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**EVALUATION REPORT  
OF THE  
OPERATIONS LEVEL MANAGEMENT PROJECT**

*implemented by*

*The MEDEX Group*

*The John A. Burns School of Medicine,  
University of Hawaii*

*from September, 1987 through January, 1992*

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## **EXECUTIVE SUMMARY**

### **Background**

The MEDEX Group is a unit of the John A. Burns School of Medicine at the University of Hawaii. It has been involved in primary health care, training, and management development in developing countries since 1972. Through its extensive involvement in health care delivery programs in many countries, MEDEX recognized that managerial problems, and weaknesses in management support systems, are a significant limiting factor in sustaining service delivery at the district level. It developed a 6-step structured approach to systematically analyze and upgrade these management systems. In 1986 MEDEX submitted an unsolicited proposal to AID for funding to further develop and test this approach. At AID's request, the original 2-phase, 5-year, \$10.8 million project was reduced to a single-phase, 4-year, 6.1 million project. It was awarded non-competitively as a Cooperative Agreement for implementation from March, 1987 to August, 1991. A later no-cost extension was given until Jan. 31, 1992. Assessment visits to six countries led to the selection of Lesotho and Botswana as implementing partners. This project, called "Operations Level Management Development" by AID, was called "District Management Improvement" in the field, and is referred to as DMI in this document.

### **The Basic DMI Process**

The core, or heart, of the DMI project was the application of a structured, 6-step process for the analysis, redesign, installation, and evaluation of new or upgraded managerial systems. These systems included those for supervision, personnel, transport, drugs/medical supplies, finance, communications, health information, patient records and referral, maintenance, and training. The six steps in the process were: 1) Establishment of a Receptive Framework, 2) Management Needs Assessment, 3) Management Analysis, 4) Decision Making and System Redesign, 5) System Implementation and Training, and 6) Evaluation. The project recruited and trained ministry personnel as management analysts, supervised them in the study of the various systems, held decision making workshops to determine the content of the redesigned systems, wrote manuals to document the new systems, trained district level personnel in the use of the systems, and was to have evaluated the final impact and effectiveness of the systems.

### **Goal, Purpose, and Outputs**

DMI's goal was "to strengthen capabilities to implement and sustain health programs in Africa through improved management support for Child Survival and other primary health care (PHC) programs." It had two purposes: (1) "To conceptualize, design, and field test a comprehensive, prototype management development technology for strengthening operations-level management of PHC programs throughout Africa"; and (2) "To institutionalize this

management development technology within the Ministries of Health in Lesotho and Botswana."

The project's five specific outputs were:

- Output 1: "Comprehensive operations level management development process implemented and institutionalized in two countries."
- Output 2: "Four innovative management technologies developed and field tested: 1) Critical Incident Technology, 2) Case Study Technology, 3) Distance Learning Technology, 4) Resource Allocation Technology."
- Output 3: "Simple and appropriate management systems in place at the operations level supporting PHC activities, and health personnel trained to use these systems."
- Output 4: "Functioning supervisory system, linked to an ongoing program of in-service training, providing regular, supportive supervision of PHC activities at the operations level."
- Output 5: "Twenty reproducible prototype manuals, modules, workbooks, and other materials field tested in two countries, for use in implementing management development in Africa."

### **Major Findings and Conclusions**

1. Despite implementation delays experienced in both countries, The MEDEX management development process appears to work, and to show potential for further development and application in other areas. The process succeeded reasonably well in Lesotho, and ran into difficulties in Botswana, in part because of problems of interministerial coordination. Significant learnings occurred which could improve the probability of success if this approach were tried in other countries. The project successfully demonstrated that a ministry can be engaged in an analytical and decision making process resulting in redesigned management systems and manuals to document those systems. What was not demonstrated by this project, mainly because they ran out of time, was that the improved systems can be put in place at the district level and made to work in support of the delivery of more and better services. Almost everyone interviewed believes the manuals to be well written and useful, but they are worried about implementation and follow-through. The revised systems, recently introduced, have not been in place long enough to take root. It is simply too early to measure or judge the ultimate impact or effectiveness of the redesigned systems.
2. This project was not able to complete everything it set out to do. The project intended not only to design and field test an innovative approach to management improvement, which it did do, but also to institutionalize the process in the ministries of health in the two countries, which was partially accomplished. As important, it was to put improved management systems "in place at the operations-level." This has not yet happened: new systems have been introduced, but they are not yet functional at the district level. According to the original project implementation schedule, the "system implementation and training" step (Step 5 of the six-step process) was to have

been initiated by month 14 of the project. This step was actually begun in month 35 in Lesotho and month 43 in Botswana. Because of these delays, there is little evidence currently available to say that improved systems are in place, that personnel have received adequate training to operate the systems, and that the systems are positively affecting the quantity or quality of Child Survival or PHC services being delivered. MEDEX made a conscious decision to give priority to the development and testing of the full range of technologies knowing that this might impact the implementation and evaluation stages of the project.

3. MEDEX originally proposed a 5-year project. At AID's request, the project was reduced in scope and price into a 4-year project. The evaluation team believes that the project's scope and implementation schedule were not appropriately adjusted to fit the shorter time frame and reduced budget. This, along with implementation delays, prevented the project from achieving some of its major objectives: putting the revised systems in place at the operations level; installation of an improved supervisory system linked to an ongoing program of in-service training; and the full institutionalization of the DMI process in the ministries of health.
4. The DMI approach and process works well in the following ways:
  - a. An entire project focusing specifically on management strengthening sends a powerful message that "management" is important, and deserving of independent efforts aimed at its improvement.
  - b. The approach provides an organized, structured framework for data gathering, analysis, presentation of findings, participative decision-making, and documentation of the redesigned systems in the form of manuals which are then used to train workers to implement the new systems.
  - c. The process trains and involves local people in data collection, analysis, the formulation of recommendations, decision-making, and in the implementation of the new systems. There is limited reliance on outside experts.
  - d. The process is visible, open, democratic, and possesses valuable elements of bottom-up involvement in decision-making.
  - e. When completed, the process builds capacity at the local level and supports the decentralization of decision making and service delivery.
5. The evaluation team supports the contention that it is the DMI process itself, and not just the final product, that is important. Any country desiring to improve its own management systems must start from a thorough analysis of its own situation, problems, resources, patterns of behavior and bureaucratic organization. A properly structured process, such as that developed by MEDEX, can effectively organize and support this process of self-examination, leading to decision-making, manual preparation, and implementation planning. It is this process that builds understanding, skill, and commitment to implement and use the new or redesigned systems. To simply hand out a "prototype" manual could short-circuit or undercut the less tangible but important benefits of going through the process. However, well written manuals can also serve as models that illustrate the level of detail and other characteristics of effectively functioning systems.

6. Where no systems or very weak systems existed, the DMI process worked well to create them, and ran into little resistance. Where reasonably well developed systems were already in place, more resistance and delays were encountered. Additional criteria, including "political volatility" and "interministerial impact" are needed as selection criteria for systems to be redesigned. Addressing less contentious systems first could build skills, experience, and credibility before taking on the more controversial systems.
7. A distinguishing characteristic of the MEDEX approach is that it focuses specifically on management improvement: it creates a "critical mass" of talent and resources focused on that important goal. Once a ministry has gone through the process under the guidance of MEDEX, it has the skills, methods and materials to continue the management improvement process independently and at relatively low cost.
8. The time, resources, and energy devoted to the development and testing of the four technologies, particularly in the early phase of the project, was a distraction to the main thrust of the project. Only one of the technologies, Critical Events (also called Management Events), proved directly useful or relevant to the core management development process. The case study and distance learning activities could have contributed more to the training and implementation step of the process, but appear to have been used in relative isolation.
9. "Establishing a Receptive Framework" is not just the first step of the DMI process: it is a major ongoing activity which, if neglected, can seriously compromise the whole effort. Understanding, commitment and participation in the process needs to be constantly rebuilt, renewed, or reestablished, particularly at the central level. Project staff went to great lengths to do this, but agreed that more could have and should have been done.
10. This project had three main areas of work: 1) the development and testing of the 6-step process and the four supportive technologies (see Chapter 5), 2) the analysis and redesign of the management systems culminating in written manuals, and 3) the training, installation, and evaluation of the systems at the district level. In this third area, the project lacked a carefully articulated training plan to install the new systems in the districts through the teaching of specific skills and competencies to operations level personnel. The original plan called for a "competency-based management training program developed and carried out to prepare district-level personnel to work within the re-designed systems." This competency based training (CBT) training was to have been based on detailed job analyses. In the view of the evaluation team, much more work is needed to design and deliver skill, concept, and competency building activities targeted at individual workers, that will result in better understanding and use of the new management systems.

**Recommendations:** Please see Chapter XII for additional, and more detailed recommendations.

1. The MEDEX DMI Project demonstrated that its management improvement process works successfully for the analysis and design of new systems. It is unfortunate that implementation delays and lack of time prevented the demonstration that the systems can be made to work at the operations level. This last, critical step needs to be made and evaluated. MEDEX fielded excellent personnel, and developed very good materials. The process shows potential for further development, and is probably transferable to strengthen vertical programs as opposed to general systems.
2. Any new project should give much higher priority to installing, testing, and evaluating the systems at the operations level to insure that they are improving effectiveness and increasing the quality and quantity of health care services being delivered. It should have a carefully articulated plan to install the new systems at the district level by teaching specific skills and competencies to operations level personnel. Effective supervision, training, consultation, adaptation, and evaluation will be required to assure that the new systems are in place and functioning.
3. The installation of new systems, and the integration of new behaviors at the district level takes substantial time and effort. Five (or more) years is a more appropriate time frame for a project seeking to train analysts, conduct studies, redesign systems, write manuals, and then put those systems in place at the district level. In addition, a project like this needs two long term advisors, one to lead the systems redesign process, and the second to lead the training and systems implementation efforts.
4. Additional project design elements and tactics are needed to achieve and sustain the "receptive framework", i.e. the continued support and involvement of central level personnel. This could be done through "special" short courses for senior level managers, technical review committees, stronger advisory groups, mentors for the management analysts, and involvement of central level officials in training, implementation, monitoring, and evaluation.
6. Installation and use of the new systems now depends on the work of the project's counterparts over the next year or two. Unless these counterpart positions are created so that implementation activities can continue, the real potential payoffs of this project will not be realized. Serious questions exist about establishment of these positions, at promised grade, and salary levels. The MEDEX Group and the USAID Missions may want to explore how they can persuade or assist the ministries to establish the posts and provide minimal operation funds for travel and workshops. Other donors are interested in supporting the work of this project. The WHO Representative in Lesotho views the work of this project as central to WHO's agenda in the country. Additional donor coordination could result in additional payoffs from investments already made.

