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STRENGTHENING THE MANAGEMENT OF THE PUBLIC HEALTH INSPECTORATE OF SWAZILAND

WASH FIELD REPORT NO. 108

APRIL 1984

The WASH Project is managed by Camp Dresser & McKee Incorporated. Principal Cooperating Institutions and subcontractors are: International Science and Technology Institute; Research Triangle Institute; University of North Carolina at Chapel Hill; Georgia Institute of Technology—Engineering Experiment Station.

Prepared for:
USAID Mission to the Kingdom of Swaziland
Order of Technical Direction No. 131

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April 20, 1984

Robert Huesmann
Mission Director
USAID
Mbabane, Swaziland

Attention: Charles Debose

Dear Mr. Huesmann:

On behalf of the WASH Project I am pleased to provide you with 10 copies of a report on Strengthening the Management of the Public Health Inspectorate of Swaziland.

This is the final report by Harry Phillips and Eva Salber and is based on their trip to Swaziland from September 7, 1983 to October 25, 1983.

This assistance is the result of a request by the Mission on January 20, 1983. The work was undertaken by the WASH Project on January 27, 1983 by means of Order of Technical Direction No. 131, authorized by the USAID Office of Health in Washington.

If you have any questions or comments regarding the findings or recommendations contained in this report we will be happy to discuss them.

Sincerely,

Dennis B. Warner

Dennis B. Warner
Director
WASH Project

cc. Mr. Victor W.R. Wehman, Jr.
S&T/H/WS

DBW:ybw

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Prepared by the USAID Mission to the Kingdom of Swaziland
Under Order of Technical Direction No. 131

Prepared by:

Harry T. Phillips, M.D., D.P.H.

and

Eva J. Salber, M.D., D.P.H.

April 1984

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TABLE OF CONTENTS

<u>Chapter</u>	Page
EXECUTIVE SUMMARY.....	iv
ACKNOWLEDGEMENTS.....	vi
1. INTRODUCTION.....	1
1.1 Background.....	1
1.1.1 General.....	1
1.1.2 Health Problems.....	1
1.1.3 Rural Waterborne Disease Control Project (RWBDCP).....	2
1.1.4 Organization of Health Services.....	2
1.1.5 Operation of the Health Inspectorate.....	3
1.2 The Water and Sanitation for Health (WASH) Consultation.....	4
1.2.1 Origin of Consultation.....	4
1.2.2 Scope of Work Assigned.....	5
1.2.3 Mode of Operation.....	5
2. ORGANIZATIONAL ISSUES.....	7
2.1 Current Situation.....	7
2.1.1 Staffing.....	7
2.2 Projected Changes.....	9
2.2.1 Staffing.....	9
2.2.2 Decentralization.....	10
2.2.3 Generalization of Functions of HAS.....	10
2.3 Comments.....	10
2.4 Recommendation: Organization of the Health Inspectorate.....	11
3. MANAGEMENT ISSUES.....	13
3.1 Current Situation.....	13
3.1.1 Management Information Systems.....	14
3.1.2 Project Activities.....	14
3.1.3 Supervision.....	16
3.1.4 Staff Evaluation.....	16
3.1.5 Provision of Supplies.....	17
3.1.6 Transportation.....	17

<u>Chapter</u>	Page
3.2 Projected Changes.....	17
3.3 Discussion.....	18
3.4 Recommendations.....	19
3.5 Suggested Management Responsibilities.....	21
4. MANPOWER DEVELOPMENT AND TRAINING ISSUES.....	26
4.1 Current Situation.....	26
4.2 Projected Changes.....	27
4.2.1 Proposed Health Assistant Curriculum.....	27
4.2.2 Informal Education.....	28
4.3 Discussion.....	28
4.4 Recommendations.....	29
4.5 Program for In-Service Training.....	30
5. MANAGEMENT TRAINING WORKSHOP.....	31
5.1 Workshop Objectives.....	31
5.2 Attendance.....	31
5.3 Workshop Methods.....	32
5.4 Evaluation of the Workshop.....	33
6. CONCLUSION.....	34
7. IMPLEMENTATION OF RECOMMENDATIONS.....	36
7.1 Health Inspectorate Task Force.....	36
7.1.1 Suggested Actions.....	36
APPENDICES	
A. Persons Interviewed.....	40
B. Places Visited.....	42
C. Scheme of Services for the Health Inspectorate.....	43

<u>Chapter</u>	Page
D. District Health Inspector Monthly Summary Report.....	57
E. Training Plan for Health Assistants in Swaziland.....	61
F. ESAMI Course 3:2 Advanced General Management Program.....	76
G. Workshop for Health Inspectors and Senior Health Assistants...	78
H. Program for In-Service Training for the Health Inspectorate...	82

EXECUTIVE SUMMARY

In December 1982 the Swaziland Government Ministry of Health (MOH) requested USAID to provide the services of a management consultant for the Health Inspectorate. The consultant was to be provided through the WASH program. The consultant was to review management skill needs, propose management, supervisory, and reporting systems, and initiate a program of management training for Health Inspectors.

For various reasons the consultation did not begin until September 1983. In the intervening months the MOH, in collaboration with members of the Rural Waterborne Disease Control Project, developed a new form for reporting field activities to the central office as well as several sound proposals for strengthening the organization of the Health Inspectorate. Consequently, a number of management deficiencies had been addressed by the time the consultancy began. The consultancy took place from September 6 to October 25, 1983.

A number of problems emerged from interviews with personnel in the MOH and other government agencies, field visits in all four regions in the country, and a review of relevant documents. The main problems were:

- Coverage of the rural areas by Health Inspectorate staff amounted to only 25 to 35 percent of the population, due mainly to lack of staff as well as to deficiencies in transportation.
- Staff was being lost because of low morale as a result of low salaries and the absence of opportunity for advancement.
- Communication between the central office and the district offices was limited and irregular.
- Several of the supervisory staff were young and inexperienced and needed strong technical and psychological support.
- Although a system for reporting field activities had been introduced six months earlier, there was still considerable difficulty in reporting correctly and promptly, and reports were not being adequately followed up.
- Planning for, organizing, and using human and other resources suffered from lack of personnel and management capability.
- The central office lacks the staff and management capability:
 - 1) To meet the demands for services.
 - 2) To plan and to work with agencies at the central level.
 - 3) To respond effectively to the material and supervisory needs of the field staff.
 - 4) To make maximum use of the available resources.

In response to the above problems the following main recommendations are offered to the MOH:

- Recommence training of Health Assistants to increase the coverage of rural homesteads.
- Press for upgrading of Health Inspectorate positions to improve morale and retention of staff.
- Proceed with proposals to increase management capacity of senior supervisors through appropriate courses offered elsewhere in Africa or Swaziland.
- Strengthen the management and supervisory capability of the central office by adding a deputy to the Senior Health Inspector with major responsibility for human and material support of field staff.
- Arrange for in-service education of field personnel to satisfy their need to work more effectively with other related agencies and communities.

Inadequate transportation (due mainly to the bottleneck caused by all repairs having to be done in the Government's Central Transport facilities) is a major impediment to efficient functioning. Since it is beyond the scope of this consultation we have offered no recommendations on the subject of transportation. However, efficient utilization of existing resources becomes even more pressing.

In order to initiate a program of management training, a one day workshop for supervisory personnel in the Health Inspectorate was held. At this workshop the group identified the major components of management and supervision, and determined their own priorities for in-service education. Highest priority was given to improving skills for community organization, health education, management, supervision, record keeping, and reporting. Recommendations for further training to improve these skills are detailed in the report.

Finally, the formation of a Health Inspectorate Task Force is recommended to review and implement the major recommendations of this report.

Conclusion:

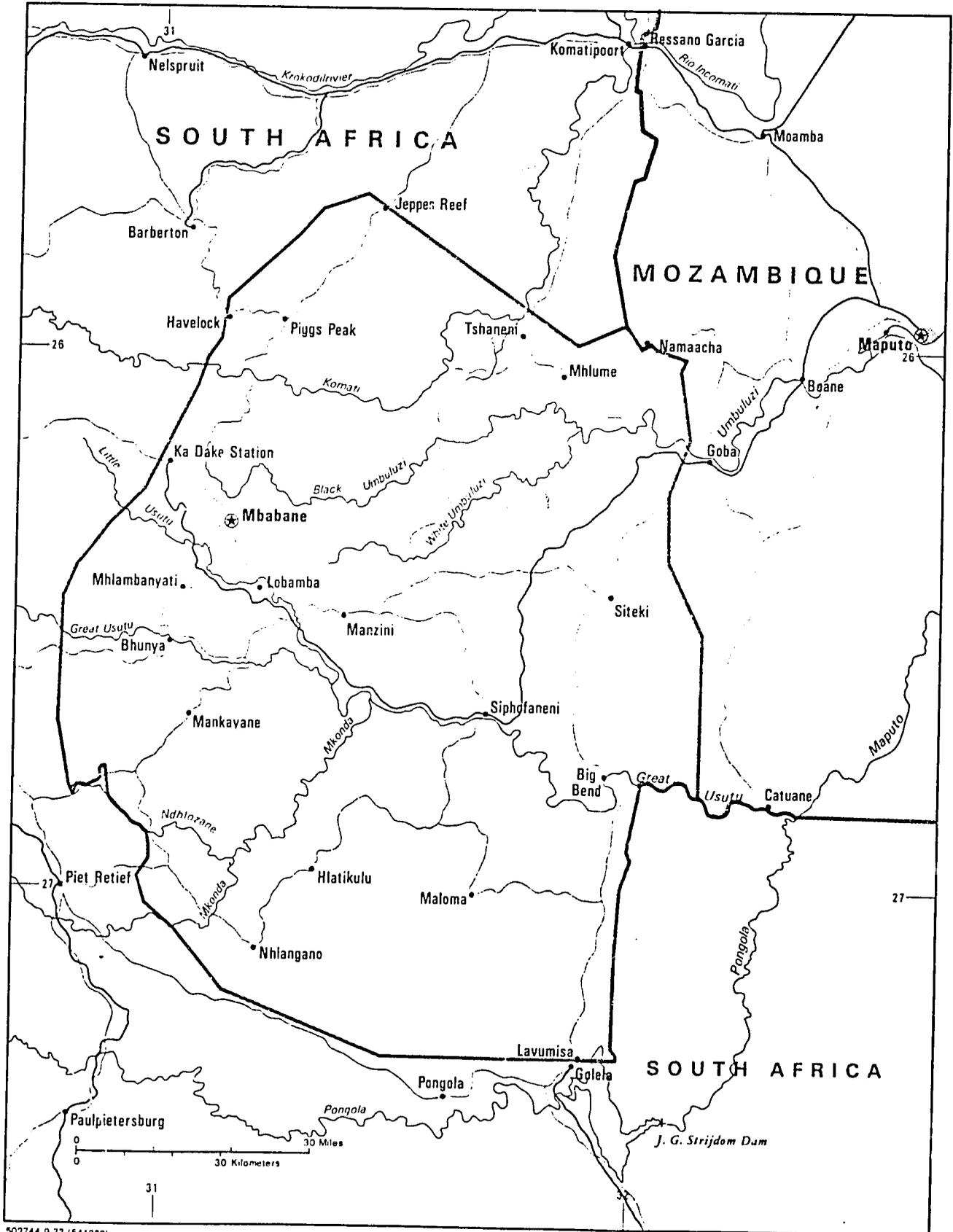
Implementation of all the above recommendations will result in an improvement in the existing management system sufficient to direct a two or three fold increase in personnel in the Health Inspectorate over the next three years. At the same time there will be a significant increase in the competence and number of senior or supervisory personnel, adequate for the efficient direction of the Health Inspectorate.

ACKNOWLEDGEMENTS

The strong support and cooperation of key officials in the Swaziland Ministry of Health, the USAID Mission in Mbabane, and the Rural Waterborne Disease Control Project (RWBDCP) is acknowledged with gratitude. All the people who gave generously of their time are listed in Appendix A. The following, however, are singled out for special thanks for their kindness and attention.

Dr. Charles DeBose of the USAID Mission who provided warm support, advice, encouragement, and much needed office space. Dr. Alfred Hoadley, Chief of Party (RWBDCP), gave kindly direction, provided introductions to key officials and participated in many of the interviews. Most of all warm thanks go to Mr. William Lawrence, Sanitarian (RWBDCP), and Mr. Leslie Mtetwa, Senior Health Inspector, Ministry of Health. They were constantly at the disposal of the consultants, supplied them with documents, made appointments for them, participated in interviews, and answered interminable questions.

Swaziland



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Chapter 1

INTRODUCTION AND BACKGROUND

1.1 Background

1.1.1 General

Swaziland is a small, mountainous and beautiful country of 17,364 sq. kms. with an estimated 1983 population of 605,172. The country is divided into four main districts, Hhohho, Manzini, Shiselweni and Lubombo, which vary in climate, topography, agriculture, industry, water supply and health care delivery. Eighty-five percent of the population is rural but unlike most countries the basic unit is the homestead of an extended family group rather than a village. About one fifth of adult males work away from home in Swazi industry or in South Africa.

Homesteads are contained within the traditional jurisdiction of about 220 chiefs and are further aggregated into 40 tinkundla areas which are themselves encompassed by the four districts. The homestead structure, as opposed to village clustering, creates tremendous difficulties in implementing a program of water and sanitation. However, in the last few years a resettlement program was instituted by the Ministry of Agriculture with donor support. Considerable progress in the provision of water supplies has been made for the population living in these resettled areas. More than half of the land in Swaziland has been designated as Rural Development Areas for resettlement.

Swaziland has made great strides economically, but the bulk of the rural population is poor, and, in the words of the Ministry of Health, "...the current health status of the people of Swaziland is unacceptable" (Ministry of Health, July, 1983). To combat this situation, national health policy stresses the promotion of primary health care, emphasizing prevention of disease. Top priority is given to assuring safe water supplies, provision of basic sanitation facilities, and health education.

1.1.2 Health Problems

While the major health problems are those of other developing countries, such as maternal and child health, communicable and infectious diseases, and nutritional deficiencies, the infant mortality rate is strikingly high--estimated at 150 per 1000 live births. (These figures are estimated from census questionnaires and hospital records; rural births and deaths are not yet routinely recorded.) Childhood mortality (about half the national population is below the age of 15) is also high. Diarrheal disease is a major cause of high mortality rates among the young. Attention was focused on these diseases nationally as a result of a cholera outbreak which lasted from October 1981 until May 1982. During this period 767 confirmed cases of cholera and 31 deaths were reported. These occurred mainly in the low veld and in a corridor extending from Siphofaneni to Manzini. Schistosomiasis and other intestinal parasites are endemic. The fertility rate of 6.9 births per female of child-bearing age (among the highest in the world) adds to the high rates of mortality in mothers and children.

1.1.3 Rural Waterborne Disease Control Project (RWBDCP)

To address the problem of diseases related to water and poor sanitation which constitute a major cause of high morbidity and mortality, especially among the young and to implement elements of the national health policy related to these diseases, the Ministry of Health has implemented a Rural Waterborne Disease Control Project. This is a USAID funded project which provides a focus on water-related diseases within the Ministry of Health. The purpose of the project is to expand the capacity of the Ministry and the government of Swaziland to deliver effective preventive health services in order to reduce the prevalence of diseases related to water and poor sanitation. The project was conceived in 1979. The first technical advisor arrived in Swaziland in February 1981, and the project will run for a period of five years terminating in February of 1986. The project provides technical assistance in sanitation, public health engineering, epidemiology, health education and the social sciences, participant and in-service training, construction and equipping of health education and laboratory facilities, and limited support for construction of latrines and the production of health education materials.

In order to strengthen and expand the delivery of health services, the following objectives were established for the project:

- To establish and implement a plan for the provision of health education to promote improved water supply and sanitation practices.
- To demonstrate and implement the construction of low-cost, technically appropriate pit latrines.
- To develop and incorporate health-related criteria into the design of water systems and water resource development projects.

For the support of these activities, nationwide surveillance of schistosomiasis and diarrheal diseases and KAP and other related sociological studies have been implemented or are planned.

