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UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

ISLAMABAD, PAKISTAN

IRRIGATION SYSTEMS MANAGEMENT PROJECT

PHASE II

Project Number 391-0467

REPORT ON END-OF-PROJECT WORKSHOP

Pearl Continental Hotel, Bhurban

18-19 April 1993

HARZA ENGINEERING COMPANY
Contractor

DEVELOPMENT ALTERNATIVES, INC.
Subcontractor

ASSOCIATED CONSULTING ENGINEERS-ACE (PVT) LTD
Subcontractor

Contract Number 391-0467-C-00-9830-00

REPORT ON END-OF-PROJECT WORKSHOP IRRIGATION SYSTEMS MANAGEMENT PROJECT - PHASE II

Introduction

An End-of-Project Workshop for the Irrigation Systems Management Project - Phase II (ISM-II) was held on April 18 and 19, 1993 at the Pearl-Continental Hotel in Bhurban near Murree. The purpose of this workshop was to elicit comments, evaluations, and recommendations from officials of the Provincial Irrigation Departments (PIDs) and other agencies associated with the Project. Both the USAID-funded ISM project and its sister project, the World Bank-funded Irrigation Systems Rehabilitation Project (ISRP), were addressed by workshop participants. Discussions centered on what the ISM/ISRP had attempted to accomplish, how it had functioned, and what difference it had made.

The intent of the workshop was to present perspectives and recommendations that will be of use to USAID in framing other institutional development projects and will be useful to other donors who continue their involvement in Pakistan's irrigation sector. Because USAID is phasing out its involvement in Pakistan's irrigation sector, particular urgency was attached to evaluating the lessons of ISM/ISRP so that these lessons may be applied by USAID in other areas and by donors such as the World Bank and the Asian Development Bank to improve their appraisal and implementation of projects in Pakistan.

In reading this report, it is important to remember that comments summarized herein express the views of individuals, or groups, present at the Workshop. Many of the Workshop participants were involved in Project activities for only a portion of the life of ISM-II and none of the government participants had been active through the entire course of the Project from the inception of Phase I in 1983. Therefore, while the opinions voiced in this report offer informed, considered insights, some perceptions were affected by unfamiliarity with events early in the Project. This is especially the case with regard to PIDs' participation in the project formulation. This report does not attempt to correct any misconceptions or misunderstandings that might exist. It is also not to be read as a comprehensive evaluation of the Project.

Participants

Attending the workshop were representatives of the four PIDs, the Alluvial Channel Observation Project (ACOP), the Federal Coordinating Cell (FCC), USAID, and Harza Engineering Company. Unfortunately, representatives of the World Bank were unable to attend the workshop. Below is a list of those in attendance.

Federal Coordination Cell

F.H Usmani, Federal Coordinator

Chaudhry Altaf Hussain, Retired, Chief Engineering Advisor

Abdul Jameel, Deputy Federal Coordinator

Provincial Irrigation Departments

Muhammed Nasim Bazai, Provincial Coordinator, Balochistan

Chaudry Muhammad Ashraf, Provincial Coordinator, Punjab

A.H. Zaidi, Additional Secretary-Irrigation, (Retired), Punjab

Mansub Ali Zaidi, Superintending Engineer, Punjab

Abdul Jabbar Uppal, Superintending Engineer (Retired), Punjab

Faqir Ahmad Paracha, Secretary-Irrigation (Reassigned), NWFP

Asif Ali Khan, Provincial Coordinator, NWFP

Saleem Ullah Khan, Chief Engineer/Provincial Coordinator (Retired), NWFP

Hussain Shah, Executive Engineer, NWFP

Sardar Ahmed Mughal, Superintending Engineer, Sindh

Abdul Rashid Shaikh, Superintending Engineer, Sindh

WAPDA

Masud Ahmad Chaudhry, Director General, ACOP

USAID

Arnold Radi, Chief, Office of Agriculture and Rural Development, USAID

Muzzamil Qureshi, Project Officer, Water Resources Division, USAID

Sohail Sheikh, Program Assistant, USAID

Harza Engineering Company

James Ringenoldus, Chief of Party, Harza Engineering Company

Adil Hasni, Training Specialist, Harza Engineering Company

David Miller, Project Coordinator, Harza Engineering Company

Organization of the Workshop

The objective of the Project was to improve equity, reliability, and safety of irrigation and drainage systems operated and maintained by the PIDs. In particular, the Project was designed to address long-standing neglect of these systems by carrying out two complementary programs. One program concentrated on rehabilitation of physical works. This aspect of the Project was aimed at bringing irrigation and drainage systems to the point where their effective operation could be continued by a systematic program of routine maintenance. The other focus of the Project was to provide the PIDs with the tools and managerial capabilities

to deliver the required maintenance. The overall objective was to repair canals, drains, and barrages that had deteriorated as a result of deferred maintenance and to develop the infrastructure needed to prevent lapses in maintenance from again seriously degrading system safety and the equity and reliability of water deliveries.