## ACRONYMS

CHN	Community Health Nurse
CS	Council Secretary
CBT	Competency Based Training
DHCCC	District Health Care Coordinating Committee
DL	Distance Learning
DMO	District Medical Officer
DPS	Deputy Permanent Secretary
DPSM	Directorate of Public Service Management
ES	Establishment Secretary
FHD	Family Health Division, MOH
HSA	Health Service Area (Lesotho)
IAE	Institute of Adult Education (Univ. of Botswana)
IDM	Institute of Development Management
MCH/FP	Maternal and Child Health/Family Planning
MLGLH	Ministry of Local Government, Lands and Housing (formerly MLGL)
MOH	Ministry of Health
NHI	National Health Institute
PHAL	Private Health Association of Lesotho
PHC	Primary Health Care
PHCCC	Primary Health Care Coordinating Committee
PHC/SD	Primary Health Care Support Division
PS	Permanent Secretary or Principal Secretary
RAT	Resource Allocation Technology
SGDO	Supervisory General Development Officer
SIAPAC	Social Impact and Policy Analysis Corporation
SNS	Senior Nursing Sister
UB	University of Botswana
ULGS	Unified Local Government Service (Botswana)

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## **CHAPTER 1: BACKGROUND**

### **A. The MEDEX Group and Its Approach to PHC**

The MEDEX Group is a unit of the John A. Burns School of Medicine at the University of Hawaii. It has been involved in Primary Health Care (PHC) since 1972 providing technical assistance and implementing PHC programs in several countries: Training mid-level health workers in PHC in Micronesia (1973-74 and 1979-80), Thailand (1974-76), Guyana (1976-79) and Pakistan (1977-80); training nurse clinicians in Lesotho (1978-84), and training management analysts and assisting in developing an integrated PHC program in Liberia (1984-88).

During this period, MEDEX developed a new approach to PHC consisting of methods and material for use in developing more effective PHC programs with a specific focus on mid-level health workers, training of supervisors and community health workers, and improving management systems. This approach culminated in the publication of a 35 volume MEDEX Primary Health Care Series, currently used in 82 countries and translated into 33 languages.

Implicit in the MEDEX Approach is the need for improved management support of PHC systems; e.g., that there must be a strong, well-organized management system to support and maintain health staff and health care operation, and that provision of training or commodities is futile, unless there exists a management infrastructure capable of supporting PHC workers. In MEDEX' view, the conventional approach of focusing on increasing skill levels of local managers through in-country workshops and training abroad is ineffective, because when managers return with upgraded management skills, they often find their efforts to improve the management of their organizations' resources frustrated by an unsupportive and dysfunctional management environment. Recognizing this problem, MEDEX has developed a methodology which is a new way of improving the management system in which managers operate.

The concept of management analysis first published in the Series provided for training of management analysts at the district level. These techniques were field-tested and applied in Liberia where 21 MOH officials were trained as management analysts. Encouraged by the Liberia experience, MEDEX embarked on a project to field-test and refine materials and methods for PHC management improvement, beginning with what MEDEX saw as the first phase of the DMI project.

### **B. AID - MEDEX Relationship**

AID has collaborated with MEDEX since 1974. This collaboration includes early inter-departmental arrangements between AID and the previous Department of Health,

Education and Welfare (HEW) as well as centrally-funded and bilateral AID-funded contracts. A brief overview of central grants includes:

1. MEDEX Resource Services, Phase I and II (1972 - 1977), funded by HEW, developed the MEDEX concept for use in the U.S. A system for training and deploying mid-level health practitioners was developed and implemented in nine medical schools across the U.S.
2. MEDEX PHC Support Project (1974 - 78), funded by AID, included prototype training modules, assisting MOH setting guidelines for health sector planning, implementation and evaluation, and providing technical assistance in health sector analysis, project design and project documentation in Guyana\*, Thailand and Pakistan.\*
3. MEDEX Primary Health Care Systems (1978-83) completed the development of the MEDEX Primary Health Care Series and provided technical assistance to Pakistan, Lesotho and Guinea in design and operation of improved PHC systems.
4. Lesotho Rural Health Development Project (1979-84) developed a complete training and development system for training of nurse clinicians and community health care workers.
5. MEDEX Support (Dissemination and Utilization) Project (1983-88) funded the printing and dissemination of 200 sets of training modules and related teaching materials (The MEDEX PHC Series.) MEDEX also assisted MOHs and other health organizations interested in utilizing the Series. (The project also included two training courses for nurses in management and clinical practice in Botswana in 1987.)
6. Southeast Region Primary Health Care Project (1984-89) funded the development and PHC management systems in two counties in Liberia.
7. Operations Level Management Development (1987-91) provides assistance to MEDEX to refine, test and apply a methodology for improving operations level health care management systems. This project is the subject of this evaluation report. At the field level, the project is called the "District Management Improvement" (DMI) project. It will be referred to as "DMI" in this report.
6. MEDEX Nurse Care (1988-93) is developing training systems for pre-service and in-service training of nurses with special emphasis on Child Survival.

\* Funded by USAID Missions

Most of the above projects were evaluated. These external evaluations were consistently positive, recommending a continued relationship with MEDEX.

### **C. DMI's Original Project Proposal**

1. **Project Development:** In June 1986, MEDEX submitted an unsolicited proposal entitled "Operations Level Management: A Proposal to Strengthen and Sustain Health Programs in Africa." The original proposal was for a seven-year effort over three phases with an initial implementation plan of five years (Phase I and II) at an estimated cost of \$10.8 million. AID/W technical reviews concluded that the proposal was too ambitious in terms of scope, timetable and cost, and MEDEX was advised to redesign the project to cover an initial implementation period of four years at a cost of approximately \$5 million, and linking project activities to AID's child survival efforts. MEDEX revised the proposal, requesting \$6.1 million over a four year period and resubmitted it to AID/W in April 1987.
2. **Issues:** Technical reviews were held in May 1987 and the proposal was conditionally approved subject to resolution of several issues such as (a) development of a more detailed implementation planning phase into overall design, (b) country selection, (c) budget review to assure that adequate resources would be provided to the field and not to MEDEX headquarters in Hawaii, (d) more collaboration with regional management institutes and (e) efforts to work with the private sector. MEDEX was also asked to provide an evaluation plan and focus their project in child survival emphasis countries.
3. **MEDEX Response:** In response to these concerns, MEDEX provided an addendum to its proposal which was reviewed by AID/W and approved. Essentially, MEDEX agreed to add a more explicit pre-implementation planning stage to the project during which two countries would be selected and detailed country plans would be developed. These plans were reviewed and approved by the respective Missions involved and by AID/W. MEDEX would also secure written host country approval of country plans. In addition, MEDEX agreed to provide a more detailed evaluation plan during the initial implementation period. For any issues that were not fully resolved, language would be included into the MEDEX agreement which would provide the necessary assurances required by AID/W.
4. **Country Selection:** Potential project countries had originally included CS emphasis countries such as Kenya, Malawi, Nigeria and Sudan as well as non-CS emphasis countries such as Ghana, Lesotho, Swaziland and Zambia. After AID/W sent a world-wide cable to USAID Mission, and followed up by individual visits by MEDEX, only Lesotho, where MEDEX had previous work experience through its six-year Lesotho Rural Health Development Project (RHDP), and Botswana, where MEDEX also had conducted a previous Nurses Training Project, responded positively. An AID/W evaluation in Lesotho in October 1986, two years after project termination, found the RHDP training program to be successful.

5. MEDEX Request for a Phase Two Extension and AID/W Response: MEDEX originally saw the project as divided into two phases:

**Phase I** had a two-pronged approach: 1) To institutionalize a comprehensive Operations-Level Management Technology within the MOH in two African countries, and 2) to conceptualize, design and field-test operational-level management technologies resulting in reproducible prototype manuals, modules, workbooks and other management materials.

MEDEX also envisioned a **Phase II** which would use the Operations-Level Management Technology to support health programs in three additional African countries; publish a comprehensive, adaptable, prototype Operations-Level Management Technology for Africa, and transfer it throughout Africa; as well as assist African countries in the adaptation and use of this prototype management technology.

The original PACD for the DMI project (Phase I) was August 31, 1991. To be able to finalize the prototype material, MEDEX asked, and was granted, a five-month no-cost extension, extending the PACD to January 31, 1992. However, AID was unwilling to fund another phase of the project, and instead encouraged MEDEX to bilateralize, emphasizing that "future activities . . . be negotiated through agreements/contracts with USAID Missions interested in the MEDEX management technologies."

6. AID Involvement During Implementation: AID/W's backstop responsibilities during the LOP experienced a lot of instability; no fewer than 5 different project officers backstopped the DMI project over the four year project span. USAID Missions, for the most part, practiced a cordial, but hands-off policy to project implementation.
7. Evaluation An external evaluation was scheduled and postponed at least three times (Oct. 1990, March 1991, May 1991). These postponements had a negative impact on the project implementation, especially in Botswana, which had reached an impasse with its implementing agencies and could have used the external evaluation report and recommendations to address the problems. This, however, should not have precluded MEDEX from undertaking an independent action or an in-house evaluation that could have recommended alternatives to speed up implementation and solve bottlenecks.
8. Relevancy of DMI to AID Goals in the Health Sector: The DMI project is relevant to AID's policy of strengthening governments' abilities to build and sustain health services. Section 3 (a) and (b), Delivery of Child Survival Services, of AID's Policy Paper on Health Assistance (Revised) (1986) states that "in countries with high infant and child mortality . . .and where government infrastructure are lacking or very

weak . . . strengthening of the government service delivery capability are important to building and sustaining child survival services." It also says that "Improvements in essential management systems required to implement child survival service delivery such as improved information systems, training, supervision, drug/vaccine procurement and logistics systems are necessary."

## CHAPTER 2: PROJECT DESCRIPTION

In March of 1988, the District Management Improvement (DMI) Project was established in Botswana and Lesotho, and work began. The project was originally expected to end on August 31, 1991, but MEDEX requested a five month unfunded extension so work could continue in country until December 31, 1991. The final Project Activity Completion Date (PACD) is January 31, 1992.

### A. Project Goal, Purpose and Outputs

1. **Goal:** The goal of the DMI project is "to strengthen capabilities to implement and sustain health programs in Africa through improved management support for Child Survival and other primary health care (PHC) programs."

2. **Purpose:** MEDEX had two purposes to accomplish during this project:

- a. To conceptualize, design and field test a comprehensive, prototype management development technology for strengthening operations-level management of PHC programs throughout Africa; and
- b. To institutionalize this management development technology within the Ministries of Health in Lesotho and Botswana.

