IIMI’S MANAGEMENT TRAINING FOR INSTITUTIONAL DEVELOPMENT
AND STRENGTHENING NATIONAL CAPACITY

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INTRODUCTION

IIMI’s management training and institutional development activities are designed to contribute especially to IIMI’s goals of strengthening national irrigation management and research capacities. In summary, these programs emphasize the development of national capacity to effectively manage irrigation systems. The training effort stresses management issues and aims to assist national irrigation professionals and agencies in the development of innovative capabilities.

This paper mainly describes the innovative experience of IIMI’s management training in Malaysia and Bangladesh. In Malaysia, IIMI’s strategic approach for training has influenced the introduction of strategic planning and its human resource development program, including training of researchers on the performance of irrigation systems aiming to sensitize the irrigation managers on the needs for working in collaboration with the national universities to conduct research to assess the problems and create solutions to improve the system performance.

In Bangladesh, the approach of IIMI’s management training program has contributed to the increased awareness of the inevitability of changes of Bangladesh Agricultural Development Corporation (BADC) due to government policies and externally induced pressures and to the assessment of possible alternative functions and roles for the organization.

IIMI’s management training efforts have mainly been directed towards the institutional strengthening so far. However, the development of research skills among the irrigation managers of the Department of Irrigation and Drainage (DID) was initiated in Malaysia.

CONTEXT

Deficiencies in management are considered to be a major cause of the failure to obtain the anticipated benefits of irrigation schemes in improving productivity, equity, sustainability and the quality of life of farmers in third world countries.

This is mainly due to lack of managerial skills among professional staff in irrigation organizations. Management training and development thus becomes an important activity which can help to develop and improve staff skills for better performance of irrigation systems and increase awareness of organizational needs for strategic planning and its human resource development (HRD) component. The HRD policies and strategies, including training and development, should be integrated with, and support the overall strategic direction of the organization.
A large number of training courses in irrigation are offered around the world. Most are specialized with continuing divisions between three major groups of disciplines: engineering and hydrology, agriculture, and the economic and social sciences. There are a particularly large number of courses available on the technical aspects of irrigation engineering but few on irrigation management, although some institutes in the industrialized countries offer such courses.

In recent years, several developing countries have initiated programs for in-service training in water management aiming to develop managerial skills among the professionals in irrigation. However, most of these programs are still very technically oriented and therefore the managerial scarcity is uneven. The scarcity is fundamentally related to lack of effective management training efforts which must develop managerial skills and facilitate the managers’ awareness of the needs to improve organizational performance through people.

The mandate of the International Irrigation Management Institute (IIMI) is to enhance national capacity to effectively manage irrigation systems. An important means of carrying out this mandate is through management training, conferences, and related institutional development activities designed to contribute both to strengthening national irrigation research capacity and supporting the introduction of improved management and policymaking.

**Training and Capacity Strengthening in Research on Irrigation Management** include comprehensive programs aimed at strengthening of institutions, and training of individual researchers. The latter includes: (a) on-the-job training, (b) fellowships for staff of national research institutions in developing countries, and (c) career internships for postdoctoral and other highly qualified staff of national research and training institutions. In addition, IIMI’s conferences and seminars provide opportunities for researchers in developing countries to meet and exchange ideas both among themselves and with irrigation managers and policymakers.

**Training and Institutional Development in Irrigation Policymaking and Management** also has two components: institutional strengthening and training of individuals. Under the former activity, IIMI works in partnership with national training centers and universities to implement a management training and development approach that includes Training Needs Assessments, Curriculum Development, Development of Training Materials, Training of Trainers, and Monitoring and Evaluation which promote opportunities for developing awareness of the needs for introducing strategic planning and its human resource development program.

**IIMI IN MALAYSIA**

In recent years, the DID felt that there was a need to review the approach to irrigation management. It was felt that the focus should be on managerial and client-oriented aspects and on output and performance. Training and human resource development are vital elements in this strategic planning process. Subjects of this nature were discussed and deliberated in workshops and conferences by the DID. Nationally, a critical review of the operation and maintenance of irrigation systems has been made in a paper by Dato Shahrizaila
bin Abdullah, the Director General, presented at the DID Senior Engineers’ Conference held in 1986. Internationally, the Director General presented a paper on "Training for Irrigation Agriculture in Malaysia" at the USAID/World Bank joint workshop on "Training Needs and Strategies for Irrigated Agriculture" held in Washington, in 1988. In 1989, the DID Senior Engineers' Conference deliberated a paper on the "Training in Irrigation System-Strategy" for the future, presented by Ir. Rahmat b Hj. Mohd. Shariff.

There was considerable concern expressed among DID personnel over the issues of irrigation-system management, in general, and human resource development, in particular. The International Irrigation Management Institute (IIMI) was invited to join the DID in the process of reviewing the existing training programs in order to improve the irrigation-management component. IIMI's strategic approach to training which involved six stages of the training cycle was implemented as follows:

(a) Training Needs Assessment (TNA)
(b) Curricula Development (Training Plan)
(c) Training of Trainers
(d) Production of Training Materials
(e) Monitoring the Implementation of Training Activities, and
(f) Evaluation of all stages of the training cycle.

