct or through WHO. The periodical dissemination by the Organization of information received from all regions constituted an important means of defining the measures that should be taken by interested countries. His country had made an important contribution by its scientific research into the subject, as presented in various papers at meetings of the Organization, and by documentary material it had put at the disposal of WHO fellows, together with the experience of the Romanian School of Malariology.

Referring to resolution EB35.R17, he proposed that the words "particularly in regard to the training of personnel" be added at the end of operative paragraph 2 of the draft resolution recommended for adoption by the Eighteenth World Health Assembly; that the following addition be made at the end of paragraph 3: "emphasizing the stage the programme will have reached when financial support by WHO ends"; and that the word "stimulate" in operative paragraph 4 be replaced by the word "ensure".

Professor CORRADETTI (Italy) congratulated the Director-General on his comprehensive report, and was happy to note that he had followed the lines indicated in resolution WHA17.22, which had provided a more realistic basis for the strategy of world-wide malaria eradication.

The concept that had now been accepted of providing drugs for treatment in areas - mostly in Africa - where there was no health infrastructure or pre-eradication programme yet in operation would save many lives. The Director-General must also be congratulated on the research projects initiated by WHO, and described in section 7 of document A18/P&B/2. A substantial increase of funds for the purpose was awaited so that research could be intensified, in response to resolution WHA17.22. Advantages of great value should thereby be obtained.

He also expressed appreciation of WHO's work in the detection of problem areas, and of the assistance it had given in overcoming their difficulties. Resistance of malaria parasites to drugs and vector reaction to insecticides were everywhere being given careful attention; training of national staff was being given increasing support by WHO, and the Organization had supplied greatly increased technical advisory services, as could be seen from Table 4 on page 49 of the report. He hoped that that increase would continue.

The tables in the annex to the document, which showed the detailed status of malaria eradication by regions, gave a complete picture of the situation. In spite of all the Organization's efforts, it had to be recognized that there were still many obstacles in the way of eradication; a number of governments had not shown sufficient interest in the problem, while others had underestimated the financial consequences of their planned operations; in other cases the potential of the attack had been reduced by sudden lack of funds or shortage of qualified personnel. Some way must be found to help countries in financial difficulties.

Another obstacle in some countries was the political instability and insecurity mentioned on page 7 of the document; a permanent state of alarm in a country might affect malaria eradication just as adversely as did technical problems. The existence of such obstacles, over which WHO had no power, had probably led the Director-General, in the first page of the introduction to his Annual Report (Official Records No. 139) to say that malaria was far from being eradicated and that international assistance in financing and organizing campaigns had not yet reached the desired level. Those frank statements of the Director-General showed his realistic and constructive criticism and were intended to call the attention of all governments to the present serious situation of malaria eradication in the world.

Dr ANOUTI (Lebanon) said that the programme in the Lebanon covered a population of 750 000 living in 1581 villages above an altitude of 1100 metres. There were at present 1052 villages, covering a population of 500 000, in the maintenance phase and 529 villages, with 264 000 population, in the consolidation phase.

Outlining the task of the surveillance staff in the two phases of the programme, he said that in the regions in the maintenance phase their duties comprised particularly insect control, environmental health activities, and detection of fever cases or suspects. In regions in the consolidation phase active and passive surveillance were carried out on a monthly itinerary in villages and in public establishments, blood samples being taken from fever cases and suspects and from nationals returning from abroad. The health services of Beirut airport drew up weekly lists of names and addresses of nationals returning from malarial countries for periods in excess of one week. All positive cases and their contacts were subjected to periodic surveillance.

Blood samples of 84 267 persons taken in 1964 and the first quarter of 1965 had yielded fifteen positive cases - thirteen among returning emigrés and two induced cases. The vectors in the Lebanon were Anopheles sacharovi, which had, until 1958, frequented large swamps in the Plain of Bekaa on the south coast, but had since disappeared; and A. superpictus, which was still rather widespread but was sensitive to the chlorinated insecticides, its favourite breeding place being near sunny streams in all regions, including mountainous areas above 1500 metres. No cases had yet been found in treated areas. From 1964 to date no spraying campaign had been undertaken, but the treatment with DDT of positive breeding places and of some caves and other shelters of the mosquitos had been carried out, particularly in frontier areas.

Dr LOBO da COSTA (Portugal) congratulated the President of the Health Assembly on his election and paid tribute to the Director-General and his staff. He outlined the history of the eradication campaign and mentioned that it had changed from an integral campaign to one aimed at the total extinction of the reservoirs of the virus. The policy followed in pursuing the programme had given rise to high hopes, although he emphasized the difficulties of carrying out the operation to its conclusion.

