Rural Development and Cooperatives
Department of Public Health Engineering

Government of the Netherlands Ministry of Foreign Affairs Directorate General of International Cooperation

# NETHERLANDS - BANGLADESH DEVELOPMENT COOPERATION PROGRAMME DPHE-WATER SUPPLY, SANITATION AND DRAINAGE PROJECTS

INTERNATIONAL REFERENCE CENTRE
FOR COMMUNE WATER OF A AND SECTION OF THE SECTION

FINANCIAL MANAGEMENT TRAINING INTRODUCTION TO M - MIS

Programme Office, Netherlands Assisted Water Supply, Sanitation and Drainage Projects

NETHERLANDS-BANGLADESH DEVELOPMENT CO-OPERATION PROGRAMME DPHE-WATER SUPPLY, SANITATION & DRAINAGE PROJECTS PROGRAMME OFFICE, DHAKA

# FINANCIAL MANAGEMENT TRAINING INTRODUCTION TO M - MIS

MASUDUR RAHMAN
MASUDUR RAHMAN
MASUDUR RAHMAN
MIS EXPERT, 18 DTP
PROGRAMME OFFICE

12287 LO: 202.8 94FI

•	CTION TO MONTHLY ENT INFORMATION SYSTEM	Code: OBM 950		
(M-MIS)	ANI IMPORMATION BISIEM	Edition:10/03/94		
SECTION 1 : INFORM	ATION SHEET	Pages: 01 of 01		
SUBJECT	DESCRIPTION			
DURATION	45 Minutes			
TRAINEES SELECTION	- PWSS Accountants/ Asstt. Accountants/ Accounts assistant/Bill clerk.			
TRAINING OBJECTIVES	- After this session, the trainees will be able to:			
	- Know what is MIS and M-MIS			
·	- Recapitulate the object	tives of the M-MIS		
	- Realise the need for reinformation	eliable		
	- Recite the significance Performance indicators	e and role of		
	- Fill in the M-MIS forma	at		
	- Calculate the performan	nce		
	- Prepare report			
TRAINING AIDS	- Handout			
	- View foils			
	- Guidelines for M- MIS	(Revised: Feb.'94)		
KEY WORDS	- PWSS, M-MIS, Management Indicators, Financial,			

## Department of Public Health Engineering

TRAINING: FINANCIAL MANAGEMENT TRAINING	Code:OBM 950		
MODULE : INTRODUCTION TO M-MIS	Edn.:10/03/94		
SECTION 2 : SESSION NOTES	Pages: 01 of 04		
1. WHAT IS MIS  A tool for decision making and planning	Show V-1		
2. WHAT IS M-MIS ?  Monthly reporting system for the PWSS	Show V-2		
3. <u>USE OF M-MIS</u> - Controlling	Show V-3		
- Decision making - Planning			
4. OBJECTIVES OF THE M-MIS	Show V-4		
<pre>* identify inefficient areas</pre>			
* improve performance i.e. service level			
* achieve and maintain sustainability			
* PWSS to take their own decisions			
* plan for the future.			

## Department of Public Health Engineering

TRAINING : FINANCIAL MANAGEMENT TRAINING	Code:0BM 950
MODULE : INTRODUCTION TO M-MIS	Edn.:10/03/94
SECTION 2 : SESSION NOTES	Pages: 02 of 04
5. NEED OF INFORMATION	Show V-5
Reliable information is needed:	
- For controlling - For decision making	
6. M-MIS FORMAT	Show V-6 (three sheets)
7. DATA FILLING	Show V-7
Must have actual support of the :-	
<ul><li>ledgers</li><li>registers</li><li>log books</li></ul>	
8. PERFORMANCE INDICATORS	Show V-8 & V-9
A performance indicator is a measuring device like a thermometer.	
- Line graphs may be drawn with the help of performance results - Bar charts may be drawn with raw data - In M-MIS, PIs are grouped into two * Physical * Financial	
9. REPORTING	Show V-10
Report to contain :-	
<ul> <li>Filled-in M-MIS format</li> <li>Bar charts</li> <li>Comments and recommendations (if any)</li> </ul>	

