DIRECTORATE OF WATER SUPPLY DIRECTORATE GENERAL CIPTA KARYA MINISTRY OF PUBLIC WORKS REPUBLIC OF INDONESIA

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DIRECTORATE GENERAL
INTERNATIONAL COOPERATION
MINISTRY OF FOREIGN AFFAIRS
KINGDOM OF THE NETHERLANDS

MDP PRODUCTION TEAM

TRAINING MATERIALS FOR WATER ENTERPRISES

VOLUME 2A

GUIDE FOR USERS OF TRAINING MATERIALS					
TRAINING MODULES					
•	GENERAL				
•	ORGANISATIONAL				
•	Basic knowledge / skills				
	Processes/procedures				
	Equipment/materials				
	TECHNICAL				
	Basic knowledge/skills				
	Processes/procedures				
	withdrawal				
	treatment				
	distribution				
	consumption				
 Equipment/materials					
TAPE / SLIDE PROGRAMMES					

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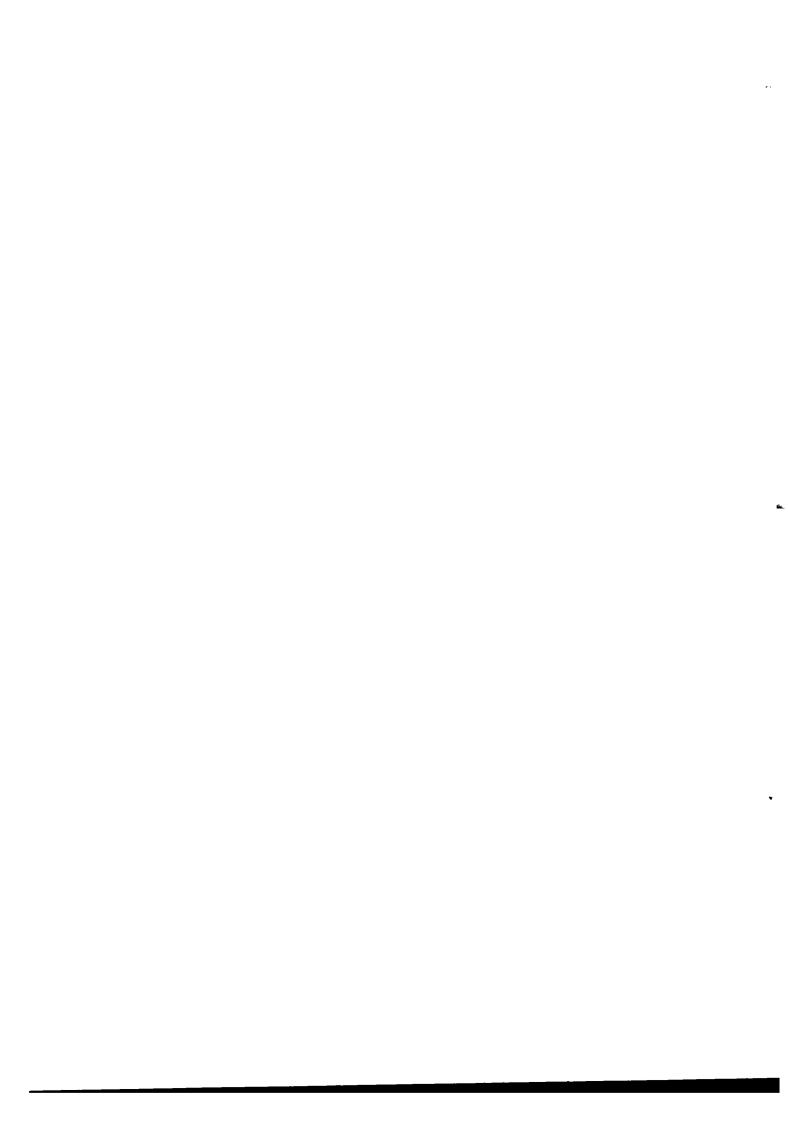
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DIRECTORATE OF WATER SUPPLY DIRECTORATE GENERAL CIPTA KARYA DEPARTMENT OF PUBLIC WORKS GOVERNMENT OF INDONESIA DIRECTORATE GENERAL FOR INTERNATIONAL COOPERATION MINISTRY OF FOREIGN AFFAIRS GOVERNMENT OF THE NETHERLANDS

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VOLUME 2A TRAINING MODULES GENERAL + ORGANIZATIONAL (basic knowledge/skills)

DHV CONSULTING ENGINEERS IWACO B.V.
T.G. INTERNATIONAL

JAKARTA APRIL 1985



PREFACE

This volume is part of the Final Report of the MDP Production Team which produced Training Materials for Water Enterprises as part of a project under the bilateral cooperation programme between the Government of the Republic of Indonesia and the Government of the Kingdom of the Netherlands.

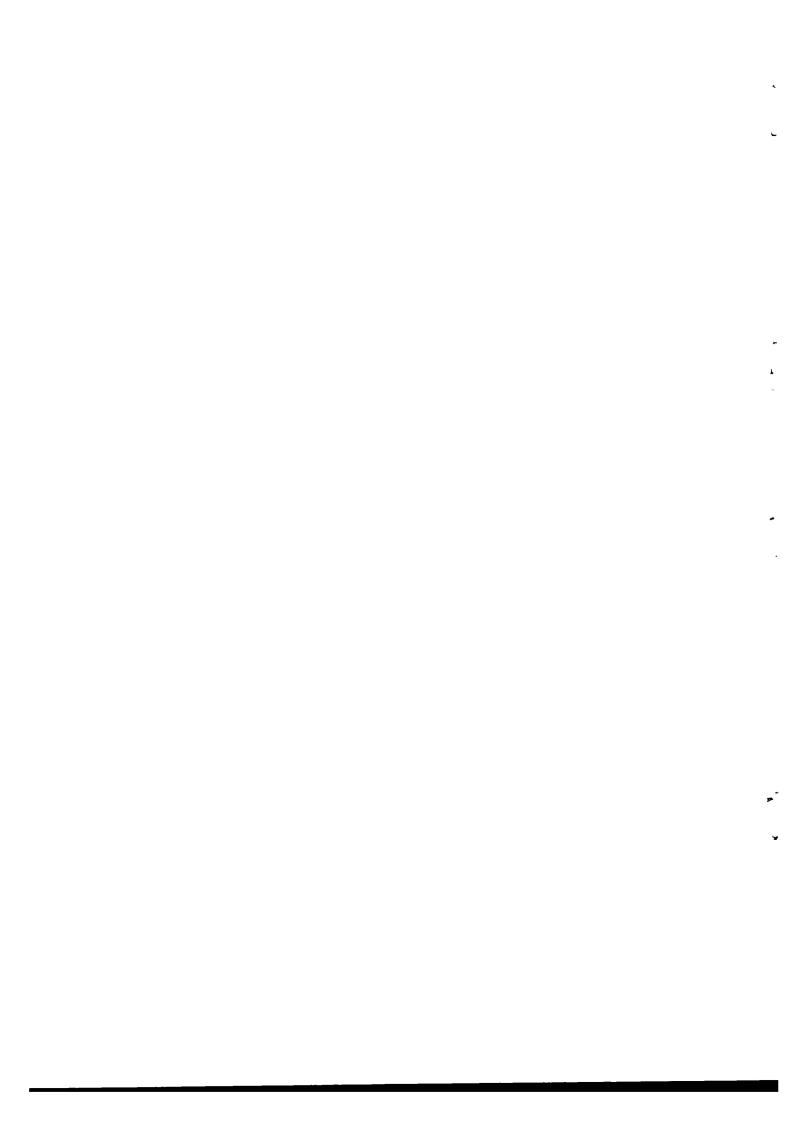
This Final Report contains the following volumes:

Volume	1	Guide for users of	training materials
Volume	2A	Training Modules,	GENERAL + ORGANIZATIONAL (basic knowledge/skills)
Volume	2B	Training Modules,	GENERAL + ORGANIZATIONAL (basic knowledge/skills)
Volume	3	Training Modules,	ORGANIZATIONAL (processes/procedures; equipment/materials)
Volume	4	Training Modules,	TECHNICAL (basic knowledge/skills)
Volume	5 A	Training Modules,	TECHNICAL (processes/procedures)
Volume	5B	Training Modules,	TECHNICAL (processes/procedures)
Volume	6A	Training Modules,	TECHNICAL (Withdrawal + Treatment)
Volume	6в	Training Modules,	TECHNICAL (Withdrawal + Treatment)
Volume	7	Training Modules,	TECHNICAL (Distribution + Consumption)
Volume	8	Training Modules,	TECHNICAL (equipment/materials)
Volume	9	Tape/slide program	mes

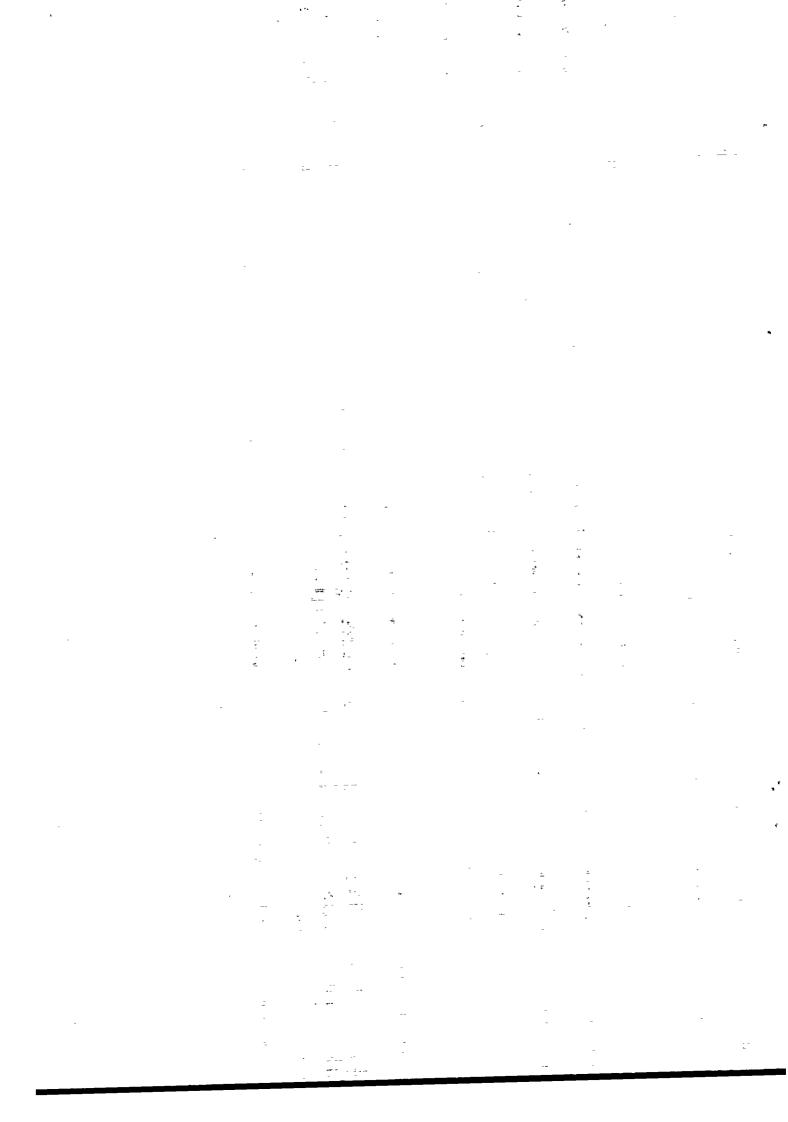
TABLE OF CONTENTS

TRAINING MODULES

CODE	TITLE
GGG 100	Water supply and public health
GGG 210	Water supply development targets in Indonesia
GGG 300	Principles of water supply
OBG 101	The water enterprise - its functions
OBG 300	Establishment of a water enterprise
OBG 610	The water enterprise - its environment
OBM 001	Principles of management
OBM 100	Planning
OBM 200	Organizing
OBM 210	Delegation
OBM 220	Coordination
овм 300	Directing
OBM 310	Motivation
OBM 320	Authority



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-, - <u>,</u>	建 1000 1000 1000 1000 1000 1000 1000 10	- list the five water needs;	
		- identify the relation between unsafe water and	
		water-borne diseases;	
, <u>-</u> -3		- recite the three aspects of water quality;	
		- explain the need for regular water quality	
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WATER SUPPLY AND Code GGG 100 Module :: PUBLIC HEALTH 11-07-1984 Edition: Section 2: SESSION NOTES : 01 of 02 Page l. Introduction - Importance of safe water supply. - There is much water in Indonesia, but still a lack of safe water. Water Needs - Ask: What are the water needs? Show V 1-5 People need water for: . drinking; . cooking; . bathing; . washing; . religious use. - Water can contain: . living organisms (bacteria and virus-Use whiteboard es); . non living elements (minerals and salts). - Waterborne diseases: diseases caused by contageous organisms transmitted by the water. - Examples: . cholera (Bali 1981); . dysentry; . typhoid. - Water must be acceptable to consumers: . it must be clear; Use whiteboard . it must taste well; . it must not smell; . it must have the right temperature. - Elements in the water may affect the distribution pipes by corrosion or scalling. Consequences: . rapid deterioration of the system; . introduction of pipematerials in the water.



	WATER SUPPLY AND PUBLIC HEALTH	Code : GGG 100		
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Section 2:	SESSION_NOTES	Page : 02 of 02		
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- Reducti	on of waterborne diseases.			
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Module : WATER SUPPLY AND Code : GGG 100 PUBLIC HEALTH Edition: 11-07-1984 Section 3: TRAINING AIDS Page : 01 of 02 Water for drinking GGG 100/V 1 Water for Cooking GGG 100/V 2 Water for bathing GGG 100/V 3 Water for washing GGG 100/V 4 Water for GGG 100/V 5 Task of religious use

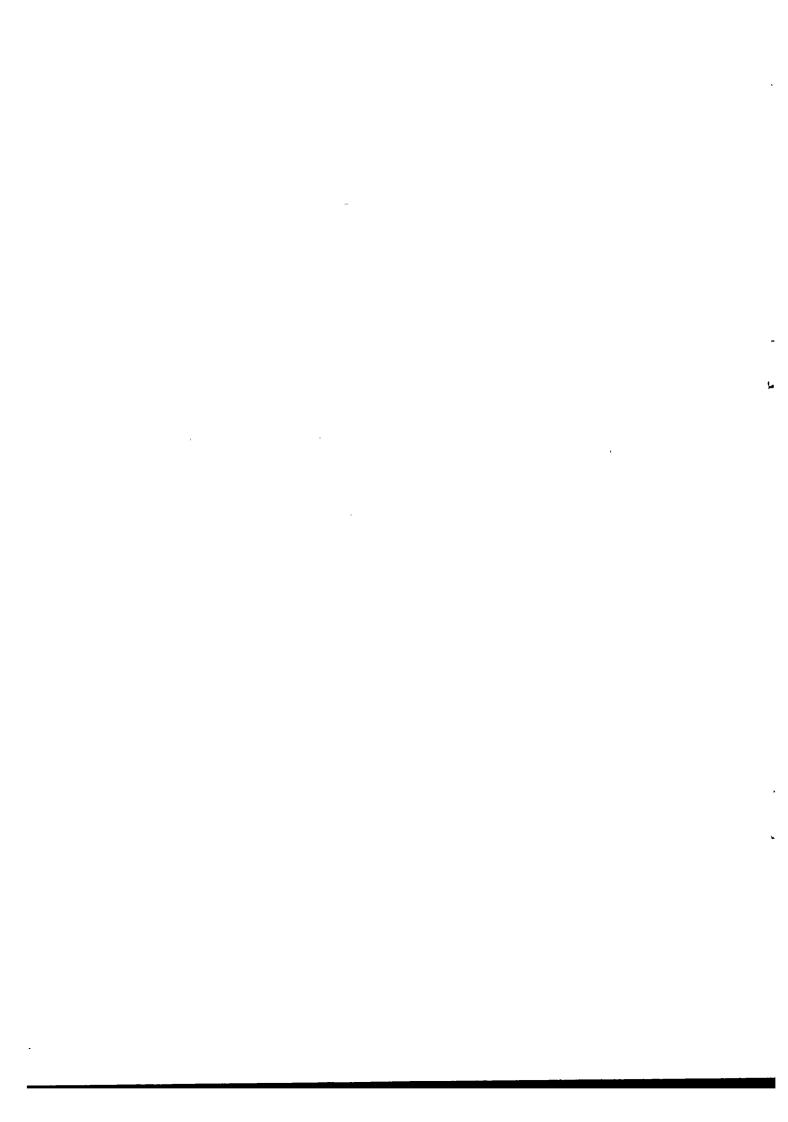


GGG 100/V 6 Water Enterprise

> WATER ENTERPRISE MUST SUPPLY SAFE WATER TO CONSUMERS



Module : WATER SUPPLY AND : GGG 100 Code PUBLIC HEALTH Edition: 11-07-1984 Section 3: TRAINING AIDS Page : 02 of 02 Task of GGG 100/V 7 Unhygienic GGG 100/V 8 Water Enterprise kitchen practice Inadequate storage GGG 100/V 9 Bad habits: bucket GGG 100/V 10 Bad habits: hands GGG 100/V 11 Water supply and public health GGG 100/H 1





DEPARTMENT OF PUBLIC WORKS
DIRECTORATE GENERAL CIPTA KARYA
DIRECTORATE OF WATER SUPPLY



Module : WATER SUPPLY AND
PUBLIC HEALTH

Code : GGG 100

Edition : 11-07-1984

Section 4 : H A N D O U T Page : 01 of 03

1. INTRODUCTION

Indonesia consists of many islands, all of them surrounded by sea. There are many rivers and lakes in the country and rainfall is abundant and regular throughout the year. It seems as if there is no problem in the field of water supply. But in fact, up to now the majority of the people in Indonesia can not be supplied with the safe water they need.