Assessment of the success of the Project and evaluation of impediments to Project implementation were structured as responses to four basic questions. Responses to these questions then led to discussion of other related issues. The four fundamental questions used to generate ideas and comments are the following:

1. What constraints to implementation of rehabilitation schemes derive from Project design and Project administrative procedures?
2. Do the Provincial Irrigation Departments see an improvement to the status of irrigation system maintenance attributable to the Project?
3. What perceived improvements in institutional capability are attributable to the Project?
4. How could design of a technical assistance project for institutional strengthening be improved?

The remainder of this report is a synopsis of comments delivered by workshop participants during discussions of the above questions. James Ringenoldus, Chief of Party of the ISM Technical Assistance team and Muzzamil Qureshi, Project Officer for USAID served as discussion leaders with the role of stimulating comments from other participants.

Synopsis of Discussions

Question 1: What constraints to implementation of rehabilitation schemes derive from Project design and Project administrative procedures?

Responses from workshop participants pointed to four interrelated constraints to implementation of rehabilitation schemes 1) time consuming requirements for preparation of schemes; 2) slow review and approval of schemes; 3) delays in reimbursement for works, and; 4) lack of coordination between provincial and Federal authorities, donors, and consultants.

Preparation of schemes In general, participants expressed the view that procedures for development of schemes under the first phase of the ISM/ISRP had been simpler and more expeditious than those adopted during Phase II. In Phase I, the irrigation departments determined the channels in need of rehabilitation based on observed maintenance requirements. Hydraulic monitoring was conducted by ACOP to support institutionalization of

design. As a result, rehabilitation took place on channels where divisions had observed problems with overtopping, breaching, or siltation but whose condition frequently did not harm the overall performance of the system.

Phase II attempted to direct rehabilitation efforts to channels where improvements would most benefit system performance. The system/subsystem approach led to better selection of channels and drains for rehabilitation, however, the approach also required much more detailed and time consuming analysis. In Phase I hydraulic analysis was necessary only for the channel being rehabilitated. In Phase II analysis was required throughout a system to identify channels where rehabilitation would have the greatest benefit. This approach allowed the PIDs to determine to what degree problems observed in a channel were due to conditions in other parts of the system and how rehabilitation of a channel would influence hydraulic conditions throughout the system.

Therefore, although viewing the intent of the system/subsystem approach favorably, workshop participants remarked that donors did not recognize the substantial increase in surveying and analysis required by this approach. A case was cited where a PID had to analyze eight channels in a system to develop a scheme for rehabilitation. A consequence of this increase in effort was that preparation of schemes was delayed because irrigation officials did not have the budget or staff to absorb the additional work.

Donor review In addition to changes in requirements for preparation of rehabilitation schemes, procedures for donor review of schemes also became more time consuming during Phase II. Because the majority of rehabilitation work was funded by the World Bank under the ISRP, comments on procedures for review of schemes were primarily directed at World Bank requirements.

In Phase I, the World Bank reviewed rehabilitation schemes at an office in Islamabad. Under Phase II, schemes above \$200,000 were reviewed by the World Bank in Washington. Review of schemes in Washington contributed to unacceptably long review periods and to misunderstandings arising from lack of face-to-face discussions. Although comments regarding reviews were communicated primarily by fax, the review process still required from eight to ten weeks.

As a result of these delays, participants at the workshop recommended returning to the practice followed in Phase I where the donor agency operated a review office in Islamabad.

Reimbursement procedures The difficulties created by slow formulation, review and approval of rehabilitation schemes were compounded by rigid procedures for reimbursement and delays in receipt of funds.