3. **Outputs:** The project had five specific outputs:

Output No. 1: "Comprehensive operations-level management development process implemented and institutionalized in two countries." This output refers to the DMI 6-step process (see Chapter 4).

Output No. 2: "Four innovative management technologies developed and field tested: 1) Critical Incident Technology, 2) Case Study Technology, 3) Distance Learning Technology, 4) Resource Allocation Technology."

Output No. 3: "Simple and appropriate management systems in place at the operations level supporting PHC, and health personnel trained to use these systems."

Output No. 4: "Functioning supervisory system, linked to an ongoing program of in-service training, providing regular, supportive supervision of PHC activities at the operations level."

**Output No. 5:** "Twenty reproducible prototype manuals, modules, workbooks, and other materials field tested in two countries, for use in implementing management development in Africa."

4. **End-of-Project Status:** At the end of the project, it was expected that 1) four management technologies would be developed; 2) a comprehensive operations-level management development process would be implemented and institutionalized in Lesotho and Botswana; 3) simple and appropriate management systems would be in place which support PHC/CS activities, including trained personnel able to use these systems; 4) a functioning supervisory system linked to an on-going in-service training program and 5) reproducible prototype training manuals, workbooks and other materials developed and field-tested for use in Africa.

B. **Discussion of Project Plan:** The six-step management development process was conceived as the cornerstone of MEDEX's proposed project. Parts of the process had been developed and used successfully in other countries, but this was MEDEX's first opportunity to go through the entire process from establishing a receptive framework to evaluation. The MEDEX Group believed that project activities would produce managers with improved management skills operating redesigned management systems in their districts. MEDEX also intended to complete management systems manuals, manuals instructing others how to improve management systems, and other materials both for continued use in Botswana and Lesotho and as prototypes for use in other African countries.

Because of their complexity, the five outputs are described here in more detail:

**Output No. 1:** "Comprehensive operations-level management development process implemented and institutionalized in two countries."

This output refers to the six-step process that constitutes the core activity of the project. The six steps are:

1. **Establish Receptive Framework.** To create understanding of the goals of the project and build commitment to the DMI process, a number of activities were carried out. They included meetings with key policy-makers, workshops and seminars with senior staff to keep them abreast of project progress, and individual meetings with senior-level staff.
2. **Management Needs Assessment.** Needs were to be identified by using: a) the critical incident (or management events) technique; b) documentation by managers in daily diaries; c) interviews; and d) observation.

3. **Management Analysis.** This was to be accomplished by systematically analyzing the operations-level organizational structure and management systems and then developing recommendations for new systems or to address weaknesses in existing systems.
4. **Decision Making and System Redesign.** Large, national level meetings were to be held to debate recommendations, discuss proposed new systems, and formalize decisions on changes that would be made. Management analysts and consultants would then develop manuals to document the new systems.
5. **System Implementation and Training.** MEDEX planned to provide competency-based management training for all operations-level personnel to support the implementation of the action plans, using case studies, distance learning, and other training methods.
6. **Evaluation.** The plan was to assess the effectiveness of the improved systems and practices in meeting the needs identified in Step 2. Evaluations were to be carried out at six-month intervals.

**Output No. 2: "Four innovative management technologies developed and field tested: 1) Critical Incident Technology, 2) Case Study Technology, 3) Distance Learning Technology, 4) Resource Allocation Technology."**

1. **Critical Incidents (later, Management Events).** This is a needs assessment method in which managers are asked to describe a recent positive event and a recent negative event pertaining to a particular management system.

In this project, district managers would be asked to describe a positive and a negative incident related to the management systems used in the health care sector, such as transport, drug supplies, supervision, maintenance, personnel, patient records, etc. The method was to be used by project staff to identify operations-level management needs (Step 2 of the DMI Process). MEDEX planned to refine the technique for future use by district managers.

2. **Case Studies.** The case study method uses a written description of a realistic situation in which there are a number of problems that learners are asked to identify, analyze and resolve.

MEDEX planned to develop local capabilities in writing, editing, adapting and teaching cases. The cases were to deal with dispute settlement, conflict resolution, management of limited resources, and other management problems and were to be used during the training and implementation phase (Step 5) of the DMI Process.

3. **Distance Learning.** This term refers to any educational endeavor in which the teacher and learner are separated by space.

Distance learning was to be used to provide management training for geographically isolated operations-level health staff in order to support the supervision process. It was to be used in the training and implementation phase and later as an in-service training and supervision tool.

4. **Resource Allocation.** This is a method for selecting communities toward which to direct resources by identifying those with the greatest willingness and ability to support primary health care interventions.

A set of indicators was to be developed which operations-level managers could be taught to adapt and use for allocating resources to communities where they would be likely to have the highest success. This tool was to be used in the training and implementation phase.

**Output No. 3: "Simple and appropriate management systems in place at the operations level supporting PHC, and health personnel trained to use these systems."**

This output is closely related to Output No. 1, the management development process, and should be an outcome of that process. By the end of the project, these systems were to be in place in the districts, and operations-level health staff were to be trained to use them. In the cooperative agreement this training was described as "competency-based results-oriented training . . . which focuses on the development of essential job-related management skills."

**Output No. 4: "Functioning supervisory system, linked to an ongoing program of in-service training, providing regular, supportive supervision of PHC activities at the operations level."**

In its proposal, MEDEX made supervision a separate project output in order to emphasize its importance in the health care system. Improved supervision was believed to be "crucial to the success of the project" because it is "the 'glue' that holds a PHC program together." MEDEX intended to: a) include supervision among the systems to be analyzed and redesigned in both countries; b) identify the skills and approaches that were being used by effective local supervisors; and c) train "large numbers of operations-level health personnel to use these same skills and approaches", thereby creating a "critical mass" that could generate interest in supervision among their peers.

**Output No. 5: "Twenty reproducible prototype manuals, modules, workbooks, and other materials field tested in two countries, for use in implementing management development in Africa."**

MEDEX proposed to prepare prototype manuals based on the materials used in the project's management development efforts in Lesotho and Botswana and to make these prototype, or generic, materials available to other African countries.

## CHAPTER 3: ADMINISTRATION OF THE PROJECT

### A. Long-Term Advisors

The project was originally designed for two Long-Term Advisors in each country, but one position was cut when the proposal was revised and the budget was reduced. That left only one long-term expatriate advisor in each country.

The Long-Term Advisors were responsible for managing the project in their countries and taking the technical lead in initiating and carrying out the DMI Process. Perhaps the most time-consuming of their duties was establishing a climate that was receptive to the DMI Process and continuing to keep commitment to the project strong at both the central and district levels. They also conducted seminars, workshops and other meetings, designed and facilitated group training, and developed many of the materials that were used during the project.

MEDEX/Hawaii technical staff were also closely involved with the project spending an average of five person months a year in Botswana and Lesotho.

To get the work done, MEDEX relied heavily on short-term consultants, both expatriate and local. For example, in Lesotho, 40 individual consultant trips totaling approximately 30 person months of technical assistance time, was provided by expatriate consultants. This included backstopping trips by Hawaii-based staff.

Both countries needed a second full-time advisor to finish the work that MEDEX set for itself, even if the counterparts (see below) had not left for graduate studies in the U.S. This would have allowed more to have been done to implement the improved management systems at the district level.

### B. Counterparts

Each of the Long-Term Advisors had a full-time counterpart who took on many project responsibilities and who would be assigned to take over activities after the termination of the project. The counterparts were particularly important in helping to establish a receptive framework in the ministries, the Private Health Association of Lesotho (PHAL), other donors and organizations. Once trained, they were also able to carry out essential functions of the DMI process, such as the conduct of management analyses, supervision, case writing, and group training.

During the project each of the counterparts completed master's degree programs in health administration at Harvard and Boston Universities. While this helped to increase their knowledge and skills and their credibility within the ministries, their absences for more than a year essentially cut full-time project staff in half.

The absence of the counterparts caused delays in implementing some parts of the project and cut the informal lines of communication that they had established with key decision-makers. However, when they returned they could demonstrate new credentials and reestablished relationships fairly quickly.

In Botswana, a Project Associate from the Institute for Development Management (IDM) functioned almost as a full-time staff member for a two-year period, helping to fill the gap caused by the counterpart's studies abroad. He was trained in management analysis and case study writing during the project and is now teaching these and other DMI procedures at the Institute of Development Management, a training institution with programs in Swaziland, Lesotho, and Botswana.

At the end of the project, the placement of the counterparts in ministry positions in which they can continue the management development process continues to be a problem. No appropriate unit exists in either MOH and it is difficult to establish a new unit and a post for the counterpart for a variety of reasons, including structural adjustment rules which prohibit the creation of new posts, bureaucratic sluggishness, and personal rivalries. To date, the issue is still outstanding in both countries, not only causing hardships for the counterparts but also for the Long-Term Advisors who hope to see the new operational management posts in place and functioning before the contract ends.

## CHAPTER 4: THE MANAGEMENT DEVELOPMENT PROCESS

This chapter discusses the extent to which the DMI management development process (Output No. 1) was implemented in the two countries. The next four chapters will address Outputs 2 through 5. Then Chapters 9 and 10 will address the related issues of institutionalization and sustainability.

### **Output No. 1: "Comprehensive operations level management development process implemented and institutionalized in two countries."**

#### **A. The Six Step Process:**

The six-steps of the DMI management development process were:

- Step 1: Establish Receptive Framework
- Step 2: Management Needs Assessment
- Step 3: Management Analysis
- Step 4: Decision Making and System Redesign
- Step 5: System Implementation and Training
- Step 6: Evaluation

#### **Finding**

- o The DMI project fully completed steps 1, 2, and 3, only partially completed steps 4 and 5, and did not complete step 6.

#### **B. Establish Receptive Framework (Step 1)**

To establish the receptive framework, the project carried out extensive briefings, workshops, meetings, and consultations with a broad spectrum of individuals and groups at both the central and district levels, as well as with donor and private organizations. The objective of these activities was to build awareness of the importance of management strengthening, to explain the objectives of the project, to describe the process to be used, to build interest and commitment, and to create an awareness of the nature of the changes that would result from project activities.

#### **Conclusion**

- o The evaluation team agrees with project staff that "Establishing a Receptive Framework" is not just one step in the process: it is major ongoing activity which, if neglected, can seriously compromise the whole effort. Understanding, commitment and participation in the process needs to be constantly rebuilt, renewed or reestablished, particularly at the central level. Project staff went to great lengths to do this, but agreed that more could have

and should have been done. In both countries we spoke with central-level personnel who felt that they had been left out, were uninformed, or uninvolved in the process. Their support and involvement is critical to the ultimate adoption and use of the new systems.