2. WHAT ARE THE WATER NEEDS OF PEOPLE?

People need water for many purposes, for example:

- drinking;
- cooking;
- bathing;
- cleaning;
- washing;
- religious use.

People need water that is free from disease-causing elements. Water can contain living organisms, such as bacteria and virusses, as well as non-living elements, such as minerals and salts. Several of these can cause diseases, or have adverse physiological effects. Diseases caused by contageous organisms transmitted by the water are called waterborne diseases.

Examples are:

- cholera (Bali 1981);
- dysentry;
- typhoid.

Sometimes water may be free from disease-causing elements and yet consumers still do not like to consume the water. For example: it may have a dirty colour, or a bad taste, maybe it smells, has an elevated temperature.

The water people consume should not only be free from diseasecausing elements. It should also be acceptable to the consumer, i.e. the water must be clear, must taste well, must not smell, and must have the right temperature.

Sometimes the water is free from disease-causing elements and it is also accepted by the consumer, but still its quality is not yet satisfactory. Elements remain in the water which affect the distribution pipes by causing corrosion and scaling. The distribution network will then deteriorate rapidly and its life-time will be reduced.

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Module	:	WATER SUPPLY AND PUBLIC HEALTH	Code	:	GGG 100
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Moreover, corrosion may lead to the unwelcome introduction of pipe-materials (heavy metals) in the water supply system, and in turn deteriorate the quality of the water.

Good quality water is:

- free from disease-causing elements;
- acceptable to consumers (colour, smell, taste, temperature);
- not adversely affecting the distribution network.

3. THE ROLE OF THE WATER ENTERPRISE

The Water Enterprise has to supply people with safe water. The enterprise abstracts raw water from the source, treats it, and delivers it to the consumers. When safe water is supplied, the occurence of waterborne diseases is considerably reduced. However, it should be remembered that the delivery of safe water to the houses does not guarantee the consumption of safe water. Bad habits of consumers can cause that safe water delivered to the houses is contaminated again. Examples of such bad habits are: unhygienic kitchen practices, inadequate storage, unhygienic personal practices.



Consumers' health depends on the quality of the water they consume. Therefore, the water which is supplied by the Water Enterprise must be regularly and seriously controlled. Water quality controls are carried out by specialists of the enterprise.

The manager must ensure that these specialists have the necessary materials and equipment to do their work and he must check regularly whether the activities are carried out according to standards (some tests once per 24 hours, others once per week).



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4. SUMMARY

People need water for:

- drinking;
- cooking;
- bathing;
- cleaning:
- religious use.

Water can contain living organisms, such as bacteria and virusses, and non living elements, such as minerals and salts. Several of these can cause diseases. Water of good quality is free from such elements. To ensure this, the water supply enterprise must regularly control the water it supplies.

Water of good quality is:

- free from dissease-causing elements;
- acceptable to consumers (the water is clear, must taste well, must not smell, and must have the right temperature);
- not adversely affecting the distribution system (corrosion and scaling).

The health of the consumers depends on the quality of the water supplied by the Water Enterprise. Therefore regular and serious water controls are a must.

* * *



Module	: WATER SUPPLY AND	Code : GGG 100
	PUBLIC HEALTH	Edition: 11-07-1984
Annex	TOTEWFOILS	Page : 01 of 12
TIT	LE:	CODE :
1.	Water for drinking	GGG 100/V 1
2.	Water for cooking	GGG 100/V 2
3.	Water for bathing	GGG 100/V 3
4.	Water for washing	GGG 100/V 4
5.	Water for religious use	GGG 100/V 5
6.	Task of water enterprise	GGG 100/V 6
7.	Task of water enterprise	GGG 100/V 7
8.	Unhygienic kitchen practice	GGG 100/V 8
9.	Inadequate storage	GGG 100/V 9
	Bad habits: bucket	GGG 100/V 10
	Bad habits: hands	GGG 100/V 11
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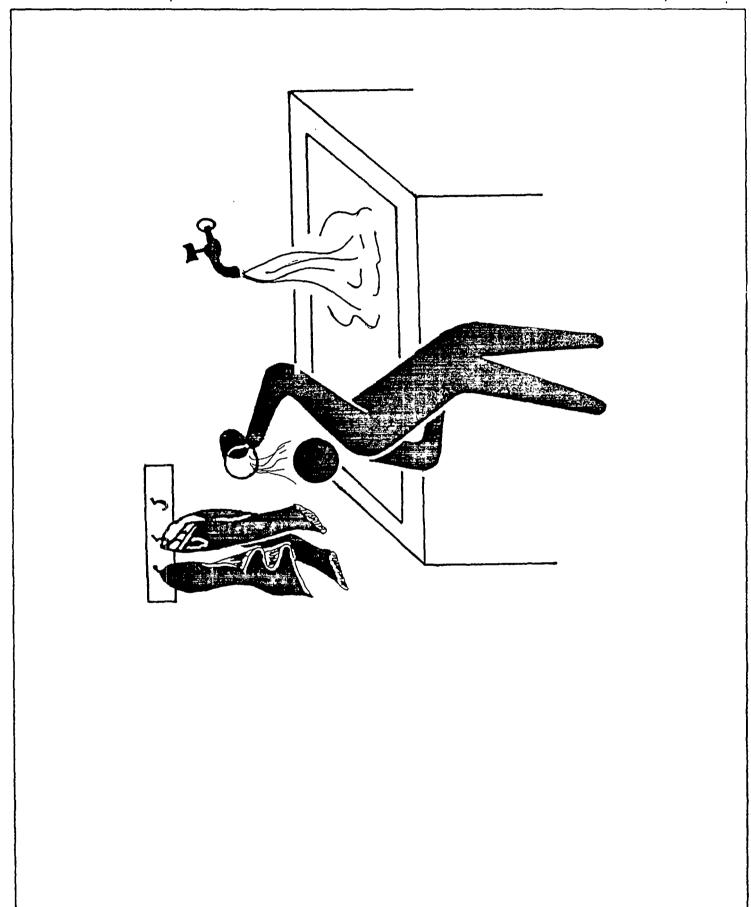




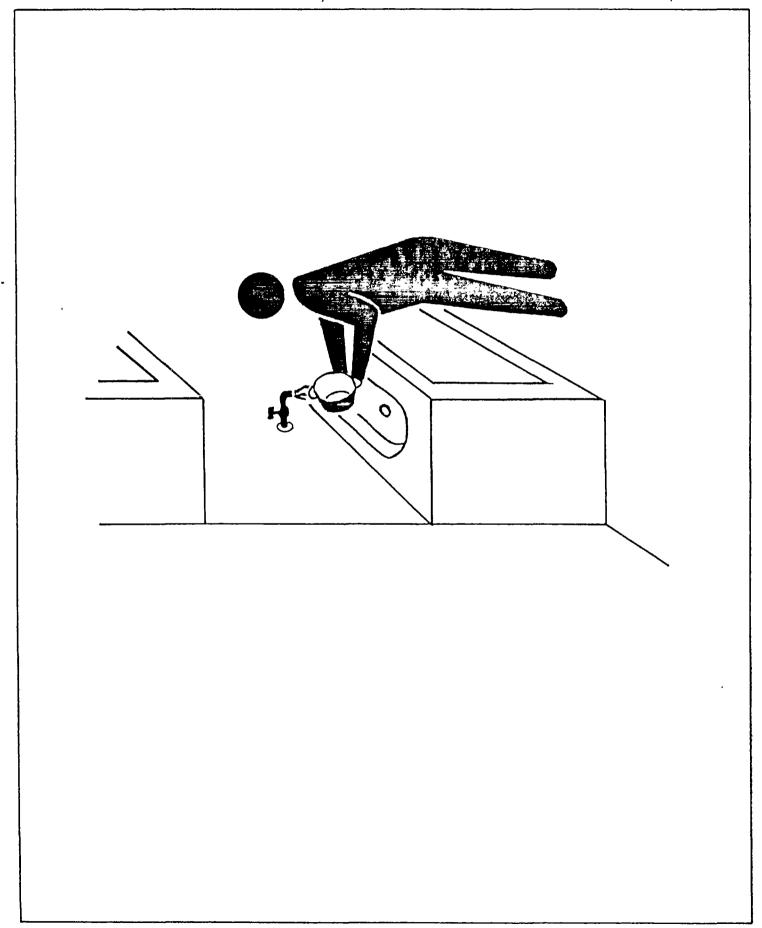


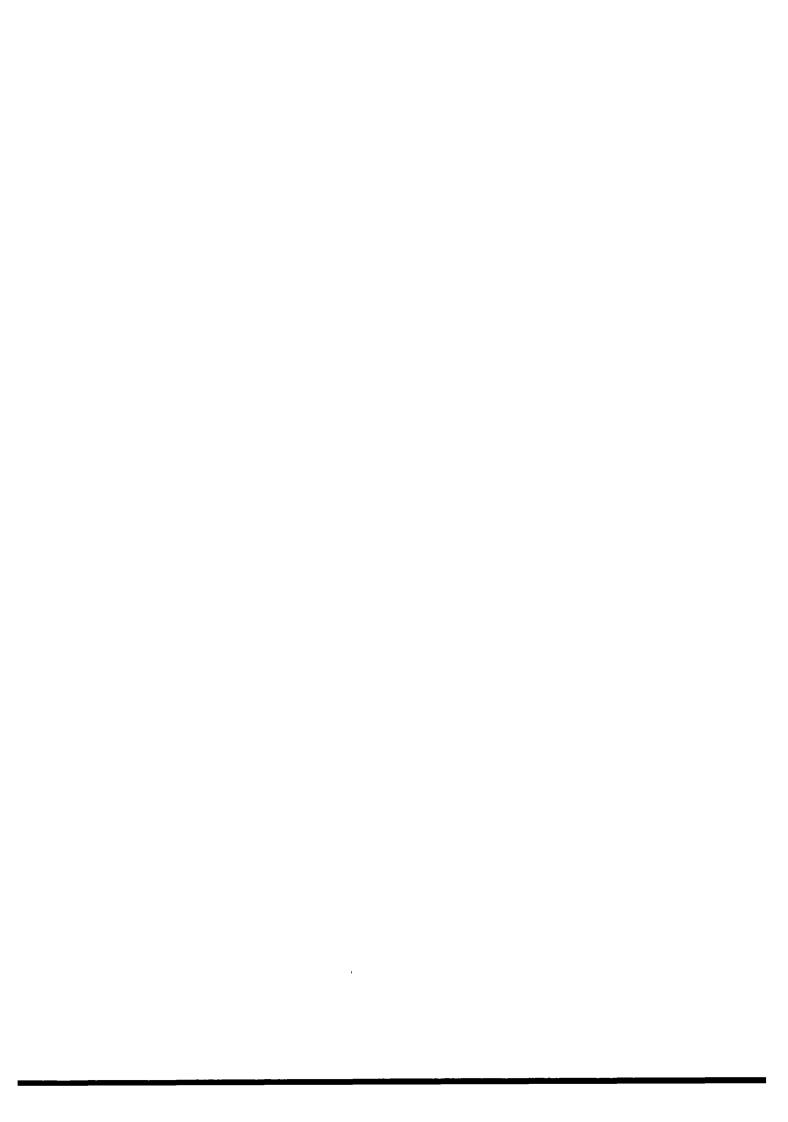


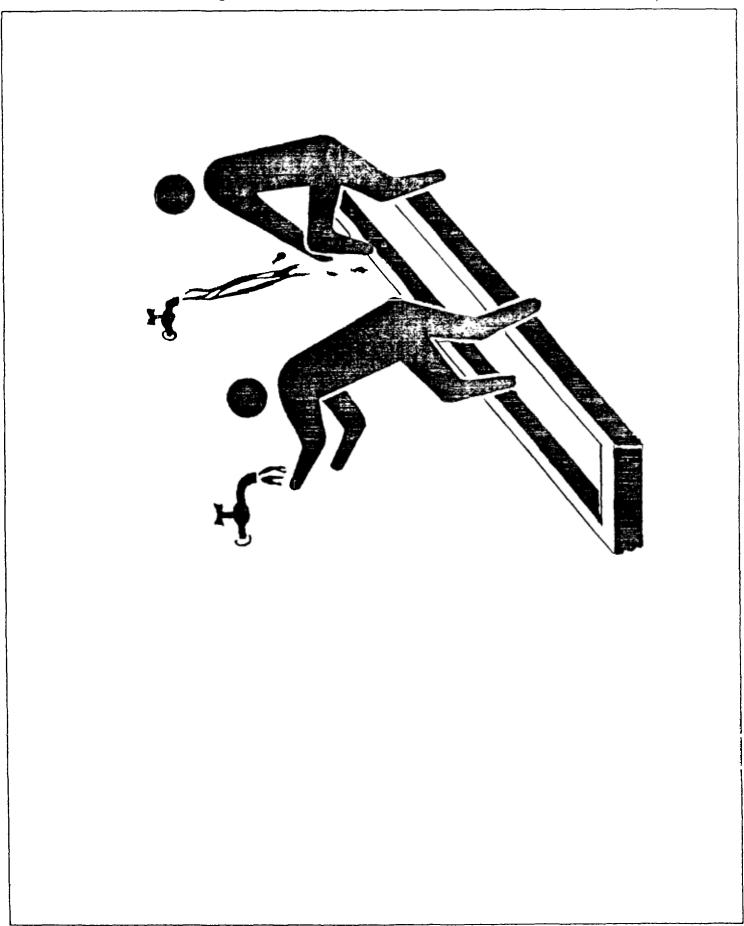










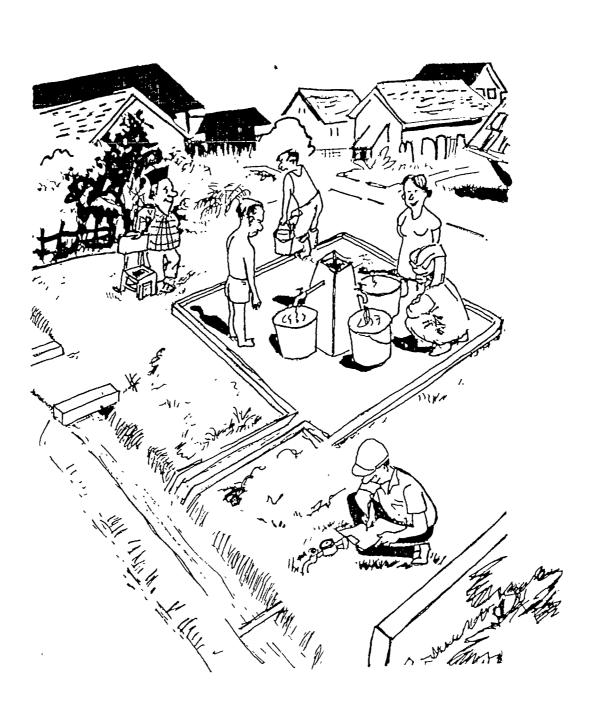


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WATER ENTERPRISE MUST SUPPLY SAFE WATER TO CONSUMERS











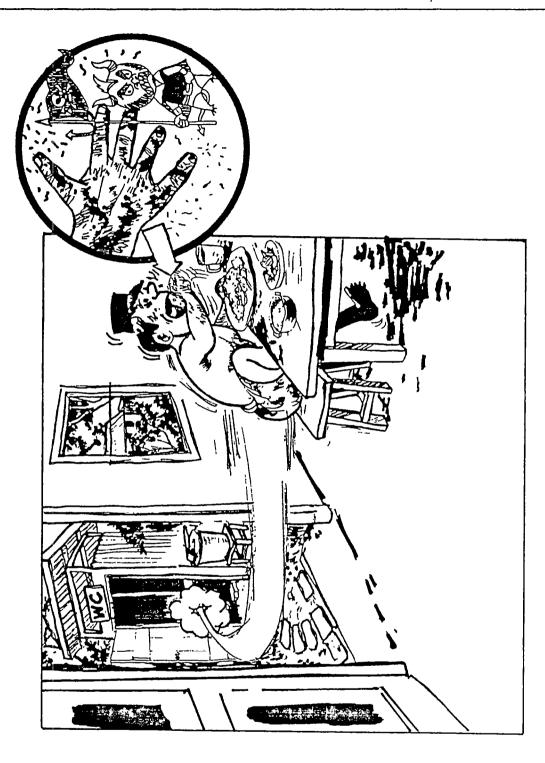




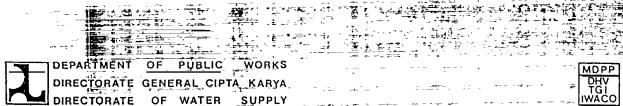


Bad habits: bucket











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Module	WATER SUPPLY DEVELOPMENT Code : GGG 210 TARGETS IN INDONESIA
	Edition: 19-04-1985
Section 1	: INFORMATION SHERT Page : 01 of 01/07
Duration	45 minutes.
Training	After the session the trainees will be able to: - recite the Third and Fourth Five Year Development Plan (Repelita) Water Supply in Indonesia.
Trainee	lection - All jobholders.
Training	- Viewfoils : GGG 210/V 1-5; - Handout : GGG 210/H 1.
Special f	eatures –
Keywords	Repelita objectives.