The USAID reliance on fixed amount reimbursement was felt to be unrealistic because of the considerable lapse of time between preparation of the estimate and completion of a rehabilitation scheme. Budget estimates are based on sanctioned rates current at the time of scheme

preparation. During the course of the project many factors beyond the control of the PID may lead to higher costs than those originally estimated. Among these factors are the following:

- loss of labor to higher paying jobs;
- general inflation of goods and services;
- increased machinery rates; and
- increases in sanctioned rates to be paid to contractors.

The considerable span of time between project preparation and certification increases the likelihood that the factors listed above will come into play during a project's lifetime. Because of these circumstances, the PIDs believe that USAID should reconsider its position on fixed amount reimbursement and on allowance of contingencies. One mechanism suggested to control the impact of rupee devaluation on contracts was to specify payment in dollars or dollar equivalent payment in rupees.

Concern was also expressed over World Bank reimbursement procedures. Workshop participants felt these procedures were unnecessarily cumbersome and rigid taking four or five months to process. Additional delays were attributed to release of funds to the Federal Government or to provincial finance departments, who in turn, were slow to release funds to the PIDs. Under these conditions, PIDs received authorization for spending from the Annual Development Budget. The participants favored mechanisms to streamline reimbursement procedures and to insure that donor funds could be channeled directly into the hands of the executing agency. In three of the four PIDs this problem had been addressed by establishment by the World Bank of special accounts, in dollars, operated by the PIDs.

Improvements in coordination As well as concern with efficiency of flow of information between the executing agencies and donors, coordination with supervisory consultants was also perceived to require strengthening. In particular, consultants were viewed as feeling beholden to donors but as not feeling responsible to provincial governments. Representatives of the supervisory consultants were stationed in each provincial headquarters. However, it was felt that coordination and cooperation within the triangle of the donor-consultant-provincial government should be improved.

Part of the perceived inadequacy of consultant support to the PIDs was attributed to insufficient consultant staff and to increases in work demanded of the consultant (particularly by World Bank), without a commensurate increase in staffing and reimbursement.

Recommendations Recommendations for addressing the problems raised in Question 1 focused on improved cooperation between donors, consultants, and the provincial governments and better coordination between the provincial and federal governments. Periodic meetings should be conducted to address not only technical issues but also questions related to review and approval periods and to reimbursement procedures. These meetings should be structured to identify financial and procedural problems and to develop ways of overcoming

these. Provincial implementation staff should ask for periodic review of funding mechanisms. Some provinces have already been successful in modifying reimbursement procedures. For example, the World Bank has established special assignment accounts enabling money to flow directly from the donor to the executing agency. Other issues, such as local review of World Bank projects have been raised, however, up to this point review continues in Washington.

Staff from the provincial agencies responsible for project implementation should be associated with project development from an early stage. Under the present system, Federal officials or officials from other agencies (Planning and Development, Finance) of the provincial governments make key decisions about project formulation although their involvement in implementation is small. Frequently, agreements are signed by the Federal Government and donors while executing agencies, those most directly involved in the project, are represented by their provincial P&D departments.

Greater involvement at the level of provincial executing agencies was seen to require improved coordination among the provinces and an effective, confident Federal Coordination unit capable of representing the Federal Government and of integrating the Federal perspective with that of the provinces.

Parenthetically, it should be noted that five PC-1s (one for each PID and one for the FCC) were prepared by the PIDs and the FCC with the assistance of National Engineering Services Pakistan (NESPAK) for ISRP/ISM-II. These PC-1s describe the scope of work to be undertaken in each province as well as including financial and implementation schedules. The USAID Project Paper also was developed in close consultation with the PIDs.

Question 2: Do the Irrigation Departments see an improvement to the status of irrigation system maintenance attributable to the Project?

Responses to this question indicated that rehabilitation efforts have been largely successful while efforts to develop a sustainable maintenance program within the PIDs have had less success.

Improvement of system condition Clear improvements in the condition of channels, drains, and barrages were attributed to the Project. Provincial government budgets often restrict PID maintenance operations to addressing emergencies, therefore, a large, donor-supported project such as ISM/ISRP was needed to permit the PIDs to undertake a comprehensive program of rehabilitation. Therefore, in spite of the difficulties discussed under Question 1, above, the results of the rehabilitation efforts were seen as both visible and meaningful.