In addition to that, the follow-up and evaluation programs are conducted to assess the effect of the training on the institutions capability to provide irrigation support to the farmers and on the system performance. During the implementation of the training cycle, DID has invited the Universiti Pertanian Malaysia (UPM), Muda Agricultural Development Authority (MADA) and Kemubu Agricultural Development Authority (KADA) to participate in all stages to facilitate awareness of the process in development for the improvement of the performance of the irrigation systems in the country.

**IIMI in Bangladesh**

In May 1990, IIMI's Training Specialist visited Bangladesh in order to get acquainted with irrigation management training in the country. The Training Specialist, along with the IIMI Resident Scientist in Bangladesh, visited irrigation institutions and training agencies.

As a result of this first visit, it was decided that a one day workshop would be useful to discuss IIMI's mission and its management training strategy with the top managers of agencies responsible for irrigation systems in the country. Accordingly, a start-up workshop on irrigation management training was held in 1990 in Dhaka.

At this workshop, three groups of participants, representing the three major institutions involved in irrigation in Bangladesh, namely, Bangladesh Agricultural Development Corporation (BADC), Bangladesh Water Development (BWDB) and Bangladesh Rural Development Board (BRDB) were formed, together with participants from other institutions to discuss their needs and in what aspects IIMI could assist them in irrigation management training. BADC was selected.
among the institutions and the collaboration initiated. Even though, there was a considerable uncertainty in the current situation with anticipated changes in the organization. The training cycle was initiated with the TNA exercise, which took place in Dhaka in 1991.

ACTIVITIES – INSTITUTION BUILDING

IIMI’s training and related institutional development activities include two major kinds of programs, namely - (a) Training and Institutional Development which aim to emphasize IIMI’s efforts for developing national research capacity; and (b) Training and Institutional Development in irrigation policy-making and management which aim to emphasize IIMI’s efforts for developing and/or improving national management capacity.

The main efforts of IIMI’s training and related institutional development activities have been directed towards the last one cited above. However, a training program for developing national research capacity at DID in Malaysia has been recently conducted in Besut.

1. Training and Institutional Development in Irrigation Policy-making and Management

1.1 Strengthening National Irrigation Management Organizations (NIMOs)

(a) MALAYSIA

At the end of 1989, IIMI initiated the implementation of the training cycle in Malaysia by conducting the TNA. In February 1990, the results of this TNA exercise were presented to the top managers and senior engineers during a three-day workshop held in Malaysia.

In October 1990, a one-day workshop conducted at DID to discuss and decide on the organizational needs for implementing two training activities under IIMI’s assistance.

Three curricula were developed and the basic training materials were produced as drafts, to support these new curricula designed for the training of trainers, engineers and irrigation technicians (overseers). The Training of Trainers was conducted to create management training capacity in Malaysia and was held at the Continuing Education Centre of the Universiti Pertanian Malaysia (UPM), from 22 April – 11 May 1991 and was carried out as a joint effort of IIMI, DID and UPM. The training program was attended by participants from the Department of Irrigation and Drainage, Universiti Pertanian Malaysia (UPM), Muda Agricultural Development Authority (MADA) and Kemubu Agricultural Development Authority (KADA). IIMI has promoted the creation of management training capacity in these organizations and has facilitated interaction among them.
The production of training materials has included the translation of IIMI publications to contribute to the development of national capacity in Malaysia.

Training Modules were developed to be used by the trainers to support the training of engineers and irrigation technicians (overseers) at DID. They were officially delivered to the DID top management in October 1991. These sets of training modules are composed of a general plan, where the objectives of the program and detailed information are provided. In summary, the modules present a complete plan along with directions of all methods, techniques, evaluation forms and training materials including all exercise sheets, slide and video shows which will facilitate the learning process, and trainers' jobs as well.

The monitoring of the implementation of the training activities for immediate utilization of DID capacity was carried out by IIMI staff. Two Malaysian trainers led the training of irrigation overseers which took place in Kota Bharu, and three others led the training of engineers took place in Penang, both in Malaysia.

This phase provided IIMI training staff with the opportunity of making observation on two very important aspects of trainers' skills while implementing management training activities.

The first aspect was related to the positive attitudes or "soft" skills of the trainers: i.e. attentiveness, care, interest, enthusiasm, motivation, etc. The second one was related to the task oriented skills, i.e. organization, group orientation and coordination, evaluation, etc. The evaluation of the training cycle activities to measure the quality of process and its outputs was undertaken. Four kinds of evaluation methods were developed and applied during the two training programs. They were: process evaluation (self and group); integrated process and (progress) program evaluation; content evaluation; and program evaluation, at the end of the training activity. The participants of this program were invited, in diverse occasions, to give feedback and emphasize strong and weak points of the activities and to give suggestions for the improvement of this exercise.

The results of the written evaluation have been compiled, analyzed, used and published in the respective reports. However, additional oral feedback have been recorded in video and audio tapes and are available at the Training Unit of IIMI.

In 1991, IIMI completed the field testing of training cycle in Malaysia. One of the most important and far-reaching aspects of the implementation of the training cycle at DID was the involvement of top management in a process of institutional development designed to ensure the results of the training programs led to real and last improvements in the management of the organization.
IIMI's management training program has influenced the introduction of the strategic planning and its human resources development which facilitate a team approach to management where managers share common organizational goals and work constructively together for the achievement of the defined goals.