Module WATER SUPPLY DEVELOPMENT Code GGG 210 TARGETS IN INDONESIA Edition: 19-04-1985 Section 2: SESSION NOTES Page 01 of 02 Introduction - Five water needs. Show V 1-5 Government Policy for Water Supply - Repelita I : . rehabilitation of existing systems: . limited extensions. - Repelita II: . construction of new systems. including distribution networks. - Repelita III

- . 1982: 36% of the urban population and 25% of the rural population access to safe water supply;
- . 1984: 60% of the urban population and 35% of the rural population;
- basic need approach : 60 liters per person per day;
- number of people served by Public Taps should equal number of people served by house connections;
- . tariff: Rp. 50/m3 for first 10 m3;
- enterprise income: FIRST STAGE: revenues from water sales cover operating and maintenance cost; SECOND STAGE: including cost of depreciation of goods with short life time; THIRD STAGE: including cost of depreciation of goods with longer life time;
- house connection fee: calculated at cost price and payment in installments;
- financing water supply systems :
 system < 60 l.p.c.d. : grants;
 system 60-125 l.p.c.d : government loans
 + state capital participation;
 system > 125 l.p.c.d : bank loans.
- Repelita IV:
 1989: 75% of the urban population and 60% of the rural population will have access to safe water.

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Mod	ule :			SUPPL						Code	•	GGG 210
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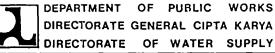
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Water for drinking GGG 210/V 1	Water for cookin	g GGG 21	LO/V 2
Water for bathing GGG 210/V 3	Water for cleani	ng GGG 2	10/V 4
Water for religious GGG 210/V 5 purposes	Water supply dement targets in		10/н 1



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Module :	: WATER SUPPLY DEVELOPMENT TARGETS IN INDONESIA	Code :	GGG 210
	TARGETS IN INDONESIA	Edition :	19-04-1985
Section 4:	HANDOUT	Page :	01 of 03

1. INTRODUCTION

People need safe water for:

- drinking;
- cooking;
- bathing;
- washing;
- religious use.

Since the First Five Year Plan (1969) the Government of Indonesia has allocated large sums of money to the development of safe water supply.

2. GOVERNMENT POLICY FOR WATER SUPPLY

Repelita I

At the beginning of the First Five Year plan safe water in urban areas was in excessive short supply. Many cities and towns did not have any water supply system and if there was a system, this was mostly old and in a bad condition. During Repelita I development strategies aimed at rehabilitating existing systems and making limited extensions to them.

Repelita II

During Repelita II development policy centred on the establishment of new water supply systems. Government assistance also included the establishment of distribution networks.

Repelita III

Up to 1982, 36% of the urban population and 25% of the rural population had access to safe water supply. At the end of the Third Five Year Development Plan (1984) 60% of the urban population and 35% of the rural population had access to safe water supply.



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BASIC NEEDS APPROACH

Government policy aimed at supplying 60 liters water per person per day. 60 liters of water has been considered as the basic daily need of a person. In order to attain an equal distribution of water, the Government promoted the installation of Public Taps. The number of people served by Public Taps should equal the number of people served by house/yard connections.

Without Public Taps the people who are unable to pay for a house connection, will remain dependent on water vendors who often charge excessive prices for water.

TARIFF

People have to pay for the water they consume. Government proposed a minimum tariff of Rp. 50 per $\rm m^3$ for the first 10 $\rm m^3$. When water consumption exceeds 10 $\rm m^3$ per month the water tariff increases progressively. Water consumption from Public Taps must be charged at the lowest possible water tariff.

In the first stage of its development a newly established water enterprise must earn enough income from water sales to cover its operating and maintenance cost. Only from the moment that the revenues of the enterprise cover operating and maintenance cost, the cost of depreciation are included in the financial calculations of the enterprise. Firstly, the cost of depreciation of goods with a relatively short life time, such as electrical and mechanical equipment, water meters, office equipment. Secondly, cost of depreciation of goods with a longer life time such as pipes, valves and buildings.

HOUSE CONNECTION FEE

The fee for house connections must be calculated at cost price and consumers should be allowed to pay the connection fee in installments over a period of one to two years.

FINANCING WATER SUPPLY SYSTEM

Up to the fulfillment of the basic need objective (supply of 60 liters of safe water per person per day) water supply systems will be financed through Government grants.

Water supply systems with a capacity of 60 up to 125 liters per person per day will benefit from Government loans and State capital participation.

Systems with a capacity over 125 liters per person per day will be dependent on Bank loans.



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Repelita IV

By the end of the decade the Government expects to supply 60% of the rural population and 75% of the urban population with safe water. Special attention will be given to the supply of safe water to the lower income groups. In fact this mean, that by 1989 some 120 million people will be "costumers" of the water enterprise.

3. SUMMARY

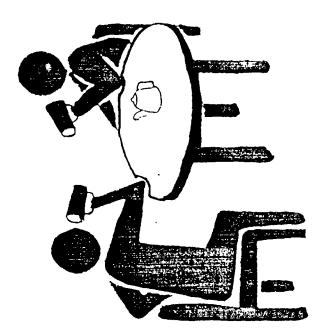
During the previous Repelitas water supply has improved considerably. By the end of Repelita IV most people will be supplied with safe water: 60% of the rural population, and 75% of the urban population.

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Module	: WATER SUPPLY DEVELOPMENT TARGETS IN INDONESIA	Code : GGG 210
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Annex	: VIEWFOILS	Page : 01 of 06
TIT	'LE :	CODE :
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1.	Water for drinking	GGG 210/V 1
2.	Water for cooking	GGG 210/V 2
3.	Water for bathing	GGG 210/V 3
		GGG 210/V 4
4.	Water for cleaning	
5.	Water for religious purposes	GGG 210/V 5
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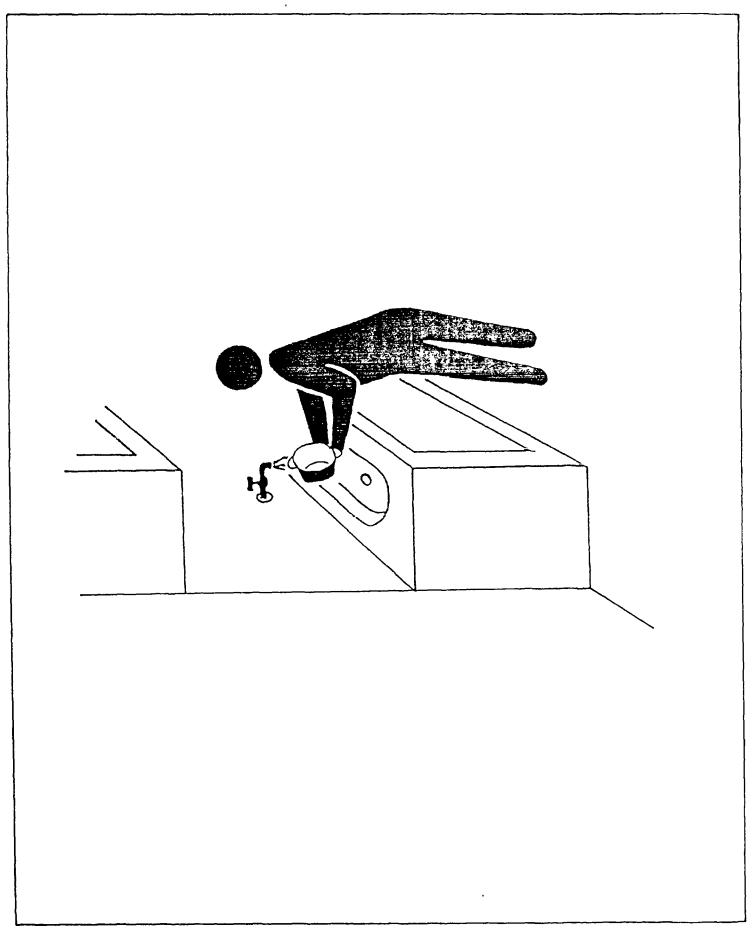




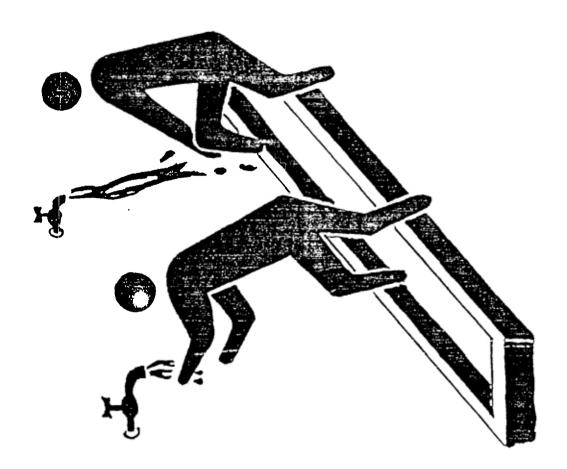








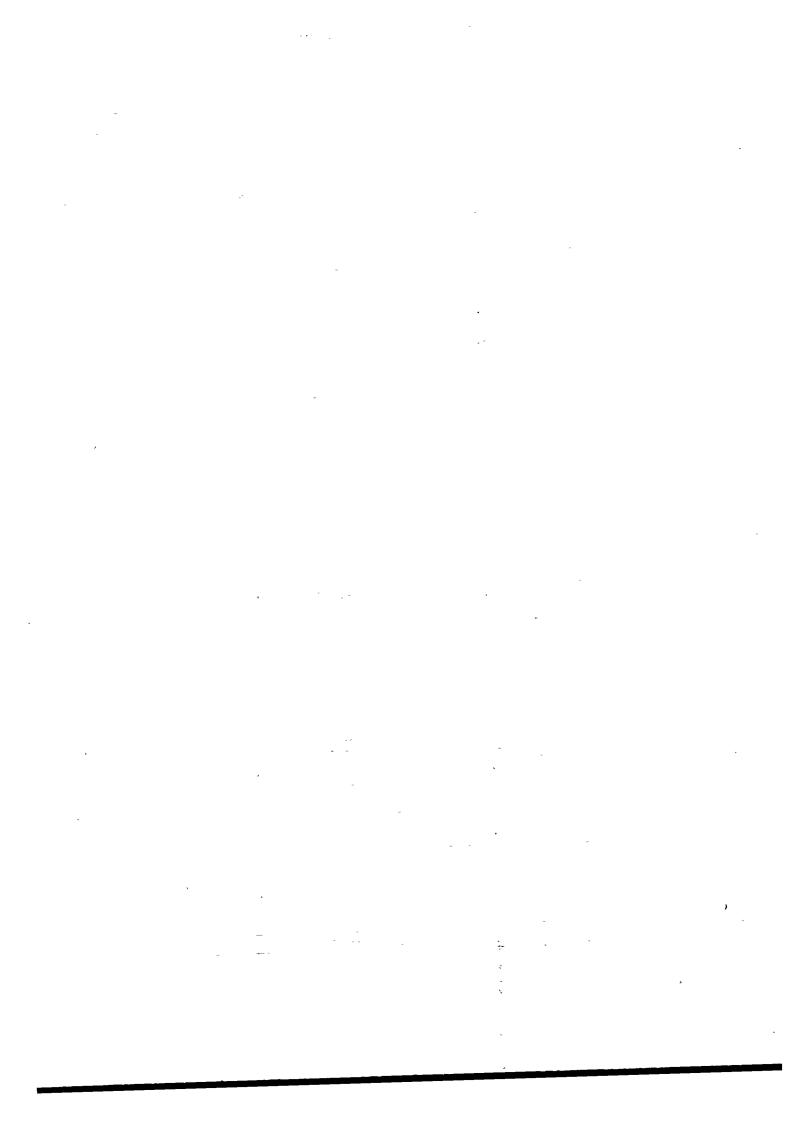




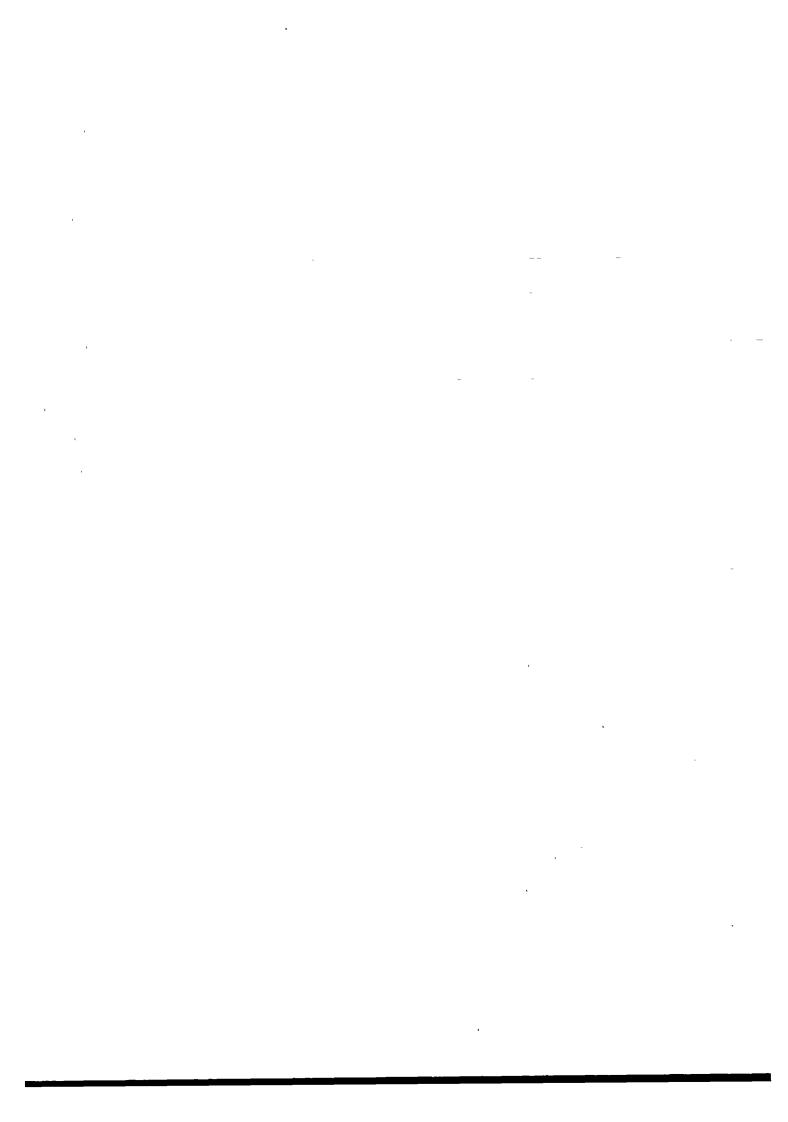


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	Module PRINCIPLI	ES OF WATER SUPPLY Code : GGG 300
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	Section I INFO	RMATION SHEET Page : 01 of 01/06
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	Special features	This module may be accompanied by the Audio-
	日本 日本 日本 日本 日本 日本 日本 日本	Visual Programme "Principles of Water Supply".
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Water Supply/water enterprise.