In one country (Lesotho) an important innovation was successfully tried which should be considered as a formal element in the process. They created "technical committees" at the central level which included persons who would be involved with or affected by the new systems. These committees would review the findings and the management analysis reports prior to the large decision-making workshops. By reviewing and discussing the findings and recommendations in advance, many of these central-level individuals came to understand and become advocates for the recommended changes. Many of them later became "facilitators" in the implementation workshops done at the district level.

### **C. Management Needs Assessment (Step 2)**

To carry out the Needs Assessment, two methods, the "Nominal Group" technique and the "Management Events" (also known as Critical Incidents) technique, were used to assess management needs. The nominal group technique is a structured group analysis and decision making methodology where group members are asked to individually analyze a situation or rank problems before the group as a whole is asked to reach consensus on the rankings or priorities. This Nominal Group Technique was used with health care workers and managers to identify and prioritize the management systems to be analyzed. Management Events was used to characterize and document the strengths and weaknesses of each system and the nature of the problems that district managers were encountering. (The Management Events technique is discussed further in Chapter 5 of this report.)

#### **Finding**

- o The Management Events technology proved to be directly applicable to the core DMI approach and to be useful in two ways. First, it helped to identify those management systems most in need of improvement. Second, it created a database of positive and negative management events that was used in the Management Analysis step that came later.

### **D. Management Analysis (Step 3)**

The process of management analysis (Step 3) is seen by MEDEX as the cornerstone of the management improvement process. The analysis of a single system takes four to six months to complete, and includes:

- Development of criteria for selection of management analysts.

- Recruitment and selection of analysts. In Lesotho, most of the people selected were relatively junior officers from the central level of government. In Botswana, they were also relatively junior staff, but mostly from the district level.
- Analyst training and internships. A total of 24 analysts were trained-- 11 in Lesotho and 13 in Botswana. They were given an intensive three-week training program followed by a two-to-four week internship during which they studied a system or sub-system in a local business or ministry. The Manual for Improving Health Management Systems, Training Workbook, and Instructor's Guide were used in the training programs and subsequently to guide the analysis.
- Data collection. Following the structured process described in the Manual, analysts designed study questions, developed interview guides, selected a sample of districts, conducted interviews, studied documents and observed management practices in the sample districts. They also collected data at the central level.
- Data analysis and preparation of management analysis reports. The reports presented the findings, conclusions, and recommendations of the studies.

In Lesotho, eight management systems were analyzed (Supervision, Personnel, Maintenance, Transport, Drug Supply, Training, Communication, and Health Information).

In Botswana, seven systems were analyzed (Supervision, Personnel, Communication, Health Information, General Supplies, Maintenance, and Patient Referral). In addition, one component (the Cold Chain) of another system (Medical Supplies) was analyzed.

### Findings

- o The management analysts selected in both countries tended to be fairly junior officers from the lower rungs of the system. This did not cause a problem in Lesotho. In Botswana, the findings, reports and recommendations contained in the management analysis reports were sometimes questioned or rejected by senior level officials because the analysts themselves were considered to be too junior or too inexperienced to make these types of recommendations. The evaluators and the DMI staff believe, however, that more senior level people are not available for the up to six month period required for training, planning, conduct of the study, data analysis, formulation of recommendations, decision making, and manual writing.

- o Many of the management analysts interviewed reported that the three-week training course in management analysis was too intense, too short, and too stressful. Some reported that they would not repeat the process. Project staff and consultants from the Institute for Development Management, who carried out most of this training, agreed that the course should be modified to somewhat decrease the pressure. Otherwise, the management analysts felt that the training and the experience of writing the report was useful, taught valuable skills, and had been beneficial to their careers.

#### E. Decision Making and System Redesign (Step 4)

Step 4 consisted of holding national "Management Systems Design Workshops" (in Lesotho) and "National PHC Management Forums" (in Botswana) to bring together personnel from all levels in the system for the purpose of receiving the management analysis reports, debating the recommendations and making decisions about policies and procedures to be included in manuals that would document the redesigned systems. These were large meetings (one had 120 participants) which used smaller working groups to analyze the reports and make recommendations that would be debated, accepted, modified or rejected in large plenary sessions. Before the national forum, Botswana held two regional seminars for all of the district and town councils to review management analysis reports and to build commitment at this level to the change process.

After the workshops, consultants (approximately 50% expatriate/50% local) were hired to write the manuals, which were based on the management analysis reports and decisions taken at the decision making workshops.

#### Findings

- o In Lesotho, eight manuals were written, reviewed, finalized, approved, printed in volume (500 copies) and distributed to personnel in the Health Service Areas (HSAs).
- o In Botswana, four manuals were written: Supervision, Communication, Health Information, and Patient Referral. These were the four systems selected when it was decided in October of 1990 that DMI would only work on management systems for which the Ministry of Health was primarily responsible. Further development work was dropped on other systems that were more the responsibility of the Ministry of Local Government, Lands, and Housing (MLGLH).
- o In Lesotho, the Ministry of Public Service, which is responsible for the civil service, would not allow the Ministry of Health to implement a revised personnel system for the MOH only. Their judgement was that the proposed changes to policies and

procedures in one sector would create undesirable consequences across the entire civil service. This effectively blocked the implementation of this system within the MOH.

The Finance system was not subjected to a management analysis because it was a newly created system: the DMI project simply documented the system into manual form. DMI did not prepare a manual for the Health Information System because it was decided that it would be prepared in 1992 by a World Bank project. These were appropriate decisions that saved resources or involved other organizations in the DMI process.

- o In Botswana, the four manuals that were distributed to the districts are still in draft form. The evaluation team tried, but was unable to determine whether the manuals would be approved by the two ministries (MOH and MLGLH) or whether they would be printed and distributed by the government. Some district-level personnel, such as the Senior Matron in Francistown, were unwilling to use the manuals because they had not yet been approved: others were already using the manuals and said that central office approval was not required.
- o Some management analysts reported that it was not necessary to hire outside consultants to write the manuals, since the outsiders do not know the system, the bureaucracies, or the culture. Judgement must surely be used in the choice of manual writers, but consideration should be given to utilizing more host country personnel to write the manuals.

**F. System Implementation and Training (Step 5)**

This is the point where district level personnel receive training in the concepts and skills required to actually use and implement the new systems. The original intent was to ". . . use competency-based results-oriented training for operations-level personnel . . ." [and that this] ". . . management training must be integrated with the supervisory and continuing education systems . . . ."

The original implementation schedule called for Step 5 to begin in month 14 of the project. In Lesotho this step began in month 35 (November 1990) of the project; in Botswana it started in month 43 (July 1991) of the project. At the time of this evaluation, October 1991, four out of nine new or redesigned systems had been introduced into 14 of 18 Health Service Areas (HSA's) in Lesotho. Four more systems were to be introduced during November 1991. In Botswana, all four of the developed draft manuals were introduced beginning in July 1991 to a total of 120 personnel representing all 20 District and Town Council Health Departments and Primary Hospitals and Hospitals.

## Conclusions

- o Because the implementation and training step began so late in the life of this project, the evaluation team was able to detect little evidence that improved management systems are now in place at the district level, that personnel have received adequate training to operate the systems, and that the systems are positively affecting the quality or quantity of primary health care services being delivered. On the other hand, the Ministries liked the DMI process, believe the manuals to be useful and well-written, and believe that the implementation or use of the manuals will contribute to better functioning management systems in the future. Many persons interviewed, however, were worried about implementation and follow-through. Until more training, adaptation, supervision, and followup takes place it will be too early to measure or judge the impact or effectiveness of the redesigned systems.
  
- o Perhaps related to the "last-minute" implementation of the manuals at the district level was the lack of a carefully articulated training plan to teach specific skills and competencies. The grant proposal submitted by MEDEX called for a "competency-based management training program developed and carried out to prepare district-level personnel to work within the re-designed management systems." This CBT training was to have been based on detailed job analyses. Much of the training actually provided involved rapid overview-type introductions (three or more systems in a one-week workshop) that focused on how to use the forms in the manuals. In the view of the evaluation team, more work is needed to design and deliver skill and competence building exercises, targeted at the individual level, that will result in adoption and use of the new management systems. Unfortunately, the project ran out of time to do this.

## G. Evaluation (Step 6)

This step of the DMI project was to have included the evaluation of the short-term and long-term effectiveness of the improved management systems, the results of the project, and its impact.

### Finding

- o This step was not reached during the project. Indicators have been developed in Botswana that will measure the extent to which the new systems are being used, and plans are in place to collect this data in the future. In Lesotho a simple monitoring system has been developed that will provide Yes/No

answers to such questions as, "Has the office set up a filing system?", "Are supervision reports available for review?", or "Does the hospital have a preventive maintenance schedule for major equipment items?" No project evaluation activity (other than this evaluation) has been developed to measure overall impact or the status of the management systems which were to be "in place at the operations level supporting PHC activities . . ." by the end of the project. An instructor's manual and a student text on evaluation were developed; it appears that these may be for the use of district-level health managers rather than for MEDEX.

Conclusions related to the overall six-step process:

- o The overall MEDEX management development process appears to work and to show potential for further development and application in other settings. The project demonstrated that a ministry can be successfully engaged in an analytical and decision-making process resulting in redesigned management systems, manuals to document those systems, and training activities to put those systems into operation. The DMI approach in this project focused on the redesign and upgrading of general management systems, such as supervision, maintenance, training, or transport. Various people in both countries expressed an interest in applying the DMI approach to vertical programs, such as EPI, Family Planning, or AIDS. The evaluation team believes that the process is transferable and that consideration should be given to testing the approach at the program level.
- o The major disappointment of this project, from a research and development point of view, was its inability to actually install the systems at the operational level and then to evaluate their impact on the efficiency and effectiveness of service delivery. This was caused, in the opinion of the evaluation team, by a number of implementation problems, and flaws in the project design. The design was unrealistically ambitious, delays were caused by the unanticipated year-long absences of the two counterparts, and the training/implementation phase of the project probably deserved the attention of a second full-time advisor. Nevertheless, significant learnings occurred which could improve the probability of success if this approach were tried in other countries.
- o In both countries, high priority was given to the redesign of the personnel, transport, and supervision systems, all of which are contentious, sensitive, and "political." It is interesting to note that in neither country was a redesigned personnel system implemented: changes in this area were blocked or delayed because they would have implications across the whole civil service. Proposed changes in supervision and transport also had interministerial implications. Perhaps "political sensitivity" and "interministerial implications" should be included as explicit selection criteria for establishing the priority or sequence

in which the various systems will be studied and redesigned. Consideration should be given to analyzing and redesigning some of the less contentious or less difficult systems earlier in the process. This would allow the project to build skills, gain experience, establish credibility, and show useful results before the "tough nuts" are tackled.