To achieve the objectives of the Ministry and the project, effective communication and collaboration among units providing water, sanitation, and epidemiologic, health education, and sociologic support is essential and this is a major goal of the project and the Ministry. Furthermore, to meet specific latrine production targets of the Ministry spelled out in the Fourth Five Year Plan for the period 1983-1988, the project, and the International Drinking Water Supply and Sanitation Decade, the institutional capacities of the Health Inspectorate and its supporting programs, such as health education and water supply programs, and the linkages among them must be strengthened. The sanitarian of the Rural Waterborne Disease Control Project (RWBDCP), who is responsible to the Chief of Party (Dr. A. Hoadley), is the liaison between RWBDCP and the Health Inspectorate and acts as advisor to the Health Inspectorate devoting all of his time to that end.

1.1.4 Organization of Health Services

The Ministry of Health (MOH) is responsible for all governmental health services. It is headed by the Minister of Health (Dr. S. Hynd) to whom the

Principal Secretary (Mr. T.M.J. Zwane) is responsible. Under Mr. Zwane comes the Director of Health Services (Dr. Z.M. Dlamini) who is assisted by a Deputy Director of Health Services (Dr. M. Owen). Nursing services are the responsibility of the Chief Nursing Officer (Mrs. V. Dlamini) assisted by the Deputy Chief Nursing Officer (Miss M. Makubu).

In 1981 there were 16 major in-patient facilities. Eight of these were government owned, three mission, one private and four industrial. Health Centres, as yet few in number, provide preventive public health services, mainly to mothers and children. Excluding hospital out-patient departments there were 75 clinics, 41 government operated, 27 mission and the rest private. Environmental health services fall under the jurisdiction of the Health Inspectorate division of the Ministry. Environmental health services are headed by a Senior Health Inspector (Mr. L. Mtetwa) who is directly responsible to the Deputy Director of Health Services. The structure and functions of the Health Inspectorate comprise the bulk of this report and will be discussed in some detail later. It is important to note, however, that the work of the Inspectorate is deeply affected, and the staff at times demoralized, by matters beyond its control. Among these are:

- The inordinately long delays in repair of vehicles which is allowed to be done only in the government garage.
- Overly high expectations imposed upon a small cadre of workers unable in some areas to cover even a quarter of their assigned population.
- Employment in a long neglected unit with low grades (hence low pay), underfunded, and with no provision for career advancement. (There are plans currently to rectify this.)
- Lack of information from, and coordination with, other Ministries (such as Agriculture) in resettling populations. (People who are told that they are going to be resettled and do not know when, do not want to build latrines.)

1.1.5 Operation of the Health Inspectorate

The 1982 Annual Report for the Health Inspectorate contained the following highlights:

Serious constraints were encountered in three areas:

1. Staffing: Only two out of the four districts had Health Inspectors (HIs). Consequently, Health Assistants (HA) were required to do much of the food and meat inspections. The number of trained HIs and HAs on the job had been declining because of attrition due to unsatisfactory conditions as compared with alternative employment. (The number of HAs lost amounts to a third in the last five years.)
2. Shortage of Funds: Money for materials for construction ran out after six months. Consequently, construction of slabs for pit latrines slowed down. (Money for this purpose was markedly increased

for 1983/84 and became available with accelerated activity in this area after April, 1983.) (However, quarterly reports of the RWBDCP states that 18,000 emalangen^{*} available for cholera control in 1982 was not utilized.)

3. Transportation was grossly inadequate, largely because of long delays in vehicle maintenance services, even for minor repairs. As a result, time was wasted because staff often had to depend on others for getting around their service areas. There were also wasteful delays in delivering materials or completed slabs.

During 1982:

- 188 cases of cholera with 19 deaths were reported.
- 369 requests for vacuum tanker service for overflowing septic tanks were made.
- 452 toilets were completed and 622 were under construction (uncompleted).
- 11 springs were protected and 13 were under construction.
- 154 private residences were inspected, mainly as a result of complaints by residents regarding structural defects and vermin.

It was also pointed out that the Swaziland Public Health Act of 1969 and any regulations written under the Act are inadequate for enforcement. The regulations do not provide definitions and standards which could be used effectively in law.

1.2 The Water and Sanitation for Health (WASH) Consultation

1.2.1 Origin of Consultation

Members of the Swaziland Rural Waterborne Disease Control Project (RWBDCP) were concerned with the need to strengthen the management structure and organizational systems of the Public Health Inspectorate in the Ministry of Health. The Inspectorate is involved in the following activities:

- Community sanitation (promotion and construction of pit latrines)
- Protection of springs
- Inspection of butcheries
- Inspection of restaurants and cafes
- Approval of housing plans
- Pest control
- The control of communicable diseases.

* The unit of currency in Swaziland and equal to the South African rand or US\$0.90, hereafter symbolized by "E".

While all these activities are important, the consultants' particular concern was with those Health Inspectorate functions directly related to the activities of the RWBDCP--pit latrine construction and protection of springs. The results of a survey conducted by the team sociologist showed that only one fifth of the homesteads on Swazi Nation Land had pit latrines. Of these latrines only 6.9 percent resulted from health assistant motivation (Green, 1982). The Ministry of Health and AID believe that improved management in the Health Inspectorate would increase the numbers of pit latrines constructed and lead to the realization of program goals.

Accordingly, the Ministry of Health and USAID Swaziland requested the services of a management consultant. The field work took place from September 6 to October 25, 1983.

1.2.2 Scope of Work Assigned

Consultation was to focus on:

1. The examination of the present situation and the formulation of recommendations for improving organization, management, and development of the Inspectorate.
2. The initiation of an in-service management training program.

1.2.3 Mode of Operation

This report is based on:

- Interviews and meetings with key individuals in the MOH and the Health Inspectorate in district offices and on the job.
- Direct field observations of work in progress in all four districts.
- Examination of relevant documents, reports, and records.
- The results of a one-day workshop designed to identify the needs for, and to outline a program of, in-service education for the Health Inspectorate.

It should be noted that certain observations and recommendations are repeated in different sections of this report. This is unavoidable since the three major issues of organization, management, and manpower are so closely interrelated.

A number of tasks originally identified in 1982 were initiated by the Ministry of Health (assisted by members of the RWBDCP) between the time the scope of work was developed and the arrival in Swaziland of the WASH team. As a consequence the team has benefitted from the work of others close to the problem. At times it was possible to assess the effectiveness of the intervention; at other times to review and comment on reports or proposals which had been initiated. Throughout this report, these proposals and interventions are commented on under the heading of Projected Changes.

In making recommendations to the Ministry of Health the history and constraints which apply to the current situation have been borne in mind. These recommendations represent a feasible, evolutionary approach rather than a radical comprehensive overhaul of the system which would not be generally acceptable.

Chapter 2

ORGANIZATIONAL ISSUES

2.1 Current Situation

The primary objective of the Health Inspectorate (as stated in the Ministry of Health's Fourth Five Year Plan) is to address the problem of communicable and environmental diseases. This objective is to be accomplished in collaboration with the public health engineer of the Rural Water Supply Board. The plan stresses the provision of potable water supplies, ensures the consideration of health impacts in water resource development projects and promotes and develops basic sanitation facilities.

2.1.1 Staffing

To implement this objective the following cadres of Health Inspectorate personnel are employed:

One Senior Health Inspector (SHI)

Four Health Inspectors (HI)

33 Health Assistants (HAs), of whom four are designated as Senior Health Assistants (SHAs), one for each district.

At present, in addition to personnel with district responsibilities, the following have specialized tasks:

	<u>Malaria Control</u>	<u>Bilharzia Control</u>
Health Inspectors	2	1
Health Assistants	36	8 (2 act as Lab technicians)

There are thus three vertical programs within the Health Inspectorate. Of particular concern are the generalized rather than specialized programs, that is, with the water and sanitation, rather than the malaria and bilharzia programs.

The Senior Health Inspector

The Senior Health Inspector, who reports to the Deputy Director of Health Services, is responsible for the overall supervision of the Health Inspectorate. He also inspects premises of applicants for annual licenses to sell liquor and attends the regular and special meeting of the Liquor Licensing Board in the four districts. He is a member of the Buildings Appeals Tribunal for non-urban cases and inspects building plans for non-urban areas of Manzini district and the Mbabane sub-district. He receives and reviews monthly reports of the Health Inspectors and Health Assistants if a district

Health Inspector is not able or available to do so. He supervises a Senior Health Assistant (SHA), who, in addition to supervising three HAs, serves as manager of supplies of all four district offices. He provides liaison between the Health Inspectorate and other agencies within the Government. He prepares an annual report of the work of the Health Inspectorate and submits proposals for the coming year and particularly for long range planning in the Health Inspectorate.

Health Inspectors

The district HIs are based in four district offices and carry out the following functions:

- Supervision of HAs, holding monthly meetings and reporting activities to the SHA.
- Inspection of food premises, butcheries, abattoirs and rural slaughter poles; meat inspection; guiding and advising HAs on improving water supplies, toilet construction, and refuse disposal.
- Advising on sanitation at institutions such as rural clinics and schools.
- Inspection of building plans for the district.
- Controlling vacuum tanker service.
- Attending meetings of the District Health Team, town boards and chiefs.
- Giving health talks at seminars and meetings.

HIs and SHAs may serve as field tutors. During the three year training programs for HIs, students were placed for field training in three sites. Two HIs and an SHA served as preceptors.

Because of vacant posts, absences from posts for advanced training (e.g., for malaria control), or difficulties in transportation, several of the above functions have been or are performed by HAs or at times omitted.

Three of the current posts (including the Senior post) are filled by people who received training in South Africa. The others have had three years training in the Institute of Health Sciences in Mbabane. A new group of seven graduated in September 1983, and two similar groups will graduate in 1984 and 1985.

HIs specialized in malaria or bilharzia control work cover the whole country and work out of a central office in Manzini. They supervise the work of the HAs who operate in the field.

Senior Health Assistants

Senior Health Assistants are responsible for distribution of building materials in connection with rural water supply and toilet construction projects. They supervise the work of health assistants, advise residents in the construction of pit latrines and protection of springs, carry out food and meat inspections, prepare and submit a monthly report of environmental health activities carried out by HAs, and help in organizing and motivating the community in environmental health activities.

All four current SHAs were promoted from the ranks of HAs.

Health Assistants

Health Assistants have for the most part received one year's formal training before appointment. A small number were "grandfathered" into their jobs by virtue of their work prior to 1975 when the HA program was initiated.

The primary focus of attention by HAs is promoting the construction of pit latrines and the protection of water supplies in rural areas. However, their functions include health education, community organization, food and meat inspection (when health inspectors are not able to do so), and liaison and cooperation with clinic nurses, community leaders, and rural health motivators if they are functioning in their areas.

They meet with their HIs and SHAs at the monthly meetings on pay days at the district office.

At the present time, there is only a loose connection between the HIs and HAs working in malaria and bilharzia control, and those working out of the four districts. Although all are regarded as members of the Health Inspectorate, they function separately out of separate offices and cover different areas. Communication between the two groups is informal and sporadic.

2.2 Projected Changes

2.2.1 Staffing

Since the initiation of the Ministry of Health (MOH) request for this consultation in 1982, a number of organizational and other changes were recommended by MOH personnel working with members of the Rural Waterborne Disease Control Project (RWBDCP). These are contained in the document "Scheme of Service for the Health Inspectorate" (Appendix C). This document* presents the revised objectives, primary duties and composition of the Health Inspectorate. Included in the clarification of roles, by the revision of job descriptions, were the following important recommended actions which have MOH approval:

* As a result of a meeting among the consultants, representatives of the MOH and a representative of the Department of Establishments and Training, a modification of the Schedule of Services is underway.

- o Upgrading of the Senior Health Inspector to Chief Health Inspector, with grade change from 18 to 22.
- o Changing title of District Health Inspector to Senior District health Inspector and upgrading the position from 16 to 19.
- o Upgrading Health Inspector from grade 16 to 17.
- o Senior Health Assistant to remain Grade 12 and promotion to this position to be based on merit and at least three years experience.
- o Health Assistant to be upgraded from grade 9 to 11.

(Reference to changes in job descriptions will be made under the heading of "Management Issues.")

2.2.2 Decentralization

Decentralization of the planning and delivery of health services to the district level (both environmental and personal) is included as an accepted MOH policy.

In the summer of 1983 a consultant prepared recommendations for designing and implementing a plan for decentralizing the management of health services and placing it in the districts (Hettle, 1983). When this policy is implemented members of the Health Inspectorate will be included in the District Health Management Team and should be able to participate more effectively and to extend their capabilities by sharing resources of a wider range.

2.2.3 Generalization of Functions of HAs

It is anticipated that when sufficient staff have been trained and approved posts are filled, only HIs will carry out meat and food inspections. HAs will no longer inspect meat and food and their functions will include education on malaria and bilharzia as well as sanitation and protection of water supplies. Similarly it is anticipated that water supply and sanitation education will be part of the function of malaria and bilharzia field workers. It is anticipated also that field personnel working in malaria and bilharzia will come under the direction of the Senior Health Inspector.

2.3 Comments

The Ministry of Health's "Indicative Plan for 1983-84-1987/88" lays out a plan which stresses the need to strengthen preventive health services. The plan gives the water and sanitation program highest priority and includes objectives for the training of an additional 53 HAs and eight HIs to fill projected posts and compensate for attrition of staff.

In view of the currently very thin coverage of the population by environmental health workers the numbers of HIs and HAs should be increased. At present there is one HI for about 100,000 population or, if HAs are included, one environmental health worker for 13,000 population. These ratios are far below the standard recommended for rural populations by WHO which is one HI per 10,000 population.

Similarly the clarification of functions and upgrading of positions in the Health Inspectorate is highly appropriate and should be strongly encouraged. However, for reasons which will be more fully reviewed in the section below dealing with Management issues, we recommend that a new post of Deputy Chief Inspector be established to provide additional strength in the central office, to supervise field operations and to promote a more effective decentralization of functions. This is of special importance because the process of decentralization is currently being initiated.

While a policy decision has been made to integrate the three vertical programs of the Health Inspectorate, the degree of integration which is envisaged or how this is to be achieved is not clear. No problem is foreseen in training new HAs to take on educational functions with regard to malaria and bilharzia. On the other hand malaria and bilharzia personnel are currently engaged in specific technical and survey tasks which could make generalization of their functions more difficult. Certainly an HA with generalized functions in his own target area is an attractive idea and it should be possible to combine water and sanitation work with malaria control. There are, however, very few bilharzia workers and their work is extremely specialized. The policy on integration needs to be clarified and perhaps reviewed on the basis of a technical analysis of the duties and functions of these personnel and the health benefits of their becoming generalists. The degree of integration of these vertical programs could be tested in the decentralization plan for Shiselweni.

However, while we comment on this issue, we do not make specific recommendations since it is really beyond the terms of reference of this consultation.

2.4 Recommendation: Organization of the Health Inspectorate

With regard to the organization of the Health Inspectorate we make or support the following recommendations:

1. The MOH must actively press for an increase in the numbers of Health Assistants as discussed in the Health Assistant Training Plan. (This is more fully discussed below in this report.)
2. The MOH should initiate the establishment of a position of Deputy Senior (Chief) Health Inspector to ensure strong liaison between the central office and the districts and provide technical and logistical support to the district staff. (This is discussed further later in this report.)

3. The MOH should cause the Public Health Act and its related regulations to be reviewed and revised so that they would be enforced effectively by the Health Inspectorate.

Chapter 3

MANAGEMENT ISSUES

3.1 Current Situation

In this context, management is defined as the acquisition, organization, and control of resources to promote a defined program. In the Health Inspectorate the main resources are staff, materials, equipment, money, environment, technology, and time. Specific to this program is the added support available from the Rural Water Supply Board and the RWBDCP. Since all programs are subject to certain constraints, management aims to use these resources as efficiently as possible.

Management of the Health Inspectorate is the responsibility primarily of the central office under the direction of the Senior Health Inspector (SHI), with certain responsibilities delegated to Health Inspectors (HIs) and/or Senior Health Assistants (SHAs) at the district level. In some districts the areas are divided into sub-districts in which case the administrative responsibilities may be delegated to an SHA for the sub-area.