Module : PRINCIPLES OF WATER SUPPLY	Code : GGG 300
	Edition: 25-02-1985
Section 2: SESSION NOTES	Page : 01 of 02
1. Introduction	
 The supply of good clean drinking water is especially important in Indonesia. 	
- Water Enterprises are organisations which supply water to the population.	
 In any water supply system there are basically three areas of operation: production; transmission; distribution. 	Show V 1
2. Water production	
- Explain water cycle.	Show V 2
- Sources of water may be many and varied:	Show V 3
- Rainwater is normally too unreliable for public water supply.	
 Water is taken from the source and normal- ly treated to make it safe to drink. 	
3. Water Transmission	
 Water is transmitted from the source to the distribution system using transmission mains. 	
- Gravity transmission mains.	Show V 4
- Pumping transmission mains.	Show V 5
·	



Mod	ule : PRINCIPLES OF WATER SUPPLY	Code : GGG 300
	<u>-</u>	Edition: 25-02-1989
Sec	tion 2: SESSION NOTES	Page : 02 of 02
4.	Water Distribution	
	 Having transmitted water from the source to the distribution system it is distributed by: primary mains; secondary mains; tertiary mains. 	Show V 6
	- From the tertiary mains connections are made for service to the consumer.	
5.	Storage of Water	
	- To make a system efficient, water is stored in reservoirs.	
	 Reservoir balance differences between supply and demand. 	
	- Water is available in case of emergency.	
6.	Revenue	
	- Water Enterprise needs revenues.	
	- Cover actual out-of-pocket expenses.	Show V 7
	- Generate reserves for future investments etc.	
	Therefore: - Water is sold to the consumer.	
7.	Summary	Give H l
]



Module PRINCIPLES OF WATER SUPPLY Code GGG 300 Edition: 25-02-1985 Section 3: TRAINING AIDS Page 01 of 02 Operational areas GGG 300/V 1 Water cycle GGG 300/V 2 1 PRODUCTION 3 DISTRIBUTION Water sources GGG 300/V 3 Transmission mains I GGG 300/V 4 SPRING TAPPING WATER SOURCES RAIN SPRINGS SHALLOW WELLS DEEP WELLS RIVERS LAKES DISTRIBUTION AREA GRAVITY FLOW Transmission mains II GGG 300/V 5 Distribution system GGG 300/V 6 WATER SOURCE FEICTION TRANSMISSION MAIN RESERVOIR STATIC PRIMARY MAINS SECONDARY MAINS PUMPED FLOW

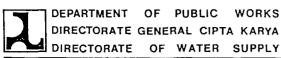
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Module : PRINCIPLES OF WATER SUPPLY	Code :	GGG 300
	Edition :	25-02-1985
Section 3: TRAINING AIDS	Page :	02 of 02
Financing water GGG 300/V 7 enterprise		
MONEY NEEDED FOR: SALARIES EXPENSES INVESTMENT / REPLACEMENT MONEY OBTAINED FROM: SALE OF WATER FLAT RATE PER MONTH FIXED RATE PER CUBIC METRE		
		1
Principles of supply	water	GGG 300/H 1

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Module	:	PRINCIPLES OF WATER SUPPLY	Code	:	GGG 300
			Edition	:	25-02-1985
Section 4	:	HANDOUT	Page	;	01 of 01

Throughout Indonesia, as in all countries, a public water supply system is important for the population. Good, clean, drinkable water helps contain the number of dangerous water-borne diseases and improves the standard of living as a whole, and that of hygiene in particular.

Although rainwater may be used in individual cases, for public water supply:

- a. springs;
- b. shallow wells;
- c. deep wells;
- d. lakes etc.,

are the common sources of water.

After water has been abstracted from the source it is treated to make it clean and drinkable. It is then transported to the distribution area by way of transmission mains.

At this point very often the water is stored in reservoirs in order to ensure that water will always be available, despite large fluctuations in the rate of consumption throughout the day. This also has the advantage of having water available for emergency purposes should there be a failure of the distribution system.

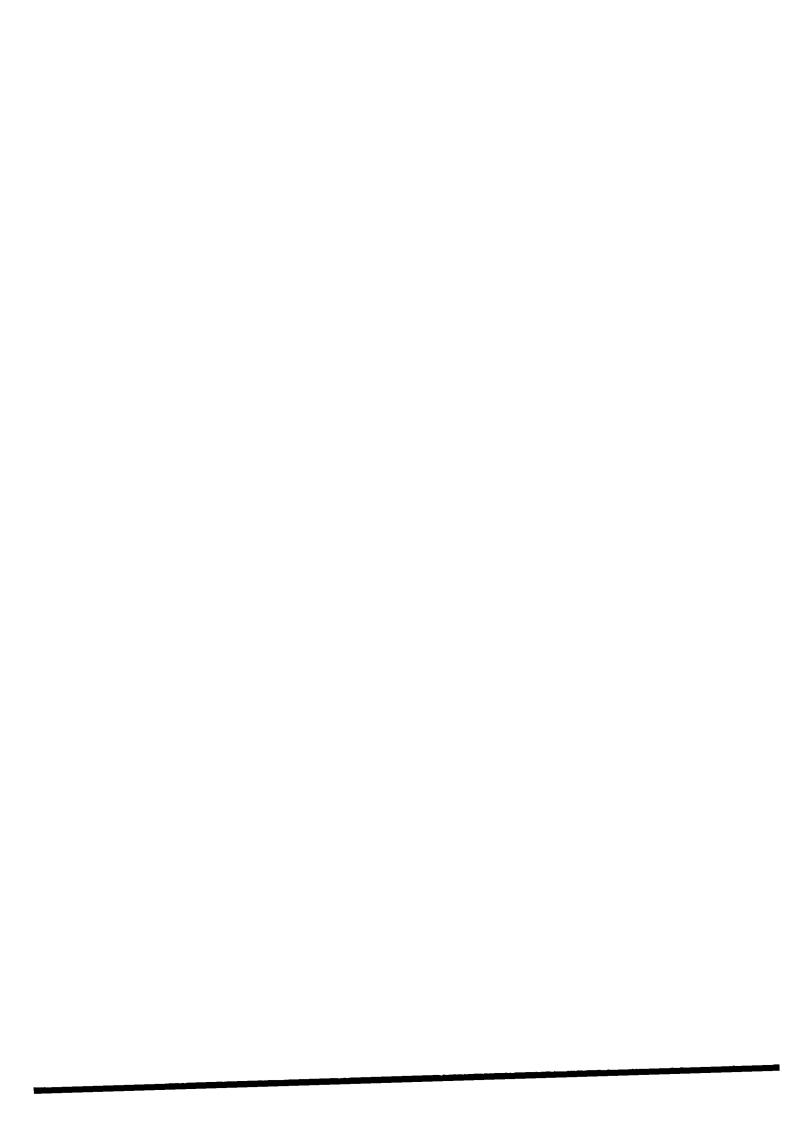
A distribution system by means of:

- a. primary water mains;
- b. secondary water mains;
- tertiary water mains,

allows the water to be distributed to the individual households.

Water Enterprises need revenues for paying their staff, electricity, chemicals, etc. and to form reserves from which the cost of replacing or extending parts of the system are met. These revenues are collected by selling water to the consumers. These either have to pay a fixed sum per month, or pay according to the amount of water that has actually been used. In the later case the quantity is normally measured by means of water meters.

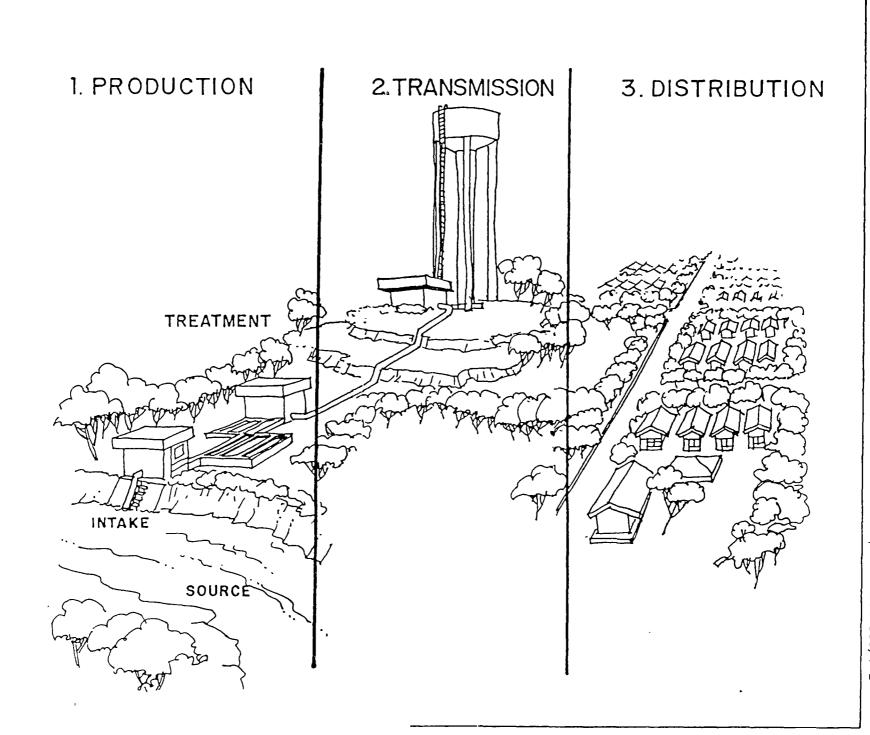
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Module : PRINCIPLES OF WATER SUPPLY	Code : GGG 300
	Edition: 25-02-1985
Annex : VIEWFOILS	Page : 01 of 08
TITLE :	CODE :
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1. Operational areas	GGG 300/V 1
2. Water cycle	GGG 300/V 2
3. Water sources	GGG 300/V 3
4. Transmission main 1	GGG 300/V 4
5. Transmission main 2	GGG 300/V 5
6. Water distribution system	GGG 300/V 6
7. Financing water enterprise	GGG 300/V 7
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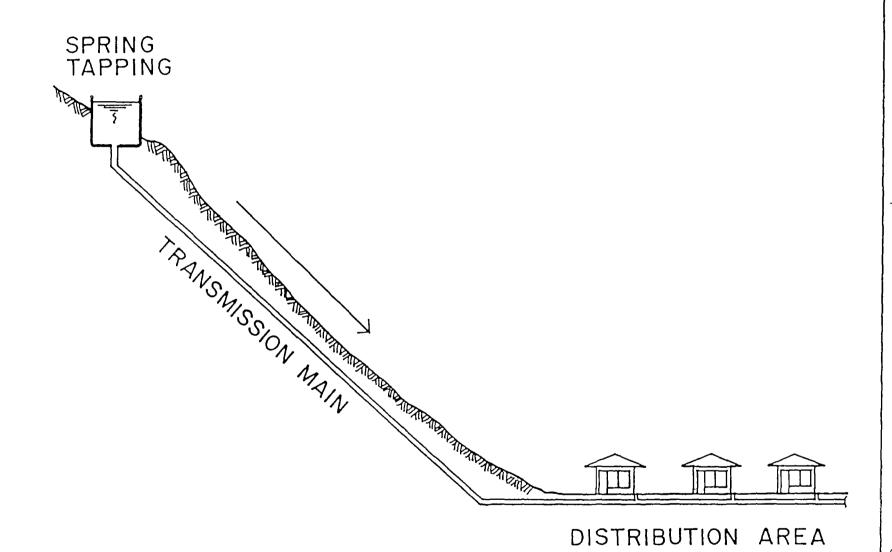




WATER SOURCES

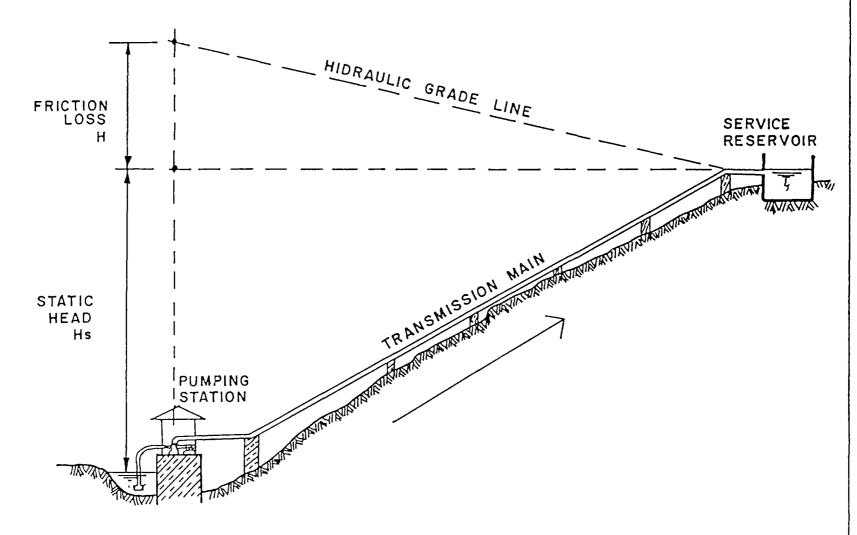
- RAIN
- SPRINGS
- SHALLOW WELLS
- DEEP WELLS
- RIVERS
- LAKES





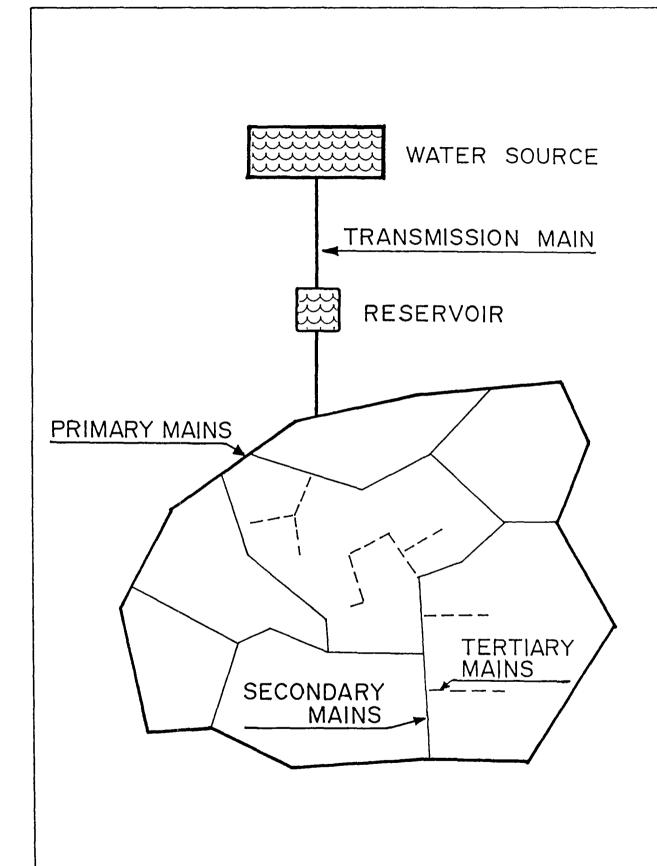
GRAVITY FLOW

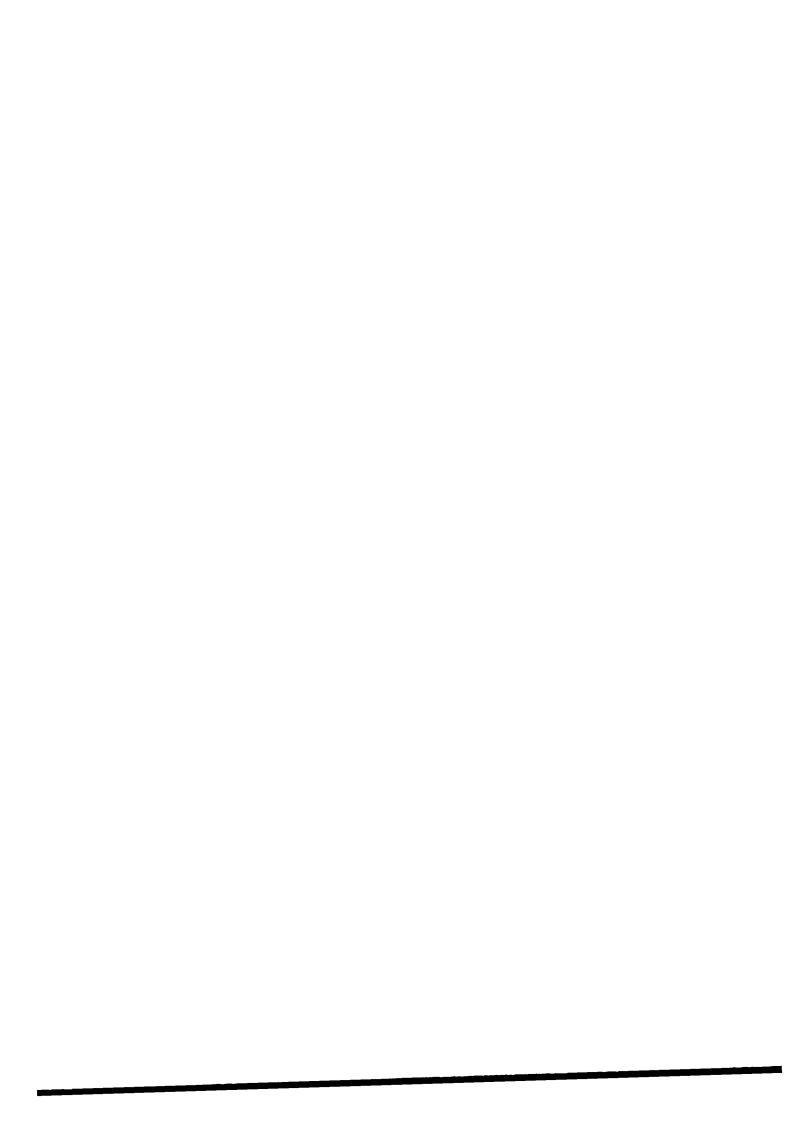




PUMPED FLOW







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MONEY NEEDED FOR:

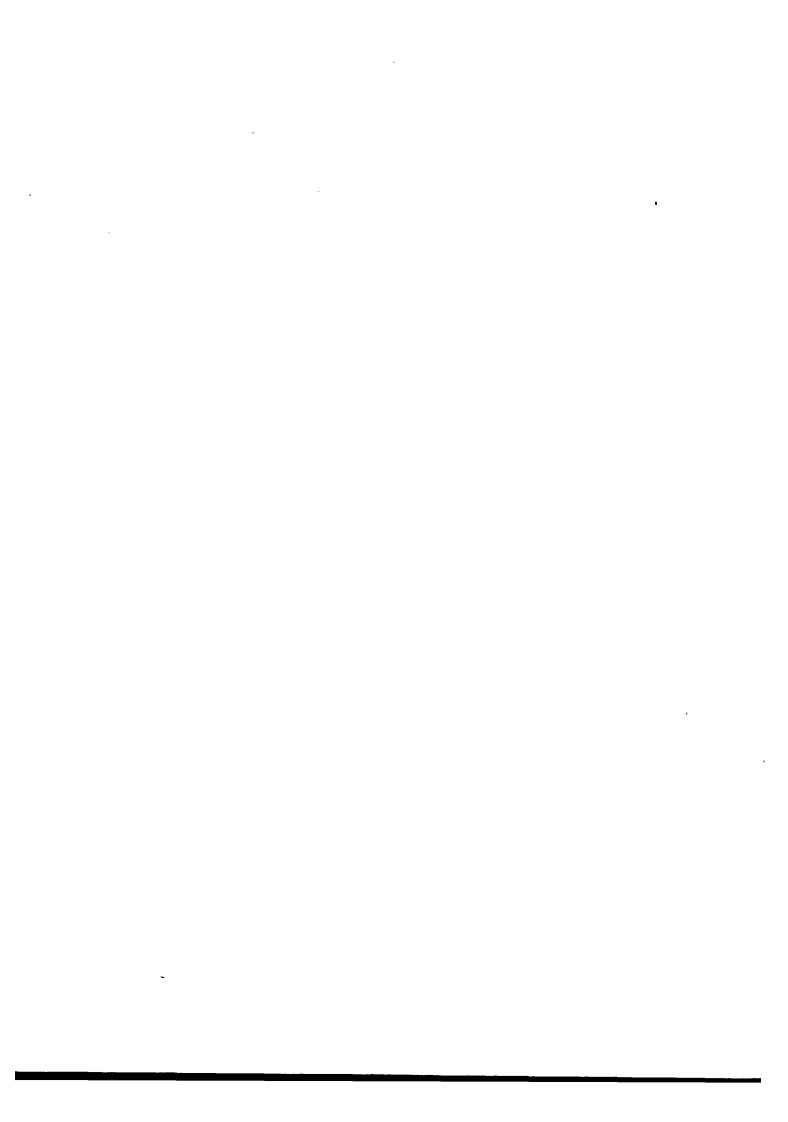
- SALARIES
- EXPENSES
- INVESTMENT / REPLACEMENT

MONEY OBTAINED FROM :

- SALE OF WATER
- FLAT RATE PER MONTH
- CUBIC METR PER FIXED RATE



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Module THE WATER EN	TERPRISE -	Code : OBG 101
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Section 1: INFORM	ATION SHEET	Page : 01 of 01/07
Duration	45 minutes.	
Training objectives:	After this session trained recite two major flows operations; - list major steps in water	in water enterprise
	- characterize the water e	
Trainee Selection	- Director PDAM/Head BPAM; - Head of Technical Depart - Head of Finance & Admini	ment;
Training aids Special Teatures	- Viewfoils : OBG 101/V : - Handout : OBG 101/H :	
Keywords	Enterprise characteristics	s/enterprise flows.



Module - : THE WATER ENTERPRISE -Code : OBG 101 ITS FUNCTIONS Edition: 11-07-1984 Section 2: SESSION NOTES Page : 01 of 02 1. Introduction - The Indonesian Water Enterprises must: . supply the population with safe water; . collect revenues from water sales. 2. Flows in Water Enterprise operations Show V 1 - Two important flows: . water from the source to the consumer; . money from the consumer to the enterprise. - Flow of water can be subdivided into: Show V 2 (a-g) . withdrawal; . treatment: . transmission; . distribution; . consumption. - Flow of money can be subdivided into: . meter reading (recording of water use); . billing (preparation of bills); . collection of revenues. What are the characteristics of the Water Enterprise? - The Water Enterprise supplies an essential Use whiteboard commodity. - Consumers cannot control the quality of product. - Consumers are dependent on a regular supp-- The Water Enterprise is a Public Enterprise.

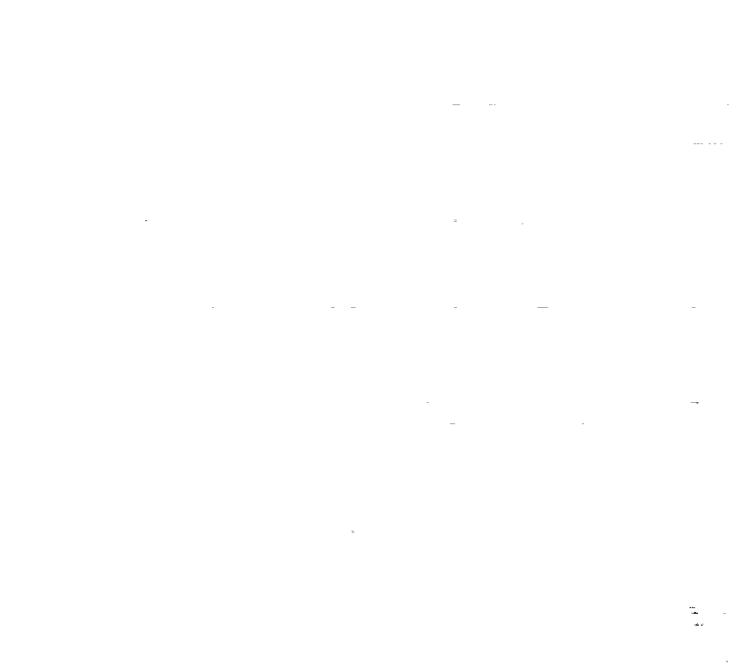


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Module : THE WATER ENTERPRISE - ITS FUNCTIONS	Code :	OBG 101
	Edition:	11-07-1984
Section 2: SESSION NOTES	Page :	02 of 02
4. Summary - Water Enterprises are responsible for:		
. supply of water; . collection of revenues.		
 Water Enterprise-operations: supplies water from source to the consumer; receives money from the consumer to the enterprise. 	-	
- Water Enterprise characteristics: . it supplies an essential commodity; . quality cannot be controlled by consumers;	1	
 consumers are dependent on a regular supply; it is a Public Enterprise. 	Give H l	
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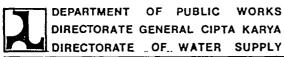
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Module THE WATER ENTERPRISE -: OBG 101 Code ITS FUNCTIONS Edition: 11-07-1984 Section 3: TRAINING AIDS Page : 01 of 01 Flows in Water OBG 101/V 1 Flows in Water OBG 101/V 2 (a-g) Enterprise Operations I Enterprise Operations II The Water Enterprise OBG 101/H 1 - its functions



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Module : THE WATER ENTERPRISE - ITS FUNCTIONS	Code : OBG 101
	Edition: 11-07-1984
Section 4: HANDOUT	Page : 01 of 03

1. INTRODUCTION

Once a new water supply system has been constructed, it must be operated, maintained, and developed. To do this an organisation is needed: the Water Enterprise.

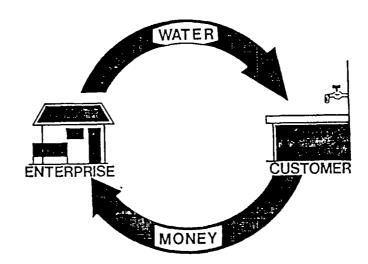
The water enterprises in Indonesia are responsible for the supply of water to the consumer. The national development targets stipulate that an adequate water supply shall be available to 70% of the urban and semi-urban population by 1990. Consumers must pay for the water they consume. Therefore the enterprises are also responsible for the collection of revenues from water sales.

2. FLOWS IN WATER ENTERPRISE OPERATIONS

Water enterprise operations can be characterized by two important flows:

- flow of water from the source to the consumer, and

- flow of money from the consumer to the enterprise. These flows are illustrated below.



The flow of water from the source to the consumer can be subdivided into a number of major processes/phases:

- withdrawal;
- treatment;
- transmission;
- distribution;
- consumption.

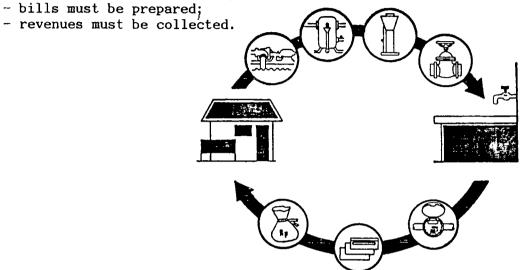


Module : THE WATER ENTERPRISE - Code : OBG 101
ITS FUNCTIONS
Edition : 11-07-1984

Section 4 : H A N D O U T Page : 02 of 03

To obtain a flow of money from the consumer to the enterprise a.o.:

- water use must be recorded;



These operations are carried out by the water supply enterprise.

3. WHAT ARE THE CHARACTERISTICS OF A WATER SUPPLY ENTERPRISE?

The Water Enterprise supplies an essential commodity

People need water for many purposes, for example for drinking, cooking, bathing, cleaning, washing and religious use. Without water people cannot live: water is an essential commodity. A TV or a motorbike are non-essential commodities: people can survive without them.

Consumers cannot control the quality of the product

People need water of good quality. This means, that they need water that is free from disease-causing elements. The consumers cannot control the quality of the water delivered to their houses. The consumer relies on the quality of the water. The water enterprise must guarantee the supply of water of good quality.



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Section 4 : H A N D O U T Page : 03 of 03

Consumers are dependent on a regular supply

There is only one water enterprise per town. If there is a break-down in the supply of water, the consumer cannot go to another supplier of water; while traditional water sources often are contaminated. Consumers are dependent on the water supplied by the water enterprise.

The water enterprise is a Public Enterprise

Like in any enterprise, water enterprise revenues must cover enterprise costs. However, the water enterprise is a Public Enterprise and not a private enterprise (PDAM and not PTAM). The enterprise must serve the public. Therefore enterprise policy should be based both on commercial principles and those of public service.

4. SUMMARY

The Water Enterprises are responsible for:

- supply of water to the consumer, and
- collection of revenues.

Water enterprise operations consist of two flows:

- water from the source to the consumer, and
- money from the consumer to the enterprise.

The characteristics of a Water Enterprise are:

- it supplies an essential commodity;
- consumers cannot control the quality of the product;
- consumers are dependent on a regular supply;
- it is a Public Enterprise and not a private enterprise.

* * *



Module : THE WATER ENTERPRISE - Code : OBG 101

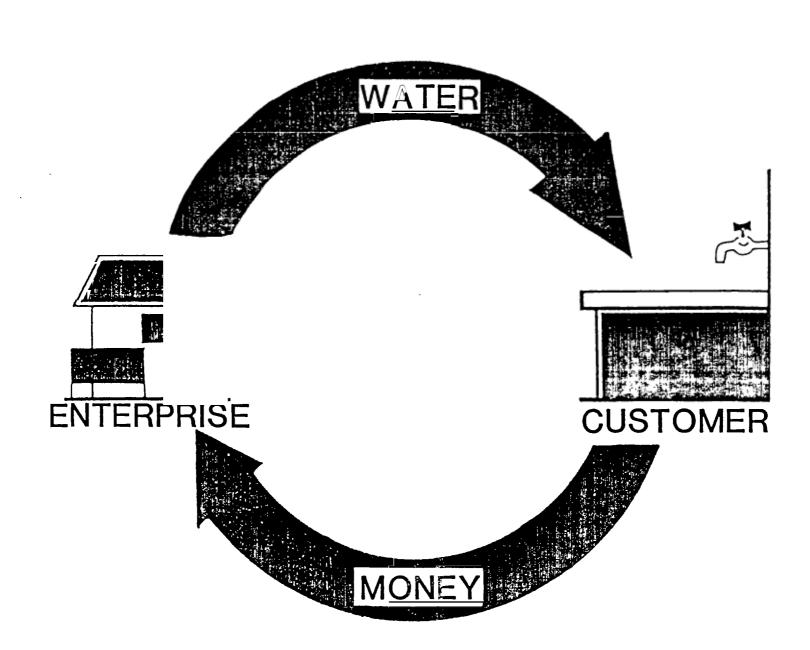
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Annex : VIEWFOILS Page : 01 of 03

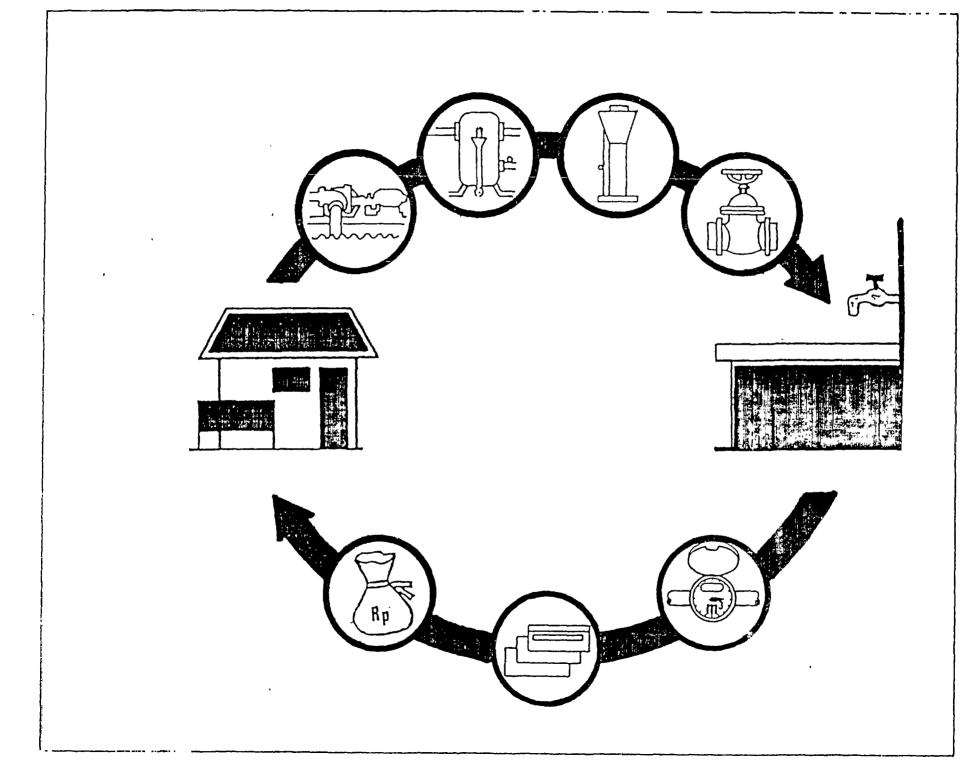
TITLE: CODE:

1. Flows in the water enterprise (I) OBG 101/V 1

2. Flows in the water enterprise (II) OBG 101/V 2









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Principle of the second of the		
Duration	45 minutes.	
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Training objectives :	After the session the trainees will be able to:	
	 recite the basic steps to be taken in esta- blishing a new water supply enterprise. 	
	Dilaning a new water supply enterprise.	
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Trainee selection :	- Director PDAM/Head BPAM; - Head of Technical Department;	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- Head of Finance & Administration Department.	
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Training aids :	- Viewfoils : OBG 300/V 1-2 (a-g);	
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ESTABLISHMENT OF Module OBG 300 Code A WATER ENTERPRISE Edition: 03-03-1985 Section 2: SESSION NOTES Page : 01 of 03 Introduction The establishment of a new water supply sys-Use whiteboard tem leads to major changes in existing water supply operations of a water enterprise : - quantity of water supply increases; - number of connections increases; - complexity of technical operations increases (production, distribution, maintenance); - complexity of administrative and financial operations increases: - revenue from water sales increases. In some cases it is a completely new activity. Water Enterprise Water supply operations can only be managed successfully by an effective and efficient organisation: the water enterprise. The Water Enterprise is responsible for a Show V 1 regular supply of water to the consumer and a regular flow of money from the consumer to the enterprise. 3. Legal identity Water supply operations should be organized as an enterpreneurial activity and the Water Enterprise shall have a legal identity of its own. Enterprise management staff shall be selfreliant in making decisions and taking initiatives and the enterprise needs its own administrative system and procedures. eri exer - - - - - -



Module ESTABLISHMENT OF Code OBG 300 A WATER ENTERPRISE Edition: 03-03-1985 Section 2: SESSION NOTES Page : 02 of 03 Regional Water Enterprise = PDAM Often the local government is responsible Show V 2 for water supply operations. Indonesian Government promotes the establishment of Regional Water Enterprises. A Supervisory Board, formed by regional authorities, has to approve enterprise policy, tariffs and budgets. It supervises the operations of the Regional Water Enterprise. Management staff of the enterprise responsible for daily operations and is accountable to to the Supervisory Board for all its actions. Management Board for Water Supply = BPAM In order to facilitate the establishment of a Regional Water Enterprise, the ministry provides the set-up of a temporary institution : the Management Board for Water Supply. This body is responsible for water supply operations within the guidelines of the Ministry. The Ministry has budget approval power appoints the Head of the organisation, Head of Finance and Administration and the Head of the Technical Department. The Management Board for Water Supply should develop into a Regional Water Enterprise within a period of three years. Staffing 6. A new Water Enterprise needs staff. A newly Use whiteboard established water supply enterprise usually has some 22 jobtitles. Examples are : - Jobs related to technical operations: treatment plant operator and supervisor, chemist, pipelayer, laboratory technician etc.;

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A WATER ENTERPRISE

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Section 2 : SESSION NOTES

Page : 03 of 03

- Jobs related to financial and administrative operations : bookkeeper, meter reader, biller, revenue officer, storekeeper etc.;

- Jobs related to management : director

PDAM/ Head BPAM, head finance and administrative department, head technical department. Qualified personnel shall be recruited and appointed.