(b) **BANGLADESH**

In Bangladesh, the Training Needs Assessment (TNA) exercise was designed and implemented, using four different approaches for four different categories of staff. The TNA proper was concerned with the training needs of the technical staff, and was conducted using a methodology which has recently been successfully applied by IIMI in Malaysia.

The other three groups, top management, researchers and trainers were involved in the TNA in their complementary roles.

The basic methodology of the TNA was also applied to these groups, modified in accordance with their special role in any future training program.

For the top management group, for example, the basic methodology was tailored to meet the changing needs of BADC, in terms of its declining role in irrigation-related activities as a result of the policy of privatization. The TNA for the top management staff therefore aimed to provide an opportunity for the senior managers to think about the future role of the BADC.

Although four groups of staff were involved in the TNA in different ways, its main objective was:

> to identify factors affecting individual performance in irrigation management for the technical staff of the Bangladesh Agricultural Development Corporation, with a view to determining the nature of the solution (training or non-training) best suited to their needs.

This TNA study at BADC has achieved its objectives and reached a number of conclusions.

In general, it was found that there are factors affecting individual performance at BADC in Bangladesh and that they are related to both kinds of intervention, training and non-training.

The "non-training" factors are of great importance and BADC should give priority to solving them before any intervention in terms of training programs. It was found that the major factor which should be addressed immediately is the definition of BADC's new roles, functions and objectives.
Workshop to deliver the TNA results to BADC officials. A workshop was held in Dhaka in September 1991 to present the results of the TNA to the Senior Management of BADC and to discuss the implications of these results for the design of a short and long term training program.

It was found that there was a considerable uncertainty in the current situation with anticipated changes in the organization of BADC due to policy decisions of the Government which are expected in near future. The exact number and composition of staff which BADC needs in future will depend upon the Government's policy decisions related to the future role, functions and program which are assigned to BADC.

Workshop on the Strategic Planning and Human Resource Development. A workshop was held in Dhaka in September 1992 to:

(a) discuss BADC's actual mission resulting from the process of change;
(b) define clear human resource development objectives, strategies, activities;
(c) define performance measures (indicators) and standards that would be used to evaluate the effectiveness and impact of a management training program at BADC.

It was framed this way because in developing human resource development (HRD) we are concerned with future outcomes as the training people for the future. Therefore, we need to know what BADC's role will be, and what activities BADC staff will be carrying out to development the training strategy.

In summary, the workshop conclusions were:

i) An integrated approach to planning and management is essential to ensure continuing organizational development and improved performance.

ii) The concepts and methodology of the strategic planning, HRD and management process explored during the workshop are relevant for BADC, and will assist in managing the change process.

iii) Many of the outputs and findings of the various working groups during the workshops, will have relevance in the current review of BADC's future role.

1.2 Training Individual Managers

1.2.1 IIMI's Special Awards Program

In the course of its work on promoting and disseminating improved irrigation management practices, IIMI has recognized the existence of field practitioners who take risks to develop and test management
techniques which produce successful results, but which are not disseminated to the irrigation audience either because of the lack of opportunities and/or abilities to record their experiences, or because of a lack of support, interest and even recognition on the part of the agencies for which they work.

IIMI has created the Special Awards Program, a training method that provides opportunities for irrigation professionals who have developed successful innovative approaches to irrigation management problems to pass on their experiences to others by documenting and publishing them as case studies.

This program provides participants with an opportunity to spend between two and four months at IIMI headquarters or at one of its field locations, and to record their experiences under the guidance of institute staff, who assist participants in formulating their ideas and approaches. IIMI provides awardees not only with allowances to cover their expenses but with substantial assistance in developing their field-level experiences into case studies.

By 1989, IIMI had provided three such awards to irrigation managers from Sri Lanka and the Philippines. Their experiences have covered organizing irrigators' associations to improve system operation and maintenance, farmer participation in the rehabilitation of a small system, and promoting coordination between farmers and agency officials in irrigation system management. As part of the Special Awards Program, in 1990, an irrigation professional was selected and invited to write a case study on his successful experience in the Philippines in turning over a pump irrigation system to a farmer's organization.

1.2.2 Training of Technical Assistants in the Irrigation Schemes from Sri Lanka

The general objective of this workshop is to review and discuss systems operations and maintenance in order to develop awareness of the needs to constantly upgrade its performance and improvement commitment among Technical Assistants to sustain the irrigation systems.

This particular program gave an insight to the participants how one could contribute towards solving problems of an irrigation scheme even when the department failed to provide sufficient funds for maintenance. This training had a good impact on the participants to get them to think on identifying constraints, prioritizing them and developing problem analysis to explore the problems where one could provide a solution for the sustainability of irrigation systems.

