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UNITED STATES GOVERNMENT

memorandum

DATE: July 31, 1985

REPLY TO
ATTN OF:

Anne Dammarell, Evaluation Officer

SUBJECT:

Multi Donor Review of the Sri Lanka Malaria Program

TO:

See Distribution

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The Annual Multi Donor Review of the Sri Lanka Malaria Program was held in Colombo in June 1985.

Attached is a copy of the Summary Report and Recommendations entitled 'Background to the Evaluation and Present Situation of the AMC - Report Summary'. Copies have been sent to the AID/W technical office and to appropriate mission staff.

Distribution:

- ANE/DP/E - M. Norton
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BACKGROUND TO THE EVALUATION AND PRESENT SITUATION
OF THE AMC - REPORT SUMMARY

The resurgence of malaria in the mid seventies and its adverse effects on large scale development projects undertaken, especially the Mahaweli Development Project, led to the launching in 1977 of an intensified malaria control programme using malathion with donor assistance from USAID and governments of the United Kingdom and Netherlands. The government gave high priority to this programme - with allocation of over 50% of its budget on Community Health Services. The Anti-Malaria Campaign, a specialized decentralized unit of the Ministry of Health was responsible for the implementation of the Programme through its Headquarters, 16 Regional Offices and peripheral units located in the rural malarious areas. The sanctioned cadre of personnel for the AMC exceed 4000.

The malaria incidence declined from 262,460 in 1977 to 30566 in 1982. With the declining malaria incidence and on the basis of a stratification in 1981 the area of spray coverage was reduced and the spray pattern changed from 4 spray cycles to 2 spray cycles largely in the Northern Dry Belt and Eastern coastal areas with 4 spray cycles retained in highly receptive areas and where development projects were underway. However, adverse climatic conditions in 1983 especially in the epidemic zone and in the endemic zone in 1984 resulted in an upsurge of malaria with 127264 and 149470 cases recorded for 1983 and 1984 respectively.

The AMC has had to contend with administrative, managerial and operational problems which have been repeatedly brought out in the multidonor reviews carried out annually.

There has been a new dimension to the existing problems under which the AMC has laboured over the past years, with the detection of a focus of chloroquine resistant P.falciparum in a locality in Tambulla health area. This focus has spurred the AMC to vigorous action with rapid development of its resources, including manpower, to contain the spread of the resistant P.falciparum strain and by its sustained efforts it appears that the containment measures adopted have been successful.

This clearly demonstrates the ANC capacity to respond to an emergency situation. However, with regard to normal programme activities/operations the same measure of response has not been evident, e.g. long delays in the establishment of spray units in areas of seasonal spraying reverted to perennial spraying.

There has been an improvement in the staff position at Headquarters and Regional levels except for supporting services which have been further compounded by transfer of experienced staff and their replacement by raw hands. The recent recruitment and training of technical personnel, microscopists and entomological assistants would relieve the shortage of these categories of staff. However, spraying operations and case detection activities have been hampered by a shortage of field personnel - field assistants and spray machine operators, where the vacancies are about 21% and 22% respectively. Other factors hampering field operations have been the lack of adequate transport services. The ANC Workshop has virtually not been functioning since August 1964 with the Transport Foreman and 6 experienced mechanics being interdicted; an acute shortage of spray machines and spare parts which would be resolved with the arrival of supplies of spray equipment under USAID (ICTI) Technical Assistance Programme and Japanese aid.

Laboratory services have been handicapped largely because of an acute shortage of glass slides. The arrival of a large supply of glass slides and the appointment of recently trained microscopists should increase the blood examination output providing more extensive epidemiological intelligence for a better understanding of the epidemiological situation.

Supervision of field Units/operations especially by Headquarters staff have been greatly hindered by lack of transport and inadequate subsistence allowances. There is a reluctance on the part of Headquarters staff to visit the field as the allowance do not meet their bare expenses. This is unfortunate as the Regional Malaria Officers have been recently appointed and need guidance from the Headquarters technical staff.

This requires urgent action by the Government by supplementation of the field allowance to induce them to visit the field regularly. The benefits to the programme would be substantial!

The excessive rainfall in 1984 especially in many parts of the Dry Zone provided favourable conditions for increased malaria transmission with an extension of the peak transmission months. In fact, the incidence of malaria would have been much higher than that recorded in 1984 but for the shortage of glass slides at crucial times. However, with the return of normal climatic conditions in 1985, there has been a sharp drop (33%) in the incidence of malaria for the first 4 months of 1985 compared to the corresponding period of 1984, however the relative prevalence of P. falciparum shows an increase. Many of these P. falciparum cases are occurring in the Mahaweli settlement areas and this requires urgent attention.