In case of an existing water supply organisation, it is important to remember that a new water supply system leads to an increase in workload and to more complications in tasks and duties.

7. Enterprise premises

Facilities and initial capital shall be made available to the water enterprise. The enterprise needs a proper office with equipment, furniture etc. But transport facilities, repair workshop, equipment store, water quality laboratory etc. are essential too for the development of a professionally operating water enterprise.

8. Summary

- To establish a new regional water supply enterprise, a number of important aspects have to be considered:
 - . legal identity;
 - . production capacity;
 - . organization structure;
 - . staffing;
 - . premises;
 - . etc.
- A Management Board for Water Supply should develop into a Regional Water Enterprise within three years.

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A WATER ENTERPRISE	Edition: 03-03-1985
Section 3: TRAINING AID	S Page : 01 of 01
Flows in Water OBG 300/V 1 Enterprise Operations II	Establishing OBG 300/V : new a Water Enterprise
	MINISTRY OF PUBLIC WORKS Proposes organization for BPAM Provides operational guidelines Approves budget Appoints management MANAGEMENT OF BPAM Establishes PDAM within 3 years
	Establishment of OBG 300/H a Water Enterprise
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DEPARTMENT OF PUBLIC WORKS
DIRECTORATE GENERAL CIPTA KARYA
DIRECTORATE OF WATER SUPPLY



Module	Module : ESTABLISHMENT OF A WATER ENTERPRISE	- ·· ·- ·- ·- ·- ·- ·- ·- ·- ·	Code	:	OBG 300
		Edition	:	03-03-1985	
Section 4	;	HANDOUT	Page	:	01 of 03

1. INTRODUCTION

In some cities there is already some form of piped water supply. However, existing systems are often small and deteriorated.

The establishment of a new water supply system will lead to major changes in water supply operations. There will be an increase in :

- quantity of water supply;
- number of connections;
- complexity of technical operations, including production, distribution and maintenance;
- complexity of administrative and financial operations;
- revenues from water sales.

In other cities piped water supply is a completely new public utility.

2. THE WATER ENTERPRISE

The huge investment in the construction of a new water supply system requires that water supply operations are organised as an enterpreneurial activity. Management and staff of the enterprise must take initiatives, look for efficiency, be consumer oriented and promote effective water use.

In order to create best opportunities for the development of the new water supply system, an independent enterprise with its own legal identity shall be established: the Regional Water Enterprise. The enterprise shall be managed by its own management staff, and administer its own funds.

Moreover the enterprise shall have its own administrative systems and procedures.

3. REGIONAL WATER ENTERPRISE = PDAM

The highest body in the Regional Water Enterprise is the Supervisory Board which is formed by authorities of the Region. This Supervisory Board approves enterprise policy, tariffs and budgets, and supervises enterprise operations. Within the guidelines of the Supervisory Board, management staff of the enterprise is responsible for day to day operations. Management staff have power to make and implement plans, to procure materials, to employ staff, and to administer enterprise funds. However, the Management staff remain accountable to the Supervisory Board for all its actions.



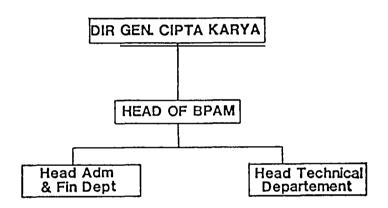
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 : ESTABLISHMENT OF A WATER ENTERPRISE
 Code : OBG 300

 Edition : 03-03-1985

 Section 4 : H A N D O U T
 Page : 02 of 03

4. MANAGEMENT BOARD FOR WATER SUPPLY = BPAM

In preparing the official establishment of a Regional Water Enterprise, the Ministry of Public Works proposes to establish first a temporary organisation: Management Board for Water Supply. This body is responsible for water supply operations, but performs its task within the guidelines of the Ministry of Public Works. The budget for the Management Board for Water Supply has to be approved by the Ministry, which also appoints the Head of the organisation, the Head of the Finance and Administration Department and the Head of the Technical Department.



By establishing a Management Board for Water Supply, the Ministry of Public Works is actively involved in the development of the water supply organisation. Within a period of three years the Management Board for Water Supply should develop into a Regional Water Enterprise.

5. STAFFING

A newly established (PDAM or BPAM) Water Enterprise will need staff for the different jobs. Some 22 jobtitles can be distinguished for a small water enterprise (up to approx. 2.000 connections). The jobs are related to the different types of operations of the enterprise, such as:

 Jobs related to technical operations: treatment plant operator and supervisor, water chemist, pipelayer, surveyor, laboratory technician, plumber/meter repair, draughtsman;



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Section 4	1 :	HANDOUT	Page	:	03 of 03

- Jobs related to financial & administrative operations: bookkeeper, meter reader, biller, revenue officer, general administration & personnel officer, customer relations officer, store keeper;
- Jobs related to management: Director PDAM/Head BPAM, Head Finance & Administration Department, Head Technical Department.

Not each job title requires one or more employees. In small enterprises with a limited work load, I employee may execute several jobs. However, qualified personnel must be recruited and appointed. In case of an existing water supply organisation, it should be remem-

In case of an existing water supply organisation, it should be remembered that a new water supply system does not only lead to an increase in the work load, but the work also becomes more complicated. The new system requires new know-how and skills. Moreover work methods and procedures must change from the existing methods (local government) to enterprise methods.

It should be ascertained whether present staff are sufficiently qualified to be recruited for the new enterprise.

6. ENTERPRISE PREMISES

A newly established water enterprise will also require a proper office with adequate equipment, furniture and office materials. Moreover the enterprise will need transport facilities, a workshop for repair works, a store for equipment, tools and spare parts, a drawing office and a laboratory for essential water quality analyses. Facilities and initial capital shall be made available to the water enterprise in order to enable it to procure these items as they are essential for the development of a professionally operating enterprise.

7. SUMMARY

To establish a new regional water supply enterprise, a number of important aspects have to be considered: the legal identity, the production capacity, the organization structure, staffing, premises, etc. To prepare all this the Ministry may provide a temporary Board for Water Supply, which should develop the regional Water Enterprise within a period of three years.



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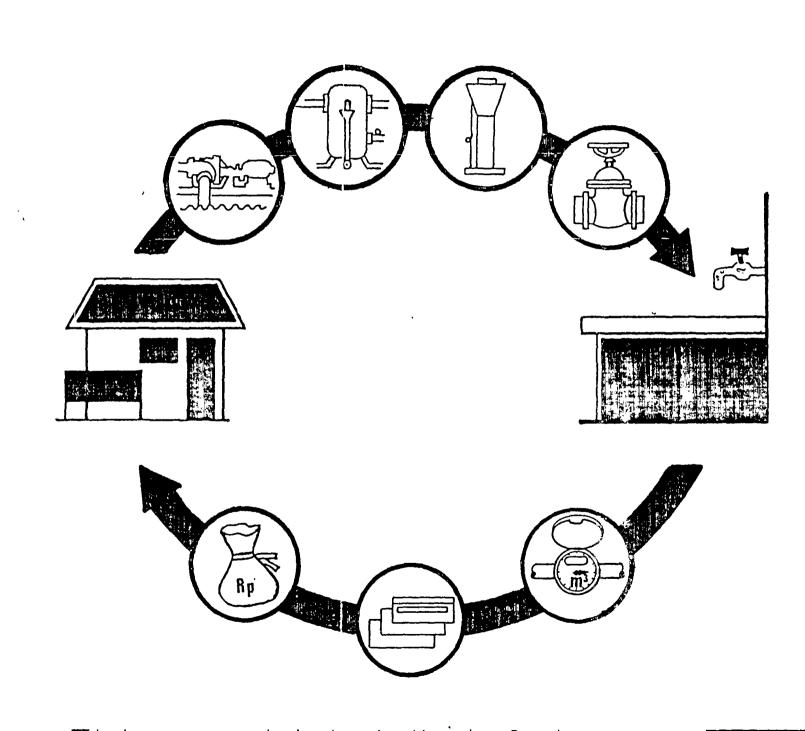
Annex : VIEWFOILS Page : 01 of 03

TITLE: CODE:

1. Flows in water enterprise operations II OBG 300/V 1

2. Establishing new water enterprise OBG 300/V 2







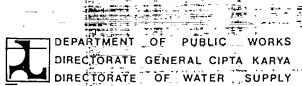
MINISTRY OF PUBLIC WORKS

- Proposes organization for BPAM
- Provides operational guidelines
- Approves budget
- Appoints management

MANAGEMENT OF BPAM

Establishes PDAM within 3 years







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Module THE WATER I	NTERPRISE -	Code :	OBG 610
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Section 1: INFORM	AATION SHEET	Page :	01 of 01/08
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Training objectives:	After the session the tra		
	- recite the main extended water operations.	rnal force	s affecting
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Trainee selection :	- Director PDAM/Head BPAM		
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Training aids	- Viewfoils: OBG 610/V 1- - Exercise : OBG 610/E 1;	6;	İ
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Module THE WATER ENTERPRISE -Code OBG 610 ITS ENVIRONMENT Edition: 26-02-1985 Section 2: SESSION NOTES Page 01 of 02 1. Introduction - Organisations provide the people with the goods and services they want and need. - Organisations interact with the outside Use whiteboard world: the environment of the organisation. The manager and the environment - Example: Construction of a Perumnas lowcost housing project (1.000 houses) influences enterprise operations : . extension of the distribution system; . start-up of a new office at the project . recruitment and training of new staff; . development of special financial administrative procedures. 3. Exercise Give E 1 - Duration: 20 minutes. which factors affect the operations of the water enterprise. - Divide trainees into groups of maximum five persons. - Assign a presentator per group who will report on group results. - Reporting by presentators. Duration: 5 minutes per group. - Write answers on flipover or whiteboard. - Mention the main factors affecting water Show V 1 enterprise operations.



Module : THE WATER ENTERPRISE - ITS ENVIRONMENT	Code : OBG 610
	Edition: 26-02-1985
Section 2: SESSION NOTES	Page : 02 of 02
4. External factors affecting enterprise	
 Government policies and regulations: Repelita objectives; tax regulations; price restrictions; Public Health regulations. 	Show V 2
 Market conditions: number of inhabitants; the amount consumers can pay for water; town development plan; industrial development plan. 	Show V 3
Materials supply:availability of materials;price of commodities;terms of delivery.	Show V 4
 Manpower supply: availability of skilled labour; availability of specific expertise; labour conditions. 	Show V 5
 Financial sources: financial assistance from government institutions; availability of loans; rates of interest. 	Show V 6
5. Summary	
 The most important external forces affecting water enterprise operations are: Government Policy; Market condition; Supply of materials; Supply of manpower; Supply of money. 	Show V 1
- The water supply enterprise takes these forces into account.	Give H l
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Module : THE WATER ENTERPRISE - ITS ENVIRONMENT	Code : OBG 610		
INGENIONIEMI	Edition: 26-02-1985		
Section 3: TRAINING AI	D S Page : 01 of 02		
Which external factors OBG 610/E 1	External factors affect— OBG 610/V 1 ing enterprise		
PDAM	EXTERNAL FACTORS AFFECT OPERATIONS OF WATER ENTERPRISE • GOVERNMENT POLICIES • MARKET CONDITIONS • MATERIALS SUPPLY • MANPOWER SUPPLY • FINANCIAL SOURCES		
Government policies OBG 610/V 2	Market conditions OBG 610/V 3		
GOVERNMENT POLICIES AFFECT WATER ENTERPRISE - REPELITA OBJECTIVES - TAX REGULATIONS - PRICE RESTRICTIONS - PUBLIC HEALTH REGULATIONS	MARKET CONDITIONS AFFECT WATER ENTERPRISE - NUMBER OF INHABITANTS - INCOME OF CUSTOMERS - TOWN DEVELOPMENT PLANS - INDUSTRIAL DEVELOPMENT PLANS		
Material supply OBG 610/V 4	Manpower supply OBG 610/V 5		
MATERIALS SUPPLY AFFECTS WATER ENTERPRISE - AVAILABILITY OF MATERIALS - PRICES OF COMMODITIES - TERMS OF DELIVERY	MANPOWER SUPPLY AFFECTS WATER ENTERPRISE - AVAILABILITY SKILLED LABOUR - AVAILABILITY SPECIFIC EXPERTISE - LABOUR CONDITIONS		

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Module : THE WATER ENTERPRISE -	Code	:	OBG 610
ITS ENVIRONMENT		:	26-02-1985
Section 3: TRAINING AIDS	Page	:	02 of 02
Financial sources OBG 610/V 6	•		
FINANCIAL SOURCES AFFECT WATER ENTERPRISE TOO GOVERNMENT ASSISTANCE LOANS INTEREST RATES			
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DEPARTMENT OF PUBLIC WORKS
DIRECTORATE GENERAL CIPTA KARYA
DIRECTORATE OF WATER SUPPLY



Module : THE WATER ENTERPRISE -	Code :	OBG 610		
ITS ENVIRONMENT		Edition :	26-02-1985	
Section 4	4 :	HANDOUT	Page :	01 of 03

1. INTRODUCTION

Organisations provide people with the goods and services they want and need. Organisations exist because to do so, something must be done.

Organisations do not work solely within the boundaries of their own premises. They constantly interact with the world outside these boundaries. The outside world is called: the environment of the organisation.

2. THE MANAGER AND THE ENVIRONMENT

Managers look outside the boundaries of their organisation. They must be aware of developments that take place in the environment of their organisation. They react to these developments and relate them to the internal options of the organisation.

3. THE ENVIRONMENT OF THE WATER ENTERPRISE

Water Enterprise operations are affected by developments which take place in the environment of the Water Enterprise. The management of the enterprise cannot influence these developments but should react to them.

Example

Perumnas decided to construct a new low-cost housing project of 1.000 houses in your town. The manager of the water enterprise reacts to this major development and determines in what way the Perumnas project will influence enterprise operations.

Consequences could be:

- extension of the distribution system to the project site;
- start-up of a new enterprise office at the project site;
- recruitment and training of new staff for operation and maintenance works:
- development of special financial administrative procedures for Perumnas house occupants.

Water Enterprise operations are affected by:

- Government Policies and Regulations:
 - . Repelita objectives;
 - . tax regulations;
 - . price restrictions;
 - . Public Health regulations.