2. Training and Institutional Development

2.1 Training of Individual Researchers

IIMI has conducted a training on research on the Performance of Irrigation Systems in Besut, Malaysia aiming to develop awareness of the complexity
of irrigation systems which demand investigation for problems solving in order to improve irrigation systems performance. Among other issues, concepts of interdisciplinary research in irrigation management system were discussed as well as performance indicators, measures and standards. The participants assessed research issues relevant to their schemes and formulated research proposals as an exercise of the training program.
1. TRAINING AND INSTITUTIONAL DEVELOPMENT IN IRRIGATION POLICY-MAKING AND MANAGEMENT

1.1 Strengthening National Irrigation Management Organizations (NIMOs) - The three distinct stages

(a) MALAYSIA

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<td>A. STAGE 1 - TRAINING CYCLE</td>
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| • TNA/ Organizational Constraints | About 400 managers, trainers and researchers from the Dept. of Irrigation & Drainage (DID), other organizations, and from the Universiti Pertanian Malaysia (UPM) were involved in the activities of the Training Cycle in Malaysia. | • Creation and utilization of management training capacity in Malaysia. In 1992, Malaysian trainers continued to implement management training programs at the Training Centre at DID in Kota Bharu for DID staff from different schemes (30 participants) and  
  - They have provided management training for all staff of Besut and Xarian Schemes (collective training) which were selected for the pilot exercise (about 60 participants);  
  - They are utilizing the training modules and materials produced by IMI to implement these programs;  
  - These management training programs have been highly evaluated by the participants (documented)  
  - The set of modules for training of irrigation technicians (overseers) were entirely translated into Bahasa Malaysia by the DID trainers of Kota Bharu Training Centre. This was planned and executed by themselves as a team work. | • "IMI/DID collaborative effort, which started in October, 1991, is a clear attempt to address the subject of irrigation management through well-structured and systematic development program involving all levels of irrigation personnel within the organization. This process is already showing positive results on the ground and managers have become aware of the importance of irrigation management training and how it can enhance operation and maintenance performance in irrigation. Such systematic approach is also relevant in other functions of the Department." (Dato' Ir. Haji Shahrizail bin Abdullah, Director General, DID, Malaysia, foreword for the forthcoming IMI publication entitled "Irrigation Management Training for Institutional Development". A Case Study from Malaysia). |
| • Curriculum Development          | Three curricula for training of engineers, irrigation technicians (overseers) and trainers were developed to reflect the TNA results. |                                                                                                               |                                                                                                 |
| • Training of Trainers            | Fifteen trainers to conduct management training were trained in Malaysia. This program included professionals in irrigation from the Department of Irrigation, other organizations and from the Universiti Pertanian Malaysia. |                                                                                                               |                                                                                                 |
| • Production of Training Modules/Materials | The training modules which include general plan, schedule, each day objectives, directions for training methods and techniques, handouts, worksheets, overhead transparencies, slide shows, etc. were developed. They are composed of three volumes for each curricula and were officially delivered to the management of DID in October 1991. |                                                                                                               |                                                                                                 |
Monitoring the implementation of training programs

Five Malaysian trainers from DIO and UPM conducted training for engineers and irrigation technicians (overseas). Total no. of participants were 26. IMI's training staff monitored the implementation of these activities.

Evaluation

Participants' evaluation of all phases of this training cycle. (Documented).

I must say that over three years collaboration with IMI, the structured process involving the training needs assessment; which was the first stage whereby we went through together, helped DIO to assess training needs and the organizational constraints. Subsequently, the curricula were designed and into the training plan. Now that I think, this training plan has in fact been implemented. Training programs for engineers and irrigation technicians were conducted by DIO trainers under IMI's observation. After that, DIO trainers continued to implement management training by themselves and believe that the objective of improving training capacity within DIO was achieved during this collaborative effort with IMI. Most important of course is the course material along with training which is very important to ensure that the right information is disseminated to people coming for training. The training course materials that were produced have been used very successfully in the various training programs. This needs to be specially commented on. At the same time, all training programs have got an evaluation which goes with it, and from what I understand, have progressed so far. The general feedback indicates one-way, which is being shown or demonstrated to be an effective process and people have reported much progress in their own work areas, and that they are in a better position to perform their jobs now. This of course has contributed significantly to human resource development in irrigation organizations.

(Dato Ir. Haji. Shahrizali bin Abdullah, Director General, DIO, Malaysia, video-taped interview with Dr P S Raw on the 2 October 1992, DIO Headquarters, Kuala Lumpur).

IMPACT ON DIO MANAGEMENT TO PROMOTE RE-ORIENTATION OF THE ORGANIZATION

The major impact of the completion of the training cycle was DIO top management awareness of the needs to evaluate the results of the training activities against the objectives of the organization. This has promoted the introduction of strategic planning and human resource development (HRD) program for the entire organization which led this process to the second stage of IMI's training approach for institutional development.