## CHAPTER 5: THE FOUR TECHNOLOGIES

This chapter analyzes project outputs and successes related to the development and testing of four technologies (Output No. 2)

**Output No. 2: "Four innovative management technologies developed and field tested: 1) Critical Incident, 2) Case Study, 3) Distance Learning, and 4) Resource Allocation."**

### A. Critical Incidents/Management Events

This strategy was used to assess health management needs. The process included:

- 1) Development of a questionnaire asking managers to describe a positive and negative event in each system.
- 2) Data Collection. All districts were canvassed in Lesotho. Both the management events and nominal group techniques were used in seven of the 18 Health Service Agencies (HSAs) there. Only the nominal group technique was used in the other HSAs. In Botswana all 20 district and town councils were canvassed using the management events technique.
- 3) Analysis of data. The management events data revealed the areas in which health workers felt they had the greatest management skills and those in which they were weakest. In Lesotho, the systems ranked in order of priority for improvement were:

- |                               |                                  |
|-------------------------------|----------------------------------|
| 1. Personnel                  | 6. Transport                     |
| 2. Supervision                | 7. General Supplies              |
| 3. Maintenance                | 8. Communication                 |
| 4. Finance                    | 9. Health Information            |
| 5. Drugs and Medical Supplies | 10. Patient Records and Referral |

In Botswana, the order of priority was:

- |                  |                           |
|------------------|---------------------------|
| 1. Transport     | 6. Maintenance            |
| 2. Supervision   | 7. Health Information     |
| 3. Personnel     | 8. Drugs/Medical Supplies |
| 4. Communication | 9. General Supplies       |
| 5. Finance       | 10. Patient Referral      |

## Findings

- o Personnel and Supervision were ranked among the top three priorities in both countries, yet in neither country was a redesigned personnel system implemented because of interministerial turf battles and policy disputes. The ministries responsible for the civil service felt that it was not MOH's responsibility to address personnel and supervisory policies, but theirs. While supervisory skill training needs were eventually addressed by the DMI project in both countries, it was done so only after a great deal of discussion. (See Chapter 7 for more details.)
- o "Training" was not included in either ranking, although in Lesotho the system was analyzed and a manual written, apparently in order to have an example for prototype development.
- o The research findings from the analysis of the Management Events were presented to central-level decision makers. They appreciated the fact that this methodology identified what was working well, not just what was wrong.
- o The Management Events technique was useful not only for identifying priority management needs of operations-level managers. The findings also served as a database for carrying out the Management Analysis studies.

## Conclusions

- o Both project staff and evaluators agree that this technology contributed directly to the main activity of the project, the DMI Process. It served important functions in setting priorities, building a useful database and helping to create interest in, receptivity to, and understanding of the project in the districts. An important characteristic of the technique is that it carefully identified strengths as well as weaknesses. This built motivation by identifying and building upon what was being done well.
- o Management events can be an effective technique for assessing needs if the extensive data are objectively analyzed and the findings used. A user's manual would help by describing the analysis process, as well as design and data collection steps, and how to use the findings. If, however, one simply wants to rank management systems in order of priority, a faster and less expensive method, such as the nominal group technique, makes more sense.

## **B. Case Studies**

Ten participants from Lesotho and six from Botswana received training as case writers in two three-week seminars.

A total of 12 cases were developed during the workshops, and four more were developed later by a Case Resources Group formed at the University of Lesotho. Case topics included dispute settlement, resource allocation, and other management issues.

The cases produced by the local writers were used to conduct management training in eight Health Service Areas in Lesotho. In Botswana, they were part of the manual implementation workshops, so health management team members from all 20 District Councils have been exposed to them. Also in Botswana, District Medical Officers have attended a workshop on the use of cases as a tool for in-service management training.

In addition to the case notes for the instructor that accompanied each case, a separate technique was tried for use in situations where no instructor was available. These "leaderless" case materials were tested in Lesotho, but were not entirely successful. MEDEX believes that more developmental work is needed to refine the use of cases in a "leaderless" setting.

### Findings

- o The Case Resource Group at the National University of Lesotho is using cases in their classes, attracting the attention of other teachers who want to learn the method.
- o Representatives of the Institute of Development Management, which operates in both countries and in Swaziland, intend to use the DMI cases in its curriculum and to train Institute staff in how to use cases.

### Conclusions

- o The case studies and accompanying notes are very well written and were used to raise awareness of managers about management problems and to teach management concepts.
- o The case studies can and should be more fully integrated into the DMI process by using them in implementation workshops and management skills training seminars.
- o At present, each case with its instructor's notes is packaged separately from the other cases. There is no manual available to advise potential users on how to choose cases for teaching, how to sequence them, what to do before and after teaching a case, etc. Such a manual is needed so that more people might have access to the learnings in these excellent cases.

C. **Distance Learning**

One-week distance learning tutor training workshops were held for 14 participants in Lesotho and 8 in Botswana.

Approximately 45 persons participated as distance learners in Lesotho and 32 in Botswana.

Three workbooks on supervision were written in Botswana; these were adapted for use in Lesotho. Three additional books have been prepared since the pilot test.

Evaluations of distance learning carried out during the project in both countries were generally positive, and evaluators recommended that the process be continued. (MEDEX has the evaluation reports in its files.) However, DMI project staff and ministry colleagues realized that a Distance Learning program in the area of health management would need to be a part of a larger and viable distance learning system. Because no such system could be found in either country, distance learning was discontinued.

**Conclusion**

- o The three workbooks developed for the pilot test are excellent. As with the case studies, these materials could be used to facilitate management development if they were used more integrally in implementing the systems. In this project, to an even greater extent than the case studies, they seem to have been used in isolation, and thus we feel that much of their potential value was lost.

D. **Resource Allocation**

The Resource Allocation Technique is a methodology designed to identify villages and communities with a willingness and ability to participate in "development" projects. It is hypothesized that investments in health and other programs in these villages is more likely to have a payoff. Pilot studies of the resource allocation technology were conducted in 82 villages in Lesotho and 50 in Botswana. Results showed that the technique was promising, but MEDEX believes that it needs to be replicated in new and larger samples before it can be considered fully developed. Work on resource allocation was stopped when the pilot studies were complete.

## Conclusion

- o In retrospect, at least, it is difficult to see the connection between this technique and the primary purpose of the project. We feel that it did not help to facilitate the process and may in fact have hindered it by distracting project staff. We think that they would have liked to see the Resource Allocation Technology (or RAT, as they called it) just go away.

## CHAPTER 6: THE MANAGEMENT SYSTEMS

This chapter discusses the extent to which the project put redesigned management systems in place at the operations level in the two countries (Output No. 3)

Output No. 3: "Simple and appropriate management systems in place at the operations level supporting PHC activities, and health personnel trained to use these systems."

### Finding

- o "Implementation workshops" were the major mechanism for introducing the new management systems at the district level in both Lesotho and Botswana. These were followed up by monitoring and consultation visits by project staff. Additional visits are planned, and more will be required in order for the systems to be in place and in use at the district level.

### In Lesotho

- o Lesotho has held implementation workshops on the supervision, maintenance, training, and transport systems in 10 of the 14 Health Service Areas. Workshops on the finance, general supply, drug supply and communication systems will be held for all HSAs in November 1991. Also in November, the four HSAs that missed the earlier workshops will be introduced to the other four systems. Approximately 235 people have attended the implementation workshops in Lesotho to date.
- o In workshops in Lesotho, major emphasis was placed on forms and procedures: attention to broader topics and concepts of management, supervision, and leadership has been limited.
- o Senior staff from the Health, and other ministries served as facilitators in training workshops of the systems that they managed. One HSA had not seen a senior central-level staff member for over three years until one came to facilitate one of these workshops. They felt that a major potential benefit of the DMI process would be the opening up of better lines of communication between the center and the periphery.
- o New management systems are being introduced by Health Service Area (HSA) personnel that have attended workshops, and some of the forms from the manuals are being used. The procedures and forms have generally been well-received, particularly by those who already have some management skills. In at least one HSA, forms in the manuals have even been adapted to meet the staff's needs. This is a sign of thoughtful use, whereas complaints that the forms don't fit the data or that there are too many forms indicate that not all health staff are prepared with organizational and planning skills to use the systems for their own benefit.

- o Although the training system was not considered to be in much need of improvement during the Needs Assessment, the procedures in the Lesotho training system manual have been implemented most fully of all the manuals at both the HSA and Central levels. On the other hand, maintenance system improvements in Lesotho have been difficult to implement, apparently because few HSAs have a technician who can be given the responsibility for managing the system and because staff have not yet been trained to look for, recognize and report problems with tools, equipment and other things in their work environment.

### In Botswana

- o In July and August of 1991, Botswana held five regional workshops to introduce four management systems to district PHC managers. Representatives from hospitals were also invited to participate. One hundred and twenty (120) people were trained in these one-week workshops.
- o The implementation workshop content included discussions of the concepts of management, supervision, leadership, and in-service training and the district manager's roles in these areas. The procedures and forms in the four draft manuals were reviewed. The project staff considers this draft stage as a step in the consultative process that must take place before agreement and finalization.
- o Since the workshops, monitoring visits have been made by Botswana project staff to assist in the implementation process. The counterpart plans to continue these visits after the project ends, if the appropriate approvals for her position come through, and if she obtains the support of MOH and MLGLH to travel to the districts.

### Conclusions

- o In both countries, more time was needed during the implementation workshops to introduce the new management systems to district-level managers and to prepare them to train peripheral-level staff in the new management procedures. However, manuals and training alone are not enough to install management system improvements and to integrate them into daily practice. Monitoring, supervision, and consultative visits should take place, especially in those places having difficulty, in order to fine tune, support, and sustain the continued use of the systems.

While the intent of the project staff was for workshop participants to return to their districts and introduce improvements to their colleagues and staff, very little has yet been done in the districts to implement the four systems. In some of the districts we visited, the procedures outlined in the manuals are just beginning to be put in place, but in most, those who attended the workshops did not feel they have had time to begin system improvements or to train their

staffs. In some cases, staff were not willing to use the draft manuals until they receive final approval from the MOH, MLGLH, or both.

