

PDABU-450



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Trip Report:
Pakistan Malaria Information System

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by
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Introduction

A. Background

In response to a request from USAID/Islamabad and the Pakistan Directorate of Malaria Control (DMOC), the Vector Biology and Control Project (VBC) provided, during February 1989, technical assistance to assess the feasibility and usefulness of computerizing the DMOC epidemiological and entomological databases. USAID/Islamabad planned to purchase a computer that had been requested by DMOC. The DMOC had expressed interest in developing an information system and it was agreed that USAID/Islamabad would prepare a PIO/T for the VBC Project to conduct this activity.

B. Scope of Work

The Scope of Work (SOW) of this consultancy included: 1) review of systems and transaction analysis; 2) development of a plan for computerizing the information system; 3) development of a computer training plan and 4) initial development of a computerized database for DMOC.

Findings

I. Current Information System

Discussions with the DMOC, the District office at Rawalapindi and the Province office at Peshwar revealed that the majority of data enters the system at the district level, with the district forwarding the information to the Province and the DMOC. There is much redundancy in data entry at the district level. The key forms used are listed in II below.

II. Database Development

Databases were developed for:

- A. Form M4 - Locality Monthly Detailed Malariometric Activities Report
- B. Form M5 - Malariometric Monthly Record
- C. Form E19 - Consolidated Record of Adult Anophelines
- D. WHO Test for Insecticide Resistance

In addition to the development of these databases, a menu system was developed for the initial database. The menus simplify data entry and editing functions.

Recommendations

I. Infrastructure, Hardware and Software

Since district data is consolidated at the Province level, it is suggested that initial development of the Malaria Information System occur at the DMOC and Province offices. It is also suggested the Provinces be supplied with computers, printers, supplies and software identical to those that are being purchased for the DMOC. Initially, one additional computer and printer should be obtained for DMOC and one for the first Province to be included in the information system. N.F.W.P. would be a suitable site for development of the database for the first Province. Its malaria division has separate offices from the rest of the Directorate, it is relatively close to Islamabad, and its database is smaller than Punjab's, for example.

Clean, air-conditioned rooms should be prepared for the computers. In addition to the software listed in the PIO/C for DMOC, it is suggested that each machine also be supplied with a copy of WordPerfect 5.0.

II. Supervision

Dr. G. Hashim has overall responsibility for data at the DMOC. It is suggested that he also have responsibility for supervising the development of the Malaria Information System.

III. Database

The VBC Project should be responsible for continuing to develop the Malaria Information System in collaboration with DMOC and the Provinces.

IV. Training

It is suggested that USAID/Islamabad investigate the availability of local training in computer literacy and courses in basic DOS, dBase III Plus and Lotus. If such courses are available, it is recommended that two to three DMOC staff members and two to three Province staff members begin these courses. In addition, it is suggested that the SOW for the next visit of the VBC biomedical computer specialist include a two-week training course in advanced dbase as it applies to the Malaria Information System and word processing.

Future advanced training for key personnel might be considered for support by USAID/Islamabad.

V. The Next Visit of VBC's Biomedical Computer Specialist

After discussions between DMOC, USAID/Islamabad and the VBC biomedical computer specialist, it was decided that August 1989 would be an appropriate time for Dr. Silverman's next visit. This should be conditional on the delivery of the additional computers. The SOW for this trip will include the training course described above, further development of the Malaria Information System and the installation of computers and software at the Province office.

Itinerary

- June 2** Arrival in Islamabad.
Briefing with Mr. Babar Hussain, USAID/Islamabad.
- 3** Meeting with Mr. C.A.A. Mujahid, DMOC Director, and Dr. C. Hashim, Epidemiologist, DMOC.
Visit to District Health Office, Rawalapindi.
- 4** Review of forms at District Health Office, Rawalapindi, and at DMOC.
Review of PIO/C for hardware and software.
- 5** Briefing with Dr. Rifaq Ahmed Ismail, Malaria Project Officer, USAID/Islamabad.
Further analysis of forms and initial database development.
- 6-13** Database development and analysis of current information system at DMOC.
- 14** Discussions with Dr. Mohammad Iqbal, Assistant Director Malaria, and Dr. Fazle Razique, Entomologist, Directorate of Health Services, N.F.W.P., Peshwar.
- 15** Final discussions at DMOC.
Demonstration of initial database.
Debriefing with USAID Islamabad.
- 16** Depart Islamabad.