HIs and SHAs supervise the Health Assistants (HAs) in their areas. The number of HAs in each of the four districts averages seven or eight. In addition, there are HIs and HAs engaged in malaria and bilharzia control units who are directed from a central office in Manzini.

The SHI reports to the Deputy Director of Health Services (DDHS) through whom budget requests, personnel changes and other major administrative matters are channeled.

Coordination of the Health Inspectorate at the central level with units that have related functions, such as public health nursing with their rural health motivators (RHMs), and other programs in the Ministry of Health (MOH) is informal and sporadic. Coordination with the Institute of Health Sciences which trains personnel for the Inspectorate is deficient. (For example, although the SHI is involved in developing the curriculum for health inspectors, he was not included in selection of students for training.)

On the other hand, there are regular monthly meetings of a subsectoral group concerned with water and wastes. It is chaired by the Deputy Director of Health Services (DDHS) and includes representation from the Health Education Unit of the MOH, the Rural Waterborne Disease Control Project (RWBDCP) (which is attached to the Rural Water Supply Board), and the Rural Development Area Water Development Program. The SHI is a member of this committee but is often absent because of other duties.

Activities at the level of the SHI have been coordinated by means of special meetings or workshops on specific issues, for example, on the question of decentralization of health services at the district level.

A visit to a senior official in the Department of Establishments and Training was illuminating. Items for discussion included proposals to clarify the roles of various positions in the Health Inspectorate, upgrading of these positions and a plan for a career ladder for HAs (see "Scheme of Service," Appendix C). It became apparent that this official was sympathetic to some (though not all) of the proposals, made helpful suggestions on methods of procedure, and encouraged further communication between the MOH and his office. On another occasion the under secretary of the MOH (Mr. Henry Malaza) expressed the opinion that relative to its importance, the Health Inspectorate has lagged behind in its development.

3.1.1 Management Information Systems

Significant progress has been made in developing a management information system in recent months.

New forms for monthly reporting were designed by the SHI and members of the RWBDCP. The form (Appendix D) covers activities (projects begun and completed, meetings attended, the findings from food and meat inspections, discussions with collaborating agencies, and the amount of construction materials used). The form also serves as the instrument for requesting construction materials for the coming month. A final open ended section provides for comments.

The draft form was reviewed by the assembled HIs, revised, and first put to use in April 1983.

The form is completed monthly by HAs and passed on to the HIs, who collate the figures and pass these on to the SHI in whose office these are filed.

In the second quarter of 1983, reports show that 55 toilet projects were completed, as compared with 96 completed during the first quarter. However, only a third of the quarterly reports had been reviewed at MOH headquarters. At the same time 562 projects were reported as incomplete or under construction at the end of June 1983. Reports for the third quarter showed 89 toilets completed, 537 under construction or incomplete, but again fewer than a third of the reports had been submitted on time (Rural Waterborne Disease Control Project, Quarterly Reports).

It is evident that although progress has been made in reporting, more time needs to be given to reviewing the process and the reports. At the time of this consultancy we noted inconsistencies in reports that had been filed, apparently without critical reviews. However, the SHI is at present training an HA working in the Mbabane sub-district to screen the reports for his final overview.

3.1.2 Project Activities

One striking observation was the high number of pit latrines that had been initiated by householders stimulated by HAs or RHMs (who are supervised by clinic nurses in about a quarter of the country), but not completed. A larger proportion of completed latrines was found in the Rural Development Areas administered by the Department of Agriculture for resettled Swazi families. In

these areas water supplies were ensured by the Department of Agriculture. Because homesteads were closer together in these resettled areas, people were more likely to want the privacy of pit latrines, especially when they were assured of continued residence.

A number of reasons were elicited for the high proportion and large number of uncompleted latrines:

1. Until the beginning of the new fiscal year, beginning April 1, 1983, funds for purchasing materials by the MOH were severely limited. For the year 1983-84 these funds were substantially increased. It has taken several months to restart the flow of materials partly because of accounting constraints beyond the control of the Health Inspectorate. However, some HIs, were not yet aware that substantial funds were available for their use. Gaps in communication were apparent. (As noted elsewhere, there were other funds which could have been drawn upon.)
2. A major impediment to completion of projects was difficulty in obtaining transportation to deliver materials and/or completed concrete slabs ready for transfer from place of manufacture to the homestead. HA's often had to depend on the generosity of other government officials for transportation for this and other purposes.
3. Another major problem seemed to be the lack of coordination between RHMs who stimulated interest among householders in the construction of latrines and HA's who were unable to satisfy this demand. This was due to the far greater numbers of RHMs than HAs, as well as the problems of transportation.

A number of reasons were also given for not starting construction of pit latrines or protection of water supplies. The more frequent were:

1. The absence of able bodied men to dig the pit, make the slabs or undertake other construction under the guidance of the HAs. (About 20 percent of men lived away from their homes in Swaziland or in South Africa and were the main source of cash income for the family.) Although some women were able and willing to do the work, families at times hired labor for that purpose.
2. The SHI and most of his staff until recently discouraged the use of locally available materials for building pit latrines. They argued that it was better to use concrete slabs since they were more durable, stronger, safer, and more easily cleaned. Green (1982) reported, however, that in a representative sample of homesteads in Swazi Nation Land, while only 21.9 percent had latrines, 68.6 percent of these had used materials other than concrete for constructing the slab.
3. While HAs are working well with individual householders who construct latrines under their supervision, they are still inexperienced in community development and work with health committees.

3.1.3 Supervision

While the SHI recognizes the importance of his visits to the field, his duties at headquarters and other time constraints have resulted in his infrequent attendance at regular monthly Health Inspectorate meetings in each district. As a result, avoidable gaps in communication occur, and inexperienced staff do not receive sufficient support. For example:

1. Communication of new information such as the current budgetary situation is deficient.
2. Recently trained HIs were given limited face-to-face direction, guidance, and support in their roles. Such support is essential since HIs are often younger and far less experienced in practical field techniques than the HAs they supervise.
3. Problems in implementation of field projects may not necessarily reach the SHI or may reach him only through perusal of monthly minutes of Inspectorate meetings.
4. Reporting of activities and accomplishments in the field has improved greatly, but six months after introduction of the new reporting form there are still problems with its use.
5. Planning of work at the district level has been insufficient. For example, high priority should be given to anticipating the need for materials so that the monthly requests will not need to be supplemented by emergency calls to the central office. Priorities and alternatives when resources are limited, as they always are, have not been seriously considered.
6. HAs are, at times, isolated from their SHAs and HIs because communication is hampered by limited access to telephones, long distances, inadequate transportation, and the inability of several HIs to drive vehicles. The recently introduced weekly roster for SHAs to visit HA's cannot always be met because of transportation and other problems.
7. Morale of field staff appears to be generally low. In a difficult job, not highly regarded and poorly paid, leadership, support, guidance, and counselling are of paramount importance.

3.1.4 Staff Evaluation

A printed, standard Government form (seven pages long) is available for this purpose. The form contains the criteria for evaluation and the process for doing so, including feedback to the person being evaluated. Evaluation of Government personnel is required in principle but is apparently seldom adhered to.

3.1.5 Provision of Supplies

Provision of supplies needed for the promotion of projects was also associated with management problems. The MOH subsidizes the production of concrete slabs and materials for protection of water supplies which householders use under the supervision of Health Inspectorate staff, mainly HAs. In 1982-83, money for this purpose was used up in the first six months of the year. For 1983-84 the sum for this purpose was raised from E 18,000 to E 26,000. (However, as previously stated, E 18,000 available for cholera control was not put to use.)

Stores for these materials are maintained in two sites, one in Manzini, the other near Mbabane. Neither is big enough to hold the total inventory needed. A new central store was requested and approved by the Government but the funds were used for some other purpose.

At present the purchases of supplies, maintenance of inventory, issue of monthly and emergency supplies, are handled by an SHA who works out of the central office. He receives phone calls to arrange the monthly or emergency issue of supplies from one or the other store. This SHA also supervises three HAs who work in the Mbabane sub-area.

3.1.6 Transportation

Transportation is grossly inadequate. All repairs, even of a minor nature, have to be carried out in the workshop of the Central Transportation Authority (CTA). This rule results in inordinate delays, leading to vehicles being out of commission for months at a time. According to one verbal report, over 50 percent of vehicles are in the workshops at any one time. This situation is of such a chronic nature that although staff are frustrated they have become resigned to the point of passive acceptance. The deficiency of working vehicles aggravates the difficulties of supervision in the field and the movement of needed supplies.

3.2 Projected Changes

A number of management changes were planned or initiated prior to the time of the consultancy:

- o The functions of HAs will exclude food and meat inspection which will be performed only by HIs. On the other hand the functions of the HAs will be generalized to include malaria and bilharzia control and will stress community organization. This new change in function will enhance the role of the HA working with members of the District Health Management team.
- o A formal request has been submitted by the MOH to the Department of Economic Planning for approval of a four-year program to train 53 HAs beginning in 1984. When these personnel become available it should be feasible to generalize the functions of all HAs.

- o A new system for reporting Health Inspectorate field activities was recently introduced (see Appendix D) and problems in its use are currently being addressed.

3.3 Discussion

The Health Inspectorate of the MOH is a permanent arm of Government established to provide environmental health protection to the people of Swaziland. It is an important partner to the RWBDCP which has other components concerned with health education, epidemiology, and collaboration with other agencies responsible for water supplies. The RWBDCP provides liaison between it and the Health Inspectorate, mainly through a sanitarian who advises on technical and administrative matters.

Planning on the macro- or conceptual level is performed by the SHI in collaboration with the Planning Unit of the MOH and with the RWBDCP. Planning within the Health Inspectorate is mainly informal. Formal planning consists of development of the annual budget and collaboration in the MOH Five Year Plan. HIs and SHAs have weekly schedules for meeting with their HAs but there is little attempt as yet to make explicit monthly objectives or to establish priorities and work plans.

While the strategies suggested in the MOH "Scheme of Service for the Health Inspectorate" are excellent (see Appendix C), they do not go far enough. A major deficiency in the total scheme persists. The HA staff is too small for its task, and supervision is inadequate. The small numbers of HIs, hardly any of whom have driving licenses and who are young and generally inexperienced in field work and supervision, cannot adequately support the HAs. There is a marked gap in the flow of information between the field and headquarters staff. The SHI needs to devote more time and energy to field visits but has too many other duties and demands on his time. In addition, promotion through career ladders, while very important for the future, does little for the present situation. It is essential that communications between the field and the central office be strengthened by the introduction of a suitable person who would be responsible for overall supervision of field work and who would be a link between the SHI and the district HIs. This post should be created as soon as possible. The SHI has no one to stand in for him and has not taken any leave since 1980. Our field observations and interviews with HIs show that there is at least one HI who could qualify for the post.

The major shortcoming is the limited amount of supervision which can be provided by the central office. The SHI is frequently called away from his desk and interrupted by persons wanting his assistance or by phone calls. In addition, he has to absent himself from his office for Liquor Licensing Board inspections and District meetings or meetings with other officials in the MOH and other Government departments. There is nobody who can act for him. The RWBDCP Sanitarian, who is there in an advisory capacity, often fills in for the SHI. However, this is not really his function and the end of his contract is approaching.

Another major shortcoming has been the failure to use financial resources to their fullest extent. For example, during 1982, while Health Inspectorate funds for materials ran out in the first half of the year, additional funds

earmarked for cholera control, and available to the Health Inspectorate, were not fully spent. In the current year money for supplies has been greatly increased. In addition, the RWBDCP has been providing E 12,000 a year for supplies. It is questionable whether all these financial resources will be fully used by the end of the fiscal year, in which case the unused money will be lost to the Health Inspectorate program.

Further, our meeting with Health Inspectorate staff in the field revealed dissatisfaction with the provision of materials for the construction of protected water supplies and pit latrines. Subsequent meetings with the SHA now responsible for issuing these supplies to field staff revealed that he had problems in communications. The system is not sufficiently controlled. A smooth provision of supplies requires firm and systematic direction. This function should be assumed by the Deputy SHI. Until the post of Deputy is approved, another person should be temporarily assigned for this duty.

It is clear that the resources of the Health Inspectorate are not being used to their fullest capacity. Some of the reasons are outside the control of the MOH, such as the lack of usable transportation which reduces communication, supervision, delivery of materials, etc. However, even within these constraints, better methods and procedures for implementation of Health Inspectorate projects could be applied.

3.4 Recommendations

On the basis of our findings and observations we offer the following recommendations:

- o MOH should actively pursue and follow-up its proposals to the Department of Establishments and Training and the Department of Economic Planning for additional manpower training and upgrading of positions.
- o A new post of Deputy SHI should be established and filled by a qualified person as rapidly as possible. His major functions would be to serve as the SHI's deputy and to direct and supervise the work of the field staff.

The following job description is suggested:

He reports to the SHI and supervises the district HIs.

Duties:

- a) Attend monthly meetings of field staff, serving as liaison between the central office and the district offices.
- b) Receive, review, and monitor monthly reports, and provide feedback to the HIs.
- c) Supervise the purchase of construction materials and other supplies for the field staff, maintain an adequate inventory, and organize the issuing and delivery of stores.

- d) Provide technical, logistical, and other support for field staff as needed.
- e) Conduct the annual performance evaluation of staff under his supervision.
- f) Other related duties, as required by the SHI.

Qualifications:

Possession of a valid certificate as an HI, and at least five years of experience as an HI.

Grade:

To be set at a level between the district HIs and the SHI.

- o The person appointed should participate in a middle management seminar such as the one given at the Swaziland Institute of Management and Public Administration (SIMPA) as outlined in the "Scheme of Service" (Appendix C).

The above recommendations are considered essential to the improvement of management in the Health Inspectorate. Without additional assistance at the central office it is difficult to see the development of more effective management procedures.

Since the need is urgent we recommend that interim or temporary steps be taken to provide additional management strength in the central office. This could take the form of transferring a potential candidate from the district to commence the duties outlined in the description of Deputy SHI.

The following recommendations are offered as additional actions, not as alternatives to the above but as interim measures until a Deputy Chief Health Inspector is in place.

- o The Chief Health Inspector (currently, Senior Health Inspector) should participate in a training program for middle management, such as the course offered at the Eastern and Southern African Management Institute in Arusha, Tanzania. (This recommendation is dealt with more fully under the heading of Manpower Development and Training Issues.)
- o The SHI should give the highest possible priority to making visits in the field, if possible to two districts per month.
- o The SHI should hold quarterly meetings with his senior staff at headquarters. His prepared agenda should include policy and other informational matters relevant to HI and HA work in the field such as the use and current status of financial and other resources.
- o The SHI should ensure that the HI monthly reports be submitted promptly to him, that the information contained in these reports be critically reviewed, and where necessary acted upon.

- o The SHI and other staff with supervisory functions should develop a planning approach to their work. This should take the form of an annual work plan based upon objectives developed by supervisors and their subordinates. In addition, HAs and HIs should set monthly written objectives for their work.
- o The new forms for reporting monthly activities by HIs and HAs (and any other new forms to be used in the health Inspectorate) should be reviewed and if necessary revised by the Statistical Section of the MOH. Particular attention should be given to the future use of the forms in computerizing management information.

Two final recommendations relating to management are:

- o A more effective means of providing adequate transportation must be developed. One possible solution is government approval for repair of vehicles outside the CTA.
- o As a means of conserving his time, the SHI should be supported by a competent secretary working under physical conditions conducive to efficient operation of the office. She should screen visitors and phone calls, make appointments, be responsible for the filing system, and in general manage the office.

3.5 Suggested Management Responsibilities

As a guide to a rational division of management responsibilities, the accompanying chart is presented (see Figure 1 following).

