REPORT

REGIONAL WORKSHOP ON HUMAN RESOURCES DEVELOPMENT FOR WATER SUPPLY AND SANITATION PROGRAMMES

Kuala Lumpur, Malaysia
21 - 25 August 1989

Kuala Lumpur, Malaysia
September 1989
REPORT

WHO REGIONAL WORKSHOP ON HUMAN RESOURCES DEVELOPMENT
FOR WATER SUPPLY AND SANITATION PROGRAMMES

Convened by the

WESTERN PACIFIC REGIONAL CENTRE
FOR THE PROMOTION OF ENVIRONMENTAL PLANNING
AND APPLIED STUDIES (PEPAS)

PEPAS, Kuala Lumpur, Malaysia
21-25 August 1989

18 OCT 1989

Not for sale

Printed and distributed

by the

Western Pacific Regional Centre
for the Promotion of Environmental Planning
and Applied Studies
(PEPAS)
P.O. Box 12550
50782 Kuala Lumpur
Malaysia

September 1989
NOTE

The views expressed in this report are those of the participants in the workshop and do not necessarily reflect the policies of the World Health Organization.

This report has been prepared by the Western Pacific Regional Centre for the Promotion of Environmental Planning and Applied Studies (PEPAS) for Governments of Member States in the Region and for the participants in the Regional Workshop on Human Resources Development for Water Supply and Sanitation Programmes, held in Kuala Lumpur, Malaysia, from 21 to 25 August 1989.
## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>OPENING SESSION</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>OBJECTIVES</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>WORKSHOP PROGRAMME</td>
<td>2</td>
</tr>
<tr>
<td>4.1</td>
<td>General</td>
<td>2</td>
</tr>
<tr>
<td>4.2</td>
<td>Working sessions</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>RECOMMENDATIONS</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>EVALUATION OF WORKSHOP</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>ACKNOWLEDGEMENTS</td>
<td>8</td>
</tr>
</tbody>
</table>

ANNEX 1 - LIST OF PARTICIPANTS, OBSERVERS AND SECRETARIAT | 9 |
ANNEX 2 - INAUGURAL ADDRESSES | 13 |
ANNEX 3 - WORKSHOP AGENDA/TIMETABLE | 17 |
ANNEX 4 - LIST OF HANDOUTS | 21 |
ANNEX 5 - LIST OF WEAKNESSES IDENTIFIED BY PARTICIPANTS | 23/24 |
ANNEX 6 - EXERCISE SAMPLES IN TRAINING | 25 |
ANNEX 7 - EXERCISE SAMPLES IN MANAGEMENT | 27 |
1. INTRODUCTION

The Regional Workshop on Human Resources Development for Water Supply and Sanitation Programmes was held at the WHO Western Pacific Regional Centre for the Promotion of Environmental Planning and Applied Studies (PEPAS) on the campus of the University of Agriculture, Malaysia (Universiti Pertanian Malaysia), Serdang, Selangor, Malaysia, from 21 to 25 August 1989.

The workshop was sponsored by WHO and attended by 14 participants from 11 countries in the WHO Western Pacific Region. In addition, two observers from the Government of Malaysia and one from the World Bank also took part in the workshop as official observers.

A list of the participants, observers and secretariat members is presented in Annex 1.

2. OPENING SESSION

Dr P. Guo, Acting Director of PEPAS, introduced Dr L.R. Verstuyft, the WHO Representative for Brunei Darussalam, Malaysia and Singapore who delivered an opening address on behalf of Dr S.T. Han, Regional Director, WHO Regional Office for the Western Pacific. During this address, participants were called upon to prepare action plans outlining steps to be taken in human resources development on their return to their respective countries.

Professor Dr Syed Jalaludin Syed Salim, Deputy Vice-Chancellor of the University of Agriculture, Malaysia, delivered a welcome address which expressed the interest of the University in the subject matter of the workshop and wished the meeting every success. The full text of these two addresses is given in Annex 2.

The consultants to the workshop, Messrs N. Carefoot and H. Gibson, were then introduced.

3. OBJECTIVES

The objectives of the workshop were:

(a) to review progress and identify weaknesses in current programmes;
(b) to educate managers/supervisors in the water supply and sanitation sector on the need for and approach to the development of comprehensive human resources development programmes in light of experience gained during the Decade; and

(c) to develop action plans for specific post-Decade activities in human resources development as it relates to the creation of national action committees; project formulation; target setting; appropriate technology; institutional development; and community education and participation.

4. WORKSHOP PROGRAMME

4.1 General

The workshop agenda/timetable is given in Annex 3.

The workshop programme was carried out by discussing problems using group exercises as a basis rather than by a series of lectures. This "guided learning" approach was instrumental in ensuring the active involvement of all participants throughout the workshop. The exercises were carried out in three smaller groups and the group chairmen were rotated during the week.

The main background document for the workshop was "Human Resources Development Handbook" written by the consultants in 1984, and this was supplemented by various other material. A full list of handouts provided to participants is given in Annex 4.