 Module
 : THE WATER ENTERPRISE - ITS ENVIRONMENT
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 Section 4 : H A N D O U T
 Page : 02 of 03

- Market Conditions:
 - . number of inhabitants;
 - . the amount consumers can pay for water supply;
 - . town development plan;
 - . state of industrial development.
- Material Supply:
 - . availability of materials;
 - . price of commodities;
 - . terms of delivery.
- Manpower Supply:
 - . availability of skilled labour;
 - . availability of specific expertise;
 - . labour conditions.
- Financial Sources:
 - . financial assistance from government institutions;
 - . availability of loans;
 - . rates of interest.

4. SUMMARY

Organisations exist because something must be done.

They constantly interact with the world outside their boundaries. Managers react to the developments which take place in the environment of their organisations, such as:

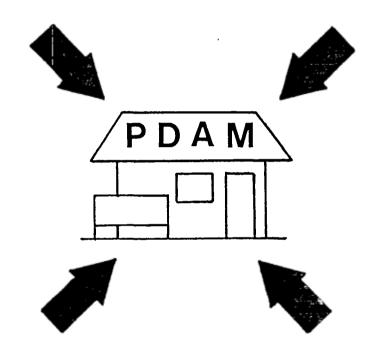
- Government policies and regulations.
- Market conditions.
- Material supply.
- Manpower supply.
- Financial sources.

They relate these developments to the internal operations of the enterprise.



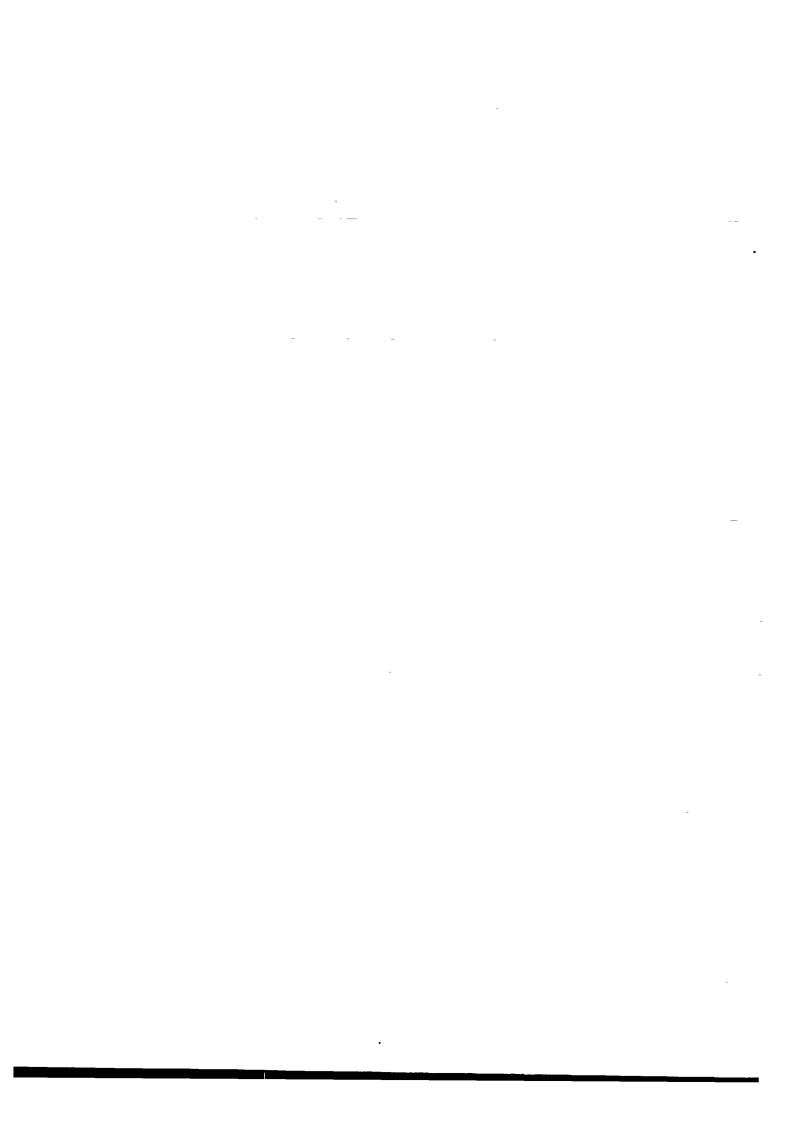
ITS ENVIRONMENT		Code :	:	OBG 610
		Edition :	:	26-02-1985
Section 4: HAN	D O U T (Exercise)	Page	:	03 of 03

Task: Write on this sheet a number of factors that affect water enterprise operations.





Module THE WATER ENTERPRISE -Code : OBG 610 ITS ENVIRONMENT Edition: 26-02-1985 01 of 07 VIEWFOILS Page Annex CODE : TITLE : OBG 610/V 1 External factors OBG 610/V 2 2. Government policies 3. Market conditions OBG 610/V 3 OBG 610/V 4 4. Material supply OBG 610/V 5 5. Manpower supply OBG 610/V 6 6. Financial sources



EXTERNAL FACTORS AFFECT OPERATIONS OF WATER ENTERPRISE

- GOVERNMENT POLICIES
- MARKET CONDITIONS
- MATERIALS SUPPLY
- MANPOWER SUPPLY
- FINANCIAL SOURCES

•

GOVERNMENT POLICIES AFFECT WATER ENTERPRISE

- REPELITA OBJECTIVES
- TAX REGULATIONS
- PRICE RESTRICTIONS
- PUBLIC HEALTH REGULATIONS



MARKET CONDITIONS AFFECT WATER ENTERPRISE.

- NUMBER OF INHABITANTS
- INCOME OF CUSTOMERS
- **FOMN DEVELOPMENT PLANS**
- INDUSTRIAL DEVELOPMENT PLANS



MATERIALS SUPPLY AFFECTS WATER ENTERPRISE...

- AVAILABILITY OF MATERIALS
- PRICES OF COMMODITIES
- TERMS OF DELIVERY



MANPOWER SUPPLY AFFECTS WATER ENTERPRISE ...

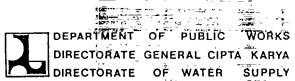
- AVAILABILITY SKILLED LABOUR
- AVAILABILITY SPECIFIC EXPERTISE
- LABOUR CONDITIONS



FINANCIAL SOURCES AFFECT WATER ENTERPRISE TOO ...

- GOVERNMENT ASSISTANCE
- LOANS
- INTEREST RATES

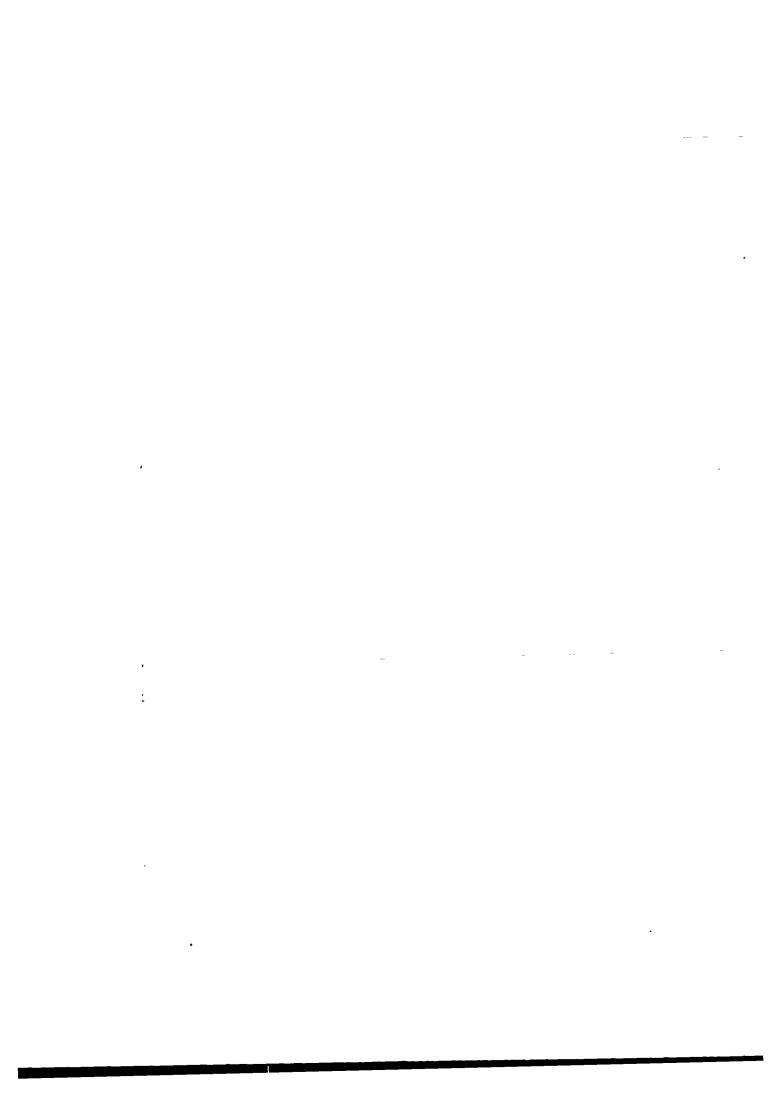






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Module PRINCIPI	ES OF MANAGEMENT -	Code : OBM	001
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Section 1: INFO	RMATION SHEET	Page : 01	of $01/\overline{10}$
		<u>.1</u> .	····
Duration	45 minutes.		
Training objectives :	After the session the tr	ainees will be a	ble to:
	- list the main princip	es of management	•
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Trainee selection :	- Director PDAM/Head BPA	λM;	
	- Head of Technical Depa	artment;	
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Keywords	Management Principles/pl	anning/organizin	ıg/
	directing/controlling.		
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Module : PRINCIPLES OF MANAGEMENT - INTRODUCTION	Code : OBM 001
INTRODUCTION	Edition: 11-07-1984
Section 2: SESSION NOTES	Page : 01 of 03
1. Ask: What is management?	Write answers on whiteboard
2. Introduction	
- There are large and small organisations.	
- Organisations provide goods and services.	
- All organisations have in common : people.	
- Different people carry out different jobs.	Show V l
- Ask : is a cigarette salesman an organisation? Answer : No, a cigarette salesman is alone.	
- Organisations are made up of: . men; . machines; . materials; . money.	Show V 2
 3. Principles of Management Example: breakdown of truck. First: decide in which direction to push. 	Show V 3-4
Next: push at the same moment. The manager coordinates the efforts of the people.	
 The manager makes sure that men, machines, materials, and money are available. 	
 The manager carries out his tasks through: Planning; Organizing; Directing; Controlling. 	Show V 5
	- ~

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Module : PRINCIPLES OF MANAGEMENT -	Code : OBM 001
INTRODUCTION	Edillon: 11-07-1984
Section 2: SESSION NOTES	Page : 02 of 03
4. Planning - Planning is thinking and deciding in	Show V 6
advance: . what to do ? . how to do it ? . when to do it ? . who is to do it ?	
- Plans also indicate what machines, materials, and money are needed.	
5. Organizing	
Organizing is making sure that:	
- All tasks are carried out.	Show V 7
 Staff are available, who: know their tasks and responsibilities; know how to cooperate. 	
 Men, machines, and materials are available at the right place/time. 	
6. Directing	
- Directing is guiding and motivating staff towards effective performance.	Show V 8
7. Controlling	
 Example: Activities to be carried out by a captain: he takes his bearing; he checks whether his boat is off course; he orders the helmsman to bring the boat 	Show V 9
back on course. - Controlling is seeing whether activities have been carried out according to plan and, if not, undertaking the necessary corrective actions.	Show V 10

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Mod	dule : PRINCIPLES OF MANAGEMENT - INTRODUCTION	Code :	OBM 001
	INTRODUCTION	Edition :	11-07-198
Sec	etion 2: SESSION NOTES	Page :	03 of 03
8.	The manager - The manager plans, organizes, directs, and controls.	Show V 5	
9.	Summary		
	Refer to answers on whiteboard.	Give H l	=
		dive ii i	
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Module PRINCIPLES OF MANAGEMENT -Code OBM 001 INTRODUCTION Edition: 11-07-1984 Section 3: TRAINING AIDS Page 01 of 02 Different people -OBM 001/V 1 Organizations need ... OBM 001/V 2 different jobs ORGANIZATIONS NEED MACHINES MEN MONEY MATERIALS Coordinating OBM 001/V 3 Coordinating OBM 001/V 4 activities I activities II Functions of OBM 001/V 5 Definition of OBM 001/V 6 Management Planning **PLANNING**



MANAGEMENT

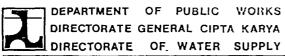
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thinking and deciding
in advance
about
WHAT to do
HOW to do it
WHEN to do it

WHO is to do it



Module : PRINCIPLES OF MANAGEMEN INTRODUCTION	Code : OBM 001 Edition : 11-07-1984
Section 3: TRAINING AID	
Definition of OBM 001/V 7 Organizing	Definition of OBM 001/V 8 Directing
ORGANIZING IS making sure that men machines materials are available to do the work	DIRECTING is guiding and motivating staff towards effective performance
Controlling example OBM 001/V 9	Definition of OBM 001/V 16 Controlling
	is seeing whether activities have been carried out according to plan and if not to take the necessary action to guarantee plan realisation
	Principles of OBM 001/H Management - Introduction







Module	:	PRINCIPLES OF MANAGEMENT - INTRODUCTION	Code	:	OBM 001
			Edition	:	11-07-1984
Section 4	1 :	HANDOUT	Page	:	01 of 04

1. INTRODUCTION

Why do organisations exist?

There are many organisations around us. There are large ones like Pralon factories, Cipto Mangunkusumo hospital, and PAM Jakarta. There are small ones like a carpenter's workshop or a garage. Organisations provide us with the goods and services we want and need. Pralon factories produce pipes, PAM Jakarta produces and distributes safe water, in Cipto Mangunkusumo hospital sick people are cured. The carpenter's workshop makes chairs and tables, cars are repaired in the garage.

Organisations have a goal. They exist because something must be done.

What have all organisations in common?

They have people. Without people there is no organisation.

Do all people do the same work?

In Pralon factories chemists, reservoir operators, and pipe cutters work together to make the pipes. In Cipto Mangunkusumo hospital doctors, nurses, and maintenance staff work together to cure people. In PAM Jakarta pipe fitters, treatment operators, meter readers and store keepers work together to produce and distribute safe water. People also cooperate in the carpenter's workshop and in the garage. In organisations different people have different jobs and carry out different tasks.

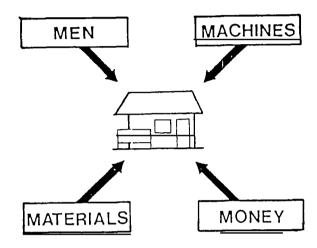
Are there only people in the organisation?

Organisations are made up, not only of people, but also of machines, materials, and money. Pralon factories have machines, the hospital has operating theatres and heart monitoring equipment. A garage has a bridge, screw drivers, a billing machine. It also needs spare parts and lubricants.



Module : PRINCIPLES OF MANAGEMENT - INTRODUCTION	Code	:	OBM 001
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In organisations people work with machines, and materials. See figure below.



So organisations need men, machines, materials, and, of course, money. Money is needed to pay for such items as electricity, petrol, and stationery.

2. PRINCIPLES OF MANAGEMENT

Example

In a busy street in the centre of Jakarta a truck breaks down. The truck hampers the traffic circulation and a long queue of cars builds up. Some helpful pedestrians are willing to push the truck to the road-side. What must they do?

- First they must decide in which direction to push.
- Next they must push at the same moment. Their efforts must be in tune.

In organisations different people carry out different tasks, but their activities are interdependent. Effective results can only be achieved through combined efforts. It is the task of the manager to coordinate the efforts of the people in the organisation to do the work.

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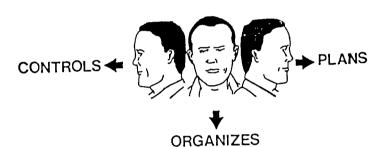
Module : PRINCIPLES OF MANAGEMENT - INTRODUCTION		Code : OBM 001
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Section 4	HANDOUT	Page : 03 of 04

The principles of management are:

- Planning;
- Organizing;
- Directing:
- Controlling.

MANAGEMENT

DIRECTS



PLANNING

Planning is thinking and deciding in advance:

- what to do ?
- how to do it ?
- when to do it ?
- who is to do it ?

A complete plan also indicates what machines, materials and money are needed to realise the plan.

ORGANIZING

Organizing is making sure that all tasks necessary for successful operation of the enterprise are carried out. Staff are available to do their job. People in the organisation know their responsibilities and know what they can decide by themselves and what is decided by their superior. They know how and with whom they should cooperate.

People work with machines and materials. Organizing is also ensuring that machines, and materials are available at the right place at the right time.