Figure 1

SUGGESTED GUIDE FOR MANAGEMENT OF THE HEALTH INSPECTORATE

	Major Management Functions	Relates to	Mechanisms	Periodicity
Senior Health Inspector (SHI)	Reporting to DDHS	DDHS	Regular meetings, Submitting written reports.	Monthly Annual
	Policy making, planning and organizing resources of health inspectorate	DDHS, Planning Unit, Personnel officer, training resources	Work plan. Proposal for development of resources.	Annual As needed
	Financial management-- acquisition, use and control of funds	Executive Office of MOH	Budget preparation	Annual
	Coordinating with other units of MOH and other agencies	e.g., Nursing, Agriculture, Education, Labor	Subsectoral and other meetings	As needed
	Monitoring activities and use of resources	Deputy Senior Health Inspector (DSHI)	Receiving, reviewing and reacting to reports	Weekly and monthly
Deputy Senior Health Inspector (DSHI)	Reporting to SHI	SHI	Regular meetings	Weekly
	Supervising district HI's	District HI's	Directing, supporting, guiding, educating, consultation, technical advice--in field. Attending direct meetings in rotation. Receiving written reports.	As needed Monthly Monthly
			Evaluating progress towards monthly targets.	Monthly

Figure 1 (continued)

	Major Management Functions	Relates to	Mechanisms	Periodicity
Health Inspectors* (HI's)	Logistical support for field staff--purchase and issue of supplies, maintain central inventory	Accounting department, suppliers, store-keepers, transportation District HI's	Making approved purchases; organizing delivery in response to field requests	Monthly and in response to emergency
	Coordinating activities and resources for all districts	SHI and district HI's	Meetings at central office	Quarterly
	Reporting to DSHI and Director of District Health Team	DSHI and Director of District Health Team	Submitting regular written reports, and/or meetings	Monthly and Quarterly
	Supervising SHA's (and HA's) within district	SHA's (and HA's)	Regular meetings with HA's at district office. Reviewing written report of activities received through SHA's. Field visits.	Monthly Monthly As needed
	Coordinating with health and related agencies in the district.	Clinic and public health nurses, district health team, RDA's, RWSB, and district development team, school personnel	Meetings as determined by director of district health team and/or as needed.	As needed
	Supervising MOH water tanker and vacuum tanker programs at district level.	Drivers and operators of equipment.	Direct contact	As needed

* When more than one HI per district is available, management functions will be divided between a Senior District HI and the other HI's. When decentralization has been implemented the Senior District HI will report to the DSHI for technical matters, and the Director of the District technical matters, and the Director of the District Health Team for work within the team structure.

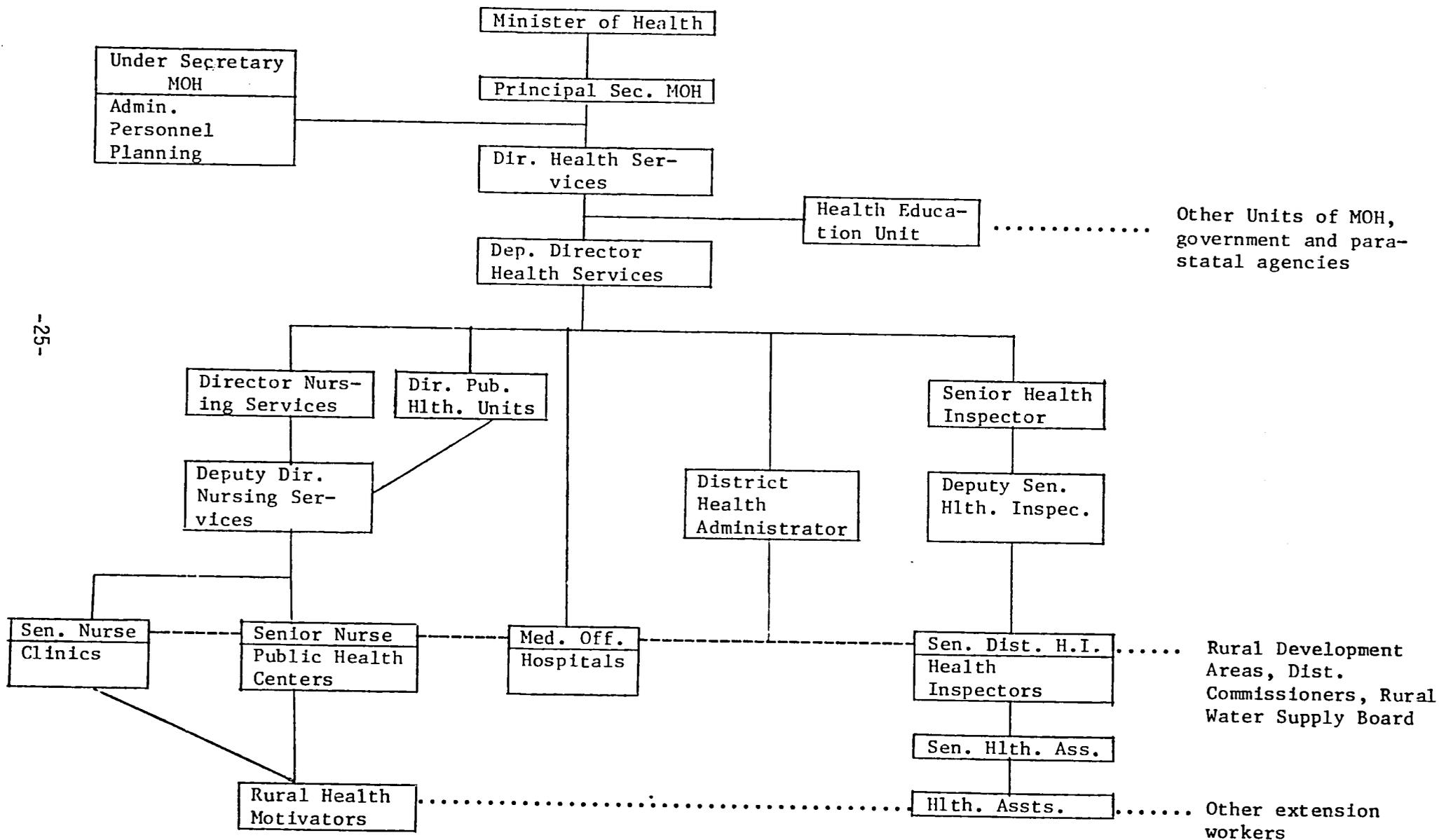
Figure 1 (continued)

	Major Management Functions	Relates to	Mechanisms	Periodicity
Senior Health Assistant (SHA)	Reporting to district HI on Water and Sanitation (W&S) projects	HI	Submitting written reports	Monthly
	Supervising water and sanitation projects of HA's in district	HA's	Regular schedule of field visits to monitor and assist projects	Weekly
	Logistical support for HA's in district--requests, receives, stores supplies; and with transportation	Through district HI to DSHI	Reviewing HA report and request forms. Maintaining sufficient supply of materials in district storeroom	Monthly and as needed. Monthly
Health Assistant (HA)	Reporting to SHA and HI	SHA and HI of district	Regular district meetings. Submitting written report on activities in past month. Regular meetings with SHA in field.	Monthly Weekly
	Liaison with related agencies and people in area served.	Schools, health committees, community leaders, extension workers, nurses, etc.	Field units and meetings.	As needed
	Coordinating with RHM's	RHM's and clinic nurses	Regular meetings	Monthly and as needed
	Organizing tasks for W&S	RHM's community leaders, SHA's, transportation resources	Organizing meetings; making requisitions.	As needed

Figure 2

PROPOSED ORGANIZATION CHART--HEALTH INSPECTORATE

MINISTRY OF HEALTH--GOVERNMENT OF SWAZILAND



Chapter 4

MANPOWER DEVELOPMENT AND TRAINING ISSUES

4.1 Current Situation

There are three classes of about 30 HI students in training at the Institute of Health Sciences (IHS). The first class of HIs graduated in 1982, the second in September 1983. Subsequent classes will graduate in 1984 and 1985. Three-quarters of these students are Swazi; the rest are from Lesotho and Botswana.

Health Assistants were first trained in 1975. Three classes (a total of 48 students) were trained subsequently with emphasis on sanitation, spring protection, and shop and meat inspection. In each case the training was for one year. At present there are far fewer HAs posted than were trained, because of attrition due to factors mentioned previously (low morale engendered by low pay, difficult and frustrating conditions of work, no career ladder, etc.). If no further training courses were to be instituted, it is estimated that by 1985 the ratio of HAs to population would be 1:20,000. WHO minimum standards are 1:8000 (see Appendix C, Training Plan for Health Assistants in Swaziland).

There are at present three distinct types of HAs, separately trained, and supervised. Thus, in addition to the more generalized HAs, there are at present HAs who deal only with bilharzia control and HAs who deal only in malaria control.

Training of the Health Inspectorate is, in the main, formal. The HIs are trained at the IHS for three years, using as a guide the curriculum designed by Duncan (1978). The instructor and HIs who have graduated from the course seem to be satisfied with the curriculum. One experienced HI, who acted as a field tutor during training, is adamant that at least six months must be devoted to practical field training. Three classes of HI training were in process during this consultancy; the second class of seven HIs graduated in September, 1983.

HAs have not been trained since 1979. In each district HAs are guided in their project work by their Senior Health Assistant (SHA) who, in turn, is guided by his district HI (DHI). Past HAs have had no formal training in community organization or in teamwork with other field workers such as Rural Health Motivators (RHMs), Domestic Science demonstrators, clinic nurses, etc. We observed a meeting at which a nervous HA addressed a newly formed Health Committee. He was obviously relieved to be able to turn the meeting over to an experienced Health Educator from Malawi who had come to Swaziland for field training.

The district HIs all emphasized the need for HAs to work more intimately with community committees and with individual homesteaders. The difficulty of coordinating their work with other extension agents, particularly with RHMs, was repeatedly emphasized. It was recognized that team work and planning at higher levels, for example as heads of units, is essential to accomplish team work at grass root levels. Coordination of nursing and Health Inspectorate work still presents considerable difficulty.

4.2 Projected Changes

Five posts for HIs were created for 1983-84 by the Ministry of Health (MOH). A further 18 posts need to be created in the following three years so that graduating students will have positions, and staffing requirements projected by the MOH for the Inspectorate will be met. Duncan (1978) estimated that a total of 70 HIs would be needed by 1991 to serve the projected Swazi population if minimum WHO standards of one HI to 10,000 people were to be met. The MOH Fourth Five Year Plan calls for up to 75 HAs to be trained by 1988, 50 HA posts to be created by the Department of Establishments and Training, posts to be upgraded, and three additional posts to be established for Health Inspector Tutors for training Health Assistants.

The MOH proposes that morale, job satisfaction, supervision and management be strengthened through the institution of a career ladder for the Health Inspectorate in a decentralized district administrative system. To achieve promotion without penalty to early HAs who were required to have only the ~~Junior Certificate~~ level of schooling, a waiver would be sought so that satisfactory job performance plus three years on the job could be counted as the equivalent of the "0 level" certificate for the purpose of entering Health Inspector training. Future HIs should come from the HA ranks. This proposal awaits approval by the Department of Establishments and Training.

As mentioned previously, primary care is to be strongly emphasized. In primary care the development of basic sanitation and the provision of clean water supplies will be of the highest priority, and far greater emphasis on community understanding, community organization and community participation will be required from all levels of the Health Inspectorate. In keeping with this emphasis on primary care the HA will become a vital primary link with, and advisor to, the homesteads with regard to environmental issues. A generalist rather than a specialist HA may be preferable for such work. Accordingly, when a sufficient number of HAs have been trained, it is possible that all HAs would become generalists and include work in bilharzia and malaria control as part of their overall functions.

4.2.1 Proposed Health Assistant Curriculum

The HA curriculum of one year's duration will be divided into six months of classroom instruction and six months of practical field instruction (see MOH Training Plan for Health Assistants in Swaziland, Appendix E).

Classroom instruction includes:

- Principles of health education techniques and strategies in the rural environment.
- Basics of sanitation and excreta disposal.
- Protection of springs and construction of safe water supplies.
- First aid practices.

Field instruction practicals include the basics of health education, communicable disease control, sanitation and water supply. It should be noted that although both HIs and HAs receive instruction in first aid, neither cadre receives first aid kits.

There is some difference of opinion on the length of time required for HA training. Most persons with whom this matter was discussed believed a year to be sufficient. On the other hand, it was suggested that an additional year (with heavy concentration on behavioral science and sociology) would be valuable. In addition, a two-year training course would assist in the efforts to upgrade the position of the HA. We believe that if additional curriculum time is added to HA training it would be most valuable if offered after a period of some years on the job.

4.2.2 Informal Education

A series of workshops involving the Health Inspectorate is in the planning stage. One three day workshop for HAs on the problems of rural sanitation in Swaziland took place in June 1982 and included participants from Community Development and Agricultural Extension offices. Issues highlighted at this workshop included:

- The need for communication between different cadres of field workers to come about at the district level.
- The need for supervisors to have weekly HA schedules.
- The need for reinstatement of monthly district Health Inspectorate meetings.
- The need for cooperation of field workers in water and sanitation projects.
- The need for promotion of construction of minimal cost local material toilets especially in areas where there are no HA's.

Two workshops designed by the Health Education Unit are planned to take place within the near future. The first of these, on primary health care, is designed for matrons, nursing sisters, clinic supervisors and health inspectors. The second is designed specifically for HAs with the objective of promoting community involvement in water and sanitation projects. This workshop will last a minimum of three days and will teach basic skills in community involvement in water and sanitation projects focusing on practical field applications of these skills.

4.3 Discussion

The proposed increase in numbers of HIs and HAs, the proposed upgrading of posts, the career ladder structure and the establishment of generalized rather than specialized HAs are all highly commendable proposals. When translated into action these changes should solve the present overwhelming shortage of manpower in the planning and delivery of basic environmental services.

The main emphasis for the Health Inspectorate, understandably, is on an accelerated provision of pit latrines and protected water supplies. At times, however, it almost seems that the ultimate aim of the Health Inspectorate has been the construction of concrete slabs! Provision of facilities without the knowledge on the part of users of causation of disease and a concomitant change of behavior in their use of water and privies is unlikely to have much effect on the prevalence of diarrhoeal diseases. In this regard the curriculum for future HAs with emphasis on community involvement and health education is very important.

Education, naturally, cannot be confined to lower echelons alone. It has been proposed, and the team concurs that the Senior Health Inspector and the District Health Inspectors attend certain short courses in management given by the SIMPA. (Obviously, if the post of Deputy Senior Health Inspector is approved, he too should undergo refresher courses in management.) However, because inevitably the Senior Health Inspector will be called upon and pulled away from course work to deal with emergencies, it might be better to consider an alternative venue in another African country. Among such venues is Arusha, Tanzania. The 1983 catalogue of training programs at the Eastern and Southern African Management Institute (ESAMI) contains at least one course which might be suitable. This is Course 3:2, Advanced General Management Programme, of one week's duration, designed for middle and senior level managers/administrators for industrial organizations and ministerial departments of the government who have substantial experience in their respective functions. (This course outline is shown in Appendix F.)

4.4 Recommendations

Our recommendations to improve manpower development and training are as follows:

- o The MOH should continue to press strongly for an increase in the number of HAs to be trained to approach at least the WHO minimum standards. If Swaziland Government funds are insufficient for this purpose the MOH should explore possible donor support for HA training.
- o All Health Inspectorate posts should be reviewed and upgraded wherever possible.
- o While the present educational entry level for HA training for the Junior Certificate (JC) should remain, other things being equal, the possession of an "O" level certificate would be desirable.
- o Health Assistant willingness to work in rural settings should be an essential qualification for entry into HA training.
- o The Senior Health Inspector should attend a course in management, preferably in another African country.
- o Other higher level supervisory Health Inspectors should attend management courses in Swaziland (or in another African country).

- o The MOH should convene a meeting of the Directors in the Division of Extra-Mural Services of the University of Swaziland, SIMPA, the Director of the MOH's Health Education Unit, and the Senior Health Inspector to plan and execute ongoing short courses and workshops on management and communication for the Health Inspectorate.
- o Health Assistants should concentrate on community organization, health education, and basic environmental programmes; only Health Inspectors should be required to inspect butcheries and other food establishments.
- o Health Assistants should be provided with in-service education to develop their knowledge and skills in community organization, health education, and teamwork with other extension workers and community leaders.
- o The MOH and the Civil Service Board should require that all future HIs and SHAs have a driving license before appointment.
- o Driver education classes should become a part of the Health Inspectorate curriculum.