In spite of the difficulties that had been encountered, the means had in general been found for a happy solution of the problem. The present programme was essentially different from previous ones. It had taken account of the universal dimensions of the problem and the world-wide effort needed to solve it, and it would be thanks to the realization of that concept that success would be achieved.

Referring to the eradication campaign in his country, he said that the financial means had not been available to achieve total coverage. At the start of the campaign the funds at the disposal of the health service had constituted less than one-third of the sum necessary to cover the regions with endemic malaria, comprising an area of approximately 43 800 km^2 with about 2 500 000 population. Although malaria was not a particularly grave problem in Portugal, there had been about 100 000 cases a year, with some 10 000 deaths. After outlining its characteristics in that country, he explained the dilemma in which the eradication campaign had found itself: whether to apply total coverage to one-third of the malarious area, or whether to apply insecticides in limited areas of great endemicity. The latter alternative had been chosen as being better adapted to the financial circumstances, and following its application it had been found that malaria had disappeared not only from those areas but also from surrounding districts. After some eight years of partial application of insecticides it was hoped that interruption of transmission would be achieved. He commended that method to the consideration of other countries with limited financial means; the attack phase had cost his country much less than the orthodox method of total coverage would have done.

He pointed out the cost and complexity of door-to-door active surveillance methods in a country like his own. By the end of 1958 there had been no cases of morbidity from malaria and the country had passed into the consolidation phase, with a plan of control in accordance with the recommendations of the Expert Committee. Active surveillance had started in 1963, but had revealed not a single case of indigenous malaria. The per capita cost of that active surveillance had been greater than that of all the other phases of the campaign.

A large number of carriers of parasites were still arriving in Portugal, not all of whom could be identified by the health services. Conditions still therefore

existed for the reintroduction of malaria. He considered that in order to prevent reintroduction, greater attention to the problem was needed by many countries even after they had passed into the consolidation phase.

After outlining the surveillance activities in his country and the difficulties encountered, he associated himself with the remarks made by the delegate of Spain, which applied also to Portugal.

Dr TJON SIE FAT (Netherlands) said that his country consisted of three autonomous territories: the Netherlands proper in Europe, and Surinam and the Netherlands Antilles on the American continent. Malaria was prevalent only in Surinam, of which the greater inhabited part was in the consolidation phase, with only six reported cases in 1964. It was still a problem in areas in the attack phase comprising most of the vast jungle area in the interior, with a population of 30 000. That population still lived in primitive conditions, and there had been some opposition to spraying operations. As an alternative method to spraying, a pilot project for the distribution of medicated salt was in operation.

Dr NOVGORODCEV (Union of Soviet Socialist Republics) said that, from the documents before the Committee, his delegation had noted with satisfaction that in 1964 some success had been achieved towards malaria eradication. However, while paying tribute to WHO for what had already been achieved, he noted that the malaria eradication programme was not developing along the lines originally planned. Although the incidence of malaria had decreased considerably in many parts of the world as a result of the efforts of the Organization and of Member States, in problem areas the programme was making only slow progress, and there were even some places where operations had ceased entirely. The effect of such delays was that governments and health authorities became disheartened, and that might further slow down the programme.

Without entering into a detailed analysis of the causes, it would suffice to say that there were certain defects in the Organization's work in the field of malaria: in certain countries, the Organization had assumed duties which fell within the competence of the national authorities concerned. Furthermore, it was impossible to form a picture of the world-wide situation since, in its evaluation, the Organization had only taken account of three-quarters of the world's population and had not included the People's Republic of China, the Democratic Republic of Viet-Nam and the Democratic Republic of Korea.

From the documents before the Committee, it was evident that there had been a marked decrease in the action against malaria; the population of areas in the maintenance phase was increasing only by 5 to 8 per cent. a year. In 1964, 92 per cent. of the increase had been in India. The increase of areas in the consolidation phase in the last three years had also been mostly in India. In tropical Africa no real success had been achieved. The main reason - as stated by the Director-General in his report - was lack of funds. The financing of the campaign was of course a matter for discussion by the Committee on Administration, Finance and Legal Matters, but it should be emphasized that the strategy adopted by the Organization did not correspond to the means at its disposal. While appreciating the gravity of the problem in certain countries, it should nevertheless be borne in mind that the Organization's basic role was to advise. It was therefore the opinion of his delegation that the guiding principles governing the malaria eradication programme should be reviewed. To that end, a committee should be set up to evaluate the achievements and defects in WHO's work in malaria eradication over the previous

ten years, to make an objective assessment of the situation and to determine the future role of the Organization. That was all the more necessary in view of the resolution of the Sixteenth World Health Assembly calling for study of the malaria eradication programme.