Following the opening ceremony, a get-acquainted session was held. During this session, each participant was asked to pair off with another participant briefly for a joint interview and they then introduced each other to the workshop as a result of the interview. This not only served to introduce everyone, but served as an "ice-breaker" as well.

4.2 Working sessions

Mr Fisher started the workshop working sessions with a brief overview of the current situation in training, planning and management pertaining to water and sanitation programmes in the Region. Ranking of the major constraints to water and sanitation programmes, e.g. shortage of manpower, lack of funds, poor operation and maintenance were summarized from various sources of information.

Mr Carefoot outlined the proposed programme for the week. All aspects would be covered by a "guided learning" approach. He then listed and enlarged upon the constraints in the sector as indicated in the answers to a pre-workshop questionnaire by participants.
The participants were then asked to think of the work they must accomplish through people and to identify the five main Human Resources and/or Human Resource Development constraints in their jobs. This was done individually and the constraints were then discussed in three sub-groups. They then reported back to the plenary session the five major constraints. After general discussion by participants, they were asked to prioritize the constraints.

All the participants agreed on the following constraints:

(a) Insufficient funding;
(b) Lack of administrative and policy support;
(c) Insufficient trainers and facilities (resources);
(d) Lack of trained staff (skill and knowledge);
(e) Lack of incentives and motivation (retention of staff);
(f) Poor interagency coordination;
(g) Lack of community awareness; and
(h) Cumbersome procedures in manpower planning

The workshop then studied the common causes of performance problems in the water and sanitation sector. These were divided into:

(a) Lack of skill or knowledge;
(b) Environmental or management causes; and
(c) Motivational, incentive or attitude related causes

Individual opinions varied widely on the relative importance of these causes but the bulk of the opinions were that they were equally important.

Human Resources Development (HRD), was defined as consisting of Human Resources Planning, Human Resources Training and Human Resources Management. Each of these was not a stand-alone activity but needed to be effectively integrated by management, if improved performance was to be achieved in our organizations. It was emphasized that two entities must be satisfied for best results, namely, (1) the organization and (2) the person. Group members were each issued with a copy of the HRD Handbook, written by Messrs Carefoot and Gibson, which would be the basis of the programme for the week and a ready source of reference for the future.

On Human Resources Planning, Mr Gibson provided a case study called "Mandarina's Manpower Study and Plan" which described the actual situation in a country whose real name had been substituted by "Mandarina". The participants were again divided into groups to report on the positive and negative aspects of the Plan.

At the conclusion of the first day, participants were asked to each prepare a table of "strengths" and "weaknesses" regarding the HRD work in their ministry/agency.

On the second day, a short initial session reviewed the previous day's work including an appraisal of both the participants' and resource staff's contributions.
Mr Gibson then explained further the linkage between training, planning and management in HRD.

The workshop then separated into three groups to discuss the recommendations of the "Mandarina's Manpower Study and Plan" versus their own recommendations made the previous day. The discussions in the groups and in plenary session brought to light several deficiencies in the Mandarina study and participants obtained a clear understanding of the requirement and output expected of such studies. In general, the HRD check list and HRD planning model were seen to be particularly useful tools to ensure a manpower study which comprehensively covered the three areas of planning, training and management.

For the Mandarina case, it was concluded that a manpower study should result in prioritized action plans to meet each of the following problems:

1. Continuing manpower shortage
2. High rate of turnover
3. Lack of training to develop self-sufficiency together with supervisory and management training
4. Leaking water tanks
5. Unused latrines

The essential items of the action plans are:

1. Agreed plan based on service coverage criteria;
2. Personnel practices that attract, retain and motivate staff; and
3. Harnessing of local communities and voluntary help.

Participants were asked to identify one shortcoming in the Human Resource Development process in their country which they wanted to resolve on their return. This was to be identified from the "strengths" and "weaknesses" tabulation prepared at the end of Day 1 by each participant. The "weaknesses" selected by participants are shown in Annex 5.

Mr Carefoot then introduced the training section of the workshop by illustrating several examples of what participants and trainees considered to be the main objectives of training programmes. It was emphasized that training programmes are not the only solution to problems and must be directed at specific needs. A systematic approach to training was then outlined. The guidelines to carry out each step were described. Environmental and management needs should also be determined and satisfied in addition to simply conducting a training programme.
Several exercises highlighting training problems were then carried out. These exercises brought out the necessity of incorporating training into the needs of both the individual and the organization (see Annex 6 for two exercise examples). The exercises were drawn from actual situations of a common type experienced in the field.

At the beginning of the third day of the workshop, Mr Carefoot outlined the fundamental questions (What? Who? When? How? Cost? etc.) that any plan should answer -- including HRD plans.

Training principles were also summarized. Research has shown that only 10% of new information is absorbed by students listening to lectures. Lectures have also been described as the means to transfer the notes of the lecturer to the notes of the audience without first passing through their minds; hence, the innovative approach used in this participatory workshop. The factors influencing human performance other than training, were also discussed, e.g. supervision, feedback, opportunity to perform, motivation, tools and equipment, working conditions, incentives, attitude and ability, and standards and procedures.