4.5 Program for In-Service Training

A suggested comprehensive in-service training program for the Health Inspectorate is appended (Appendix H).

Chapter 5

MANAGEMENT TRAINING WORKSHOP

Projected training for the Health Inspectorate and our recommendations for manpower development were presented in the previous chapter. In order to initiate a training program aiming at enhancing the management capability of this unit, the consultants conducted a one-day workshop for staff with supervisory responsibilities, namely Health Inspectors (HIs) and Senior Health Assistants (SHAs).

This workshop was held at the Institute of Health Sciences, Mbabane on Friday, October 7, 1983.

5.1 Workshop Objectives

The objectives of the workshop were stated in the following terms: At the end of the workshop, members of the Health Inspectorate with supervisory roles will have:

1. Recognized their needs for in-service education in management.
2. Identified other important topics to be included in a program of in-service education, and
3. Become aware of the responsibilities of supervisors and the kinds of knowledge and skills needed for effective supervision.

5.2 Attendance

All persons invited to the workshop attended. The group thus consisted of:

1	SHI
5	HIs
7	SHAs

and the following visitors:

Jean-Paul Chaine, Wilbur Hoff, and William Lawrence of the Rural Water Borne Disease Control Project,

Gladys Matsebula from the Public Health Nursing Service of the MOH.

The consultants (Harry Phillips and Eva Salber)

The Central office and all four districts were thus represented by eight HIs and SHAs; the malaria and bilharzia control programs by five HIs and SHAs.

5.3 Workshop Methods

The consultants acted as workshop facilitators. The methods they used included the following (see Appendix G):

1. Preparation of a list of in-service education needs perceived by the supervisory staff before attending the workshop.
2. Public listing of these topics.
3. Development of a list of definitions of management using the nominal group process.
4. Discussion of five different definitions printed on a handout sheet.
5. Arising out of these definitions, a discussion of
 - a) the resources available to the Health Inspectorate
 - b) the nature and benefits of developing work plans.
6. Discussion of ways in which resources are managed.
7. Supervision as management of personnel.
8. Private, followed by public, listing of main responsibilities of, and methods used by, supervisors.
9. Discussion of list and of printed handout on supervision.
10. Discussion of printed handout on leadership styles.
11. Private and confidential self-assessment of supervisory performance.
12. Revision and elaboration of list of perceived needs for in-service education, developed in item 2 above. (These needs are ranked later.)
13. Establishing priorities among these topics by voting on them.
14. Evaluation of the workshop.

Just before the final evaluation, Wilbur Hoff (of the RWBDCP Health Education Unit) briefly described a workshop he proposed for HAs on the subject of community involvement in water and sanitation programs.

From the list of management topics suggested by the group the following items were given highest priority:

- Improving skills in health education and community organization (management at the grass roots level),
- improving supervisory skills,

- planning of work,
- report writing and record keeping.

Other topics listed included in order of priority:

- Application of new and appropriate technology in the field.
- Cross disciplinary education (learning about the efforts of other workers in the field).
- Methods of self and program evaluation.
- Health legislation.
- Interpersonal and interagency relationships.
- Ways to sensitize officials at higher levels to the needs of the Health Inspectorate.
- Health education in schools.
- Introducing emergency programs.
- Application of first aid skills.

5.4 Evaluation of the Workshop

This was reflected by the responses to the following questions listed on a form:

Please indicate to what extent this one day workshop helped you to recognize your own needs for:

1. In-Service Education generally (Circle One)

Very Much:	Moderately:	Slightly:	Not at all
10	4	0	0

2. In-Service Education in management (Circle One)

Very Much:	Moderately:	Slightly:	Not at all
10	1	2	0

3. In-Service Education in supervision (Circle One)

Very Much:	Moderately:	Slightly:	Not at all
8	4	1	0

Note: One of the 14 respondents answered Question 1 only, hence the differences in the total for questions. Several respondents gave additional comments, all of which were positive.

Chapter 6

CONCLUSION

This report details many needs and recommends appropriate courses of action. In conclusion, the following highlights are offered:

- o There was a gap of about a year between the request for consultation and the actual arrival of the consultants in September 1983. As a result, several of the management needs of the Health Inspectorate had been addressed and remedial action initiated by the MOH with the support of members of the Rural Waterborne Disease Control Project.
- o The main problems of the Health Inspectorate emerging from interviews and personnel in the MOH and other government agencies, field units and review of relevant documents were:
 - Penetration of the rural areas by staff amounted to only 25 to 35 percent of the population, due mainly to lack of staff as well as to deficiencies in transportation.
 - Communication between the central office and the district offices was limited and irregular.
 - Several of the supervisory staff are young and inexperienced and need strong technical and psychological support.
 - Although a reporting system reflecting field activities had been introduced six months earlier, there was still considerable difficulty in reporting correctly and promptly.
 - Planning for, organizing, and using human and other resources was limited by lack of personnel and management capability.
 - The central office lacks the staff and management capability:
 - 1) To meet the direct demands for services.
 - 2) To plan and work with agencies at the central level.
 - 3) To respond efficiently to the material and supervisory needs of the field staff.
- o In response to the above problems we offer the following main recommendations to the MOH:
 - Recommence training of Health Assistants to increase the coverage of rural homesteads.
 - Press for upgrading of Health Inspectorate positions.

- Proceed with proposals to increase management capacity of Senior Supervisors through appropriate courses offered elsewhere in Africa or in Swaziland.
- Strengthen the management and supervisory ability of the central office by adding a deputy to the Senior Health Inspector with major responsibility for human and material support of field staff.
- Arrange for in-service education of field personnel to satisfy their need to work more effectively with other related agencies and communities.

If all of the recommendations are effectively implemented, the existing management system should be adequate to handle a two or three fold increase in personnel in the next four years and to direct efficiently the planned expansion in activities. Simultaneously, the management capability of the unit will be enhanced by

- Improvement of administrative skills of the SHI through participation in training programs: This will lead to increased efficiency in the use of accessible human, material, and financial resources.
- Appointment of a competent deputy to the SHI: The Deputy SHI will give strength to the direction of field operations and delegate responsibility as needed to the field supervisors.
- Implementation of in-service training programs for HIs in supervision and communication: This will lead to a significant increase in ability to decentralize direction of field workers.
- Improvement of the secretarial support to the SHI: The SHI's ability to carry out his administrative functions will be substantially enhanced by the services of an efficient secretary who will assume the duties of office manager.

The MOH must also take whatever steps are politically or administratively feasible to overcome the transportation deficiency. This may entail going outside the present Government transportation system. Adequate transportation is essential for effective direction, supervision, and logistics of the entire Health Inspectorate.

Chapter 7

IMPLEMENTATION OF RECOMMENDATIONS

Two main goals for strengthening the Health Inspectorate have been recommended in this report. They are:

To strengthen the supervisory capacity within the central office of the Senior Health Inspector, and

To increase the quantity of Health Assistants and raise the morale of the whole Health Inspectorate.

7.1 Health Inspectorate Task Force

In order to implement these goals, we recommend the establishment of a Health Inspectorate Task Force. The charge to this Task Force should be as follows:

1. To review this report.
2. To implement recommendations approved by the MOH.

The following membership of the Task Force is suggested:

Deputy Director of Health Services (Chairman), Senior Health Inspector, Personnel Officer, Director Health Education Unit, representative from the Department of Establishments and Training, and the Rural Waterborne Disease Control Project. Other members should be invited by the Chairman for special tasks or meetings.

7.1.1 Suggested Actions

The following list of actions is offered as a guide:

1. As soon as feasible, transfer a competent Health Inspector from a district office to the central office to supervise the district Health Inspector.
2. Simultaneously, initiate the necessary steps to establish a permanent post of Deputy Senior Health Inspector.
3. Transfer purchasing and distribution of supplies to the interim Deputy Senior Health Inspector immediately upon his appointment.
4. Work with the Department of Establishments and Training to upgrade posts in the Health Inspectorate.
5. Immediately press for approval of the Health Assistant training program and if needed, seek donor funding for this program.

6. Arrange for the Senior Health Inspector to take an appropriate management course in another African country.
7. Arrange for appropriate management courses to be taken by the Deputy Senior Health Inspector and district Health Inspectors in another African country or in Swaziland.
8. Convene representatives of the training resources available in Swaziland to plan and execute in-service training in supervision, management, community organization, health education, communication, keeping of records and writing of reports, and other topics identified by the Health Inspectorate in the workshop conducted by the consultant.

We recommend that the Task Force should be constituted and have its first meeting within three weeks of receipt of this draft report. Meetings, thereafter, should be held with the frequency necessary to accomplish the majority, if not all, of these actions by March 31, 1984. A chart for implementation of the main recommendations follows (see Figure 3).

Figure 3

IMPLEMENTATION CHART FOR HEALTH INSPECTORATE
TASK FORCE

Activity	Responsibility	Time	Resources Needed
1. Transfer a Health Inspector (HI) to Central Office as temporary Deputy Senior HI.	Deputy Director of Health Services (DDHS) in consultation with Senior HI.	As soon as feasible.	Best available HI. Appointment of substitute in District as replacement.
2. Establish permanent post of Deputy Senior Health Inspector.	DDHS in consultation with Personnel Officer (MOH) and approval of Dept. of Establishments and Training.	Initiate process immediately.	Qualified person and appropriate salary.
3. Transfer responsibility for purchasing and distribution of supplies to interim Deputy SHI.	Senior Health Inspector.	On completion of Recommendation 1.	None additional.
4. Upgrading posts in Health Inspectorate.	DDHS, Senior HI, Personnel Officer, Establishments and Training.	As soon as feasible.	Salary increases concomitant with upgrading.
5. New training program for Health Assistants.	(At the time of completion of this consultancy, we learned that the request had just been approved.)		
6. In-Service Management training for Senior HI.	DDHS	In 1984 at time at which appropriate course is offered, e.g., at Arusha	Money for travel, subsistence and tuition. (Probably available from donor funds.)

-38-

Figure 3 (continued)

Activity	Responsibility	Time	Resources Needed
7. In-Service Management training for Deputy HI and district HI's.	DDHS and Senior HI in collaboration with training agencies.	1984 at intervals and times convenient to parties concerned.	Time of staff, subsistence and transportation where needed. No additional funding if carried out by government training agencies such as HEU, SIMPA and DEMS.
8. Convene representatives of available training resources to plan and execute in-service training (see Appendices F and G).	DDHS and Senior HI.	As soon as feasible.	Staff and agency time.

APPENDIX A
PERSONS INTERVIEWED

Bennett, J., Advisor, East African Region, UNICEF, Nairobi

Byram, M., SFE Specialist, Division of Extra-Mural Services, University of Swaziland

Chaine, J.P., Epidemiologist, Rural Waterborne Disease Control Project

Connoly, D., Statistician, Ministry of Health, Government of Swaziland

DeBose, C., Regional Health Development Officer, USAID, Mbabane

Dlamini, C.S., Management Services Officer, Department of Establishments and Training, Government of Swaziland

Dlamini, L., Nursing Sister, Public Health Unit, Mbabane

Dlamini, V., Chief Nursing Officer, Ministry of Health, Government of Swaziland

Dlamini, Z.M., Director of Health Services, Government of Swaziland

Fleet, J., Manpower Planning Advisor, Ministry of Health, Government of Swaziland

Friedman, F., Country Director, Swaziland, Institute of Development Management, Mbabane

Herman, D., Statistician, Ministry of Health, Government of Swaziland

Hoadley, A.W., Leader of Party, Rural Waterborne Disease Control Project, Swaziland

Hoff, W., Health Director, Rural Waterborne Disease Control Project, Swaziland

Huesman, R., Director, USAID, Mbabane

Jenkins, P., Technical Advisor, Community Mental Health Nursing, Institute of Health Services

Konturas, G., Rural Health Administrator, Shiselwini District, Swaziland

Lapping, D., General Practitioner, Nhlanguano, Swaziland

Lawrence, W., Sanitarian Advisor, Rural Waterborne Disease Control Project

Maitin, F., WHO Technical Advisor to the Health Inspectorate Program, Institute of Health Services

Makubu M., Deputy Chief Nursing Officer, Ministry of Health, Government of Swaziland

McCarthy, S., Human Resources Development Officer, USAID, Mbabane

Malaza, H., Under Secretary, Ministry of Health, Government of Swaziland

Menouta, L., Director, Health Education Unit, Ministry of Health, Government of Swaziland

Mkoko, T., Personnel Officer, Ministry of Health, Government of Swaziland

Mndebele, E.T., Nursing Sister, Public Health Unit, Mbabane

Motsa, A., Community Development Officer, Refugee Resettlement Center, Ndzevane, Swaziland

Mtetwa, L.L., Senior Health Inspector, Ministry of Health, Government of Swaziland

Ntiwane, E.N., Matson, Public Health Unit, Mbabane

Nxumalo, D., Director, Health Planning Unit, Ministry of Health, Government of Swaziland

Owen, H., Deputy Director of Health Services, Ministry of Health, Government of Swaziland

Procter, J., Peace Corps Volunteer, Water Technician, Mahamba-Zombodze Rural Development Area

Rose, S., Peace Corps Volunteer, Water Technician, Mahamba-Zombodze Rural Development Area

Shabalala, R., Director, Public Health Unit, Mbabane

Sibisi, H., Rural Sociologist, Ministry of Agriculture, Government of Swaziland

Simelane, P., Health Educator, Ministry of Health, Government of Swaziland

Simelane, V., Director, Department of Extra Mural Studies, University of Swaziland

Yoder, R., Advisor, Health Planning Unit, Ministry of Health, Government of Swaziland

Ziane, J., Principal, Swaziland Institute of Management and Public Administration, Mbabane

Zwane, T., Principal Secretary, Ministry of Health, Government of Swaziland

APPENDIX B
PLACES VISITED

Mbabane

USAID Offices
Ministry of Health (MOH)
Department of Establishments and Training
Institute of Health Sciences
Public Health Unit
Swaziland Institute of Management and Public Administration
Institute of Development and Management
Ministry of Agriculture

University of Swaziland

Ministry of Health District Offices

Shiselweni District

Nhlangano Office
Zombodze Clinic
Mahamba--Zimbodze Rural Development Area

Lubombo District

Siteki Office
Lomahasha Primary School
Refugee Resettlement Center--Ndzevane

Manzini District

Manzini Office

Hhohho District

Pigg's Peak Office

APPENDIX C

SCHEME OF SERVICE FOR THE HEALTH INSPECTORATE

MINISTRY OF HEALTH

1.1 INTRODUCTION

The Public Health Inspectorate is currently staffed with a Senior Health Inspector (at Headquarters); 2 district Health Inspectors; 2 Senior Health Assistants and 32 Health Assistants. In training at the Institute of Health Sciences (IHS), are 4 classes of Health Inspector students totalling nearly 40 students. Three quarters of the students are from Swaziland. The remaining students come from either Lesotho or Botswana. The first class will graduate in December 1982, with the second class following in August 1983. Successive classes will graduate in August 1984, and 1985. Six posts for Health Inspectors have been created for 1983-84 by the MOH, but 6 additional posts must be allocated for each of the 3 succeeding financial years in order to meet staffing projections of the Inspectorate as delineated in MOH Five Year Plan.

The Health Assistant cadre has been in existence since 1975, when a WHO sanitarian-tutor initiated a one year training course. Three classes totalling 48 students were subsequently trained with emphasis upon sanitation, spring protection, shop and meat inspection. Attrition (mainly from inadequate logistical support, lack of housing and transport, and low government grade) have reduced the Health Assistant cadre by 1/3 in less than five years. Training of more HA's is clearly indicated, and has been encouraged by a WHO manpower consultant to MOH in 1981.

1.2 OBJECTIVES:

- i) To ensure proper supervision and communications within the cadre by clear definition of job descriptions of each grade within the cadre.
- ii) To provide a career structure which will promote job identity, incentive, and satisfaction as a public health servant.