- o Involving senior central-level staff as facilitators in the implementation workshops for "their" systems is a good way of involving the central level and getting their support.
- o It appears that, for some, a clear distinction has not been made between "forms" and a "management system." Not everyone understands that management tools should make their units more effective, or that they may need to adapt the tools to fit their needs. For example, when a district-level manager says that she can't use a form because it has fewer spaces than the number of health clinics that she supervises, one wonders whether a management system is in place.
- o The manuals themselves do not represent complete management systems, but they codify those parts of the system upon which agreement has been reached. They may leave out important areas that are still being researched, developed or tested. Nevertheless they serve to document standards, protocols, procedures, or guidelines where none may have existed before. If used they become a tool for training, supervision, and reference. Just as important, they define what is desired or expected, and form a basis for assessment, quality control, and evaluation.
- o In any case, the manuals are an important step toward putting "management systems in place." They can provide uniformity and structure where there may have been little or none before. However, to put those systems in place and make them work, another series of activities is required: development of curricula, extensive implementation efforts, sustained competency-based training, followup, and evaluation. It is many of these latter activities that this project did not have time to accomplish.

## CHAPTER 7: IMPROVEMENT OF SUPERVISION

This chapter discusses Output No. 4 of the project: the extent to which a redesigned supervisory system, linked to in-service training, was in place at the district level in the two countries.

**Output No. 4: "Functioning supervisory system, linked to an on-going program of in-service training, providing regular, supportive supervision of PHC activities at the operations level."**

### Findings

- o In both countries, various aspects of supervision were identified as weaknesses, and supervision was selected as a priority need in the Needs Assessment step. Management analyses were carried out, and the findings and recommendations were presented for discussion at decision-making workshops. Discussions tended to be heated: some people felt that their own supervisory practices were being criticized or took offense for other reasons. Eventually, supervision manuals were written for both countries. Other recommendations for changes in supervisory policies and procedures that were not included in the manuals are still being considered.
- o The manuals contain descriptions of the supervisory structure in the country, supervisors' duties and responsibilities, and sample forms and procedures. The manual produced in Botswana also includes an extensive section on how supervisors should carry out their duties. These guidelines are intended to be used as the basis for supervisory training to be carried out by Unified Local Government Services (ULGS) and the Primary Health Care Support Division sometime in the future.
- o In addition to the manuals, case studies dealing with supervision issues were written and are being used by DMOs, university faculty, and others. In Botswana, implementation workshops for the supervision system effectively used case studies as a means of introducing new concepts in supervision, as well as other information.
- o The Distance Learning workbooks also dealt with supervision. Almost 80 nurses from both countries participated as learners. The three workbooks reviewed by the evaluators contain two or three short lessons each and are oriented toward increasing knowledge about supervision.

## Conclusions

- o Because the implementation phase of this project started so late, there is little evidence presently available to conclude that "a supervisory system, linked to in-service training, providing regular, supportive supervision" is in place and functioning in either country. The evaluators were impressed with the level of supervisory knowledge and skill demonstrated among Matrons and Senior Nursing Sisters in Botswana, but few of these nurses would attribute their skills to the DMI project. On the contrary, some of them considered the DMI materials to be "too basic" and more appropriate for use in pre-service training or in-service training of junior nurses.
- o Good tools (the case studies, Distance Learning workbooks, and the Botswana supervision manual) were developed for improving supervision skills, but these were not used in any systematic fashion to train "large numbers" of district or peripheral-level supervisors.
- o Because supervision was such a contentious issue, getting consensus on policies and practices that needed revision was a slow, sometimes painful, process. A tactical solution to dealing with this sticky subject might be to separate the policy and personnel-related issues from the strictly procedural or "how to" issues of supervision and deal only with the latter. In other words the manual would deal with the skills and process of supervision while avoiding the more contentious subjects of discipline, salary administration, promotion and transfer.

## CHAPTER 8: MATERIALS

This chapter reviews project performance relative to Output No. 5, the production of manuals, reports, and other materials.

**Output No. 5:** "Twenty reproducible prototype manuals, modules, workbooks, and other materials field tested in two countries, for use in implementing management development in Africa."

A. **Prototype Materials:** MEDEX has prepared (or is in the process of preparing) the following prototype materials:

1. The MEDEX Management Development to Support PHC: An Introductory Text (unavailable for review at the time of evaluation)
2. Three Management Analysis Manuals: 1) Manual for Improving Management Systems, 2) Training Workbook and 3) Instructor's Guide
3. Eleven Operations Manuals (also referred to as "prototype" or "generic" manuals) for Decentralized PHC Management Systems:
  1. Communication
  2. Drugs and Medical Supplies
  3. Facilities and Equipment Maintenance
  4. Finance
  5. General Supplies
  6. Health Information
  7. Patient Referral
  8. Personnel
  9. Supervisory System
  10. Training
  11. Transportation

(Not all of these were available at the time of the evaluation.)

4. Six Distance Learning Workbooks (three of which were available for review)
  5. Twelve Case Learning Sets, which include a case study, case notes, and instructor's notes
  6. Two Evaluation/Monitoring Materials: Student Text and Instructor's Manual
- B. **Lesotho Specific Materials:** In addition, materials were developed for use in each of the countries. Among the most notable were the Management Analysis Reports and Systems Manuals.

1. Management Analysis Reports were developed for:

Supervision	Drug Supply
Personnel	Training
Maintenance	Communication
Transport	Health Information

2. Systems manuals were developed for:

Supervision	Training
Personnel	Communication
Maintenance	Finance
Transport	General Supply
Drug Supply	

The Personnel Manual was not distributed to Health Service Agencies because the Ministry of Public Service, which governs personnel policies for all civil servants, has not approved its release. Since the government was just introducing new systems for Finance and General Supply, these systems were not analyzed, although manuals were prepared to document the new policies and procedures. The Health Information System was analyzed, but a World Bank Project will write the manual for it in 1992. The counterpart, in her new post in the MOH, will participate in the implementation of the systems.

C. Botswana Specific Materials:

1. Management Analysis Reports were developed for:

Supervision	General Supplies
Personnel	Maintenance
Communication	Patient Referral
Health Information	The Cold Chain Component of the Drug Supply System

2. Systems manuals were developed for:

Supervision  
Communication  
Health Information  
Patient Referral

Manuals for Personnel, General Supplies, and Maintenance were not developed in Botswana because this work was perceived as duplicative of the work being carried out by MLGLH for all sectors in the district and town councils. A cold chain

management manual was not developed because materials already exist that cover the subject adequately.

### Conclusions

- o Materials development was an area in which MEDEX met, and even exceeded, the goals they had set for the number of manuals and other documents to be produced. The quality of these materials is generally quite good and often excellent.
- o The materials prepared in Lesotho and Botswana were products of the DMI Process; and we think that the process was at least as important as the products. The Management Analysis Reports, while remarkably well-written documents in themselves, are even more important because they resulted from a process that we believe will have a lasting impact on those who participated. The manuals could make the work of district-level managers more effective; but it is too soon to tell whether they will be used and what impact they will have on improving management.
- o The prototype materials reviewed are for the most part, simple, clear, comprehensive, and useable. We feel that those who may adopt the DMI Process in other countries will find the materials describing the process itself most useful. These materials should include the Introductory Text to Management Development and the Management Events Manual, which we have not seen, and the Management Analysis Texts, which are excellent. Should other countries wish to use case studies and/or distance learning, the workbooks and case sets may be applicable, but, unfortunately, no manuals have been prepared to help new users of these materials.
- o The materials on the subject of Evaluation and Monitoring appear to be the least useful because their intent is unclear, and the writing does not meet the high quality of other products. To our knowledge, they have not been tested in either country.
- o The utility of the eleven prototype systems manuals is more difficult to assess. Their quality is very good, but we would not recommend their adoption without a process of analysis, problem solving, and debate. It may be that the intense, often contentious, often painful, experience of self-examination had more impact on participants' thinking and learning about management than the manuals themselves. However, the manuals can serve as useful prototypes for the management support systems that are needed in many settings. They can serve as the starting point in a process of learning, adaptation, and application.

## **CHAPTER 9: PROJECT IMPACT AND SUSTAINABILITY**

This chapter and Chapter 10 (Institutionalization) address questions included in the evaluation team's scope of work. The questions deal with the effectiveness of project implementation, the project's impact, sustainability, and the project beneficiaries, which was not asked about directly but we know is of interest to AID. Questions on institutionalization are addressed in Chapter 10.

### **A. The Effectiveness of Project Implementation**

One objective of this project was to develop and evaluate MEDEX's six-step approach to management improvement. The DMI Process generally seemed to work as MEDEX intended, although with some minor modifications. They discovered, for example, that the establishment of the Receptive Framework is not just one step in their overall six-step process, but a continuous activity that begins on the first day of the project and continues after its end. Remarkable efforts were made to meet with, inform, explain to, obtain commitment from, and otherwise involve decision-makers at both the central and district levels. But because new issues were constantly arising, new faces appearing in decision-making posts, and different project phases beginning and ending throughout the project, constant attention was needed to maintain the receptive environment that the project required.

An issue related to the implementation of this project was the speed, or efficiency, with which analysts could be trained, systems analyzed, decisions made, manuals written, personnel trained, and systems made to function at the district level. This project carried out these activities in three cycles. A "cycle" included the recruitment and training of a small group of analysts, the conduct of studies on three or four systems, the holding of a "decisionmaking workshop", and the writing of manuals. Because of problems and delays in implementation, and because the project was also working so hard to develop and test the four technologies, they ended up with all three cycles running simultaneously. This situation made the project very difficult to manage, and probably contributed further to the delays that were experienced.

At the time of this evaluation, the all-important step of implementation and training was progressing, but more slowly than intended. The continuation of these activities after the termination of the contract was in doubt because of uncertainty over the establishment of suitable positions for the two counterparts. This is unfortunate because the real payoff phase of the project---the installation of the new systems at the operations level--- has just been reached. Implementation and followup services could be inexpensively provided by the counterparts at this point, and could make a real difference in the adoption and use of the new systems. Their continued presence can be critical to the sustainability of the potential gains of this project.

## **B. Project Impact**

It is too early to determine what impact this project has had or will have in either country. We cannot say that the project has reduced infant, child, or maternal mortality or morbidity, which is one measure of the impact of a health-related project, nor can we say that the quality or quantity of health service delivery has increased as a result of the project, although that is its ultimate goal.

We would like to say that district-level health management is better now in Lesotho and Botswana than it was four years ago, but, as a whole, we think that managers at that level have not worked with the redesigned management systems long enough to integrate them into their routines. They have probably not discussed the new management systems or their implications enough nor had the opportunity to consult frequently enough with a project counterpart or other knowledgeable person to have made significant improvements in the target systems.

Nevertheless, some managers in the districts, and at the central level, are using the manuals. Not all managers are using the manuals and not all are using them well, but some manuals are in use, and this is a first step toward improving management.