The concepts of human resources management were then introduced by Mr Gibson. Participants were asked to determine the relative importance their employees attached to each of the factors commonly accepted as being necessary to meet employees. The conclusions were compared with the results of employee surveys in the United States of America, Europe and developing countries. The importance of giving recognition and encouragement to employees and keeping them well-informed and involved were stressed as valuable tools to increase performance in a comparatively cheap and easy way. Various procedures and practices to overcome management problems were identified and discussed in detail. Several exercises were carried out in the groups, involving typical problems in management of people in water and sanitation programmes (refer items HO-15 and HO-18 in Annex 7). These dealt with such problems as performance standards, absenteeism, job descriptions, career structure, promotion, motivation, attitude and behaviour of employees. The group recognized that improvements in performance called for a balanced approach to management, that is, one which concentrates on both people and task management. The use of fully integrated Human Resources (Personnel) Departments applying modern techniques to assist line management in getting the best result from employees, was stressed.

On Thursday morning, 24 August 1989, Mr Carefoot summarized the results of the previous day's critique of the course. The participants rated the workshop on the basis of contents, presentation and usefulness and came up with rankings of 4.4, 4.3 and 4.3 respectively using a scale of 1 to 5. They rated the standard of their own participation at an average of 4.0.

The concept of a HRD clinic was then explained. This process is a mechanism by which participants select individual problems encountered in their own country and consult with either the other participants who previously indicated particular experience in that problem area or with
the consultants themselves. This exercise elicited good response and consultations extended for the remainder of the morning.

In the afternoon, the participants elected a representative to give their views of the workshop on the final day and their recommendations concerning follow-up required by WHO. The participants were then divided into two groups to prepare "Corrective Action Plans" for use in their own countries. This was a follow-up activity to the identification on Day 2 of the one "weakness" which each participant would like to resolve on return to his home country.

On the last day of the workshop, participants continued work on action plans after introductory directions and comments by Messrs Carefoot and Gibson.

Panel discussions were then carried out on the following topics:

(a) Lack of funds; and
(b) Incentives and staff retention.

Participants were able to discuss problems with both the resource personnel and participants having particular experience in each topic.

The afternoon session commenced with the representative of participants from the smaller countries outlining his action plan for implementation on his return to his country, namely, Papua New Guinea. The weakness identified was the lack of adequate maintenance on rural water supplies owing to:

(a) lack of funding;
(b) no planned maintenance programme; and
(c) shortage of manpower.

The action plan outlined consisted of the following actions:

(a) to develop maintenance policy;
(b) to develop guidelines for planned maintenance programme;
(c) to organize workshops; and
(d) to form action committees at the provincial and community level.

It was also suggested that manning ratios for maintenance, construction and monitoring activities be studied to enable the size of the problem to be assessed.

The action plan to accelerate activities in drinking water supply and sanitation in the Lao People's Democratic Republic was also presented by the Lao participant. In spite of nine training programmes having been carried out, progress was not up to target because of lack of budget and programme direction. An action plan to establish a high level National Committee was outlined. This committee would comprise senior members from the Ministries of Agriculture, Construction, Finance and Health, and would
chart future responsibilities and policies and review current progress and problems. The action plan outlined the various steps in the creation of this committee.

In the later part of the afternoon, Mrs R. Tuason presented a summary of the workshop which outlined the programme carried out during the week and a general summary of the participants' thoughts on the workshop. The participants also expressed appreciation for the overall conduct of the workshop from both the administrative and technical viewpoints. This was followed by a short evaluation session carried out by the participants on questionnaires (See Section 6).

Various recommendations made by the participants and resource personnel were discussed. These covered both administrative and technical aspects of the workshop.

The workshop was then closed at 4.30 p.m. by Dr Guo after a few closing remarks.

5. RECOMMENDATIONS

The following recommendations were developed by the participants/resource personnel on the technical aspects of HRD in the Western Pacific Region:

(1) Countries of the Region should consider the development of proper training and manpower plans related to overall water and sanitation development plans and PEPAS should collaborate with Member States in the preparation of such plans as required.

(2) National workshops on aspects of personnel management and training needs should be carried out in countries of the Region with PEPAS collaboration.

(3) Plans and targets for water supply and sanitation beyond the Decade should be formulated in countries which have not yet done so.

(4) Consultant support in the design of training aids and promotional materials is desirable in some countries. This support could be carried out by consultant assignments with the possible inclusion of a workshop in the country.
6. EVALUATION OF WORKSHOP

The participants and observers gave a particularly high rating to all aspects of the workshop that were evaluated. It is considered that the greater than usual number of hands-on exercises and particular efforts made to involve all participants were the main reasons for this achievement. On a 1 to 5 scale, all 14 aspects evaluated by participant and observers were rated on an average over 80% and most items averaged over 90%.

All participants expressed a desire for further follow-up activities in their own countries with WHO collaboration.