The resettlement of population from hypoendemic and non malarious areas in the newly opened areas for agricultural production in the endemic malarious areas is another factor favourable for the malaria transmission process. This caused a severe strain on the AMC in providing protection to these populations without any financial resources from the agencies concerned.

The interplay of the above factors resulted in a diminished potential of the AMC to prevent the worsening malaria situation in 1984 though the epidemiological situation in the first 4 months of 1985 seems to be more encouraging largely because of return of normal climatic conditions and spray coverage in the endemic zone being completed in late 1984.

The supply of malathion up to 1987 is assured with the signing of a 3 year agreement with USAID for malathion supplies but with increasing government inputs and corresponding reductions in USAID funding over the 3 years.

In another agreement with USAID is the provision of Technical Assistance aimed at improving the effectiveness of insecticide spray operations, institutionalizing training and surveillance and introducing alternative methods of control to minimise the need for house spraying with insecticide.

The emphasis is on Training, Operational Research & Pilot projects, Information and Education, Programme Planning, Management and Evaluation. A number of activities relating to Training, Management and Planning, Malaria Research, Social Marketing and intersectoral action have been carried out. However, the Plan of Action lags behind because of implementation delays on the part of the AMC.

The persistence of administrative and managerial problems is an indication that sufficient attention has not been paid by the 3 levels of the National public administration :-

Anti-Malaria Campaign
Ministry of Health
Higher level of the Government

to overcome, or at least minimize the adverse effects in the effective implementation of the Malaria Control Programme. There are deficiencies in the management of the Programme at the AMC. Some of them are beyond its control but within the AMC there are many areas where the management needs to be tightened :- clear definition of duties/functions of senior staff at Headquarters,

- delayed response to field requests for supplies, equipment
- delay in payment of travel claims etc to field staff
- delay in filling of vacancies of mid level technical and operational personnel
- delay in implementation of action on decisions taken at meetings largely because of delays in the circulation of minutes of meetings
- lack of coordination at Headquarters and between the Headquarters and the Regional Offices
- delegation of responsibilities to senior technical and administrative staff.

At the Ministry level processing of requests in respect of filling of vacancies, supplies and equipment, transfer of funds etc needs to be expeditious. Intra-departmental coordination in the promotion of AMC activities/operations such as utilization of Family Welfare Workers, Range Public Health Inspectors in field operations and of medical institutions in case detection and treatment activities lags behind and needs to be vigorously pursued.

The Ministry should take a more active role in strengthening interministerial/interdepartmental coordination for fostering intersectoral action by concerned agencies such as Mahaweli Economic Authority, Agriculture, Fisheries, Information etc. Implementation of the recommendations made at the National Malaria Control Seminar held in April 1984 would facilitate the process of intersectoral action for Malaria Control.

There is an urgent need of overcoming the administrative, managerial and operational problems by the 3 levels of administration as the AMC has now to contend with the technical problem of parasite resistance with the appearance of a focus of chloroquine resistant P.falciparum and possible resistance of vectors to malathion in the near future with 2 potential vectors already resistant to malathion.

7. RECOMMENDATIONS

GENERAL

7.1 Being acutely aware of the variety of administrative, operational, epidemiological and other technical difficulties faced by the AMC which have contributed to the apparent steady deterioration in the malaria situation in the country since 1962, and which so far as P.falciparum is concerned appears to be continuing in the first half of 1985, conscious of the rapid eco-epidemiological changes occurring in the country, particularly in the Mahaweli Development Area, and concerned at the vulnerable nature of the settlement areas, the Team strongly recommends a major strategic review of the AMC, with appropriate external support, aimed at analysis and possible revision of the objectives of the campaign and identification of appropriate operational methods.

Preparation for such a review should be put in motion immediately so that the findings can provide support for and be reflected in the next Plan of Operations.

EPIDEMIOLOGY

7.2 Given that the current incidence of malaria is well above what the current system of surveillance can cover completely, indeed well above the level of incidence which that type of system had originally been designed to cover within the strategy of malaria eradication, it is recommended:

- a) That the objectives of surveillance be critically reviewed within a strategy of control, and
- b) That the methods of surveillance be critically reviewed in the light of the revised objectives and in particular that better use be made of the clinical diagnosis of malaria currently made by the health services and that the AMC's capacity for microscopic diagnosis be selectively redeployed towards representative sampling plus investigation of abnormal situations, rather than towards total coverage.

7.3 Given the fact that obscurely distinct Plasmodium falciparum parasites are being transmitted in Sri Lanka and that P.falciparum malaria will likely remain a health threat for the foreseeable future, the Team recommends that -

- a) the AMC continues to support the programme of geographically representative drug sensitivity testing, with increasing emphasis on the in vivo response, in order to develop a national drug therapy policy, and
- b) the AMC approaches the control of P.falciparum within an integrated malaria control strategy, and reconsiders whether the current policy of specifically eradicating P.falciparum from the island is appropriate.