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<td>B. STAGE 2: STRATEGIC PLANNING AND HRD PLAN</td>
<td>About 40 top managers, policy-makers and senior engineers were involved in this Contingency Plan activity for HRD during 1992.</td>
<td>- DID has disseminated its mission through a publication of the National Water Management Training Center.</td>
<td>Of course, we also realized through this program the need for involving the entire management structure on strategic planning process in the context. In October 1991, we had separate sessions for strategic planning and HRD which has gone through three sessions and now culminating to this stage which is connected to dealing with similar exercise with the people under the project. For this purpose two projects were selected. They were Kerian and Besut. People who are involved in this schemes are adequately prepared prior to participate in the workshop in the last 10 days (September 1992) and based on the feedback I get, they were not only prepared but were also committed to the workshop and at the end of which they have themselves developed HRD plans as well as identification of areas of specific interest that needs to be addressed. This is indeed very encouraging of course, as along with this, ultimately identified areas such as, how to improve irrigation management and irrigation performance, and to this extent, performance indicators also have been identified. This would be subsequently useful in evaluation which would be based on this parameter so that we can from time to time see where we are as far as irrigation performance takes time to improve. I ensure that the process we have gone through at the second stage would definitely be most effective towards improving irrigation performance as a whole in the country. (Dato’ Ir. Haji. Sharifzaila bin Abdullah, Director General, DID, Malaysia, video-taped interview with Dr P S Rao, 2 October 1992, DID Headquarters, Kuala Lumpur.)</td>
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<td>• Workshops for top management to discuss on mission statement, objectives, strategies, activities, performance indicators, measures/standards – 1st &amp; 2nd management of the organization and HRD plan.</td>
<td>- Definition of the DID mission statement and its interpretations to the Government and Minister; other agencies; clients; farmers; consumers and to the staff of DID.</td>
<td>- DID has accomplished about 80% of the activities of the 1992 HRD Contingency Plan prepared by IIMI and DID.</td>
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<td>• Workshop for managers of Besut and Kerian Schemes – to define and discuss objectives, strategies, activities, performance indicators, measures and standards for evaluation of personnel and of the irrigation system.</td>
<td>- Objectives for the organization as a whole, objectives for Irrigation Branch, strategies, activities and definition of performance categories and indicators for DID.</td>
<td>- Increased level of motivation and interest of DID senior management to write a document stating objectives for the irrigation branch, strategies, functions, performance indicators, measures and indicators (A workshop was conducted for this purpose)</td>
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<td>The total number of 24 participants including 9 managers (engineers and technical assistants) of Besut and Kerian Schemes; 2 trainers from DID Training Centre in Kota Bharu; 2 Directors for Irrigation; Acting Director for Training and Research; and 1 Chief Engineer for Training from DID.</td>
<td>- Improved commitment of the management staff of Besut and Kerian, DID, to prepare drafts for strategic planning issues for both schemes to be discussed and defined during the workshop with IIMI training staff September 1992.</td>
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<td>- Interpretation of the DID mission statement by Besut and Kerian staff.</td>
<td>- Improved motivation and self-confidence among the managers of Besut and Kerian Schemes who understand better the Strategic Planning, the HRD plan and their impact on the improvement of irrigation performance. This was documented by the participants on the evaluation forms at the workshop Sept. 1992.</td>
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<td></td>
<td>- Definition of objectives for Besut and Kerian Schemes, along with some strategies, activities, performance indicators, measures and standards for evaluating personnel.</td>
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<td>- Increased awareness on the performance indicators for evaluating irrigation systems.</td>
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<td>- Draft of the HRD plan for Besut and Kerian schemes to be refined by the scheme staff and implemented afterwards.</td>
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THE IMPACT OF THE 1992 STRATEGIC PLANNING AND HUMAN RESOURCES DEVELOPMENT ACTIVITIES ON THE BESUT AND KERIAN SCHEMES

THE IMPACT OF THESE ACTIVITIES CONDUCTED IN SEPTEMBER 1992 ON THE PERFORMANCE OF STAFF OF BESUT AND KERIAN AND OTHER IRRIGATION SCHEMES OF DID WILL BE ASSESSED IN 1993 AND BEYOND.

HOWEVER, THE MAJOR ANTICIPATED IMPACT IS THAT MANAGERS OF THESE TWO SCHEMES WILL REINFORCE PLANNING PROCESS AND DEMONSTRATE COMMITMENT TO ACHIEVE DID MISSION THROUGH MONITORING, EVALUATING AND DIAGNOSING PROBLEMS TO INVESTIGATE AND PROVIDE PROMPT AND RELEVANT REACTIONS THROUGH RESEARCH ACTIVITIES.