Participants were also asked to rate their own contribution to the workshop. This rating in previous surveys improved during the week and the final average was 4.2 on a scale of 1 to 5 indicating that participants were also well satisfied with their own performance at the workshop.

7. ACKNOWLEDGEMENTS

The assistance of the Deputy Vice-Chancellor and staff of the University of Agriculture, Malaysia in the conduct of the workshop is gratefully acknowledged.
## ANNEX 1

### LIST OF PARTICIPANTS, OBSERVERS AND SECRETARIAT

<table>
<thead>
<tr>
<th>Participants</th>
<th>Designation and address</th>
</tr>
</thead>
</table>
| 1. Mr Tan Seng Teck| Public Health Superintendent  
                     | Public Health Headquarters  
                     | Jalan Berakas  
                     | Bandar Seri Begawan  
                     | Brunei Darussalam |
| 2. Mr Haji Samat bin Haji Abas | Assistant Director of Public Works  
                     | (Water)  
                     | Ministry of Development  
                     | Bandar Seri Begawan  
                     | Brunei Darussalam |
| 3. Dr Zou Ping     | Project Officer (Management & Coordination)  
                     | Rural Water Supply Project Office  
                     | National Patriotic Health Campaign  
                     | Committee  
                     | 44 Hou Hai, Bei Yan  
                     | Beijing  
                     | People’s Republic of China |
| 4. Dr Xu Dong-Fang | Sanitary Programme Officer  
                     | Planning and Coordinating Division  
                     | National Patriotic Health Campaign  
                     | Committee  
                     | 44 Hou Hai, Bei Yan  
                     | Beijing  
                     | People’s Republic of China |
| 5. Dr Nouanta Maniphousay | Assistant Director or Deputy Director  
                     | National Institute of Hygiene and Epidemiology  
                     | Ministry of Public Health and Social Welfare  
                     | Vientiane  
                     | Lao People’s Democratic Republic |
| 6. Mr Mukundan Sugunan Pillay | Chief Public Health Engineer  
                     | Engineering Division  
                     | Ministry of Health  
                     | Block E, Jalan Dungun  
                     | 50490 Kuala Lumpur  
                     | Malaysia |
7. Mr Ismail bin Mat Noor  
Head of Water Supply Section  
Training and Research Institute  
Public Works Department  
Jalan Serdang  
43000 Kajang  
Selangor  
Malaysia

8. Mr Kaoga Galowa  
Senior Health Inspector  
Department of Health  
P.O. Box 3991, Boroko  
Papua New Guinea

9. Engr Rosemarie D. Tuason  
Supervising Sanitary Engineer II  
Environmental Health Service  
Department of Health  
San Lazaro Compound, Sta. Cruz  
Manila  
Philippines

10. Mr Shady Carlson Taro  
Health Inspector (Training)  
Ministry of Health & Medical Services  
P.O. Box 349  
Honiara  
Solomon Islands

11. Mr Lelea Tu'itupou  
Acting Senior Health Inspector  
Ministry of Health  
Nuku'alofa  
Tonga

12. Mr Iou Pusin  
District Environmental Health Officer  
Ministry of Health  
Private Mail Bag  
Port Vila  
Vanuatu

13. Dr Hoang Dinh Hoi  
Deputy Director  
Department of Hygiene and Environment  
Ministry of Health  
138A Giang Vo  
Hanoi  
Socialist Republic of Viet Nam

14. Mr Tua Tipi  
Health Inspector  
(In charge of sanitary programmes)  
Ministry of Health  
Apia  
Western Samoa
Representatives/Observers

1. Dr Eddie Ke-Siong Hum  
   National Country Officer  
   World Bank Regional Mission in  
   Bangkok  
   Udom Vidhya Building  
   5th Floor, 956 Rama IV Road  
   Bangkok 10330  
   Thailand

2. Dr Mohd. Ismail bin Yaziz  
   Lecturer  
   Department of Environmental Sciences  
   University of Agriculture Malaysia  
   43400 UPM Serdang  
   Malaysia

3. Ir Haji Mohd. Haris b. Abas  
   Director of Management  
   Public Works Department  
   Ibu Pejabat JKR Malaysia  
   Jalan Sultan Salahuddin  
   50582 Kuala Lumpur  
   Malaysia

Secretariat

1. Dr Paul Guo  
   Acting Director/Water Quality Management Adviser, PEPAS

2. Mr Bruce Fisher  
   Decade Engineer, PEPAS

3. Mr Neil Carefoot  
   Sanitary Engineer/Scientist, WHO, Geneva

4. *Mr Howard Gibson  
   WHO Consultant

5. Mr Satya Sardana  
   Administrative Officer, PEPAS

6. Ms Tan Yit May  
   Special Assistant, PEPAS

* Mr Howard Gibson  
  Manager of Personnel Relations  
  IBM United Kingdom Limited  
  Industrial Participation Association  
  85 Tooley Street  
  London SE1 2QZ  
  United Kingdom
INAUGURAL ADDRESSES

Opening address by the WHO Representative on behalf of the Regional Director, WHO Regional Office for the Western Pacific

On behalf of Dr S.T. Han, WHO Regional Director for the Western Pacific Region, I am pleased to welcome you to this five-day Regional Workshop on Human Resources Development for Water Supply and Sanitation Programmes. As Dr Han is unable to attend the opening of this workshop today, I wish to take this opportunity of reading his message and, at the same time, extending our best wishes to you.