7.4 There is evidence of a number of deaths being reported by the Registrar to the Ministry of Health as due to malaria but there seems to be a considerable delay in such information reaching the RMO who is responsible for investigating such an event. In addition, if the death is not confirmed as due to malaria a record of the event is not included in the statistics of the AMC. The Team recommends that action be taken to -

- a) shorten the period between notification by the Registrar and the investigation of the death, by establishing a direct communication between the Medical Officers of Health and the RMO/AMC.
- b) that notification of deaths due to malaria be recorded in the statistics of AMC specifying whether it has been confirmed or not.

CHEMOTHERAPY

7.5 Given the pressing need to develop a national malaria therapy policy which will provide effective therapy and also prolong the period of efficacy of the few available antimalarial drugs, the Team agrees with the findings and recommendations of the Meeting on Drug Resistant Malaria Studies in SEAR - New Delhi - 13 to 15 May 1985, and urges the Ministry of Health to implement the various recommendations made, at this meeting.

ENTOMOLOGY

7.6 Recognising the important role entomology plays in the AMC, in both operations and research, the Team recommends that more attention be paid to the supervision of field teams by H.Q personnel and the prompt fulfillment of requests for supplies for these teams. At the same time these field teams need to be more fluid in their choice of SPOT CHECK stations, aiming always at creating the best opportunity to collect vector species.

OPERATIONS

7.7 The main operational deficiency in the anti-malaria campaign is the poor spray coverage of houses by insecticides. The proportion of houses fully sprayed declines from one cycle to the next and there is ample evidence that coverage is insufficient to prevent transmission in many areas. An analysis of the performance of individual spray teams reveals considerable variation in their efficiency.

To improve their performance it is recommended that individual team performance be closely monitored and evaluated at the Regional level

7.8 Being aware that the Medical Statistics Branch of the Ministry of Health updates estimates of population by Health Area every year and issues a list, the Team recommends that the Director/AMC makes the information available to his Regional Offices. The latter should then utilise these figures in their calculation of population for operational planning and evaluation. The estimates of population under spray coverage will, of course, be updated by the Region after each round of spraying.

In case of a MOH area belonging to more than one Region, agreement should be reached on the population allotted to each Region.

7.9 Due to the continued serious threat of malaria transmission in the Kataragama pilgrim area, the Team recommends that ULV application of malathion from November to February/March be implemented on an applied field research basis for one season. There is good supporting data from entomology and the indicator institution.

SAFETY

7.10 Cholinesterase tests of spray personnel were insufficient in 1984. It is recommended that these be carried out more frequently in 1985 so as to verify that protective precautions are being taken. It is suggested that AMC request ISTI vector control specialist to assist in the monitoring of this activity part of his duties.

LOGISTICS

7.11 In view of the unsatisfactory situation as regards the AMC stores, the Team recommends that records be maintained in a more satisfactory way, the vacant position of Extra Office Assistant - Stores should be filled and that the storemen should be trained in supply management.

The Team encourages the newly assigned Assistant Director(Admin) to make a special effort during the next year to improve stores management activity.

ADMIN/PLANNING

7.12 In view of the considerable discrepancies in data presented in different reports produced by the programme, and which are utilised for operational planning and administrative and evaluation purposes, the Team recommends that increased attention be paid to the production of compatible data throughout the reporting system.

7.13 In view of the ever increasing trend of expenditure and need to improve planning, management and operations in order to ensure maximum utilization of available resources, the Team recommends that the strategy for the evolution of the AMC be geared to the gradual integration process but with the maintenance of a comprehensive vector borne disease control department within the ministry which would provide facilities for operational advice, epidemiological monitoring and field applied research.

COMMUNITY PARTICIPATION

7.14 In view of the emphasis put on the essential contribution which community participation has to play in the delivery of Primary Health Care, the Team recommends that the drive for Voluntary Treatment Centres be intensified, particularly in new settlement areas where health facilities may be more than 3 Km distant.

Efficiency through training, supervision and maintenance of supplies must be ensured.

HEALTH EDUCATION

7.15 The Team, considering the heavy workload of the Bureau of Health Education and the specific nature of AMC activities, recommends that a full time Health Educator be assigned to AMC, and recognising the importance of approach to the community in the implementation of anti-malaria activities the Team also recommends training in health education for all AMC personnel with emphasis on RMOs and SREOs.

COMBINED ALLOWANCE

7.16 Recognizing that an insufficient combined allowance continues to constitute a significant constraint on field supervision activities, the Team recommends that serious consideration be given to increasing this allowance.