TRA	INING : FINANCIAL MANAGEMENT TRAINING	Code:OBM 950				
MOD	ule : Introduction to M-MIS	Edn.:10/03/94				
SEC	TION : SESSION NOTES	Pages: 03 of 04				
10.	FEEDBACK AND ACTION	Show V-11				
_	Data supplied by					
*	Financial Section Technical Section					
_	Feed back to PWSS :					
*	PO & SB					
_	Action by :	•				
* * *	Supervisory Board Chairman PWSS Superintendent SDE, DPHE 18 DTP					
11.	SUMMARY	Show V-12				
_	A tool for decision making and planning					
-	M-MIS is designed for use of the PWSS					
_	Reliable data needed for controlling and decesion making					
-	Data filling must have actual support of the available ledgers, registers etc.					
-	Performance Indicator is a measuring device like a thermometer					
-	Improve performance to achieve and maintain sustainability					
-	Assist strengthening institution and management					

TRA	INING : FINANCIAL MANAGEMENT TRAINING	Code:OBM 950		
MOD	ULE : INTRODUCTION TO M-MIS	Edn.:10/03/94		
SEC	TION : SESSION NOTES	Pages: 04 of 04		
12.	CONCLUSION			
-	It is said that if you cannot measure anything, you cannot also manage it			
_	M-MIS is a useful tool for the PWSS			
-	Initial start may take some time but once you are used to it, you cannot think without it.			

TRAINING: FINANCIAL MANAGEMENT TRAINING	Mode: OBM 950
MODULE : INTRODUCTION TO M-MIS	Edn.: 10/03/94
SECTION 4 : H A N D O U T	Pages: 01 of 05

#### 1. WHAT IS MIS

The Management Information System or MIS is a tool by which the management can compare their past & present performances, identify inefficient areas, take corrective measures and plan for the future

#### 2. WHAT IS M-MIS ?

M-MIS is the Monthly Management Information system for the PWSS PWSS under 18 & 12 DTP.

This is specially designed for use of the PWSS

M-MIS is revised into a three page format. This is to be filled-up each month by the PWSS Superintendent, analyzed and and based on the result, management decisions are to be taken.

#### 3. USE OF M-MIS

MIS can provide the PWSS management with the readily available information which are needed for controlling and taking appropriate action/ decision and planning

Department of Public Health Engineering

TRAINING: FINANCIAL MANAGEMENT TRAINING	Mode:OBM 950	
MODULE : INTRODUCTION TO M-MIS	Edn.:10/03/94	
SECTION : HANDOUT	Pages: 02 of 05	

#### 4. OBJECTIVES OF M-MIS

- PWSS to take their own decisions based on PI
- Identify inefficient areas
- Improve performance aiming at achieving sustainability i.e. to run the PWSS atleast at "NO LOSS" basis and also to maintain it
- To plan for the future

#### 5. NEED OF INFORMATION

The PWSS has targets that need to be reached and PWSS Superintendent is responsible to achieve these targets. For controlling and decision making reliable information is needed. The information contains data from the Technical Section as well as from the Finance & Administration Section. With these information the PWSS Superintendent compares the progress with the planned targets and recommends corrective measures to be taken.

#### 6. M-MIS FORMAT (REVISED FEB. '94)

M-MIS format is developed in to a three page data form containing 3 main reporting criteria, these are:

### **Financial**

\* Water revenue : Demand/ Collection

\* Water supply system : Running cost

### Department of Public Health Engineering

TRAINING : FINANCIAL MANAGEMENT TRAINING	Code:OBM 950	
MODULE : INTRODUCTION TO M-MIS	Edn.:10/03/94	
SECTION : H A N D O U T	Pages: 03 of 05	

#### Physical

\* Water Supply

: Demand/ Supply

\* Water Supply

: Services

\* Water Supply

: System Condition

\* Manpower

: Working under PWSS

### Performance Indicator (PI)

- \* Financial
- \* Physical

#### 7. DATA FILLING

Data filling must have actual support and linkage with the available books, registers, ledgers, logs and other records maintained by the PWSS.