1.3 PRIMARY DUTIES OF THE HEALTH INSPECTORATE

Current MOH policy endorses heavily the provision of a primary health care system that fundamentally includes the development of clean water supplies and basic sanitation. In order to meet the objectives defined by the MOH policy, the activities of the Health Inspectorate can be summarized to concentrate upon:

1. Increase community understanding of environmental disease and establish strategies for community involvement in planning and implementing protection of water supplies and construction of sanitary facilities.
2. Increase coverage of basic sanitation facilities in the rural and peri-urban areas of Swaziland from the present 20% to 50% by the end of the Fourth Five Year Plan.
3. Increase coverage of protected water supplies in the rural and peri-urban areas through the construction of small unreticulated (non-piped) water systems.
4. Increase coverage of protected water supplies and sanitation at schools and clinics.

1.4 COMPOSITION OF HEALTH INSPECTORATE

Revised job descriptions for chief and senior Health Inspector, Senior Health Assistant, and Health Assistant are attached:

Job Descriptions of Chief Health Inspector

1. Review and analyze monthly reports submitted by each SDHI and Health Assistants.
2. Make periodic inspections of the districts, particularly the district monthly meetings.
3. Meet with DDMS routinely to discuss progress of the Inspectorate water/sanitation programme and other activities.

4. Advise on health matters to Liquor Licencing Board.
5. Meet periodically with appropriate officials in Education, Labour, RDA, RWSB, Community Development and others in order to establish or strengthen links with those units.
6. Prepare in collaboration with Planning Unit yearly budget, and annual work plan.
7. Serve as member of Town Boards.
8. Serve as member of National Celebrations Committee.
9. Prepare Annual Health Inspectorate Report.
10. Carry out vector control activities at airport as required.

Job Description of Senior District Health Inspector

1. Coordinate and supervise all activities within district. Visit each HI and HA periodically.
2. Submit written monthly summary report to Chief Health Inspector on activities within district, and status of construction materials.
3. Serve as member of district Health Team.
4. Attend District Development Team meetings monthly and present monthly activity report at this meeting.
5. Liase with RWSB, RDA, Community Development and establish working relationships with them.
6. Chair monthly District Health Inspectorate meetings and submit minutes to CHI.
7. Inspect periodically factories, institutions, and agricultural estates in conjunction with Labour/Factory Inspector. Particular emphasis paid to water, sanitation, ventilation, overcrowding, exposure to health hazards. Submit copy of report to CHI.

8. Supervise the MOH water tanker programme within district.
9. Direct vacuum tanker services within district.
10. Carry out routine inspection of food handling establishments including stores and restaurants, abattoirs.
11. Serve as member of District Celebrations Committee.
12. Review building plans for health implications.
13. Member of Town Board in district.
14. Attend Tinkhundla meetings.

Job Description of Health Inspector

1. Routine supervision of Health Assistants
under jurisdiction.
Assure that monthly reports from HA
are correct before submission to SDHI.
2. Carry out routine inspection of food handling establishments including stores and restaurants.
submit summary report to SDHI monthly.
3. Conduct inspections at abattoirs, and rural slaughter poles as required, and submit copies of inspection to SDHI.
4. Carry out communicable disease control activities as required by SDHI. These would include contact tracing, health education sessions with public, conveyance of water samples and faecal swabs to appropriate lab, and burials.
5. Attend monthly district Health Inspectorate meeting.
6. Visit schools in areas that HA's cannot visit.
7. Participate in training of Rural Health Motivators.
8. Carry out any needed Pest Control activities.
9. Attend Tinkhundla meeting when SDHI cannot attend.

Job Description of Senior Health Assistant

1. Supervise and control ordering of and distribution of construction materials and the maintenance of stores records within the district. A written monthly summary of stores records is to be submitted to SDHI.
2. Supervise the work of Health Assistants as required by Senior District Health Inspector.
3. Perform other duties as assigned by Senior District Health Inspector, i.e. contact tracing.
4. Attend monthly District Health Inspectorate meetings.
5. Attend Tinkhundla meetings as required by SDHI.

Job Description of Health Assistant

1. Promote community understanding of environmental disease by educational talks with community leaders, and health committees.
2. Advise on and assist with the construction of sanitary pit latrines in the community. Liase with RHM's routinely.
3. Advise and assist in construction of water systems, particularly in liaison with Rural Water Supply Board.
4. Visit regularly (twice weekly) schools in immediate area to promote the construction of toilets and refuse pits.
5. Carry duties as assigned by district Health Inspector in the control of communicable and infectious diseases, pertaining to contact tracing, burials, and conveyance of water samples.
6. Attend monthly district Health Inspectorate meeting.
7. Prepare monthly report of activities and submit to district Health Inspector. Report should include status of water and sanitation projects as well as material use and inventory information.

1.5 PROGRESSION WITHIN THE CADRE

Historically, the Health Inspectorate has borne the burden of budgetary constraints, both in salary grade and monetary allotment for capital construction activities.

It is recommended that the following changes occur within the Inspectorate cadre:

1. Senior Health Inspector (change title to Chief Health Inspector). It is recommended that the present grade of 18 be changed to grade 22. This is based upon comparison with very similar positions in the Town Councils and Ministry of Agriculture. The Responsibilities of Chief Health Inspector in the MOH are certainly equal to if not exceeding those in Town Councils or MOA. However, it is also recommended that prior to the aforementioned change, the SHI participate in a middle management level seminar such as the one scheduled at SIMPA in June 1983. (Description of Course in Appendix 2). Promotion to this position is based on merit as district Health Inspector with at least 3 years as DHI.
2. District Health Inspector (change title to Senior District Health Inspector). It is proposed that the proposed position (DHI) grade of 16 be upgraded to 19. Justification here is based on expectations/responsibilities of the position and grades in other Ministries for similar post. Promotion here is conditional upon merit and at least 3 years of experience as a Health Inspector. Also, a basic management functions course like one proposed at SIMPA during June - July, 1983 would be a prerequisite. (Course brief in Appendix 2).
3. Health Inspector. It is recommended that the current grade of 15 be upgraded to 17. This promotion is justifiable upon examination of corresponding positions within other Ministries and the Town Councils. Presently, the best qualified candidates are being lured to positions in Agriculture and Town

Councils. MOH Health Inspectors constitute an important supervisory and decision-making link in the provision of primary health care service to the rural populace, and provisions must be made to attract and keep them at their posts. Entry to this position is contingent upon successful completion of the 3-year course at IHS or presentation of equivalent credentials from another institution.

4. Senior Health Assistant. It is envisaged that this post remain at grade 12. Promotion to this position is contingent upon merit and at least 3 years experience as a Health Assistant.
5. Health Assistant. It is recommended that the current grade of 9 be upgraded to 11, to correspond favourably with HA's in the Town Councils. In view of the recommendations that HA training be recommenced starting in 1984, the upgrading might also induce Town Councils to participate in the training by proposing candidates and helping in both the theoretical and practical aspects. Entry point is possession of Cambridge "O" level with passes in Maths, Science, and English, and successful completion of the Health Assistant training programme. An interest and aptitude in health and development in rural Swaziland is also expected.

Appendix 3 illustrates a proposed organizational structure of the Health Inspectorate.

1.6 TRAINING WITHIN THE HEALTH INSPECTORATE

Presently, there is little opportunity for a Health Assistant to be promoted except to the position of Senior Health Assistant. However, as there are only 4 SHA posts in the MOH, and presently 32 HA's, the chances of becoming a SHA are not encouraging (1 in 8).

In order to boost morale and incorporate a greater sense of professionalism within the HA cadre, it is proposed to draw

future Health Inspector students exclusively from the HA cadre. The process would entail two selection criteria: 1) 3 years experience as HA; and 2) recommendation to study Health Inspection from the District Health Team. Recruitment of SHA's to the Health Inspection programme would of course also be possible. The rationale behind this idea is clearly to improve the incentive and career orientation of the Health Assistant personnel. MOH is proposing a temporary exemption for the entry point to the Health Inspector grade. Because the entry point for HA training was JC certificate and all present HA's possess only the JC certificate, an exemption for these present HA's is recommended for the next two HI training programmes. After these programmes, all HI trainees would qualify for the entry point of "0" level holder as this point would also apply to HA trainees.

A tailor-made two-year Health Inspector programme would have to be developed by IHS/MOH staff. Because the present HA's have already one year training and at least 4 years field experience behind them before entrance to the programme, it would be somewhat repetitive to continue with the same 3 year curriculum that current HI students are following. (Current students are directly from high school with little or no previous health work experience). It is hoped that both the Department of Establishments and Training and the University College of Swaziland (which officially recognizes the Health Inspector programme) would endorse this aforementioned idea. Although somewhat unorthodox, it is also proposed for another reason. Health Assistants are the critical MOH link to the community in many areas. Their self-ésteem and pride are essential to their effectiveness and responsiveness to the community. Without the chance of real promotion, there may eventually evolve a degree of friction and animosity between the HA and HI cadres. Obviously, this would be detrimental to the programme.

After the four classes of current Health Inspector students graduated, and are placed in the field, the MOH can expect a certain degree of attrition. In order to maintain an equilibrium, it will be necessary to provide some periodic

training. A recommendation would be to alternate Health Inspector training with Health Assistant training after the training of the 53 HA's needed to staff the Health Inspectorate, Bilharzia, and Malaria Units. By this plan, after the graduation of the 4th class of Inspectors in August 1985, it would not be necessary to re-commence HI training until 1987, when at least 3 or 4 classes of HA's would have completed their one year programme at IHS.

Projected staffing of the Health Inspectorate is presented in Appendix 1. In brief, the 5 Year Plan anticipates the localized training of Health Assistants to commence no later than April 1984, so that 13 new Health Assistants can be placed in the field no later than April 1985. These projections would mean the training of about 53 Health Assistants by the end of the 4th Five Year Plan period for the Health Inspectorate alone.

Posts for these trainees must be established concurrent with the training of the Health Assistants and equally important is the localization of the HA tutors. Currently, a WHO sponsored Sanitarian/Tutor and an expatriate Health Inspector occupying a local post are the only tutors at IHS. The grade of Health Inspector tutor is 16, and is a main factor in the MOH's inability to hire a qualified local candidate. Four additional tutors have been requested by IHS in order to create a teacher/student ratio that is academically effective and that will produce qualified graduates.

It would be desirable to recruit qualified candidates with local experience as they understand the Swazi language and culture better than outsiders. Without advertising, this could be partially achieved by the transfer of the two existing Health Inspectors, Mr. A. Lerulle and Mr. A. Marule from Pigg's Peak and Nhlanguano respectively, and Mr. P. Mathews, Chief Inspector at the Malaria Control Unit to IHS tutor posts. They all have a wealth of experience as HI's in Swaziland and were all in fact active in previous HA training programmes.

Upgrading the tutor posts of 18 may also attract other qualified local candidates that are currently uninterested in the position.

Attached is a detailed training plan for Health Assistants that delineates the points briefly touched above.

Appendix 1.

PROJECTED STAFFING - HEALTH INSPECTORATE

<u>Fiscal Year</u>	<u>HEALTH INSPECTORS</u>				<u>HEALTH ASSISTANTS</u>			
	<u>Existing at Start of Year</u>	<u>Loss During Year</u>	<u>New Recruit</u>	<u>Total Supply to Meet Objectives</u>	<u>Existing at Start of Year</u>	<u>Loss During Year</u>	<u>New Recruits</u>	<u>At End of Year</u>
83-84	8	1	5	12	25	2	0	24
84-85	12	1	4	15	24	2	0	22
85-86	15	2	4	17	22	3	13	32
86-87	17	2	3	18	32	3	20	49
87-88	18	3	3	18	49	4	20	65

Appendix 2. PROPOSED TRAINING AT SIMPA FOR 1983 - SUITABLE FOR
HEALTH INSPECTORATE PERSONNEL

A. MIDDLE MANAGEMENT (MIDDLE MANAGERS)

SEMINAR PROPOSED FOR CHIEF HEALTH INSPECTOR

OBJECTIVES:

To enable middle managers to understand better their roles and responsibilities. To provide participants with an awareness of the factors influencing and shaping human behaviour in the working environment and to assist them in improving the management of individuals in their work groups. To provide participants with increased knowledge and more sharpened skills to enable them to manage their operations. To broaden the perspectives of participants for better team performance.

CURRICULUM:

Decision making, planning, problem solving, leadership, communications, motivation, teamwork and delegation, conflict resolution, personnel administration, performance appraisal, time management, management by objectives, management information systems, budget and financial management.

DURATION:

2 (two) weeks - June 5 - June 17, 1983

PARTICIPATION:

Grades 20-23

RESIDENTIAL:

B. BASIC MANAGEMENT FUNCTIONS COURSE -
PROPOSED FOR DISTRICT SENIOR HEALTH INSPECTORS

COURSE OBJECTIVES:

1. To enable participants to gain an appreciation of some key management concepts and skills.
2. To assist participants to gain an understanding of their roles, functions and responsibilities.
3. To stimulate, among participants, interest to pursue increased knowledge of their functions and responsibilities with a view of finding ways of performing their duties more effectively.
4. To enable participants to have a better understanding of Government operations.

DURATION:

Two (2) weeks - June 20-July 1, 1953

CURRICULUM:

Management Information Systems
Basic Management Functions
Human Relations
Introduction to Public Relations
Machinery of Government
Basic Financial Management
Basic Concepts of Organization and Methods
Communications and Report Writing
Civil Service Structure/Rules and Regulations
Budget and Financial Management

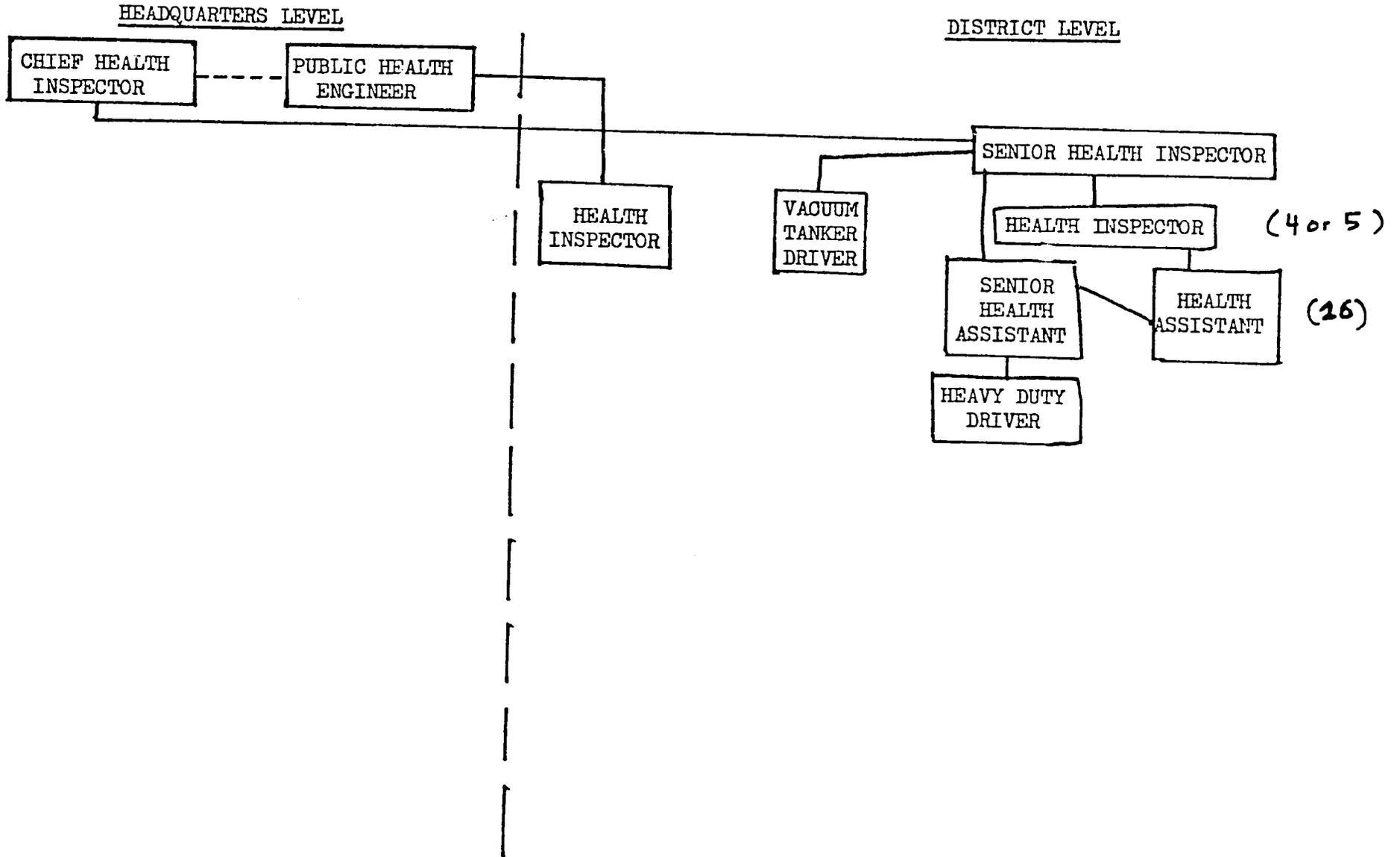
PARTICIPANTS:

