PROJECT ASSISTANCE COMPLETION REPORT

Malaria Control 383-0043

PACD - December 31, 1988

A. Status of Project:

1. Project Purpose: The Project is designed to assist the Anti Malaria Campaign (AMC) to reduce the annual cases of malaria to 35,000 or fewer by 1987 and to institutionalize an effective integrated vector control program.

2. Completion of Project Activities:

a. Technical Assistance -

Technical assistance was provided to the AMC through February 28, 1988, by an 8A contractor, International Science and Technology Institute, Inc. (ISTI) under an AID Direct Contract. ISTI supplied two long-term resident advisors and 24.75 man months of short-term technical assistance, including nine months of local consultant time. ISTI subcontracted procurement work to a PSA, Franklin Export and Trading Company, which supplied all commodities required for the project. (The ISTI contract was amended to September 30, 1988, only to complete this procurement).

Under a "buy-in" to a centrally-funded Vector Biology and Control (VBC) Project, Medical Service Consultants provided technical assistance in data management and job training of AMC staff in vector biology. Due to the security situation in Hambantota District, a followup TDY to program AMC data on integrated vector control could not be completed.

b. Training -

All grant-funded training was completed by October, 1987. 29.5 man months out of 30.0 man months of training planned (98%) were completed as a 2 week training for the Director, AMC, was cancelled.

c. Commodities -

Over $600,000 worth of laboratory equipment and supplies were provided to the AMC for its operations and the IVC pilot project. The final shipment of IVC commodities arrived in Sri Lanka in October, 1988. AMC has acknowledged receipt of these project commodities.

d. Operational Research and Pilot Projects -

This component of the project aimed at introducing alternative malaria control measures which would minimize the need for house spraying with residual insecticides failed to meet project goals. The AMC Research Committee approved only four studies for project funding.

e. Education Information -

A project-funded multi-media campaign aimed at correcting negative public perceptions of anti-malaria activities was successfully completed. Other progress in this component was hampered by the lack of technically qualified personnel to manage the AMC National Training Center and AMC's inability to establish an Information Center.

f. Planning; Management and Evaluation -

Despite the initial impetus generated by the Project Implementation Planning Workshop held in August, 1984, the project failed to achieve significant progress in planning and management. This was due in part to AMC's failure to decentralize and delegate more authority to the AMC regions, its inability to implement Annual Plans of Action, and its underutilization of the project-supplied computer.

g. Multi-Donor Review

Although no project funds were spent, USAID did provide the services of Health Development Officer, Larry Cowper, as a participant in the GSL/AID/WHO/JICA malaria strategy review conducted June/July, 1988.

h. USAID Evaluations -

A mid-term evaluation of the project was conducted in March/April, 1986. The evaluation recommended a regional pilot IVC demonstration project, which was subsequently carried out in Hambantota District. No final evaluation was conducted.

i. Purchase of Insecticides (Loan-funded) -

The final shipment of malathion, financed by project loan funds, arrived in Sri Lanka in February, 1988. Loan funds, totalling $25,103,000, were spent to meet AMC's malathion requirements.

3. Summary of Contributions:

a. USAID Inputs -

Through the December 31, 1988, PACD, the sums of $165,000 in project loan funds and $880,000 in project grant funds were not required in the project and were deobligated. The final project budget as compared to the budget per PIL No. 20, dated August 6, 1985, is as follows:

AID Loan	Obligations per PIL No. 20	Revised Financial Plan
Insecticides	25,240.0	25,103.0
Training	50.0	42.0
Other Commodities/ Equipment	210.0	190.0
	25,500.0	25,335.0