#### 8. PERFORMANCE INDICATORS

Performance Indicators or PI is a measuring device by which one can measure and compare the extent to which set objectives are achieved. PI can be compared with a thermometer.

Bar Charts have been introduced in the M-MIS by which one can see at a glance the financial position of the PWSS and compare it with the previous positions

Line graphs may be drawn with the help of PI results. For the time being, we only use the PI results and concentrate on Bar Chart.

PIs are grouped into two major groups.

- Financial
- Physical

Department of Public Health Engineering

TRAINING	:	FINANCIAL MANAGEMENT TRAINING	Code: OBM/950
MODULE	:	INTRODUCTION TO M-MIS	Edn.: 10/03/94
SECTION	:	HANDOUT	Pages: 04 of 05

#### 9. REPORTING

M-MIS report to be prepared by the PWSS Superintendent assisted by the Accountants/ asstt. Accountants. Report should be submitted to the chairman & SB members by the 7th of each month One set of the report should be sent to the PO by 10 of each month for record.

Report should contain the following

- (a) Filled-in M-MIS format
- (b) Bar-charts
- (c) Comments and recommendations (if any) based on information and performance of the PWSS

#### 10. FEEDBACK AND ACTIONS

The pourashava Chairman, SDE DPHE, Superintendent of the PWSS within their authorities should take necessary steps to accelerate corrective measures based on the M-MIS report targeted to run the system on "NO LOSS" basis

If necessary, PO would assist/ recommend actions on matters which PWSS cannot solve.

#### 11. SUMMARY

- MIS is a useful tool for management which helps in decision making and planning
- M-MIS is designed for use of the PWSS
- For controlling and decision making reliable information is needed
- Data filling must have actual support of the available books, ledgers, registers etc.

TRAINING	:	FINANCIAL MANAGEMENT TRAINING	Mode: OBM/950
MODULE	:	INTRODUCTION TO M-MIS	Edn.: 10/03/94
SECTION	:	HANDOUT	Pages: 05 of 05

- Performance Indicator is a measuring device which can measure the difference between the set targets and actual performance
- Improve performance aiming at achieving sustainability i.e. to run the PWSS at "NO LOSS" basis and also sustain it
- Assist strengthing institution and management

#### 12. CONCLUSION

MIS is a useful tool for management which helps the decision making and planning process

It is said that if you cannot measure anything, you cannot also manage it. MIS provides the basic yardstick for measurement which we call the Performance Indicators.

PI can easily measure the difference between the desired target and actual performance.

MIS ,in turn, would assist in strengthening the Institution and the managerial increase capabilities.

Initial start may take some time but once you are used to it, you cannot think without it.

## NETHERLANDS-BANGLADESH DEVELOPMENT CO-OPERATION PROGRAMME DPHE-WATER SUPPLY, SANITATION & DRAINAGE PROJECTS

	Code: OBM 950
MODULE : Introduction to M - MIS	Edition:10/10/93
SECTION 1 : VIEWFOILS	Pages: 01 of 14
TITLE	VIEWFOIL
1. What is MIS ?	OBM 950/ V-1
2. What is M-MIS ?	OBM 950/ V-2
3. Use of M-MIS ?	OBM 950/ V-3
4. Objectives of M-MIS	OBM 950/ V-4
5. Need of information	OBM 950/ V-5 .
6. M-MIS format	OBM 950/ V-6
7. Data filling	OBM 950/ V-7
8. Performance Indicator (PI)	OBM 950/ V-8 & 9
9. Reporting	OBM 950/ V-10
10. Feedback and action	OBM 950/ V-11
11. Summary	OBM 950/ V-12
12. Bar Chart	OBM 950/ V-13

OBM 950/ V-1

## WHAT IS MIS

A TOOL BY WHICH THE MANAGEMENT CAN

- COMPARE PERFORMANCES
- TAKE CORRECTIVE MEASURES
- PLAN FOR FUTURE

OBM 950/ V-2

### WHAT IS M-MIS?

M-MIS IS THE MONTHLY MANAGEMENT INFORMATION SYSTEM FOR THE PWSS

IT IS DEVELOPED BASED ON 3-MAIN REPORTING CRITERIA:

- FINANCIAL
- PHYSICAL
- PERFORMANCE INDICATORS

OBM 950/ V-3

## **USE OF M-MIS**

M-MIS CAN ASSIST THE PWSS IN :-

- CONTROLLING
- DECISION MAKING
- PLANNING

OBM 950/ V-4

## **OBJECTIVES OF M-MIS**

- \* IDENTIFY INEFFICIENT AREAS
- \* COMPARE PERFORMANCES
- \* IMPROVE SERVICES
- \* ACHIEVE AND MAINTAIN SUSTAINABILITY
- \* PWSS TO TAKE DECISION
- \* PLAN FOR THE FUTURE

OBM 950/ V-5

### NEED OF INFORMATION

## **RELIABLE INFORMATION IS NEEDED:**

- FOR CONTROLLING
- FOR DECISION MAKING

OBM 950/ V-7

## **DATA FILLING**

DATE FILLING MUST HAVE ACTUAL SUPPORT OF THE

- LEDGERS
- REGISTERS
- PUMP LOG BOOKS

# MONTHLY MANAGEMENT INFORMATION SYSTEM FOR THE PWSS UNDER 18 & 12 DTP

POURASHAVA:

REPORTING MONTH/YEAR:

OBM 950 / V-6

SL.NO.	DESCRIPTION	UNIT	FIGURES		REMARKS
1.	WATER REVINUE DEMAND/COLLECTION		LAST MONTH		
1.1	Water bills : Prepared	Tk.			<u></u>
1.2.1	Current water bill : demand	Tk.	N (		
1.2.2	Current water bill : collected	Tk.			
1.3	Water connection fee : collected	Tk.			
1.4	Contribution money from : HT/Ws	Tk.			
1.5.1	Water charge (holding tax) : demand	Tk.			
1.5.2	Water charge (holding tax) : collected	Tk.			L
1.6.1	Arrear dues : cumulative	Tk.		·	
1.6.2	Arrear dues : collected	Tk.			
1.7.1	Total revenue : demand	Tk.			
1.7.2	Total revenue : collected	Tk.			
18	Contribution money : from project	Tk.			
1.9	Money withdrawn from jt.A/C : Total	Tk.			
1.10	Jonit account : closing balance	Tk.		<u>.</u>	
1.11	Electricity bills not paid : cumulativel	Tk.		,	
2	WATER SUPPLY SYSTEM: RUNNING COS				
2.1.1	Electricity consumption cost	Tk.		,	
2.1.2	Personnel related cost	Tk.			
2.1.3	Office related and mise, cost	Tk.			
2.2.1	Water supply maintanance cost	Tk.			
2.2.2	HT/Ws maintanance cost	Tk.			
2.3	System running cost (O&M) Total	Tk.			

# MONTHLY MANAGEMENT INFORMATION SYSTEM FOR THE PWSS UNDER 18 & 12 DTP

POURASHAVA:

### REPORTING MONTH/YEAR:

OBM 950/ V-6

SL.NO.	DESCRIPTION		UNIT	FIGURES		REMARKS
3.	WATER SUPPLY : DEMAND/SUPPLY			LAST MONTH	THIS MONTH	
3.1.1	Water discharge rate :	avarage	m³/hr			
3.1.2	Water pumping hours :	avarage	hrs/d			
3.1.3	Electricity consumed :	Total	Kwh/m			
3.2.1	Water demand :	Calculated	m³/day			
3.2.2	Water production :	Calcuated	m³/day			
4. WATER SUPPLY : SERVICES						
4.1.1	HC : applica	ation received	Nos.			
<b>↓</b> .1.2	нс :	installed	Nos.			
4.1.3	Illegal/defaulter's HC :	disconnected	Nos.			
4.2	Water supply hours :	Average	hrs/d			_
4.3.1	Consumer's complaints :	received	Nos.			_
4.3.2	Consumer's complaints	attented	Nos.			
5. WATER SUPPLY : SYETEM CONDITION						
5.1.1	Length of pipe line :	Total	Km			
5.1.2	System leakage :	identified	Nos.			
5.1.3	System leakage :	repaired	Nos.			
5.2.1	Production well :	Total	Nos.			
5.2.2	Production well :	out of order	Nos.			
5.2.3	Production well :	repaired	Nos.			
5 2.4	Production well : requir	e regeneration	Nos.			
3.1	Hand tube-wells	Total	Nos.			
5 3.2	Hand pump	out of order	Nos.			
5.3.3	Hand pump	repaired	Nos.			