THESE EXPECTATIONS HAVE LED IIM/DID TO THE FINAL STAGE OF THIS MANAGEMENT TRAINING FOR INSTITUTIONAL DEVELOPMENT PROGRAM.
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<td>C. STAGE 3: TRAINING ON RESEARCH ON THE PERFORMANCE OF IRRIGATION SCHEMES</td>
<td>- The total number of 15 professionals participated in this training program. They were 10 engineers, 2 technical assistants, 2 DID trainers and 1 professor from the Universiti Pertanian Malaysia (UPM).&lt;br&gt;- Selected performance indicators which are relevant to evaluate Besut and Kerian Schemes in 1993 and beyond.&lt;br&gt;- Draft of an Action Plan for monitoring and evaluating Besut and Kerian Schemes.&lt;br&gt;- List of research issues assessed by the participants as relevant for Besut and Kerian Schemes.&lt;br&gt;- Draft of Research Proposal for identified research issues.&lt;br&gt;- Draft of an Action Plan for conducting research collaboratively between DID and UPM.&lt;br&gt;- Training modules composed of general plan, objectives, exercise sheets, handouts, transparencies, slide show and flip charts.</td>
<td>- Increased interest in monitoring and evaluating the performance of Besut and Kerian Schemes as indicated in the self-assessment evaluation form.&lt;br&gt;- Top management and the training participants awareness of the needs for developing research skills among irrigation engineers/managers in order to be sensitive to diagnose, investigate and solve the two schemes' problems through a collaborative research with the universities or others for improving the performance of the irrigation schemes. (Documented in video and evaluation forms).&lt;br&gt;- Creation of a temporarily research division for irrigation management research in Kinta Bharu Training Centre. Actions have been planned by the Trainer - Research Coordinator of this Training Centre to support engineers/managers of Besut and Kerian Schemes in this respect. The institutionalization of this division will be decided by the top management soon.&lt;br&gt;- Increased awareness and belief that research and training are complementary to each other.&lt;br&gt;- Increased awareness and belief that research results provide the basis for developing relevant/effective contents for training programs to meet the needs of the DID. (results oriented)</td>
<td>&quot;Research and training. I think that these two activities go along hand in hand. They cannot be divorced one from the other because development of training is very much depended on how much of updated materials on the latest technology and latest developments can be disseminated to users. I think, that the development of sensitization through the workshop, which was held in Besut recently for both Kerian and Besut projects, is going to help the staff to bring the dimension of research as part and parcel of day-to-day activities of irrigation performance and management of projects. So that at any time when one is aware of the shortcomings and identify the need for irrigation management research, will take the initiative to undertake this subsequently to work in-house or with the help of the research institutions within the country or outside the country to enable these areas of advancement to be developed to a stage where we can bring about positive results towards a successful performance of irrigation schemes.&quot; (Dato Ir. Haji. Shahrizaila bin Abdullah, Director General, DID, Malaysia, video-taped interview with DR P Sale at DID Headquarters, Kuala Lumpur.)</td>
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CLIENTS' EVALUATION ON THE COMPLETION OF THE THREE STAGES OF IIMI MANAGEMENT TRAINING PROGRAM FOR INSTITUTIONAL DEVELOPMENT.

"IN SUMMARY, I MUST SAY THAT THE THREE STAGES THAT WE HAVE GONE THROUGH SO FAR IN THIS COLLABORATIVE PROGRAM WITH IIMI HAVE INDEED BROUGHT ABOUT THE TOTAL IMPROVEMENT TO THE MANAGEMENT OF IRRIGATION AREAS ESPECIALLY AND MORE IMPORTANT THAT IT IS ALSO BENEFICIAL TO EVEN DEVELOPING HUMAN RESOURCE DEVELOPMENT PROGRAM FOR THE ORGANIZATION AS A WHOLE."

"I THINK THAT HAVING THIS PROGRAM FOCUSED ON IRRIGATION MANAGEMENT AND GOING THROUGH THE STRUCTURED PROCESS IN DEALING WITH THIS PARTICULAR AREA OF IRRIGATION MANAGEMENT, WE CAN SEE THAT THE WHOLE METHODOLOGY AND STRATEGY ADOPTED IN THIS PROGRAM, INDEED IS VERY RELEVANT FOR ANY ORGANIZATIONS. IN THIS ASPECT, THE DEPARTMENT BEING INVOLVED IN MORE THAN JUST IRRIGATION, I.E. IN FUNCTIONS LIKE AGRICULTURAL DRAINAGE, COASTAL ENGINEERING, ETC., WHAT I SEE IS THE RELEVANCE OF WHATEVER WE HAVE GONE THROUGH IN THIS EXERCISE TO OTHER AREA OF THE ORGANIZATION. I SEE THAT THE SAME METHODOLOGY COULD BE APPLIED TO OTHER AREAS AS WELL. IN THE PROCESS, OF COURSE, WE COULD THEN DEVELOP AN ORGANIZATION WHICH IS VERY WELL EQUIPPED IN THE FINAL ANALYSIS TO DEAL WITH ALL THE PROBLEMS OF THE ORGANIZATION BY BUILDING OUR OWN CAPACITY NOT ONLY AS PLANNERS AND IMPLEMENTORS BUT ALSO AS MANAGERS IN OUR RESPECTIVE FIELDS WHO ARE WELL TRAINED, COMPETENT AND IN A POSITION TO DEAL WITH ANY OTHER PROBLEMS IN THE FUTURE. I SEE THIS PROGRAM IN A POSITIVE NOTE AND, OF COURSE, TIED UP WITH THE ISSUE OF HAVING THE INSTITUTIONAL ARRANGEMENT TO ENSURE THE SUSTAINABILITY OF IT, BECAUSE SUCH METHODOLOGY MUST BE CAREFULLY MONITORED AND PROGRESSIVELY EVALUATED. REVIEWING THIS CONTEXT, OF COURSE, ONE HAS TO BE VERY CONVINCED OF THE FACT THAT CHANGES NEED TO BE DONE FROM TIME TO TIME AND, IF IT IS PROPERLY PLANNED AND EXECUTED, THE CHANCES OF SUCCESS WILL ALWAYS BE THERE. I THINK THAT THE STRATEGIC PLANNING AND ITS HRD PROGRAM IS ALL ABOUT."