More complete, objective evaluation of the performance of system improvements will be provided through data collected by ACOP, the Punjab Economic Research Institute (PERI), and the Watercourse Monitoring and Evaluation Directorate of WAPDA (WMED). These

assessments will describe how completely the Project achieved its aims of improving the safety of conveyance, and equity and reliability of distribution of irrigation water. A preliminary indication of the success of the rehabilitation program with regard to safety is that no breaches have occurred in any of the rehabilitated sections.

Maintenance capability Workshop participants did not believe the Project had reached its goals of developing a sustainable maintenance capability within the PIDs. The shortcoming was attributed largely to a continuing shortage of funding for system maintenance.

Revenues collected from farmers go to the provincial finance departments and are then allocated to the general provincial budget. Thus, there is no direct relation between the abiana, or water charge, and PID maintenance budgets. However, increases in irrigation related revenues do enable the PIDs to present a case for additional funds. In this light some PIDs favor on-going studies on rate enhancements and other means of increasing revenues. Other departments view increases in the abiana as not being realistic in light of the farmers unwillingness and inability to pay more for water. These reservations have been reinforced by the ending of subsidies for purchases of fertilizers and other inputs.

A result of the static condition of PID maintenance capabilities is that the problem of system deterioration due to deferred maintenance is being observed in channels rehabilitated in early stages of ISM/ISRP. This deterioration is particularly acute in areas experiencing heavy traffic on canal banks or where the PIDs do not have adequate support from local authorities to stop interference with outlets.

Because of insufficient funding for maintenance and remodeling of canals, the perceived importance of data on system condition, upon which decisions on remodeling are based, has declined. One objective of the Project has been to strengthen the hydraulic monitoring capabilities of the PIDs. However, although training and equipment have been provided for hydraulic monitoring, this monitoring must be motivated by a need for data. The Manual of Irrigation Practice specifies that condition surveys be conducted at five-year intervals. These surveys were the basis for decisions on system maintenance and repair. Now, because there are few requests for data on system condition, condition surveys are seldom conducted and maintenance of outlet registers is sometimes ignored.

The capability for conducting condition surveys and system monitoring resides with ACOP and with PID personnel who have received training from ACOP as part of the Project.

Another reason given for lack of improvement in irrigation system maintenance is the PIDs' lack of control over conditions causing maintenance problems. For example, some attendees noted the futility of developing maintenance yardsticks when the PIDs had insufficient authority to control tampering with outlets, and excessive traffic on canal roads.

As well as remarking on problems, workshop participants noted positive signs regarding the maintenance capabilities of the PIDs. One participant noted a gradual increase in allocation of funds to maintenance activities. In addition, there was a general agreement that the trial of light mechanized equipment had been successful. Lastly, overhaul of construction equipment and improvements in PID workshops increased the PIDs' access to machinery needed in maintenance programs.

Recommendation The major recommendation arising from discussion of Question 2 was that the package of equipment tested in the trial equipment program should be made available nationwide. Because of the relatively low cost of the tractors and implements contained in this package, procurement of maintenance equipment could form a component of another, larger irrigation sector program.

Question 3: What are perceived improvements in institutional capability that are attributable to the Project?

Training, computer utilization, improvements in workshops and development of manuals were noted as aspects of the Project that contributed to improving the institutional capabilities of the PIDs. The severe reduction in funding to the equipment overhaul program resulted in disappointing performance in this area. Continuing problems in staffing of Design Cells contributed to mixed results in improvement of design capabilities.

Training Workshop participants regarded both in-country and overseas training as having been highly effective. Large numbers of staff were trained in Pakistan, particularly at courses offered by the Government Engineering Academy. ACOP was also successful in running courses in hydraulic monitoring for each of the four PIDs. Staff members who were able to participate in overseas training programs are bringing new ideas to the departments and will change how the departments function.

Participants noted that academic training should be given to junior officers who have been with the PIDs for a sufficient period of time to be recognized for their capabilities but who are young enough that their training may benefit the PIDs for many years to come. Another recommendation regarding training was that every effort should be made to encourage posting of persons having received long-term training to positions where they can utilize this training and pass it on to others.

Computerization The PIDs were introduced to computers through Project activities. The sustainability of computerization is evident from the degree of training in computer usage now carried out by some departments. Nevertheless, cutbacks in Project funding limited the installation of computers to the circle and zonal level. Computerization was not extended by the Project to the divisional level as originally planned.