Mrs ABRAHAM (Ethiopia) said that malaria was the most important single obstacle to the development of the economic and social potential of countries such as her own. The malaria eradication programme in Ethiopia had been evolved following certain pilot projects carried out in various parts of the country under the auspices of UNICEF and WHO. As a result the Ethiopian Government had set up a malaria eradication service within the Ministry of Public Health, with the ultimate objective of affording protection to 8-10 million people. Although a measure of integration had been achieved between the rural health services and the malaria eradication service in the field, the rural health service had made little progress as compared with the malaria eradication service, mainly due to lack of funds. However, a solution to the problem was being sought, since the importance of combining the efforts of the two services was recognized if the ultimate goal of complete eradication were to be speedily achieved.

Dr BAIDYA (Nepal) said that the malaria eradication programme had been launched in his country with the help of WHO and of the United States AID. It had originally been estimated that the programme would take eight years to complete but, for various reasons, it had been found necessary to advance the date of completion first to 1970 and, then again, to 1972. The programme's extension by an additional two years involved not only problems of finance but also meant that vectors would gradually

develop a resistance to the available insecticides. In Nepal more than half of the health budget was spent on the malaria eradication programme, the extension of which until 1972 would result in hardship for other programmes. A request had therefore been made for an independent appraisal team to evaluate the work carried out to date, with a view to ensuring malaria eradication by 1972. Lastly, thanks were due to UNICEF, which had assisted the Government of Nepal in developing a health infrastructure which was an essential feature of the surveillance and maintenance phases of malaria eradication.

Dr EL DABBAGH (Saudi Arabia) said that malaria constituted one of the main obstacles to a country's development. Considerable progress in overcoming it had however been made, as would be seen from the report before the Committee. One aspect of the matter of particular interest to him concerned nomadic tribes, to which he had referred at the Technical Discussions on health planning. The problem of nomads, who either imported malaria into non-malarious areas or else became infected themselves, required thorough and careful study and was, in his opinion, a matter worthy of the Organization's consideration.

Regarding the international pilgrimages made to Mecca and Medina, he wished to state that, as a result of the intense and strict antimalarial measures enforced upon the advice of WHO experts, both cities had remained free from malaria.

Dr CHARLES (Trinidad and Tobago) said that WHO had brought forth the idea of global eradication of disease - a concept which the nations of the world had accepted. The first major disease tackled on a global scale was malaria, but not all countries had embarked upon their programmes at the same time and the world was therefore now

at different stages of eradication. While appreciating that certain countries were encountering difficulties in their fight against malaria, he nevertheless called upon them to make an all-out effort for eradication and urged other Member States, where possible, to assist them. In many instances, all that had been achieved was the elimination of the malaria parasite: the problem of vectors still remained and, while that was so, the countries which had eradicated or were in the surveillance phase were vulnerable and liable to a recrudescence of the disease. Trinidad and Tobago were in the surveillance phase and the only cases of malaria which had occurred there in the previous two years had been imported. The Government had spent millions of dollars on eradication, which it had achieved with the help of WHO and UNICEF. At the present time, several hundred thousand dollars were being spent every year on the surveillance phase. It was not possible for a small and developing country to continue to spend such large sums indefinitely, since the money was needed for the improvement of other social services. He therefore trusted that the Organization would submit to the Eighteenth World Health Assembly concrete proposals, involving the minimum of expenditure, regarding the action to be taken to keep a country free from malaria once it had eradicated the disease or was in the surveillance phase. In the same connexion, the Organization should submit some form of draft legislation for consideration by Member States.

Finally, he wished to record that the spraying carried out on aircraft on international flights was perfunctory and on some flights was not carried out at all. Furthermore, it should be remembered that the first-class compartments on such flights were not exempt from the regulations. His delegation would appreciate having the Organization's further guidance and concrete proposals on the matter as well as the views of Member States present.

Dr QUIROS SALINAS (Peru) paid tribute to Dr Carlos Alberto Alvarado and requested the Director-General to transmit an expression of gratitude to him for the brilliant service he had rendered in the field of malaria. It was certain that, upon his retirement, his successor, the eminent Indian malariologist, Dr Sambasivan, would pursue the task with the same zeal and efficiency.

He rendered homage to the malariologists who had perished in the fight against malaria. In Peru alone, there had been ten such cases since the beginning of the campaign and recently three had drowned in the forest area of Peru.

Referring to the malaria eradication programme in Peru, he said that it was proceeding satisfactorily although some problems had arisen, mainly as a result of the programmes of economic and social development which led to migration, resulting, in turn, to dissemination of disease. In the coastal zones of Peru, a crucial stage had been reached regarding the organization of the maintenance phase. In the Americas, the problem had been studied thoroughly at two seminars - one held at Pocos de Caldas in Brazil and the other at Cuernavaca in Mexico - which had considered ways of improving the health services in charge of the maintenance phase. The question was one of major importance and merited careful study. In that respect, he expressed alarm at the gradual decrease in UNICEF's aid which was indispensable, particularly when it came to organizing the consolidation phase with a view to achieving the ultimate success of an eradication programme.