(DATO DR. HAJI. SHAHRIZAELA BIN ABULLAH, DIRECTOR GENERAL, DID, MALAYSIA, VIDEO-TAPED INTERVIEW WITH DR P S RAO AT DID HEADQUARTERS, KUALA LUMPUR, 2 OCTOBER 1992.)
**MAJOR ACTIVITIES**

<table>
<thead>
<tr>
<th><strong>A. STAGE I – TRAINING CYCLE</strong> (Including a Start-up Workshop)</th>
<th><strong>OUTPUTS</strong></th>
<th><strong>IMPACTS ON BADC</strong></th>
<th><strong>CLIENTS’ PERCEPTION OF THE IMPACTS</strong></th>
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<tbody>
<tr>
<td>• TNA/Organizational Constraints</td>
<td>About 250 professionals in irrigation institutes in Bangladesh have participated in the joint BADC/IIIM management training program for Institutional Development so far.</td>
<td>- Increased awareness of the changes of BADC due to government policies and externally induced pressures.</td>
<td>&quot;... IIME-BADC collaboration that led to holding of a TNA exercise. The program that involved officers from different management layers of BADC's irrigation wing had been commendable and extremely effective. The brainstorming sessions successfully generated new ideas and thoughts reflecting on the TNA and the areas into which BADC could venture in the foreseeable future. ... a workshop was convened... to present the results of the TNA exercise to the senior management of BADC. It also focussed on issues of strategic planning and management of change in the organization. We deeply appreciate the efforts of IIME in this regard and would like to admit that BADC stood to be substantially benefitted from the workshop.&quot;</td>
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<tr>
<td>• TNA Delivery of TNA results</td>
<td>About 180 participants including BADC senior staff and from other research institutions, and trainers were involved in this exercise. The number of 18 participants attended this event.</td>
<td>- List of possible alternative functions and roles for the organization.</td>
<td>&quot;... three-day workshop by IIME... centered around efforts of rewriting the vision and mission statements for BADC that would be relevant to its apparent modified role in the context of major shifts in the government policy... BADC would deeply appreciate fruitful continuation of such efforts and would enthusiastically look forward to contributing to them in any way it can.&quot; (Mr A K Kalan, Member Director for Irrigation, Letter No. 945 dated 28.09.92 to Dr R Lenton, Director General, IIME)</td>
</tr>
</tbody>
</table>
Workshop on Strategic Planning and Human Resources Development Plan for Bangladesh Agricultural Development Corporation (BADC) in the process of change.

- The number of 23 senior managers of BADC were involved in this event.
- Draft of Vision and Mission statement for BADC (expected new role) and defined objectives, strategies, activities and "possible" performance indicators to be discussed with the BADC staff.
- Guidelines for designing a Human Resources Development Plan.
- Action Plan to overcome an identified problem within BADC.

EXRESSED EXPECTATION OF BADC ON THE NEXT STEPS TO WORK COLLABORATIVELY WITH IIMI

"... BADC's activities would expectedly be continuous monitoring and evaluation of relevant undertakings, innovation and diffusion of appropriate technologies and training and development....

In this context, there is a pressing need for BADC to embark on the task of re-orientation of its functions....

And in this area BADC could draw on the expertise of IIMI in its efforts to manage changes."

(MR M A KALAM'S LETTER OF 26 OCTOBER 1992, REF NO. 845, TO DR A LENTON, DIRECTOR GENERAL, IIMI)
### 1.2 Training Individual Managers:

#### 1.2.1 IWMI'S Special Awards

<table>
<thead>
<tr>
<th>MAJOR ACTIVITIES</th>
<th>OUTPUTS</th>
<th>IMPACTS</th>
<th>RECIPIENTS' PERCEPTION OF THE IMPACT ON THE PROGRAM OF HIS CAREER</th>
</tr>
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<tbody>
<tr>
<td>1. Writing a case study about the successful management techniques used in the field.</td>
<td>• Publication of 4 case studies</td>
<td>• Two of the Special Award case studies were translated into training modules for the training modules for DIF in Malaysia and both are highly evaluated by the participants of the programs.</td>
<td>1. &quot;I became more popular because of the circulation of the case study report among a large number of irrigation professionals.&quot;</td>
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<td>• The number of four recipients were reached by this program.</td>
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<td>2. &quot;It gave me a chance of being a consultant.&quot;</td>
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<td></td>
<td>• Translation of two case studies into training materials, slide shows, transparencies and worksheets.</td>
<td></td>
<td>3. &quot;The comments and constructive criticism from IWMI's researcher (program adviser) was invaluable in updating and correcting my understanding and knowledge.&quot;</td>
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<td>4. &quot;This program increased my interest in my job and improved my interpersonal relationship.&quot;</td>
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#### 1.2.2 Training of Technical Assistants in the Irrigation Schemes in Sri Lanka