The project has had other important impacts as well. Senior- and junior-level health personnel have benefitted from participation in the project as management analysts, as decision-makers in regional and national management conferences, as case writers, and as participants and facilitators in workshops. They have learned that:

- o Local people can identify and analyze their own management problems and can propose workable solutions. Expatriate consultants are not needed to do this.
- o A structured, systematic approach to problem solving works. Better results are obtained when based on careful and complete data gathering and analysis.
- o Good decisions can be made in an open, participative, democratic forum. Such decisions often better understood and supported.
- o Management is an important, separate area of professional activity that can be improved.

## **C. Sustainability**

Once a ministry in a country has gone through the DMI Process under the guidance of MEDEX, we believe that other ministries, private organizations, vertical programs, and other entities in that country can repeat it with relatively little additional cost and little or no contractor involvement. This assumes, of course, that the ministry uses the resources that

the project has left behind. These include: the counterpart and other individuals in the MOH who are familiar with the whole process, the management analysts, the manuals that describe the process, the country-specific or prototype systems manuals, the regional management development institute, and other human and material resources.

One major advantage of the MEDEX approach is that it focuses specifically on management development, and management improvement; it creates a "critical mass" of talent and resources focused on that goal. A country can continue the management improvement process (i.e. conduct needs assessments, carry out management analyses, and redesign systems) relatively inexpensively once the basic skills, methods, and materials are in place. A major unknown, however, is the level of effort and cost of the training, support, and supervision required to install the new systems and assure that they are functional.

Both Botswana and Lesotho have highly competent counterparts who are well qualified to continue the implementation phase, and plans have been made for them to do so. These plans include, but are not limited to: monitoring visits to all districts, management skill training for both district- and central-level staff, and evaluation of the extent to which management improvements have been made. All of which involve costs. In Lesotho, which is undergoing structural readjustment, the government may not be able to afford the travel, per diem, office supplies, and workshop costs associated with continued implementation. It has applied to donors for financial assistance. Botswana, which is not operating under structural adjustment constraints, will be able to support the activities financially, if it chooses to do so.

#### **D. Project Beneficiaries**

The beneficiaries of this project include all persons in Lesotho and Botswana receiving primary health care services. The more direct beneficiaries, many of whom attended more than one event, include:

- o Two project counterparts
- o One project associate
- o 24 management analysts
- o 18 case writers
- o 16 case teachers
- o 22 distance learning tutors
- o 77 distance learning students
- o 420 national decision-making workshop participants
- o 36 central-level workshop participants (Lesotho)
- o 100 regional workshop participants (Botswana)
- o 356 implementation workshop participants
- o 17 DMOs in Botswana trained to use case studies
- o 85 management workshop participants (Botswana)

## CHAPTER 10: INSTITUTIONALIZATION OF THE MANAGEMENT DEVELOPMENT PROCESS

### A. The Counterparts

In both countries, project staff believe that "institutionalization" is predicated on the establishment of regular full-time positions for the counterparts in the Ministries of Health. The counterparts themselves are exceptionally well trained, experienced and committed. While MOH officials in both countries stated that positions would be established, serious questions remain. It is unclear whether commitments to create the positions at promised grade and salary levels will be fulfilled or whether the two individuals concerned will accept or remain in those positions. It is also unclear whether budget line items will be established to support ongoing implementation and training activities, or to create additional positions in the newly established "management development units."

In Lesotho, the evaluation team was told that the position had been approved at the grade 12 level, whereas the counterpart had previously been told, in writing, that it would be at grade 14. Efforts are now underway with the support of WHO and the World Bank to see that the position is upgraded or to top up the salary. If these efforts are unsuccessful, it is likely that further follow-up and implementation activities will cease. Conversely, if the position is filled, the ministry will have a person who is well-qualified, experienced, and capable of conducting management analysis studies and providing training. She will be the key person who will continue the DMI process and who will monitor the implementation of the new systems. There are also 11 trained analysts in Lesotho, many of whom are still available to carry out further studies or to assist with implementation. To a considerable extent, the Ministry of Health knows and understands the DMI process. The framework is in place for smaller groups of individuals to carry out studies, write management analysis reports based on carefully collected data, meet to decide on new policy, and write new manuals.

In Botswana, the situation is both similar and more complex. The counterpart position is still "up in the air" in terms of salary and grade level. In addition, the decision to retain the focus of management development efforts in the Ministry of Health means that the project will continue to concentrate most of its implementation and follow-up activities on those systems directly controlled by that ministry. It is unclear whether the project, which is perceived as an "MOH baby", will enjoy effective support from the MLGLH which is directly responsible for health care service delivery at the district level. It is paradoxical that personnel at the district level are the most enthusiastic supporters of DMI, but their own ministry seems unsupportive of the project.

## **B. The Regional Management Development Institute**

Many of the "higher level" skills associated with the DMI process have been institutionalized in the Institute of Development Management, IDM, which conducted many of the management analyst training courses, supervised the analysts as they carried out the studies, and participated in the decision-making workshops. Two individuals at IDM are fully capable of teaching the management analysis course which, we were told will become a regular offering in the new IDM course catalogue.

## **C. Management Analysts**

If the assumption is made that the counterpart positions and modest supporting budgets are established in both Ministries of Health, then the minimum would be in place to continue the introduction of the manuals through training workshops and other follow-up activities. If greater levels of funding were to become available, the two counterparts, plus the two IDM staff members, would be capable of training new analysts and supervising them as new management analysis studies are carried out. In addition, at least some of the already-trained analysts are still available to assist with additional studies and/or implementation. Therefore, the elements are at least potentially in place to sustain management development activities in these two countries without a great deal of outside technical assistance. In Lesotho, the WHO Representative is actively seeking the means to carry on the work of the DMI project.

## **D. The Impact on Decentralization**

Many developing countries throughout the world are presently engaged in efforts aimed at governmental and program decentralization. Botswana and Lesotho are two such countries. A relevant question, therefore, is the extent to which the DMI process contributed to the decentralization of PHC service delivery. One clear requirement for decentralization to succeed is that personnel at lower levels must acquire the technical and managerial skills needed to operate programs and deliver services. The DMI process can potentially upgrade management systems and teach personnel at lower levels to use them. Unfortunately, the process remains unfinished in Lesotho and Botswana so little can yet be said about whether managerial skills and systems in these two countries were, in fact, upgraded. Two District Medical Officers we met in Serowe, Botswana said that the DMI project had facilitated the process of decentralization in their districts, not because of enhanced skills or systems, but because it had provided a forum in which decentralization issues and problems could be surfaced and discussed. This appears to have been an unintended positive by-product of the project. Had the DMI projects in Lesotho and Botswana been able to run their course to the point of "simple and appropriate management systems in place at the operations-level" (Output 4) there is little doubt that a positive impact on decentralization would have been observable.

## CHAPTER 11: GENERAL CONCLUSIONS

This chapter summarizes the more important general findings and conclusions of this evaluation report. For the reader who has not had time to read the full report, this chapter captures the key points. It repeats or encapsulates some, but not all, of the findings and conclusions from earlier chapters.

### A. Project Incomplete

It is unfortunate that this project was not able to finish what it set out to do. The original intent was to develop and test a new approach to management improvement; to institutionalize the process in two ministries of health; to develop at least 20 manuals, guidebooks or other materials; to create an improved supervisory system linked to an in-service training program; and to install up to 10 new or redesigned management support systems at the district level in Lesotho and Botswana.

In terms of accomplishments the project developed and tested its new approach with positive results. Nine manuals documenting new or redesigned management support systems were introduced in Lesotho: four draft manuals were introduced in Botswana. Twenty-three management analysts were trained. The project produced more manuals and other documents than originally called for and the quality of these materials is generally very good. The redesign of the supervisory systems in both countries was politically sensitive and controversial, especially in Botswana. Therefore, it cannot be said that the project fully achieved its objectives of having "a supervisory system, linked to in-service training, providing regular, supportive supervision" in place in either country.

Because of implementation delays and other problems, the projects in both countries arrived at the "training and implementation" step (Step 5) very late in the life of the project. This step was to have started in month 14 of the project according to the original implementation schedule. It began in month 35 in Lesotho and in month 43 in Botswana. Because of these delays, there is little evidence currently available to conclude that improved management systems are in place, that personnel have received adequate training to operate the systems, and that the systems are positively affecting the quantity or quality of Child Survival or PHC services being delivered.

### B. Process Works To Redesign Management Systems

Nevertheless, this project successfully demonstrated that it is possible to engage a ministry in an analytical and decision making process that results in redesigned management support systems, and manuals to document those systems. This alone is a significant accomplishment. While the manuals themselves do not represent complete management systems, they do codify the areas upon which agreement has been reached. They potentially serve to document standards, protocols, procedures or guidelines where none may have existed before. If used, they become a tool for

training, supervision, and reference. Just as important, they define what is desired or expected, and form a basis for assessment, quality control and evaluation.

C. **Systems Not Put In Place At The District Level**

A major shortcoming of this project, however, was that it did not demonstrate that revised management systems can be put "in place at the operations level." In both countries workshops were held at the district level to introduce manuals documenting the new systems. In some cases, up to four systems and manuals were covered in a single, week-long workshop, with emphasis placed on the use of the forms in the manuals. In the opinion of the evaluation team, at least equal emphasis should be placed on the understanding of management concepts, the rationale for their use, and on skill building exercises that teach how-to-do-it. The project lacked a carefully articulated training plan to install the new systems at the operations level. The original plan called for a "competency-based management training program developed and carried out to prepare district-level personnel to work within the re-designed systems." This CBT training was to have been based on detailed job analyses. Much more work is needed to design and deliver skill, concept, and competency building activities targeted at individual workers, that will result in better understanding and use of the new management systems.

D. **Quality Personnel**

The competence and commitment of both long-term advisors made this project work effectively under the most difficult of circumstances. They were both purposeful and flexible, which the evaluation team believes contributed to the project's achievements. Similarly, the counterparts are highly competent people who have demonstrated their commitment to the project and to the DMI process in a variety of ways. Their knowledge and skills, if suitably placed in the ministries, and if supported by senior-level personnel, could ensure that management improvement continues.

E. **Potential For Further Development**

Despite implementation difficulties in both countries, the DMI management development process appears to work and to show potential for further development. Significant learnings occurred which could improve the probability of success if this approach were tried in other countries. In both countries, and within MEDEX, there is interest in applying the DMI process to vertical programs, such as EPI or AIDS, as opposed to general management systems. The evaluation team believes that the process is transferrable and that consideration should be given to testing the approach at the program level.