Equipment overhaul The original program of supplying spare parts for equipment overhaul was reduced to 10 percent of the level planned in 1987 due to reductions in the Project budget. Workshop participants noted that the machinery overhaul program was much less extensive than they had hoped and that parts procurements had been seriously delayed. USAID's commitment to the cost of spare parts without any provision for labor was noted to have led to a low rate of overhaul. Despite these obstacles, the overhaul program was credited with having returned to service many pieces of heavy machinery that otherwise would have remained inoperable.

Mechanical workshop modernization Renovation of mechanical workshops was generally held to have been an important contribution to the PIDs. The upgrading of the workshops combined with training of workshop staff generally expanded the capabilities of the mechanical circles. In particular, workshop modernization improved output, supported barrage rehabilitation, and enabled fabrication of new components and repair of damaged ones.

Design Some workshop participants noted the effective implementation of the Design Cell concept and use of computers in design applications. Other participants commented on continuing inability to retain staff in design units because of the few incentives available to those working in design. No conclusions were reached regarding the reasons behind the reported success of design units in some departments and the continuing problems frustrating their establishment in others. One participant expressed disappointment that design software for hydraulic structures such as bridges, falls, and syphons had not been developed under the Project.

Manuals Manuals were noted as important and sustainable contributions of the Project. Publications produced by the project include manuals on Hydraulic and Sediment Monitoring, and Surface Drainage, as well as Operation and Maintenance Manuals for the Sindh and the NWFP.

Although substantial efforts were made to coordinate manual production between the consultant and the PIDs, the level of provincial participation and review desired by some of the departments was not achieved. Dedication of high-level PID staff throughout the period of manual development may be necessary to ensure production of manuals fully satisfying the requirements of the PIDs.

Additional areas One participant noted the development of a departmental "new project unit" in connection with ISM/ISRP. Creation of this unit has been received positively by the World Bank who would like to use this approach on other projects.

Several participants commented on prospects for privatization of some PID activities. One activity discussed as being suited for privatization is design. In some departments design office allowances of 600-1200 Rs have proven insufficient to retain highly qualified staff. Directing design activities to consultants while retaining in-house capabilities for review would be one approach to privatization of the design function.

Similarly, privatization of mechanical workshops and construction equipment was introduced as a mechanism for relieving the provincial governments of the burden of maintaining these facilities exclusively to support the PIDs. By expanding the workload of these currently underutilized facilities, private workshops may also be better able to pay wages needed to attract skilled mechanics who can be entrusted with operation of expensive, sophisticated workshop equipment.

Participants who did not favor privatization of construction equipment expressed concern over the ability of private equipment operators to rapidly mobilize the machinery needed for flood fighting and other emergencies.

An important aspect of PID operation not emphasized in the ISM/ISRP program was modernization of PID telecommunications systems. Several workshop participants remarked on the severe state of deterioration and obsolescence of the old telecommunication equipment and on the need for a new network.

Question 4: How could design of a technical assistance project for institutional strengthening be improved?

Role of Executing Agencies As noted in recommendations for Question 1, workshop participants felt that provincial government executing agencies should be represented in project formulation. Participants are concerned that provincial and Federal representatives now active in formulating and signing agreements may not have a sufficiently specific knowledge of project implementation to draw up adequately detailed understandings.

Provincial participation in project activities should begin with preparation of PC-1s and PC-2s. At this time provincial needs should be assessed and project concepts formulated to address these needs. The Federal government can then work with the provinces in consolidating the various provincial assessments into an integrated proposal. This proposal would then be submitted for the required approvals before being presented to the Economic Affairs Division and, then, to donors.

Participation of executing agencies would also be beneficial in joint meetings between representatives of the Federal and provincial governments and donor appraisal missions. Executing agency participation at such meetings would be important for correct scoping of the Terms of Reference and detailed preparation of a Memorandum of Understanding.

Executing agency input was also recommended for selection of consultants to ensure that the consultants felt responsible to the provincial governments and to establish procedures ensuring that the consultants' operations were closely coordinated with those of the executing agency. One recommendation was that counterparts should be seconded from departments to

work as part of the consultant team. This would enable executing agency staff to receive on-the-job training with the consultant and would provide the consultant with staff intimately familiar with the operations of the department.

Also, as recommended under Question 1, funding arrangements should be established with donors so that funds flow directly to executing agencies. Some participants commented that PID staffs were overtaxed by procedures for preparation, implementation, and quality control of schemes. These participants noted that these administrative requirements should be suited to the capabilities of the staff of the executing agency.