As you are aware, the International Drinking Water Supply and Sanitation Decade is drawing to a close. This provides an opportunity to look back at some of the lessons we have learnt in developing and managing water supply and sanitation projects with a view to using these experiences to guide our activities beyond the Decade. The focus of this workshop will be on the planning, training and management aspects of human resources development for water supply and sanitation programmes.

At the midpoint of the Decade, a summary of returns from twelve reporting countries of the Western Pacific Region rated the shortage of trained professional and sub-professional personnel as the biggest constraint in the water and sanitation sector. This constraint cannot be overcome merely by creating more training institutions. But by properly identifying occupational priorities, manpower needs, job qualifications and requirements, planners can do much to optimize the use of available human resources. In many of the countries in our Region, the baseline data on human resources are incomplete. However, this should not prevent a manpower development plan from being prepared. I hope that during this workshop, participants will be able to prepare an action plan which will outline the steps that need to be taken on their return to their respective countries. It is possible in many cases to implement a manpower development plan effectively by focusing on priority areas such as training requirements, suitable training courses and correct trainee selection.

Although the shortage of skilled manpower tops the list of constraints in the Region, it is evident that many water agencies have staff who are not being fully utilized. The efficiency of these staff largely depends on senior management staff like yourselves. Very often, management staff receive considerable technical training during their careers, but their training in management skills is largely ignored. As their years of service increase, staff become more involved in management than in technical decision-making. We intended this workshop to provide management guidelines which you as participants will be able to use effectively on your return.
I am sure the workshop will also provide a useful forum for identification and discussion of problems in human resource development. I urge you all to participate actively and wish you all a fruitful and pleasant week of discussions, as well as a pleasant stay in Malaysia.

Thank you.

Welcome address by Professor Dr Syed Jalaludin Syed Salim, Deputy Vice-Chancellor, University of Agriculture, Malaysia

Mr Chairman, distinguished delegates, ladies and gentlemen.

Thank you for giving me this honour to address you all at the opening ceremony of the Regional Workshop on Human Resources Development for Water Supply and Sanitation Programmes. You can be rest assured that I know so little of the subject and therefore do not intend to speak for more than I can cope with.

First of all, let me have the privilege of welcoming the delegates from overseas to UPM campus. I know it is not a terribly exciting place to visit but I am sure it has a different environment from the others you have been or known. Our university is relatively a young one but I think we have come of age as far as environmental science education and studies is concerned. Environmental science education is given high priority at UPM since environmental problems are escalating, the consequence of development and other human activities.

Water resources are essential for the quality of life and ultimately the very survival of human kinds in the planet. Hydrological cycle and human activities interact in a complex way but the knowledge we have today is not adequate for development of a sound management system of the water resource. Besides, there is a need to enhance the knowledge in hydrologies in order to provide guidelines for the establishment and development of water-related information and documentation systems.

I say this because a sound knowledge of hydrological processes is essential for those involved in managing the water resources - to guarantee wholesome and quality water supply at all times.

The International Drinking Water Supply and Sanitation Decade (1981-1990) is coming to a close but progress in the provision of water supply and sanitation is still short of the target. The major problem is the lack of adequately trained and experienced personnel to plan, develop and manage the services. This workshop can help to a certain extent, to alleviate the shortage of trained manpower. It is almost an impossible task for PEPAS to train every manager/supervisor involved in water supply and sanitation but I think, like all training programmes, it has a
multiplier effect. Those trained will in turn be in a position to disseminate the knowledge and expertise they gain to others. Hopefully, if the transfer of knowledge is quickly effected, this Region may achieve the goals of the International Drinking Water Supply and Sanitation Decade.

With that I end my address and with great honour I declare this WHO Regional Workshop on Human Resources Development for Water Supply and Sanitation Programmes open.

Thank you and I hope all of you have a successful workshop.
ANNEX 3

WORKSHOP AGENDA/TIMETABLE

Monday, 21 August 1989

0900 - 0930
Introductory remarks
Dr P. Guo, Acting Director, PEPAS

Opening speech
Dr L.R. Verstuyft, WHO Representative for Brunei Darussalam, Malaysia and Singapore on behalf of the Regional Director

Welcome address
Professor Dr Syed Jalaludin Syed Salim, Deputy Vice-Chancellor, University of Agriculture, Malaysia

Introduction of consultants
B. Fisher

0930 - 1000
Break and group photograph

1000 - 1010
Administrative briefing
S. Sardana

1010 - 1040
Get-acquainted
H. Gibson

1040 - 1100
Overview of Regional status of human resources development (HRD) in water and sanitation
B. Fisher