AID Grant		
Training	339.5	276.5
Other Commodities/ Equipment	447.4	416.4
Technical Assistance	1,575.4	1,251.4
Operational Research	218.0	27.0
Pilot Projects	184.0	31.0
Education Information	64.2	64.2
Planning/Management/ Education	11.5	11.5
Multi-Donor Review	80.0	-
USAID Evaluations	80.0	42.0
	3,000.0	2,120.0

b. Host Country Contribution -

In Section 3.4(b) of the Project Loan and Grant Agreement, the GSL committed not less than the equivalent of U.S. 48.1 million, including costs borne on an "in-kind" basis to the project. Through 1987, the GSL had expended Rs.1,319,823,568 on the Anti Malaria Campaign. This exceeds the commitment level of Rs.1,250,600,000, based on an exchange rate of Rs.26 = US$1.00 on April 30, 1984, the date of signing of the Project Loan and Grant Agreement.

c. Contribution of Other Donors -

According to the July, 1988, report of the Multi Donor Review, expenditures for the AMC for calendar year 1987 were Rs.284,192,826. Of this sum, Rs.205,871,894 were from GSL sources, Rs.74,110,052 from USAID, Rs.2,300,000 from Japan, and Rs.1,910,880 from WHO. Approximately 53% of the funding levels, Rs.149,980,745, was for procurement of malathion.

4. Conditions Precedent and Covenants:

All conditions precedent and covenants have been fulfilled.

B. Project Accomplishments:

1. Progress Toward Planned Project Outputs -

Although the project did implement an improved program for the treatment of malaria and introduced to the AMC vector control methods designed to replace widespread spraying, the project has failed to achieve its institutional objectives. A brief comparison of planned and actual outputs is as follows:

Major Project Outputs	Progress Toward Outputs
a. House spraying with residual insecticides targeted and stratified to provide coverage where and when needed so that total insecticide spraying is reduced.	Little stratification of spraying is taking place; rather seasonal spraying is conducted in all medium-risk regions and quarterly spraying continues in areas with high incidence of malaria.
b. Functioning, effective continuous epidemiological, parasitological, and entomological surveillance system capable of collection and rapid analysis of valid data and fast reporting of developing foci.	Epidemiological surveillance system operating but reliant on parasite data 4 to 8 weeks old due to logistic problems, including inability to establish radio links between AMC and field offices. Entomological data collected to determine impact of insecticide, but not geared to vector control.
c. Effective vector program in place in pilot areas to replace house spraying.	Although the AMC has introduced some integrated malaria control technologies (larviciding, space spraying, source reduction, use of larvivorous fish, trials using impregnated bednets), an irrate resistance to change from the traditional mass spraying of insecticides remains, particularly among medical officers of AMC.

d. Effective presumptive, prophylactic, and radical drug treatment systems in place and responsive to surveillance data.	Following the placement of trained microscopists in many health institutions in 1986 and 1987, clinical diagnoses based only on presenting symptoms and mass drug administration and prophylaxis have been significantly reduced. AMC is also now monitoring the severe complications of the P. falciparum strain and its resistance to chloroquine.
e. Malaria Education and information program in place and serving all levels of AMC, MOH informers, educators and potential beneficiaries.	The project-funded multi-media campaign was conducted between September, 1987, and February, 1988. Literature and posters were made available to AMC, but distribution to schools and the general public is hampered by AMC's failure to have established an Information Center.
f. Revised, intensified and continuing training programs for staffs of AMC and other relevant institutions.	Although several hundred AMC employees were trained in management and supervision of field operations, IVC, and other pertinent subjects under the project, the lack of qualified staff at the AMC National Training Center and termination of the Training Advisory Committee formed early in the project have resulted in an inadequate training program.
g. Effective program planning, management and evaluation.	The AMC has completed its "Plan of Action for Malaria Control Programme" for the period March 1, 1988, through December 31, 1989. Notwithstanding this plan, progress in planning and management is hampered by AMC's failures to decentralize, to hold periodic meetings to implement the plan, and to fully utilize the project-supplied computer. A Multi Donor Review completed in July, 1988, should give AMC new direction in reducing the incidence of malaria in Sri Lanka.