February, 1994

# MONTHLY MANAGEMENT INFORMATION SYSTEM FOR THE PWSS UNDER 18 & 12 DTP

### POURASHAVA:

REPORTING MONTH/YEAR: OBM 950/ V-6

SL.NO.	DESCRIPTION WATER SUPPLY: SYSTEM CONDITION		UNIT	FIGURES		REMARKS
5.				LAST MONTH	THIS MONTH	
5.4.1	Street hydrant	: Total	Nos.			
5.4.2	Street hydrant	: out of order	Nos.			
5.4.3	Street hydrant	: rapaired	Nos.			
5.5.1	House connection	: Total	Nos.			
5.5.2	In-house survey	: carried out	Nos.			
5.5.3	House with defects	: detected	Nos.			
5.5.4	House with defects	: repaired	Nos.			
6.	MANPOWER UNDER PWSS		Nos.			

7.	PERFORMANANCE INDICATORS (PI)	UNIT	LAST MONTH	THIS MONTH	REMARKS
7.1	<u>Financial</u>				
7.1.1	Current water bill collection rate	%			
7.1.2	Cash backing to expenses	%			
7.1.3	Water production unit cost	Tk/m³			
7.1.4	O&M cost/house connection	Tk/HC			
7.1.5	Electricity consump./unit water produced	Kwh/m³			
7.2	PHYSICAL				
7 2.1	Water supply to demand ratio	%			
7.2.2	Population served by pipe line	%			
7.3.3	Population served by HT/Ws	%			

W/W Superintendent	SDE, DPHE	Chairman
PWSS	Sub-Division	Pourashava
February, 1994		

### PERFORMANCE INDICATORS (PI)

PERFORMANCE INDICATOR

IS A MEASURING DEVICE BY
WHICH ONE CAN MEASURE THE
EXTENT TO WHICH A SET
OBJECTIVE OR STANDARD IS
ACHIEVED.

## PERFORMANCE INDICATORS (PI)

- PIS ARE GROUPED RELATED TO
  - \* FINANCIAL PERFORMANCE
  - \* PHYSICAL PERFORMANCE
- BAR CHART TO BE DRAWN WITH RAW DATA
  - LINE GRAPH TO BE DRAWN WITH PERFORMANCE RESULTS

OBM 950/ V-10

## REPORTING

## REPORT SHOULD CONTAIN THE FOLLOWING:

- \* FILLED-IN M-MIS FORMAT
- \* BAR-CHARTS
- \* COMMENTS AND RECOMMENDATIONS BASED ON OVER ALL PERFORMANCE OF THE PWSS.

OBM 950/ V-11

#### FEED BACK AND ACTIONS

- FEED BACK TO PWSS BY:
- \* PO OFFICE & SB
- ACTION BY:
- \* POURASHAVA CHAIRMAN
- \* SDE, DPHE, 18 DTP
- \* PWSS SUPERINTENDENT

OBM 950/ V-12

## **SUMMARY**

M-MIS IS DESIGNED FOR PWSS

- TOOL FOR DECISION MAKING
- YARDSTICK FOR MEASUREMENT
- PERFORMANCE INDICATOR IS A MEASURING DEVICE
- ASSIST TO REACH SUSTAINABILITY OF THE SYSTEM
- INCREASE THE MANAGERIAL CAPABILITIES

VIEWFOIL-13 BARCHART SHOWING FINANCIAL POSITION OF THE PWSS DURING THE PERIOD - JAN 94-JUNE 94 OBM 950 / V-13 NOTES 510 -- 390 360 330z 270 -1111 LEGEND 150 CURRENT WATER BILL DEMAND 120 CURRENT WATER BILL COLLECTED TOTAL REVENUE DEMAND 60 TOTAL REVENUE COLLECTED SYSTEM RUNNING COST ( O.B.M.)