As noted in recommendations for Question 3, development of operation manuals should be given greater attention. The PIDs should participate more actively in manual preparation, perhaps to the level of assigning experienced senior staff to work full time with consultants on manuals.

Another general comment was that the PIDs should devote serious thought to identifying their needs for consulting activity and then participate in development and execution of projects that respond to these needs. Responsible, skillful Provincial Coordinators are required to orchestrate these efforts within each province and a committed Federal Coordination Cell is necessary to consolidate the efforts of the various provinces into a form consistent with Federal policy and acceptable to donors. The view was expressed that the Provincial Coordinator should have facilities needed to effectively coordinate projects, and that his posting should be for entire period of a project. This could be achieved by adopting the "project approach".

Workshop participants also noted that the PIDs must be active in educating consultants to the requirements and capabilities of the departments so that the consultant's activities focus on departmental needs and are tailored to the department's capability to assimilate new methods and modern technologies. The Project Start-up Workshop, held near the start of the ISM Project, was mentioned as being an effective means of developing cooperation between the consultant and the PIDs. Additional workshops would have been helpful in adjusting the course of TA activities throughout the life of the Project. In this respect, some participants noted the utility of contracts between donors and consultants having sufficient flexibility to allow project resources to be redirected in the event that the executing agency believed this to be desirable.

Soundness of ISM/ISRP Project design A final point covered during the workshop was whether the formulation of the ISM project was fundamentally sound. Two divergent points of view were expressed on this issue.

One perspective was that the ISM/ISRP formulation was excessively widespread and scattered resulting in a program that filled in the gaps left by deferred maintenance without making an integrated attempt to develop an area. In this view, rehabilitation and maintenance activities should have been focused on one or two command areas and coupled with

agricultural extension, sociological, and other components of an area development project. The Command Water Management Project was cited as a program better fitting this model.

A more widely held view was that the ISM/ISRP formulation had succeeded when evaluated on its own terms. The Project was not intended as a pilot for area development. Although Project activities had not extended below canal outlets, the Project had rehabilitated almost all of the bad channels and drains in the system, had adopted a subsystem and system approach to evaluating channel performance and had succeeded in increasing the safety, equity, and reliability of irrigation and drainage works.

The view was also expressed that more emphasis should have been given to rehabilitation of barrages and regulation system. The Project made a good beginning in this regard but full-fledged studies are required of all barrages in the system to develop a comprehensive program of control structure repair, maintenance, and modernization.

A final observation was that all PID activities, including ISM/ISRP, operate in an environment where the departments have limited control. Delays in approval of and payment for schemes, tampering with modules, lack of modern telecommunications and other factors all impede the departments' capacity to fully meet their responsibilities. Therefore, in evaluating the achievements of ISM/ISRP, it is important to recognize areas where the Project suffered from factors outside of the control of the PIDs. In general ISM/ISRP has been successful where elements were under the control of the executing agencies and their consultants.

Summary

The End-of-Project Workshop was designed to give participants intimately familiar with ISM/ISRP an opportunity to voice their opinions on how similar donor-financed projects may be improved in concept and in execution. As was hoped, the majority of comments were not platitudes but seriously considered, constructive observations that highlighted areas where formulation and implementation of this Project could have been improved.

Comments received at the Workshop emphasized the need for donors, government agencies, and consultants to pay particular attention to the following areas:

- Formulation and review of rehabilitation schemes;
- Reimbursement for rehabilitation schemes;
- Coordination between provincial and Federal authorities, donors, and consultants;
- Increase in funding for maintenance;
- Introduction of light mechanized equipment packages;
- Modernization of telecommunication facilities;
- Privatization of appropriate PID functions; and
- Integration of executing agencies into project formulation and implementation.

Although the specific comments delivered at the Workshop and reported in this document focus on deficiencies, the universal attitude of the participants was that the Project had been a success. Therefore, rather than being a *post mortem* on a troubled project, the Workshop's tone and content addressed strengthening and continuing initiatives created by the Project. In spite of enormous obstacles to implementation, some mentioned in this report and others including the evacuation of expatriates during the Gulf War and restrictions on travel in the Sindh and Balochistan, local and expatriate staff showed great fortitude in looking for, and frequently finding, ways to achieve Project objectives. As a result, those who have been closely associated with the Project look back with satisfaction on its achievements.