Dr SAMII (Iran) reported favourable progress of the malaria eradication programme in Iran. Of the population of 15.7 million originally at risk, 7.3 million were now under the consolidation phase, 3.9 million under the attack phase and 3.7 million under the control and preparatory phase. The future prospects of the programme in

Iran depended upon the ability to resolve certain problems. In the first place, the consolidation areas ran the risk of importing cases from the southern part of the country. The main problem was a double resistance to insecticides in the south which resulted in the transmission of malaria to peoples who, by their large-scale movements, were a constant danger to both attack and consolidation areas in the north. Research was being carried out by the epidemiological unit of the malaria eradication organization and the Institute of Public Health Research through pilot projects to find new antimalarial measures and techniques whereby transmission might be interrupted. Lastly, in the area of consolidation there was the problem of integration with the general public health service.

Dr ADESUYI (Nigeria), referring to paragraphs 2.2.1 and 2.2.2 of the Director-General's report, said that surveys had been carried out in certain regions of Nigeria from which it had been possible to ascertain the gaps which would have to be filled in order to assure an adequate health infrastructure, without which it would be futile to proceed with the attack, or any subsequent, phase of the malaria eradication programme. The delegate of the United States of America had stated that there should be no delay in implementing malaria eradication programmes in endemic areas, particularly in tropical countries. However, it was precisely the need to fill the gaps in health infrastructure which was bound to cause delay in many cases. It was evident therefore that the main point upon which to concentrate was the early development of a health infrastructure and any assistance should be directed at planning such programmes. To achieve the health coverage of the whole population would not only ensure the success of the malaria eradication programme but would also

be invaluable in all subsequent health programmes. However, despite the fact that Nigeria was not yet ready to proceed with the attack phase, limited malaria control was being carried out by local health authorities in all areas; the country-wide programme would however only begin when the network of health infrastructure was sufficiently strong.

Dr FIŞEK (Turkey) observed that the Director-General had, in his report, noted the integration, in Turkey, of the malaria eradication programme with the other health services. Early results had proved most promising. The rural midwife service, the public health nurse-aid service and the malaria surveillance agents had all been combined into one unit. The surveillance agents and the rural midwives were placed under the supervision of a male public health nurse. The medical doctors in the malaria eradication organization supervised their activities, which were mainly concerned with surveillance work in malaria eradication, maternal and child welfare and the improvement of environmental health. The medical doctor also examined and treated patients in the rural area. The arrangement gave great satisfaction to the peasants who took an interest in the work being carried out.

Several delegates had commented upon the importance of having an adequate health infrastructure, which was essential if eradication was to be achieved. In Turkey, under the newly nationalized health services, the rural health organization was working most satisfactorily: there was one public health nurse for every two or three thousand members of the population and one medical doctor for every three thousand. It was hoped that, as a result of such a well-established rural health organization, it would prove possible to eradicate malaria. The first years in the malaria

eradication campaign in Turkey had been very successful and the number of cases had dropped from millions to a few thousands. However, over the past six years, the number of cases had remained at four to five thousand. The reason lay with the difficulty of carrying out surveillance in small communities in mountainous areas. It would therefore be advisable if some operational research could be carried out to evolve a more efficient method of surveillance and to look into the possibility of making increased use of local people.

His delegation had particularly appreciated the statement made by the representative of Saudi Arabia regarding the problem of nomadic tribes - a problem common to all Moslem countries. It was to be hoped that increased attention would be paid to the matter by all nations.

Dr AL-ADWANI (Kuwait), referring to the point made by the delegate of Trinidad and Tobago, considered that the importation of the vector to malaria-free areas of the world constituted a real problem. Some research had been carried out on the means of controlling transportation via aircraft and a commercial firm in the United States had discovered that it was not possible to control the vector despite the spraying of both compartments. Research was now being carried out on the possibility of spraying insecticides into the aircraft's ventilation system, so that even the luggage compartment would be reached. It was to be hoped that the Director-General and the Organization would pay more attention to the matter.

With regard to the remarks of the representative of Saudi Arabia, he agreed that the transmission of malaria through the nomadic tribes was a serious problem, especially when they travelled from one oasis to another.

Dr HAQUE (Pakistan) said that, although it was automatically assumed that malaria was eradicated from large towns, in the light of what the representative of Saudi Arabia had said he would suggest that WHO should lay down specific methodology for clearing such towns, possibly by means of larvicidal action.

The meeting rose at 11.50 a.m.