Grades 15-19

CERTIFICATION:

None

PROPOSED ORGANIZATIONAL CHART OF HEALTH INSPECTORATE



MINISTRY OF HEALTH - HEALTH INSPECTORATE DIVISION
DISTRICT HEALTH INSPECTOR MONTHLY SUMMARY REPORT

District: _____

Month: _____

Year: _____

Name of DHI: _____

Station: _____

A. TOILET CONSTRUCTION

1. Number of projects carried over from previous month
2. Number of new projects started this month
3. Number of projects completed during this month
4. Number of projects incompleted at end of this month

III	RHM Motivated At RDA	With RWSB	Schools	TOTAL	Cement Slab	Local Materials

B. SPRING PROTECTION

1. Number of projects carried over from previous month
2. Number of new projects started this month
3. Number of projects completed during the month
4. Number of projects incompleted at end of month

COOPERATING AGENCY						

APPENDIX D

C. CONSTRUCTION MATERIALS

1. On hand at start of month
2. Used for toilets during month
3. Used for springs during month
4. Total material used
5. Materials received
6. On hand at end of month
7. Material requested

Pockets Cement	6m Rein- forcement	13m Rein- forcement	Vent Pipes	Flyscreen (6" x 6" pcs.)	Galvanized Pipe (metres)	Metres of Plastic Pipe	Elbows	Nipples	Taps	Sheets of Corrugated	Lengths of Timber (metres)	Nails and Washers	Saw Blades

D. MEAT INSPECTION

1. Number of carcasses inspected
2. Number of carcasses passed
3. Number of carcasses in deep freeze
4. Number of carcasses condemned
5. Reason for condemning carcasses:

Beef	Sheep	Goats	Pigs

6. Organs condemned:

Organs condemned:	BEEF									SHEEP									GOAT									PIG								
	Lung	Liver	Heart	Kidney	Spleen	Intestine	Udder	Head	Pancreas	Lung	Liver	Heart	Kidney	Tongue	Intestine	Udder	Head	Lung	Liver	Heart	Kidney	Tongue	Intestine	Udder	Head	Lung	Liver	Heart	Kidney	Tongue	Intestine	Udder	Head			
Measles	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
Flukes	x		x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
Necrosis																																				
Hydatid Cysts																																				
Abscess																																				
Hydronephrosis																																				
Nephritis																																				
Cirrhosis																																				
Emphyzema																																				
Pneumonia																																				
Pimply Gut																																				

(+) Specify pathology: _____

E. FOOD ESTABLISHMENTS

	Visited	Foodstuffs Seized (+)	Warnings	Prose-cutions	Closures
Shops					
Butcheries					
Restaurants					
Bakeries					
Hotels					
Others					

(+) List items seized here: _____

F. NON-FOOD ESTABLISHMENTS

	Visits	Warnings
Hardware store		
Clothing store		
Barber shop		
Other(specify)		

G. MEETINGS

1. Schools - Names of new schools contacted by HA's in district

2. Rural Water Supply Board - Community meetings where HA's attended with RWSB Community Development Officer

Number of meetings with school committees

Name of Locality or Community	Date	Status of Project

Are there any new RWSB supplies being considered in your district?

Name of Community/Locality	No. of Homesteads served

Contact	
Yes	No

3. (RDA) Community Meetings with RDA's

Name of RDA	Date of Meeting

Are there any new RDA water supplies being considered in your district?

Name of RDA	No. of Homesteads to be served

Contact	
Yes	No

4. RHM's - Meeting with RHM's in your district

Date	Location	Comments

COMMENTS: _____

Signature: _____ Date: _____

APPENDIX E
Ministry of Health

TRAINING PLAN FOR HEALTH ASSISTANTS
IN SWAZILAND

	<u>Page</u>
I. INTRODUCTION	1-5
. Five Year Plan/Policy Statement	
. Status of Health Inspectorate Activities	
. Current Health Assistant Programme	
. Tutors for HA training	
II. RATIONALE FOR HA TRAINING	5-6
III. PLAN OF ACTION	6-7
. dates that HA training programme can commence	
. tutors	
. length of training	
. number of students	
. qualifications of candidates	
IV. CURRICULUM OUTLINE	8-9
. Principles of Health Education	
. Basics of Sanitation	
. Spring Protection	
. First Aid	
V. OUTLINE OF FIELD PRACTICALS	9
VI. COST ESTIMATES OF PROGRAMME	10
VII. SUMMARY	11
Appendix 1. Proposed Health Inspectorate Staffing 1983-88	

The Public Health Inspectorate is currently staffed with a Senior Health Inspector (at Headquarters); 5 district Health Inspectors (3 are recent graduates from IHS); 4 Senior Health Assistants and 30 Health Assistants. Additionally, the Malaria Control Unit is staffed with 2 Health Inspectors and 29 Health Assistants (one of the Health Inspectors is a recent graduate of the Institute of Health Sciences). The Bilharzia Control Unit consists of a recent IHS graduate Health Inspector, and seven Health Assistants. In training at the Institute of Health Sciences (IHS), are 3 classes of Health Inspector students totalling nearly 30 students. Three quarters of the students are from Swaziland. The remaining students come from either Lesotho or Botswana. The first class graduated in December 1982, with the second class to follow in August, 1983. Successive classes will graduate in August 1984, and 1985. Six posts for Health Inspectors have been created for 1983-84 by the MOH, but 6 additional posts must be allocated for each of the 3 succeeding financial years in order to meet staffing projections of the Inspectorate as delineated in MOH Five Year Plan.

The Health Assistant cadre has been in existence since 1975, when a WHO sanitarian-tutor initiated a one year training course. Three classes totalling 48 students were subsequently trained with emphasis upon sanitation, spring protection, shop and meat inspection. Attrition (mainly from inadequate logistical support, lack of housing and transport, and low government grade) have reduced the Health Assistant cadre by 1/3 in less than five years. Training of more HA's is clearly indicated, and has been encouraged by a W.H.O. manpower consultant to MOH in 1981.

It is incumbent upon the MOH to not only provide training and jobs for new Health Assistants, but also address the problem of high attrition rates within this cadre. Currently, the MOH, via the Rural Clinic Renovations Project, is making progress with HA housing. Houses currently being built at twelve clinics throughout the country. Beyond the scope of this project, MOH must emphasize the need for HA housing at every one of the 33 rural clinics within Swaziland.

A common complaint of Health Assistants is the lack of construction materials to build toilet slabs and to protect springs. Aside from the problem of transport, the limiting factor in this impediment of the sanitation programme has been budget. For example, the E11,200 allocated to the Health Inspectorate for construction materials during fiscal year 1982-83 was depleted within seven months. This underestimate has been rectified for the current financial year with an over 100% increase in this capital expenditure item. This increase should allow the purchase of cement, reinforcement, etc. throughout this fiscal year.

The grade of Health Assistant is currently 9, where it has remained for several years. It has been proposed in a revised Scheme of Service being prepared by MOH that this grade be changed to 11, so that the salary be comensurate with the responsibilities of the post.

The employment of the Health Inspectors being trained at Institute of Health Sciences can only help in the management and supervision of the Health Assistant cadre which for a long time has relied on the services of two Health Inspectors to perform these functions. Regular feedback and proper supervision will not only increase performance but also boost morale of a cadre in which up to 75% of the personnel are posted in rather remote areas.

PRIMARY ACTIVITIES OF THE HEALTH INSPECTORATE AND STATUS OF THESE ACTIVITIES

Current MOH policy endorses heavily the provision of a primary health care system that fundamentally includes the development of clean water supplies and basic sanitation. In order to meet the objectives defined by the MOH policy, the activities of the Health Inspectorate can be summarized to concentrate upon:

1. Increase community understanding of environmental disease and establish strategies for community involvement in planning and implementing protection of water supplies and construction of sanitary facilities.
2. Increase coverage of basic sanitation facilities in the rural and peri-urban areas of Swaziland from the present 20% to 50% by the end of the Fourth Five Year Plan.
3. Increase coverage of protected water supplies in the rural and peri-urban areas through the construction of small unreticulated (non-piped) water systems.
4. Increase coverage of protected water supplies and sanitation at schools and clinics.

A major pre-requisite in the implementation of the above-stated activities is the improvement of the manpower capabilities of the Health Inspectorate via:

1. reinstatement of Health Assistant training; and
2. institution of an effective management system hinging upon decentralization, a management information system, and effective routine supervisory practices. As a training plan, this activity is not dealt with in detail in this document.

In addition to the above-mentioned activities, the Bilharzia Control Unit aims to:

1. Conduct a national survey to determine the prevalence of bilharzia in Swaziland.

2. Provide drug treatment for all persons found to be infective with bilharzia parasites.
3. Conduct on-going research of vector snails found in Swaziland.

The Malaria Control Unit focuses upon:

1. Active malaria case detection through home visits and routine examination of blood films.
2. Space-spraying of houses hosting the A. gambiae vector.
3. Treatment of all positive cases with a curative dose of chloroquine with follow up of the cases at fortnightly intervals.
4. Administration of prophylactic doses of chloroquine to vulnerable age groups (i.e. children and pregnant women).
5. Residual spraying with DDT of all human habitations to eliminate resting mosquitoes.
6. Treatment of obvious breeding sites by filling, draining, or treating with larvicides.
7. Entomological investigations ^{doing} by night collections to determine vector densities in various areas of the country. Research on species identification is being done in conjunction with Ross Institute.

HEALTH ASSISTANT PROGRAMME

Projected staffing of the Health Inspectorate and Bilharzia and Malaria Units is presented in Appendix 1. In brief, the Five Year Plan anticipates the localized training of Health Assistants to commence no later than April 1984, so that 20 new Health Assistants can be placed in the field no later than April 1985. These projections would mean the training of about 75 Health Assistants by the end of the 4th Five Year Plan period.

Posts for these trainees must be established concurrent with the training of the Health Assistants and equally important is the localization of the HA tutors. Currently, a WHO sponsored Sanitarian/Tutor and an expatriate Health Inspector occupying a local post are the only tutors at IHS. The grade of Health Inspector tutor is 16 and is a main factor in the MOH's inability to hire a qualified local candidate. Four additional tutors have been requested by IHS in order to create a teacher/student ratio that is academically effective and that will produce qualified graduates.

In order to "localize" training, it would be desirable to recruit qualified local candidates as they understand the Swazi language and culture better than outsiders. This could be partially achieved by the transfer of the three existing Health Inspectors, Mr. P. Mathews, Mr. A. Lerutle and Mr. A. Marule from Manzini, Piggs Peak and Nhlangano respectively, to IHS tutor posts. They all have a wealth of experience as HI's in Swaziland (more than 10 years each) and were in fact active in the previous HA training programme.

II. RATIONALE FOR HA TRAINING

By mid 1985, the MOH Health Inspectorate will be staffed by at least seventeen Health Inspectors nationwide. This number could be as high as twenty-five, provided posts for Inspectors are appropriated.

It is projected that by the same period (mid 1985) there will remain only twenty-two Health Assistants active in sanitation projects (see Appendix 1). By any recognized effective Management practice, this ratio of one HI to one HA is not an effective one.

More importantly, with the rural population of Swaziland estimated to be in excess of 420,000 by 1985, it is ludicrous to expect twenty-two field workers to cover the entire country (the ratio of HA to population would be almost 1 : 20,000!). Current Health Manpower Planners prefer a ratio of no more than 1 : 8,000. (Health Manpower Planning - Principles, Methods, Issues, edit.: T.L. Hall and A. Mejia - World Health Organization 1978).

Also, of consequence is the current plan to liase the Health Inspectorate cadre with the Public Health Unit's Rural Health Motivator programme. With presently 381 RHM's located in 10 various Tinkhundla about the country, it is also important to field enough Health Assistants to effectively collaborate with the RHM cadre.

III. PLAN OF ACTION

Dates:

As delineated in the MOH Fourth Five Year Plan and strongly encouraged by two recent WHO consultants to the MOH (Max Roy 1981, Bud Day 1982), Health Assistant Training should be reinstated as soon as possible. However, constraints such as venue and tutors currently exist and must be addressed.

The Institute of Health Sciences could not realistically absorb new Environmental Health students prior to October-November 1983, when there would remain still two classes of Health Inspectors at IHS. It is envisaged that training should commence no later than April 1984 (beginning of fiscal year 1984-85).

Tutors:

Concerning tutors for the HA training programme, it was mentioned earlier that Messrs. Mathews, Lerutle, and Marule could be seconded from their operational respective positions as Chief of Malaria Unit, DHI - Piggs Peak, and DHI - Shiselweni only after new Health Inspectors have been in their posts for a year. 5 Health Inspectors will soon be employed by MOH in January or February 1983. By January 1984, they would have about one year's experience in the field, and three of the five could be expected to move into the operational positions currently held by Messrs. Mathews, Lerutle, and Marule.

It is suggested that prior to assuming the posts of tutor, Messrs. Mathews, Lerutle, and Marule would have time to review the proposed curriculum and training methodology with the Senior Health Inspector and Environmental Sanitarian advisor in the MOH. As all three inspectors have teaching experience in Swaziland, no further pedagogical training is seen as necessary.

Training Programme:

The length of the HA training programme is expected to be one calendar year in duration. (Previous training of three classes of HA's during 1975-77 was also of one year duration). An outline of the proposed curriculum follows. Generally, six months of theoretical and didactic activities will be followed by six months of field practicals in the rural communities.

Qualifications of Students:

Entrants to the Health Assistant programme must have a minimum of J.C. certificate, with passes in Maths, Science, and English. In addition, preference will be given to candidates with an aptitude for work in rural development. This can be partly achieved by posting advertisements of the training programme in the rural areas (RDAs), Clinics, Post Offices, Community Development Offices, etc. in order to attract as many rural people as possible.

IV. HEALTH ASSISTANT CURRICULUM OUTLINE

1. Principles of Health Education Techniques and Strategies in the Rural Environment

Course includes an introduction to Health Education Centre and its personnel. HEC staff will orient students to HEC outreach strategies, educational programmes and technical resources. When possible, HEC staff may provide field trips to communities that the HEC is currently working with. Emphasis will be made on stressing to the HA's that they are also health educators and along with RHM's, represent the primary health contacts in a rural community.

2. Basics of Sanitation and Excreta Disposal

Various culturally and economically appropriate means of sanitary excreta disposal will be discussed after review of communicable, infectious, and vector-borne diseases pertinent to the HA's job. Special attention will be paid to water-borne diseases such as typhoid and cholera, and vector-borne diseases such as malaria and bilharzia. Latrine construction technology discussions and demonstrations will focus on both cement and wooden pole construction of toilet slabs and importance of the vent pipe for control of odours and flies.

Also, refuse disposal and hygiene practices within the home will be discussed. Field visits to communities with exemplary sanitation programmes will be made.

3. Protection of Springs and Construction of Safe Water Supplies

This course will place demonstrational and practical emphasis upon construction of spring boxes and small cement reservoirs. Basics of hydraulics, construction techniques, and soakaway design/construction will be taught. SCOT may be used for some construction theory and cement work.