1100 - 1200
Orientation and overview of workshop
N. Carefoot

1200 - 1300
Lunch

1300 - 1445
Manpower planning
H. Gibson

1445 - 1500
Break

1500 - 1700
Manpower planning (Cont'd)
H. Gibson
Tuesday, 22 August 1989

0900 - 1025  Manpower planning (Cont'd)  H. Gibson
1025 - 1040  Break
1040 - 1200  Manpower planning (Cont'd)  H. Gibson
1200 - 1300  Lunch
1300 - 1445  Training:
- Causes of performance problems
- The systematic approach to training
- Training needs assessment
- Task analysis  N. Carefoot
1445 - 1500  Break
1500 - 1700  Training: (Cont'd)
- Job description
- Evaluation of training
- Factors affecting human performance  N. Carefoot

Wednesday, 23 August 1989

0900 - 1025  Management sessions:
- What do employees really want?
- Performance standards  H. Gibson
1025 - 1040  Break
1040 - 1200  Management sessions: (Cont'd)
- Employee services
- Job analysis
- Employment  H. Gibson
1200 - 1300  Lunch
1300 - 1445  Management sessions (Cont'd)
- Absenteeism
- Constraints to better performance  H. Gibson
1445 - 1500  Break
1500 - 1600  Management sessions (Cont'd)
            H. Gibson
1600 - 1700  Detailed briefing for Day 4 & 5
            activities and division of participants
            into Groups A and B
            N. Carefoot

Thursday, 24 August 1989

0900 - 0930  Critique of previous day and explanation
            of day's activities
            N. Carefoot
0930 - 1030  HRD Clinic
1030 - 1045  Break
1045 - 1200  HRD Clinic (Cont'd)
1200 - 1300  Lunch
1300 - 1445  Independent work* on "Corrective Actions"
            Plan
1445 - 1500  Break
1500 - 1700  Independent work* on "Corrective Actions"
            Plan

Friday, 25 August

0900 - 1000  Work on Actions Plans
1000 - 1045  Panel discussions
1045 - 1100  Break
1100 - 1300  Groups A & B discuss Actions Plans to be
            reported in the afternoon
1300 - 1400  Lunch

*Messrs Carefoot and Gibson available for consultation
1400 - 1445  Presentation of Actions Plans
1445 - 1500  Break
1500 - 1600  Summing-up
1600 - 1630  Closure
ANNEX 4

*LIST OF HANDOUTS

Workshop papers

1. HO-2
2. HO-3 Causes of Performance Problems in the Water Supply and Sanitation Sector
3. HO-4 Brain-storming Rules
4. HO-5 Mandarina's Manpower Study and Plan
5. HO-6 Questions Re: The Mandarina Case Study
6. HO-7 Case Study Follow-up
7. HO-8 Recommendations
8. HO-9 Using HRD Tools
9. HRD Appraisal and Planning Guide...Part (1). Check List
10. HO-10 "In-Basket" Exercise: Appraisal of a Fellowship
11. HO-11 "In-Basket" Exercise: Support to a Training Centre
12. HO-12 "In-Basket" Exercise: Pump Specifications
13. HO-13 "In-Basket" Exercise: Training of Water Treatment Plant Operators
14. HRD Appraisal and Planning Guide ....Part (2). Summary Findings
15. HO-14 What Do Employees Really Want?
16. HO-E Opinion Survey
17. HO-15 Case Study Re: Performance
18. HO-16 Performance Standard Distribution Division
19. HO-20 Opinion Survey
20. HO-17 Case Study Re: Manning Ratio
21. HO-18 Management Training
22. HO-18 Annex 1: Detailed Study Programme

* Copies available on request from PEPAS
23. HO-19 "In-Basket" Exercise: Management Training
24. OH-10 - Conclusions
25. HRD Appraisal and Planning Guide...Part (3). Corrective Actions
26. Human Resources Development (HRD), a paper by Neil F. Carefoot
27. Types of Leadership Behaviour

Publications
2. HRD Activities 1988-1989
## LIST OF WEAKNESSES IDENTIFIED BY PARTICIPANTS