<table>
<thead>
<tr>
<th>MAJOR ACTIVITIES</th>
<th>OUTPUTS</th>
<th>IMMEDIATE IMPACTS (Which are documented in the Self-Assessment Form)</th>
<th>PARTICIPANTS' IMMEDIATE PERCEPTION ON THE IMPACT OF THE PROGRAM ON THEIR BEHAVIOR</th>
</tr>
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<tbody>
<tr>
<td>1. Workshop on Performance Improvement and Sustainability of Irrigation Systems under Irrigation Systems Management Project, USAID.</td>
<td>• The three-day workshop of two days each were attended by a total number of 40 Technical Assistants.</td>
<td>• Increased awareness of developing leadership skills to perform better jobs as Technical Assistants.</td>
<td>&quot;I have improved my communication ability and working in group.&quot;</td>
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<td></td>
<td>• Action Plans which are expected to be implemented in the field.</td>
<td>• Increased interest in self-motivation, motivating farmers, staff and peers.</td>
<td>&quot;The strong point for me was group participation and exchange of view.&quot;</td>
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<td></td>
<td>• Training modules composed of general plan, objectives, exercise sheets, handouts, transparencies, slide show and flip charts.</td>
<td>• The participants' increased self-confidence and belief that they are capable enough to help farmers to understand and accept the TAs' advice to improve the system performance.</td>
<td>&quot;To receive orientation in modern way to understand and overcome existing and oncoming problems.&quot;</td>
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<td></td>
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<td>&quot;I learned to write action plans.&quot;</td>
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<td></td>
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<td></td>
<td>&quot;Gave me an understanding of planning, organizing and working as a leader-manager and how to keep the system in good shape.&quot;</td>
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CONCLUSIONS

As a result of the effective implementation of the management training activities for institutional development, the main conclusions are as follows:

1. IIMI's management training approach, presenting a defined plan (Training Cycle) has facilitated IIMI's interaction with its partners. It has raised expectation and developed confidence, trust among them.

2. The initial approach to the organization, using training as major concern has been proved to be very effective. It did not bring any "threat" to the organization and the program was welcomed.

3. The assessment of training needs through an interactive exercise, encouraging participation and open analysis of the staff jobs was very effective. It has developed understanding and increased awareness of the participants on their responsibilities to improve the performance of irrigation systems.

4. The development of the training capacity through the training of trainers within the organization has guaranteed the continuation of staff development for improvement of the organizations' performance.

5. One major factor which has helped the maintenance of the training quality within the organization was the production of training materials.

6. The evaluation and improvement of the training materials, based upon the feedback from the Malaysian trainers, gave them the feelings of ownership and developed commitment. This was a very strong point in this program.

7. Training has to be systematic and be a part of the Human Resource Development Plan.

8. The assistance provided by IIMI during implementation phase of the first training programs has developed seriousness and commitment among the trainers and DID top management.

9. The continuous process of evaluation during the program motivated participants and provided information for the improvement of the training program. These evaluations included: content evaluation, process evaluation (participants' self-evaluation on his/her personal development and group development), program evaluation (program plan, techniques, trainer performance, etc.).

10. The continuous contacts with the top management have given opportunities to discuss major problems of the organization, to advise on possible solutions and to influence the implementation of some actions, such as, to introduce strategic planning.
11. The strategic training process provided opportunities for the managers to analyze and evaluate the needs of their organization and develop better understanding of the total organization as a system of management.

12. Human Resource Development Plan can only come from a Strategic Planning Exercise which forces the organization to think about itself and its future.

13. The continuing implementation of the planned activities has developed motivation and interest within the organization.

CAUSALITIES AND FACTORS WHICH INFLUENCED THE RESULTS OF THE PROGRAMS

1. IIMI's interest and support to the Training Unit to implement the training cycle which promoted better understanding on the needs of the strategic planning, human resources development plan and research for quick responses to the systems' problems in Malaysia.

2. IIMI's reputation as a research institution in irrigation management which is a new area of concern. This raised the trust of the clients towards IIMI's experience in other countries and the results of its studies.

2. The commitment of the experts who led the activities aiming to improve organizational results.

3. The clear commitment of the top management and the trainers of the organization who participated in all stages of this program.

4. The country's external environment which is supportive to increase the quality of services among all organizations to accomplish the "Vision of Year 2020" which is making Malaysia to be a developed country in that year.

5. The Government's decision on privatizing major activities of BADC. This has raised interest and commitment of the top management to reorganize and continue the services of the institution to fulfill the needs of the farmers in Bangladesh.

LESSONS LEARNED AND RECOMMENDATIONS

1. To be successful, management training and development must have support from the top management of the National Organizations who must devote sufficient time and effort to participate in it.

2. The involvement of two national trainers, as part of IIMI/DID team in all activities of this program, has provided excellent results. They developed deep sensitivity and understanding of the whole process, including great responsibility for the success of the program.

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3. IIMI's research results were invaluable contribution to strengthening the training program in Malaysia.

4. The discussion of the research studies and its recommendations developed useful insights for the participants to analyze their own environment, assess problems and propose possible solutions. This research information from different countries was considered very helpful and relevant by the participants.

5. The interactive exercise used during the development of all management training activities has facilitated a better understanding of the participatory approach for better management of the organization.

6. This management training program brought the entire organization together, i.e. managers from all levels have participated in this program.

7. The three stages of the management training for institutional development demonstrated to be effective to sensitize managers on the needs of (a) developing human resources within the organization to strengthen the management capability; (b) defining an integrated and systematic approach to the management and coordination of the total range of activities for an agency; and (c) developing research skills to investigate problems and propose relevant solutions for the organization.

8. The IIMI Training Team has to be inter-disciplinary, involving professionals in irrigation management and practitioners of national organizations.

9. To ensure sustainability of this program, the activities in national countries need to be continuously followed-up and evaluated with the assistance of IIMI.