**F. Overambitious Objectives And Implementation Schedule**

The original MEDEX proposal called for a 5-year Phase I project to field test the approach and develop support materials. This was to be followed by a Phase II project that would extend the process to other African countries. At A.I.D.'s request, the project was scaled back into a single-phase, 4 year long project. When this happened, the evaluation team believes that the project's scope and implementation schedule were not appropriately adjusted to fit the reduced 4 year time frame. In essence, this prevented the project from accomplishing two of its five outputs: 1) implementation and institutionalization of the DMI process in the ministries of health, and 2) putting the revised systems in place at the operations level. One consequence of the scale-back was that the number of long term advisors in each country was cut from two to one. Had the second training advisor positions been retained, we believe that the projects would be further along in getting the systems in place and getting them used at the district level.

**G. Large Number of consultants**

The large number of consultant visits, (40 in Lesotho alone), each of which had to be managed by the Long-term Advisor or his counterpart, took their time away from the technical work of the project.

**H. Institutionalization And The Critical Role Of The Counterparts**

Almost everyone interviewed believed the manuals to be well-written and useful. They think that the implementation of the new systems will contribute to better functioning management systems in the future. However, there is a concern about implementation and follow-through. What happens will depend largely on what the counterparts do in the next year. In both countries there are serious concerns regarding the establishment of permanent positions for the counterparts at acceptable grade and salary levels. Unless these counterpart positions are created so that implementation activities can continue, the real potential payoffs of this project will not be realized.

**I. The Process Itself Is Important**

The evaluation team supports the contention that the DMI process itself, and not just the final product, is important. Any country wanting to upgrade its management systems must start with an analysis of its own situation, its problems, its resources, patterns of behavior and bureaucratic organization. A properly structured process, such as that developed by MEDEX, can effectively organize and support this process of self-examination. This can lead to democratic decision-making, documentation of the new systems into manuals, and the use of the manuals for training and action planning. It is this process that builds understanding, skill, and commitment to

implement and use the new systems. To simply hand out a "prototype" manual might short-circuit or undercut the less tangible but critically important benefits of going through the process.

J. **The DMI Process Works Well In The Following Ways:**

1. An entire project focusing specifically on management strengthening sends a powerful message that "management" is important, and deserving of independent efforts aimed at its improvement.
2. The approach mobilizes a critical mass of talent and energy to address management problems and needs. It provides an organized, structured framework for data gathering, analysis, presentation of findings, participative decision-making, and documentation of the redesigned systems in the form of manuals, which are then used to train workers to implement and use the new systems.
3. The process trains and involves local people in data collection, analysis, generation of recommendations, and decision-making, as well as in the implementation of the new systems. Once the basic process and skills are taught, there is limited reliance on outside experts or consultants.
4. The process is visible, open, democratic, and possesses valuable elements of bottom-up involvement in decision making.

K. **The Four Technologies**

The time, resources and energy devoted to the development of the four technologies (Management Events, Case Study, Distance Learning, and Resource Allocation) was a distraction from the main thrust of the project. A quite large proportion of MEDEX management, personnel and consultant time was devoted to the development and testing of these four technologies, particularly in the early phase of the project. This investment of time and resources probably reduced the effectiveness and speed of implementing the core six-step process. Only one of the technologies, Management Events, proved directly useful to the core process. The Case Study and Distance Learning technologies could contribute to the training and implementation step of the process in future projects: in this one they appear to have been used in relative isolation. The Resource Allocation technology was tested but found not useful to the purposes of this project.

L. **Receptive Framework Not A Step In The Process**

The evaluation team agrees with project staff that "Establishing a Receptive Framework" is not just the first step in the DMI process: it is a major ongoing activity which, if neglected, can seriously compromise the whole effort. Understanding, commitment, and participation in the process needs to be constantly rebuilt or re-established. Project staff went to great lengths to do this, but agreed that more could have and should have been done. In both countries we spoke with

central-level personnel who felt left out, uniformed, or uninvolved in the process. Their support and involvement is critical to the ultimate adoption and use of the new systems.

**M. Interministerial Issues In Botswana**

The project in Botswana appears, in some sense, to have been the victim of the environment in which it was implemented. The delivery of health services at the district level in Botswana is the responsibility of the Ministry of Local Government, Lands, and Housing (MLGLH), not of the Ministry of Health. Botswana has long been involved in a process of decentralization whereby District and Town Councils (who report to the MLGLH) take over direct local responsibility for service delivery in all sectors. When the DMI project began, Ministry of Health personnel at the local level were being transferred to become employees of the local government units. Upon transfer, they came under the administrative supervision of the MLGLH. The DMI project, however, was housed in the Ministry of Health, which was and is responsible for standard-setting and the technical supervision of health personnel. Unsurprisingly, the project got caught in the politics between the two ministries, and there was no effective third-party to arbitrate the differences. In retrospect, almost everyone (including the Permanent Secretaries of both MLGLH and MOH) agreed that the project should have been placed in the MLGLH, so as to have better and continuing access to its real clientele: health workers in the districts. They also stated, however, that the original placement of the project in the Ministry of Health was understandable, and that the project had been overtaken by events beyond its immediate control.

## CHAPTER 12: RECOMMENDATIONS

The following recommendations are made to A.I.D. and/or to the MEDEX Group should opportunities arise to apply the same, or a similar approach in other countries or in other programs.

1. This project succeeded in designing new management systems, but because of lack of time, was not able to finish putting them in place at the operations level. Any new project must focus much more attention on installing, trouble-shooting, using, revising, and evaluating the systems at the operations level to assure that they are making a functional improvement in operations and health care service delivery.
2. Any project with scope and ambition similar to this one should have two long term advisors, one to lead the systems redesign process, and a second to lead the training and systems implementation efforts.
3. Training of analysts, system redesign, and implementation at the operations level takes more time than originally estimated. Five (or more) years is a more appropriate time frame for a project of this scope which seeks to redesign management systems, put them in place, and institutionalize the process in the ministry.
4. Additional project design elements and tactics are needed to insure continued understanding and support from the central level. These might include 1) special short courses for senior level personnel to teach the management analysis and management improvement process, 2) technical committees at the central level to review findings and recommendations before decision-making workshops are held, 3) establishment of mentoring relationships between senior level personnel and the more junior management analysts, 4) the creation of more active and viable advisory groups to guide project strategy and implementation, and 5) greater involvement of central level personnel in systems training, implementation and monitoring.
5. Where no systems or very weak systems existed, the DMI process worked very well to create them, and ran into little resistance. Where reasonably well developed systems were already in place, more resistance and delays were encountered. Additional criteria, including "political volatility" and "interministerial impact" should be included for selecting and prioritizing systems to be redesigned. The selection of less controversial and more implementable systems for development in the early phase of the project could allow for the analysis, redesign and installation steps to move ahead more quickly. This would enable the project to build skills, experience, and credibility before tackling more contentious problems and systems.

6. When politically sensitive systems, such as personnel or supervision, are chosen for study and redesign, it is suggested that the more controversial aspects of the systems (salary determination, promotion, discipline, transfer policies, etc.) be treated separately from the more technical or how-to-do-it skills. This may allow for the upgrading of supervisory and personnel management skills without getting hung up on interminable policy debates.
7. During the implementation and training step of the process, no more than two new systems and manuals should be introduced at the same time, and it should be done within a broader context of management skill building. This will require the development of more and better competency- and skill-building exercises based on careful job analyses and a firm understanding of the practical constraints faced by front line workers.
8. In both countries, installation and use of the improved management systems will depend largely on what the counterparts do in the next year. The MEDEX Group, and The USAID Missions may want to explore how they can persuade or assist the ministries to establish appropriate posts for the counterparts within appropriate units of the ministries. There is interest among other donors, especially WHO in Lesotho, in supporting and extending the work of this project. A minimal investment in followup and donor coordination could result in substantial payoff from investments already made.
9. Of the four technologies developed by this project, only "Management Events" proved to be directly applicable to the core DMI process. It helped to identify and prioritize systems most in need of development, and it created a database of events that was useful in the analysis and redesign steps of the process. An important characteristic of this technology is that it focusses on strengths to be built upon as well as on weaknesses that need to be rectified. It is recommended that manuals be developed to make this technology available to other potential users.
10. The management analysis training course and internship needs to be longer and less stressful.
11. Consideration should be given to using more local consultants to write systems manuals. These individuals know the systems, the culture, and the bureaucracies better than outside consultants, and with adequate support and supervision could effectively write the manuals.
12. Considerable interest exists to apply the MEDEX management development approach to upgrade specific programs, such as EPI, Family Planning, or AIDS. The evaluators believe that the approach is transferrable and could be used effectively for this purpose.

13. The case study methodology can and should be more fully integrated into the management improvement effort during the training and implementation step of the process. A manual is needed to advise potential users on how to chose cases for teaching, how to sequence them, and what to do before and after teaching a case.
14. Good tools, in the form of case studies, Distance Learning workbooks, and supervision manuals, were developed for improving supervisory skills, but these were not used in any systematic fashion to train "large numbers of district and peripheral level supervisors." The evaluators agree that the strengthening of the supervision system should be a high priority in any district-level management improvement effort. It is recommended that redesign efforts be focused on the skills and the process of supervision, while avoiding the more difficult areas of salary, promotion, discipline, and transfer.
15. There is a value in well written "prototype manuals" as models for management systems. They document standards and procedures where none may have existed before, and can provide examples of simple, effective tools for use at the district level. The quality of the MEDEX-developed materials is good. Nevertheless, we do not recommend that these materials be adopted and used "as is" in new countries. There is value in going through a process of self-assessment, systems analysis, and the design of solutions to one's own problems. It may be that the intense, contentious, painful experience of self-examination and problem solving has more impact on thinking and learning than any manual, no matter how well designed and written.

## NAMES OF PERSONS INTERVIEWED

LESOTHO

October 8-15, 1991

### Ministry of Health

Mr. Makhaola, Principal Secretary  
Mr. Petlane, Deputy Principal Secretary  
Dr. Moji, Director General/Health  
Ms. Matsau, Chief Planner  
Ms. Phalatsi, Financial Controller/Health  
Ms. Ntholi, PHC Director (project liaison)  
Ms. Chabane, Chief Nursing Officer  
Ms. Khali, Principal Personnel Officer  
Ms. Seipobi, Continuing Education Coordinator  
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Mr. Baholo, Head of Maintenance Services

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Mr. Kasozi, Assistant SGDO

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### UNDP

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Maintenance and Transport Officer  
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BOTSWANA

October 16-28, 1991

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Ms. P. Venson, Permanent Secretary

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Ministry of Education

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