<table>
<thead>
<tr>
<th>Weakness</th>
<th>HRD Code</th>
<th>Responsible Officer</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manpower development plan</td>
<td>P</td>
<td>Lelea Tu'itupou</td>
<td>Tonga</td>
</tr>
<tr>
<td>Integrated personnel policy</td>
<td>M</td>
<td>Haji Mohd. Haris bin Abas</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Manpower index</td>
<td>P</td>
<td>Shady Carlson Taro</td>
<td>Solomon Islands</td>
</tr>
<tr>
<td>Training aids (visual)</td>
<td>T</td>
<td>Rosemarie D. Tuason</td>
<td>Philippines</td>
</tr>
<tr>
<td>Recruit &amp; train more village sanitarians</td>
<td>P</td>
<td>Iou Pusin</td>
<td>Vanuatu</td>
</tr>
<tr>
<td>Training in good procedures</td>
<td>T</td>
<td>Hoang Dinh Hoi</td>
<td>Viet Nam</td>
</tr>
<tr>
<td>In-house training for promotion</td>
<td>T</td>
<td>Haji Samat bin Haji Abas</td>
<td>Brunei</td>
</tr>
<tr>
<td>Discuss Improvements with Training Officers</td>
<td>T</td>
<td>Tua Tipi</td>
<td>Western Samoa</td>
</tr>
<tr>
<td>Suitable candidates for professional training</td>
<td>M</td>
<td>Tan Seng Teck</td>
<td>Brunei</td>
</tr>
<tr>
<td>Prepare organizational &amp; institutional chart showing linkages between agencies</td>
<td>M</td>
<td>Mukundan Sugunan Pillay</td>
<td>Malaysia</td>
</tr>
<tr>
<td>Lack of maintenance</td>
<td>M</td>
<td>Kaoge Galowa</td>
<td>Papua New Guinea</td>
</tr>
<tr>
<td>Some agencies have policy</td>
<td>M</td>
<td>Zou Ping and Yu Dong-Fang</td>
<td>China</td>
</tr>
<tr>
<td>More information for good planning</td>
<td>P</td>
<td>Nounta Maniphousay</td>
<td>Laos</td>
</tr>
</tbody>
</table>

P - Planning  
M - Management  
T - Training
Annex 6

Exercise Samples in Training

A. H-10... "In-Basket" Exercise

You are the Regional Water Engineer for one of the rural areas of Mandarina. The region is subdivided into 4 districts. Each district has a district water office with a small staff for operation and maintenance activities.

This morning you have received a short memo from one of your District Engineers asking you to endorse a fellowship application for third country training for a water technician. The scope of the training course, which is of two years duration, is described in great detail. In fact, a copy of the syllabus is enclosed and it covers among other things:

- surveying
- soil mechanics
- quadratic equations
- hydraulics
- hydrology
- chemistry
- etc.

Also on the application you note that the District Engineer has indicated that the trainee's duties upon his return will be in accordance with the following job description:

"To perform specified routine tasks requiring skill and knowledge which require precision with a minimum of supervision and generally to assist professionals in their relevant field".

Questions

1. Do you ever receive applications like this?
2. How helpful is the job description in determining what course or courses will be appropriate for the applicant?
3. How would you normally respond to such a request?
4. Is there anything in the flow-chart of the Systematic Approach to Training that might suggest a response? Or might provide a suggestion to the requesting government official?
5. You are a firm believer in the philosophy that everyone deserves the opportunity to develop to their full potential. In fact, you have provided coaching/counselling to a number of individuals during your career in order to facilitate their professional growth. You also believe that investments in the education/training of an employee must benefit the employee's organization. What advice could you give the District Engineer which would help ensure that both individual and organizational needs are met in this case?
B. HO-ll... "In-Basket" Exercise

You are a programme officer for a bilateral agency. Over a 10 year period, your agency has been providing financial support as well as equipment and instructors to a training centre for Technicians in the Tornado Republic. In monetary terms this support represents an investment of about US$ 200 000 per year.

A new Director has just been installed as head of your division and he has inherited a very tight budget. From remarks he has made you know that he will be a stickler for justification on any programme expenditure you put forward.

On arrival in your office this morning you find a letter of request from the Tornado Training Centre in your "in" basket. There is a routing slip attached to the letter and on it your new Director is asking for an opinion about the advisability of continuing support to the Centre. The letter from the Government of Tornado is casual in its request for US$ 200 000 support -- to the point it seems to be taken for granted that such support will be forthcoming.

As you are relatively new in your job, you do a little research to come up with some accomplishment indicators which would help justify the allocation. After two full days of studying past reports and going through different files, you have determined that over the past 10 years the Training Centre has graduated about 900 technicians. As to what they are doing, how well they are performing, where they are (if they are in the country), how effective the training was -- there is not a shred of evidence.

Are you aware of situations similar to this? Yes No

How might you respond to the Director?

Is there anything in the Systematic Approach to Training that would suggest some recommendations you could make?
EXERCISE SAMPLES IN MANAGEMENT

A. HO-15...Case Study Re: Performance

You are an engineer in charge of water systems construction in a region of one million people. The region is agricultural in character and the population is widely dispersed in small villages. You are employed in the Rural Water Division of the Ministry of Health. As it happens, the Minister of Health is from the very region in which you work. Although the Minister is in the nation's capital much of the time, he closely monitors the situation in his home region. The provision of water supply to the rural population is a "pet" interest of his. He is consistently urging the Chief Water Engineer to construct more small systems for more villages. The Chief Engineer relays these demands to you quite regularly. Often the Minister contacts you directly during visits to the region. In his conversations with you he normally concludes by saying that faster progress could be made. Elections have been tentatively set for mid-year 1989 and the pressure from the Minister is increasing with each passing month. As the pressure mounts you begin to wonder if the five crews which you supervise could be more productive. Perhaps their present performance could be better.