2. Malaria Statistics -

During 1978, the first year of the USAID Malaria Control Project, AMC reported 69,685 cases of malaria. The project purpose was to reduce this annual level to 35,000 cases of malaria by 1987.

The incidence of malaria dropped over the first years of the project, but in October, 1982, the country experienced an increased incidence which has since gone to epidemic proportions. According to a 1987 report of the Ministry of Health, malaria is the leading cause of hospitalization in the country with no sign of improvement. The following data is extracted from the 1987 Ministry of Health report:

BLOOD FILM EXAMINATIONS FOR MALARIAL PARASITE
1978 - 1987

Year	No. of Blood films examined	No. positive	P. Vivax	P. Falciparum & Mixed
1978	968,327	69,685	67,809	1,876
1980	803,692	47,949	46,474	1,475
1981	898,143	47,383	46,143	1,240
1982	1,127,605	38,566	36,967	1,599
1983	1,055,626	127,264	122,764	4,500
1984	859,178	149,470	145,711	3,759
1985	1,165,698	117,816	104,759	13,057
1986	1,496,737	412,521	328,443	84,079
1987*	1,952,739	676,769	493,677	183,092

*Excludes northern and eastern provinces.
Source: Anti Malaria Campaign

3. Assessment of Project Success/Failure -

Overall, the Malaria Control Project must be judged a failure. The incidence of malaria in Sri Lanka during 1987 was the worst in 30 years and the country's current malaria situation, the worst in South and Southeast Asia. The failure of the project can be attributed to a variety of reasons, including the following:

1. The Mahaweli scheme resulted in the migration of a highly susceptible population to an area with a high incidence of malaria and the creation of manmade breeding places, e.g., irrigation channels and water reservoirs, in a region where rainfall is scanty.

2. The AMC failed to realize the full potential of the project in terms of long-term effects on malaria control in Sri Lanka, particularly in introducing alternative malaria control activities which would reduce the reliance on house spraying with residual insecticides.

3. The AMC is hampered in its ability to institutionalize an effective malaria control system by the lack of experienced senior staff who recognize the need to move away from its traditional house spraying program to alternative methods of control.

4. The AMC lacks strong, dynamic and inspirational leadership and a commitment to and indepth understanding of malaria control methodologies on the part of senior technical staff. Notwithstanding the rapid deterioration of the malaria situation in the country and the considerable budgetary resources required by the AMC, the Ministry of Health has failed to give priority attention to malaria control.

5. At the field level, poor quality supervision has resulted in an ineffective house spraying program. Additionally, the AMC's failure to conduct a public education program has resulted in homeowners' resistance to the house spraying program.

6. There has been little, if any, coordination between the WHO and USAID programs of assistance to AMC.

7. The deteriorating security situation in the North and East throughout the project period and more recently in the South has severely restricted malaria control activities in those regions, resulting in the further spread of the disease.

8. The increasing prevalence of the P. falciparum parasite and its resistance to chloroquine resulted in inappropriate treatment and relapses of the severe strain of the disease in many malaria patients.

C. Lessons Learned from the Project:

Given the rapid deterioration of the malaria situation and the lack of strong leadership at the AMC, the Ministry of Health must give the malaria control program increased and priority attention. The Ministry should take a more active, positive and emphatic role in the activities of the AMC and support AMC management in the use of new methodologies introduced in the USAID Malaria Control Project. There is a serious need for reorganization of the AMC if the malaria situation in Sri Lanka is to improve.

With the devolution of health services responsibilities, including malaria control, to the newly-established provincial councils and community participation in prioratizing local needs, provincial plans for malaria control should be developed taking into consideration the local malaria epidemiological situation and resources available for its control. This will require close cooperation between AMC staff and provincial health services officers to design a plan relevant to each local situation.

Perhaps by strengthening the direction of the Ministry of Health to the AMC and by decentralizing responsibilities for malaria control, the grave malaria situation in Sri Lanka might be improved and further suffering and government resources spared.

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