Rural Water Supply Board staff (i.e. Microtechnicians, Community Development Officers, Clerks of Works) will be asked to broaden the scope of water supply projects constructed in Swaziland (i.e. hand dug wells, boreholes with hand pumps, and "macro-systems"). Emphasis will be placed on importance of Health Inspectorate/RWSB relationship.

4. First Aid Practices

This course, administered in conjunction with Swaziland-Baphalali Red Cross will cover emergency first aid practice and culminate in a Red Cross certificate for the participant.

V. OUTLINE OF FIELD PRACTICALS FOR HEALTH ASSISTANT TRAINING

Venue^{for} for practicals will be decided jointly by Health Inspectorate staff and IHS staff. It is anticipated that the practicals which should cover a 5-6 month period will permit the students to have a positive impact in the community in which they are working. The practicals should incorporate the basics of health education, communicable disease control, sanitation, and water supply that were covered in the classroom phase.

Camping equipment is available at IHS, from HI practicals and will allow students to live and work anywhere in Swaziland during the practical period.

VI. SUMMARIZED ESTIMATE OF COSTS FOR HEALTH ASSISTANT TRAINING (COSTS FOR 20 STUDENTS)

1.	<u>Tuition at IHS</u> 20 students x E200 ¹ /student	.....	E 4,000
2.	<u>Books & Stationary</u> 20 students x E150/year	.....	E 3,000
3.	<u>Room & Board</u> ² 20 students x E25 /month x 6 months..	.....	E 3,000
4.	<u>Personal Allowance</u> while at IHS (6 months) 20 students x E150	.....	E 3,000
5.	<u>Stipend</u> ³ for Living Allowance during field practicals 20 students x E60/month x 6 months	.....	E 7,200
6.	<u>Uniforms</u> 20 students x E95/year	.....	E 1,900
7.	<u>Vehicles</u> 1 Caball (long wheel-base 1 Kombi van (ten seater)	.....	E10,000 Apr. E 9,000
8.	<u>Drivers</u> (2) @ Grade 9 (E3,000 per annum)	.....	E 6,000
9.	<u>Protective Clothing</u> - Overalls, gumboots 20 students x E25	.....	E 500
10.	<u>Tool Box</u> with tools (tape measure, trowels, spirit level, square, hack saw, blades, woodsaw) est. E50 x 20 students	.....	E 1,000
11.	<u>Stationary, Office Supplies</u> - Notebooks, pencils..	E	200
12.	<u>Construction Materials</u> for 15 springs and 100 toilets:		
	. Cost per spring - E150 x 15	.....	E 2,250
	. Cost per toilet E15 x 100	.....	E 1,500
13.	Subtotal	.....	E52,550
14.	Contingency costs @ 20%	.....	E10,510
15.	<u>TOTAL ESTIMATE</u> .....	.....	<u>E63,060</u>

Note: (Tents, sleeping bags, stoves, and cooking/eating utensils are available at IHS; however, it may prove necessary to supplement this as all Health Inspector students will not complete their studies till August 1985).

- 1 This is fee for a twelve month period at IHS, but tuition fees still apply during the field practical period.
- 2 This is based on current fees at IHS of E300 per student per academic year charged to Dept. of Establishments & Training, but may not reflect the true costs borne by the IHS. Due to inflation, this is probably closer to E50.75 per student per month.
- 3 This E60 per student per month must cover all food costs whilst in the field.

VII. SUMMARY

It is envisioned within this training plan that up to 75 Health Assistants will be trained by the end of the Fourth Five Year Plan period (1983-88). To accomplish this objective, there are certain pre-requisites that have to be considered by GOS:

1. Posts for up to 50 Health Assistants be created by the Department of Establishments and Training.
2. Posts for Health Assistants be upgraded to grade 11. A revised Scheme of Service will be soon prepared by MOH for review in other Government Ministries.
3. Establish 3 additional posts for Health Inspector/ Assistant tutors at IHS. MOH would transfer three existing Health Inspectors, Messrs. Mathews, Lerutle, and Marule to these new posts.
4. MOH Training Committee to review proposed course curriculum for the Health Assistant Programme.

Appendix 1.

A. PROJECTED STAFFING - HEALTH INSPECTORATE
(FROM MOH FOURTH FIVE YEAR PLAN)

HEALTH INSPECTORS

HEALTH ASSISTANTS

<u>Fiscal Year</u>	<u>Existing at Start of Year</u>	<u>Loss During Year</u>	<u>New Recruit</u>	<u>Total Supply to Meet Objectives</u>	<u>Existing at Start of Year</u>	<u>Loss During Year</u>	<u>New Recruits</u>	<u>Total Supply to Meet Objectives</u>
83-84	8	1	5	12	25	2	0	24
84-85	12	1	4	15	24	2	0	22
85-86	15	2	4	17	22	3	13	32
86-87	17	2	3	18	32	3	20	49
87-88	18	3	3	18	49	4	20	65

Appendix 1.

B. PROJECTED STAFFING - MALARIA CONTROL UNIT
(FROM MOH FOURTH FIVE YEAR PLAN)⁺

HEALTH INSPECTORS

HEALTH ASSISTANTS

<u>Fiscal Year</u>	<u>Existing at Start of Year</u>	<u>Loss During Year</u>	<u>New Recruit</u>	<u>Total Supply to Meet Objectives</u>	<u>Existing at Start of Year</u>	<u>Loss During Year</u>	<u>New Recruits</u>	<u>Total Supply to Meet Objectives</u>
83-84	1	0	1	2	29	0	0	29
84-85	2	1	1	2	29	0	0	29
85-86	2	0	1	3	29	1	7	35
86-87	3	0	1	4	35	2	10	43
87-88	4	0	0	4	43	2	12	53

-74-

For purposes of yearly projection, the authors of this training plan have taken the total numbers of personnel required and put them in a yearly basis.

Appendix 1.

C. PROJECTED STAFFING - BILHARZIA CONTROL UNIT
(FROM MOH FOURTH FIVE YEAR PLAN)*

HEALTH INSPECTORS

HEALTH ASSISTANTS

<u>Fiscal Year</u>	<u>Existing at Start of Year</u>	<u>Loss During Year</u>	<u>New Recruit</u>	<u>Total Supply to Meet Objectives</u>	<u>Existing at Start of Year</u>	<u>Loss During Year</u>	<u>New Recruits</u>	<u>Total Supply to Meet Objectives</u>
83-84	0	0	1	1	6	0	0	6
84-85	1	0	0	1	6	0	0	6
85-86	1	0	1	2	6	1	4	9
86-87	2	0	1	3	9	1	6	14
87-88	3	0	1	4	14	2	6	18

* For purposes of yearly projection, the authors of this training plan have taken the total numbers of personnel required and put them in a yearly basis.

APPENDIX F

EASTERN AND SOUTHERN MANAGEMENT INSTITUTE (ESAMI):
ARUSHA, TANZANIA

TRAINING PROGRAM FOR 1983

HUMAN RESOURCES MANAGEMENT DIVISION

Course No. 3:2

ADVANCED GENERAL MANAGEMENT PROGRAMME

Duration: Four weeks, from 7 February to 4 March

OBJECTIVE:

To develop a broader and deeper understanding of concepts tools and techniques of general management.

To provide opportunities for critical evaluation of their relevance to specific environments.

To acquire and/or sharpen such conceptual, analytical and behavioral skills as are necessary for increased managerial effectiveness particularly in position of higher responsibility.

CONTENT:

--The appreciation and diagnosis of relevant environments and their impact upon organizations. Management of interface relationships.

--The conceptual and analytical skills in general management processes such as planning, control and decision making.

--Individual behavior in group and organizational contexts, the dynamics of interpersonal, and intergroup relationships and team working.

--Organization diagnosis, design and development.

--Human resources management and manpower development planning, personnel policies, reward systems and their impact as applied to employees' morale and motivation.

--Industrial relations, workers participation in management.

--Leadership, management of conflict and motivation.

--Financial management, financial analysis, budgeting, cost benefit

analysis, PPBS, financial planning and control.

--Information systems and decision making; quantitative tools for decision making.

--Management of change.

--Production management and marketing.

PARTICIPANTS:

Middle and senior level managers/administrators from industrial organizations and ministries/departments of the government with substantial experience in their respective functions.

APPENDIX G

WORKSHOP FOR HEALTH INSPECTORS AND SENIOR HEALTH ASSISTANTS

1. Some Definitions of Management

1. Management is getting things done.
2. Management is deciding what needs to be done, and then getting it done.
3. Management is the efficient use of resources for a given purpose.
4. Management is getting people to work together harmoniously to achieve objectives.
5. The main functions of management are planning, implementing and evaluation.

2. Resources Available to Health Inspectorate

The following list was developed by the group:

- Community organizations, e.g., existing committees, leaders.
- Transport.
- Equipment.
- Materials needed for tasks.
- Cooperation amongst team workers.
- Time.
- Space (storage, office, housing).
- Determination of staff.
- Knowledge and skills (managerial, technical).
- Communication media.
- Money.
- Manpower.
- Community acceptance.
- Information (for management).

3. Responsibilities of Supervisors

The following list was suggested by participants:

- Must communicate the purpose and method of tasks to be done.
- Must see that objectives are reached.
- Must satisfy needs of subordinates.
- Must evaluate work performance of subordinates.
- Ensure that work starts on time.
- Monitor progress of work.
- Ensure that materials are properly used.
- Check work plans of subordinates.
- Scrutinize reports and correct them.
- Provide leadership.
- Ensure appropriate staff are appointed.
- Promote staff development.
- Given staff moral, technical and psychological support.
- Plan staff duties and division of labour.
- Organize implementation of duties.
- Given subordinates instruction, if needed.
- Screening and selecting staff.
- Monitoring staff.

Methods of carrying out these responsibilities

included:

- Scheduling.
- Field visits.
- Obtaining feedback from community.
- Regular conferences, for individuals or group.
- Knowing capabilities of staff (and building on them).
- In-Service Education.
- Giving assistance when needed.
- Work sessions.
- Good record keeping.
- Timely ordering of materials.
- Rewarding (or punishing) staff, e.g., by transfers, access to transportation.
- Giving feedback.

--Ensuring that communications are always clear.

4. Supervision--Managing Staff

Definition: Getting things done through people.

Responsibilities:

Leadership--setting an example

Direction--promoting high level of performance

Support--helping subordinate to function and grow

Feedback--evaluation of performance and assistance in correcting deficiencies.

Skills:

Interpersonal--Communication, persuasion, motivation

Conceptual--Planning, decision-making, division of labour, coordination

Technical--Monitoring, teaching, informing, consulting

Methods:

Selecting new staff.

Orientation of new staff to job.

Regular communication, congratulation and information.

Reporting, monitoring, feedback.

Periodic evaluation of performance.

5. Leadership Styles in Supervision

STYLE	ADVANTAGES	DISADVANTAGES
AUTOCRATIC	<ul style="list-style-type: none"> - saves time - good in emergencies - works well with employees who are insecure and do not like responsibility - chain of command and work division clearly understood by all 	<ul style="list-style-type: none"> - no feedback - supervisor alone in decision-making - most people resent this type of "rule" - stifles creativity
BUREAUCRATIC	<ul style="list-style-type: none"> - very consistent - fair, applies for one and all - people know where they stand 	<ul style="list-style-type: none"> - inflexible - confusion in situations where no rules apply - resentment in employees
DIPLOMATIC	<ul style="list-style-type: none"> - people cooperate and work more enthusiastically if they know why they are doing something - show of respect for employee 	<ul style="list-style-type: none"> - some see persuasion efforts as a sign of weakness - if supervision is not sincere, could be seen as manipulation - supervisor must be "good salesman"
DEMOCRATIC	<ul style="list-style-type: none"> - when people help make a decision, they support it and work hard to make it work - supervisor has benefit of best information, ideas and suggestions for decision-making - group discussion can bring critical information to surface - encourages development and growth of staff - most people work better with degree of freedom - establishes good work climate for motivated workers 	<ul style="list-style-type: none"> - takes time - some supervisors use this style to avoid responsibility - if not done well, can result in complete loss of control
FREE-REIN	<ul style="list-style-type: none"> - optimum use of time and resources - many motivated to full effort only if have complete freedom 	<ul style="list-style-type: none"> - little control - high degree of risk - can be a disaster if supervisor does not know well the competence and integrity of staff

Adapted from: Owens, James: "The Uses of Leadership Theory" in MICHIGAN BUSINESS REVIEW: University of Michigan, January, 1973.

APPENDIX H

PROGRAM FOR IN-SERVICE TRAINING FOR THE HEALTH INSPECTORATE

Introduction:

The following list of topics and subtopics is suggested as a basis for developing a comprehensive program of in-service training for the health inspectorate. The more conceptual topics such as General Management and Organization of Resources are most appropriate for the higher ranks of the health inspectorate; Supervision is appropriate for all levels of personnel, and Community Organization mainly for the lower ranks.

Suggested Schema:

1. Management--General

- Problem solving--assessing need, data collection and analysis, problem definition, reviewing experience (own and others); brain storming, nominal group process, force field analysis; consultation.
- Planning--setting priorities, goals, and objectives; innovating.
- Implementation--selecting alternatives; programming.
- Evaluation--monitoring use of resources and progress towards objectives.

2. Organization of Resources

- Resource development--identifying resources, both regular and opportunistic.
- Managing finances--budgeting, accounting.
- Managing equipment and materials--ordering, storing, issuing, controlling.
- Managing time--scheduling, work plan, duty rosters.
- Managing information--form development and use; feedback and corrective action.

--Team building--within agency and interagency.

--Coordination of activities.

--Managing personnel (see 3. Supervision).

3. Supervision

--Assigning duties and directing activities--defining responsibilities and roles.

--Communication--two-way reporting, listening, feedback; staff conferences, meetings, demonstrations.

--Teaching and learning--didactic and experiential.

--Styles of leadership--example setting, supporting.

--Motivation--inspiration, incentives, rewards, recognition, morale building, job satisfaction.

--Management by Objectives--participatory management, monitoring progress.

--Staff Performance Evaluation--monitoring, feedback (positive and negative).

--Barriers to Successful Supervision--poor communication, lack of goals, lack of coordination, management attitudes, personal problems.

4. Community Organization

--Health Education--individual, group and community; use of visual aids, demonstrations, and mass media.

--Working with Groups--brain storming, nominal group process, role playing, lectures, workshops.

--Community Involvement--identifying and working with natural leaders and existing structures; group development, motivation, and management.

filed, apparently without critical reviews. However, the SHI is presently training an HA working in the Mbabane sub-district to screen the reports for his final overview.

3.2.3 Project Activities

One striking observation was the high number of pit latrines that been initiated by householders stimulated by HA's or RHM's (who are supervised by clinic nurses in about a quarter of the country), but not completed. A larger proportion of completed latrines was found in the Rural Development Areas administered by the Department of Agriculture for resettled Swazi families. In these areas water supplies were ensured by the Department of Agriculture. Because homesteads were closer together in these resettled areas, people were more likely to want the privacy of pit latrines, especially when they were assured of continued residence.

A number of reasons were elicited for the high proportion and large number of uncompleted latrines:

1. Until the beginning of the new fiscal year, beginning 1st April, 1983, funds for purchasing materials by the MOH were severely limited. For the year 1983-84 these funds were substantially increased. It has taken several months to restart the flow of materials, partly because of accounting constraints beyond the control of the Health Inspectorate. However, some HI's, we found, were not yet aware that substantial funds were available for their use. Gaps in communication were apparent. (As noted elsewhere there were other funds which could have been drawn upon.)

3.5.9 The new forms for reporting monthly activities by HI's and HA's (and any other new forms to be used in the Health Inspectorate) should be reviewed, and if necessary revised, by the Statistical Section of the MOH. Particular attention should be given to the future use of the forms in computerization of management information.

3.6 Suggested Management Responsibilities and Organizational Structure

The accompanying charts^{etc} presented (Charts 1 and 2,^{pp} 32-34 and 34A) to reflect the recommended system of management and hierarchy of responsibilities and structure.