The Minister is an attorney by education and in your most recent encounter with him, just this morning, you were subjected to a barrage of questions which made you feel like a defendant in a court case. It was obvious that the Minister had been under fire from some of his constituents concerning delays in construction of their facilities. Thus, his questions to you were very pointed in trying to determine if the delays were justified. Unfortunately, you could only give vague answers to such questions as:

- Is there an identifiable pattern in the delays?
- Why does there appear to be less teamwork among some construction crews?
- Has each member of a crew been adequately trained to do his job?
- What is the average length of watermain laid per day by a pipe laying crew?
- How do the different crews compare as to output?
- Which crew could be identified as a performance model and why?
- Which of the current projects will be completed on time?

Service to a small village is normally by means of a simple gravity system with a few house connections and standpipes. As you reflect on the construction experience over the past few years it appears that the construction of a system for the average village has taken anywhere from three to six months to complete. You cannot remember for sure, but your memory tells you that two of the crews consistently run over the time estimates and are "dragging" behind as to number of systems built. You begin to search the records for some statistics that would help determine if indeed production (performance) could be better or try to prove to the Minister that everything that can be done is being done.

As you go through various files and papers, your thoughts drift to your own responsibilities as the person in charge of water systems construction for the region. Still smarting from the Minister's questions of this morning, you wonder how well you meet your responsibilities.
You realize that you do not know the individual workers from a personal standpoint nor do you know their capabilities (strengths and weaknesses) in relation to their respective jobs. You do a mental self-appraisal of your performance as a supervisor and it dawns on you that the current pressure situation with the Minister may very well be your own fault.

You remember reading an article recently about HRD in which strong emphasis was placed on the influence of the manager/supervisor over employee performance and development. You take out the article again with the hope that it will provide some inspiration.

QUESTIONS

1. Could this happen in any of the Ministries you are familiar with?

2. What steps can you take in terms of self-improvement which would probably also help improve crew performance and ease the pressure from the Minister?

3. How could performance standards help the engineer?
B. HO-18...Management Training

You are a programme officer for a bilateral agency. The technical university in your country has contacted you several times expressing an interest in conducting training courses for water supply personnel from developing countries. Each time they have asked your opinion as to the priority for personnel training in the countries you are familiar with. On every occasion you have explained that managerial training was top priority from your point of view.

During the last conversation with university officials the Director of the Engineering Programme asked if financial support and sponsorship might be available from your agency if the school were to hold a management course. You suggested that an official request from the government of a developing country would probably secure the support desired.

Three months later such a request is received from the government of Magnolia. The government's request indicates that it wants to send 25 rural water engineers to attend the "management" course designed by the technical university. Appendix 1 shows an outline of the proposed course. Your chief has asked for your recommendation concerning support and sponsorship.

As follow-up to the request you telephone one of your colleagues stationed in Magnolia and learn that the water engineers to be sent on the course are managers in large rural areas of the country. You are informed that probably less than 10% of their time is spent on technical matters. The majority of their time is devoted to the problems they face in their rural regions, e.g., resource allocation, motivation of staff, transport management, updating personnel, coping with shrinking budgets, etc.

Would it be possible for your agency to receive this type of request? Yes [ ] No [ ]

How would the agency normally respond?

What is your opinion of the content of the "management" course?

What would your recommendation be regarding support? Why?

What would you suggest to the government and/or to the university — if anything?
The following subject fields will each be allotted approximately one week:

**INTRODUCTION**

The importance of water
- from a global perspective
- for the social development of a country
- for the overall community planning of a country
- for soil questions, among others

**Hydrology**
- hydrological processes and their application in arid and semi-arid regions
- stochastic hydrology
- hydrological mathematical models
- modern hydrological measuring technique
- hydrological parameters as a basis for water resources planning

**Drinking Water Supply**
- surface water resources
  - limnological investigation
  - methodology
- ground water resources
  - general hydrogeology & geophysics
  - preliminary investigation
  - methodology
  - drilling and well technology
- water requirement and quality
  - physical-chemical factors and analysis
  - hygienic factors and bacteriological analysis
- purification technology
- desalination
- distribution

**Wastewater Engineering**
- characterization and analysis
- purification technology
- wastewater re-use

- systems for scarcely populated areas
- health aspects
- environmental aspects
- cultural and social aspects

**Irrigation**
- irrigation methods
- water requirements
- salinity and drainage problems
- feasibility of irrigation and cropping patterns
- planning for irrigation

**Study Visits**
Study visits will be arranged to
- industries & contractors
- consultants
- plants for water supply
- plants for wastewater treatment

**Water Resources Planning**
- planning philosophy
  - soil - water
  - for whom - for what
  - limitations
  - conflicts
- planning within different sectors
  - rural
  - urban
  - irrigation
- data requirements, stock-taking and analysis
- forecasting methodology
- model technology
- optimisation methods

**Summing Up**
- planning timetable
  - supply/demand forecasts
  - aspects of water quality
  - alternative production
  - administrative aspects
  - legal aspects
  - cultural and social aspects
  - environmental aspects
  - health aspects
  - other consequences and side effects
  - evaluation
- project costs
- seminars on participants' case studies