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Edition : 11-07-1984

Section 4 : H A N D O U T Page : 04 of 04

DIRECTING

Plans can be perfect, people may know what to do, and how to cooperate. However, without the willingness and enthusiastic support of enterprise staff, the best plans will fail. Directing is guiding and motivating the staff of the organisation towards effective performance.

CONTROLLING

On open sea a captain of a boat will regularly take his bearing to determine whether his boat is still on course. If the boat is off course he will order the helmsman to bring the boat back on course. Planning is looking into the future and deciding what has to be done, how, when, and by whom.

Controlling is looking backwards and seeing whether the activities have been carried out according to plan and if this is not the case to take the necessary corrective actions to guarantee the realisation of the plan.

3. SUMMARY

The manager thinks and decides upon what the organisation must realise in the future. He makes sure that all activities necessary for successful operation of the organisation are carried out. He ensures that machines, materials, and money are available.

The manager guides and motivates his staff in doing their job. Finally the manager will check whether the work has been done according to plan.

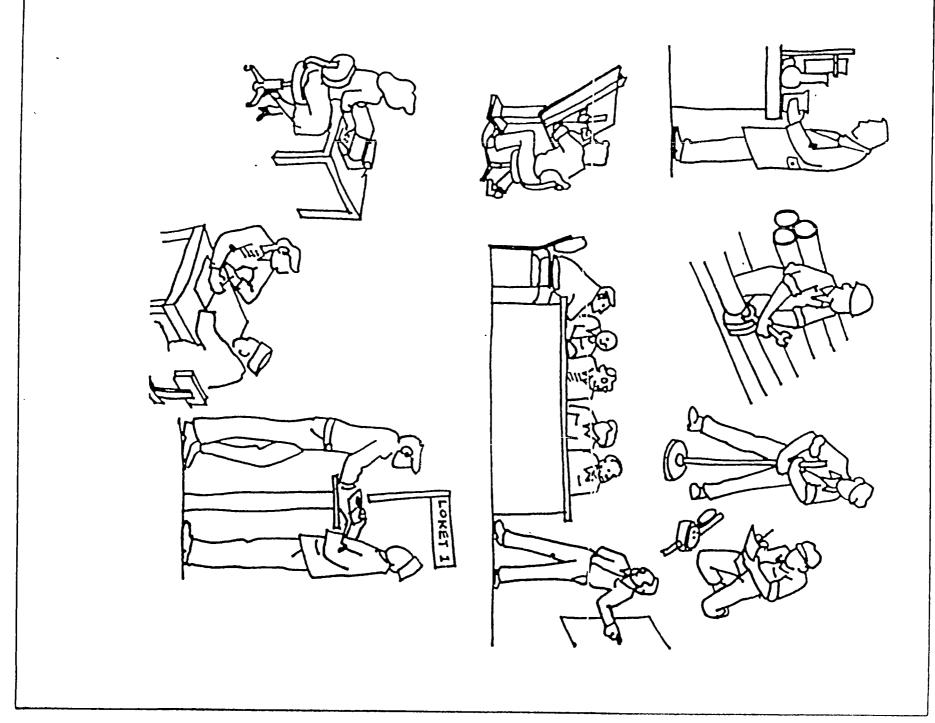
The manager plans, organizes, directs and controls. If one of these activities is not being undertaken, the manager does not perform his task effectively.

* * *

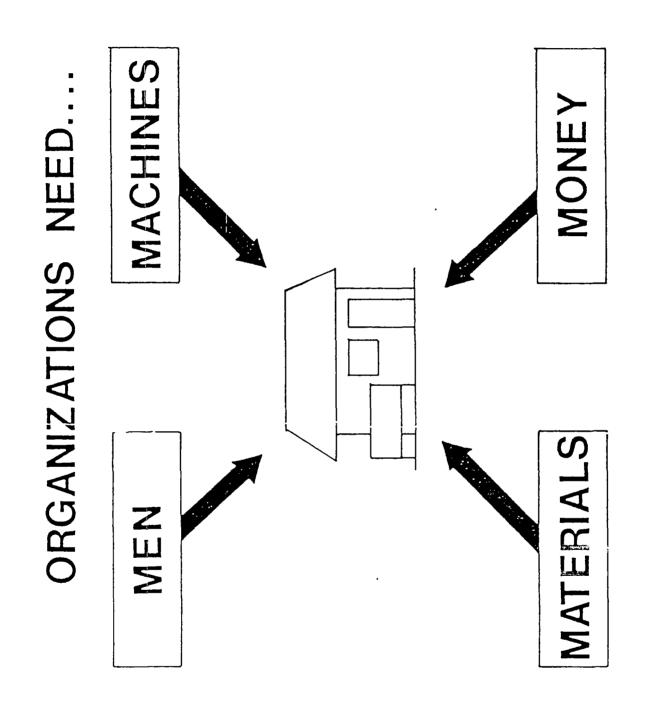


Module	: PRINCIPLES OF MANAGEMENT - INTRODUCTION	Code : OBM 001
	INTRODUCTION	Edition: 11-07-1984
Annex	: VIEWFOILS	Page : Ol of ll
тіт	LE:	CODE :
1.	Different people different jobs	OBM 001/V 1
2.	Organizations need	OBM 001/V 2
3.	Coordinating activities (I)	OBM 001/V 3
4.	Coordinating activities (II)	OBM 001/V 4
5.	Functions of management	OBM 001/V 5
6.	Definition of planning	OBM 001/V 6
7.	Definition of organizing	OBM 001/V 7
8.	Definition of directing	OBM 001/V 8
9.	Controlling example	OBM 001/V 9
10.	. Definition of controlling	OBM 001/V 10
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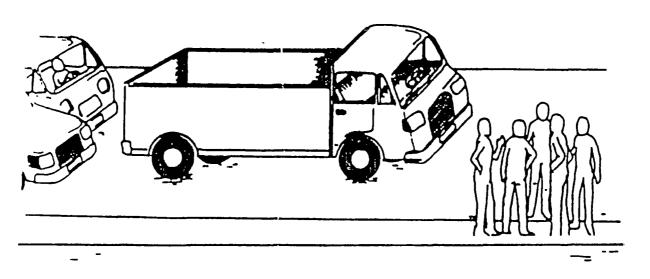


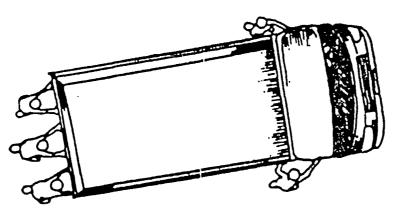




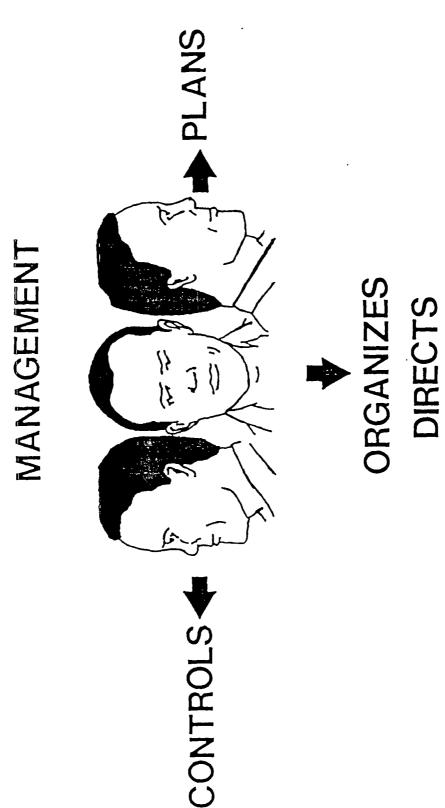














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PLANNING
         is
thinking and deciding
     in advance
       about
    WHAT to do
   HOW to do it
   WHEN to do it
  WHO is to do it
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ORGANIZING

making sure that

men machines materials

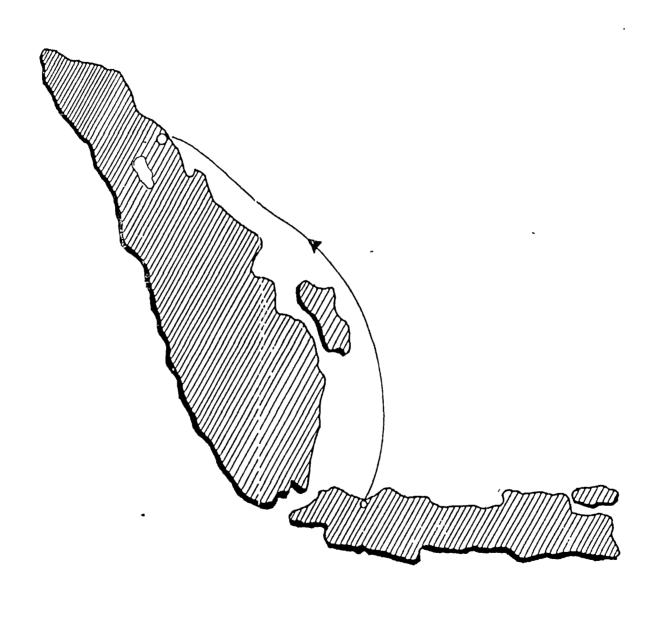
are available to do the work

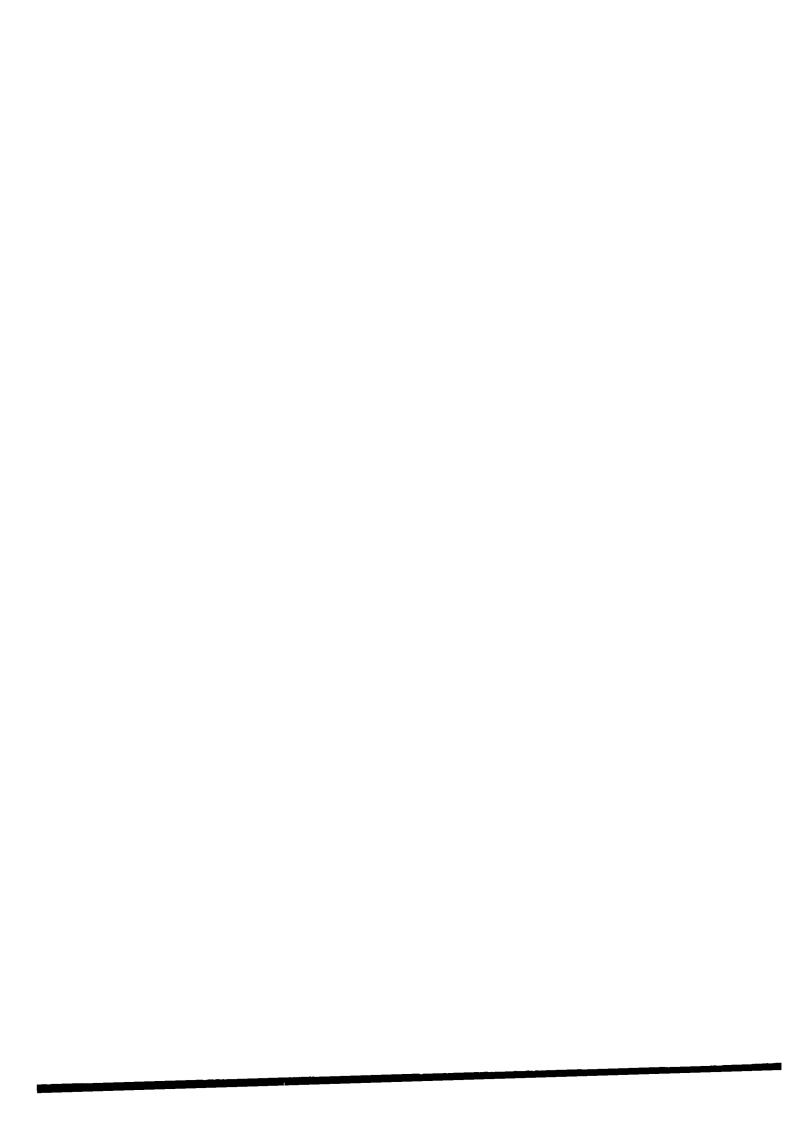


DIRECTING

guiding and motivating staff towards effective performance







CONTROLLING

seeing whether activities have been carried out according to plan

and if not take the necessary action

guarantee plan realisation to to





DEPARTMENT OF PUBLIC WORKS DIRECTORATE GENERAL CIPTA KARYA DIRECTORATE OF WATER

ADDRESS OF STREET STREE Module : OBM 100 Code Edition: 19-04-1985 Section 1 INFORMATION SHEET Page : 01 of 01/09 in a second

Duration To The Part of the Pa

90 minutes.

Training objectives:

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After this session the trainees will be able to:

- recite the four elements of planning;
- indicate the types of plans for water enterprise operations.

Trainee selection :

- Director PDAM/Head BPAM;
- Head of Technical Department;
- Head of Finance & Administration Department.

Training aids :

- Viewfoils OBM 100/V 1-3;
- Exercises OBM 100/E 1-2;
- Handout OBM 100/H 1.

Special features

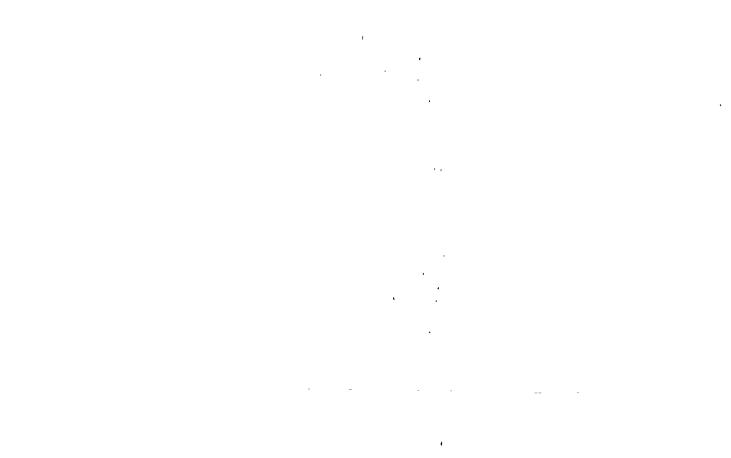
Keywords

Planning/types of plans.



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Module : PLANNING	Code : OB	1 100
	Edition: 19	-04–1985
Section 2: SESSION NOTES	Page : 01	of 02
1. Introduction		
- The manager : . plans . organizes . directs . controls.	Show V 1	
- Planning is the first activity.		
- Remaining activities require good plans.		
 Exercise: a. ask : What is wrong with this paper? b. answer: Look before your leap. 	Give E l	
- Think before acting.	Show V 2	
2. Exercise	Give E 2	
- Explain exercise.	Give 8 2	
- Do exercise (30 minutes).		
- Discuss result.		
3. Planning in the water enterprise		
 A new water supply system must be: operated; maintained; developed. 		
 Two objectives for the water enterprise: to supply sufficient water to customers; to be financially autonomous. 		
 To obtain combined efforts, activities must be planned. 		

-

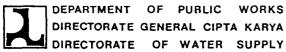


Module PLANNING Code OBM 100 Edition: 19-04-1985 Section 2: SESSION NOTES Page 02 of 02 - Planning is thinking and deciding in ad-Show V 3 vance: . WHAT = the end result of the plan; . HOW = the activities to be carried out; WHEN starting and completion date; WHO = person(s) responsible carrying out the activities. 4. Which plans should be developed for the Water Enterprise ? - Operation plans. - Maintenance plans. - Development plans. - Other plans, for example: . new constructions; . extension of distribution system; . recruitment of staff; . personnel development; . cash expenditures; . material use and procurement; . a new working-day, week. - Planning is not a one-time activity, but a recurring activity. 5. Budget - Men, machines, and materials are needed to implement plans. - A budget is a plan in money terms. - A budget indicates: . the revenues: . the costs of men, machines, and materials. are only complete after prepara-- Plans tion of the budget. 6. Summary The most important aspect of a plan is that it indicates what should be done, when and how, and by whom. Each plan must be accompanied by a budget. Give H l



Module : PLANNING	Code : OBM 100
_	Edition: 19-04-1985
Section 3: TRAINING AII	D S Page : 01 of 01
Functions of Manager OBM 100/V 1	Think before you OBM 100/V 2 acting
MANAGER	
CONTROLS - PLANS	
ORGANIZES DIRECTS	
	Think before acting
Definition of OBM 100/V 3 planning	Look before you leap OBM 100/E 1
PLANNING is thinking and deciding in advance about WHAT to do HOW to do it WHEN to do it WHO is to do it	Think before acting
Plan wedding party OBM 100/E 2	Planning OBM 100/H 1







Module	:	PLANNING	Code	:	OBM 100
			Edition	:	15-04-1985
Section 4	:	HANDOUT	Page	:	01 of 05

1. INTRODUCTION

The tasks of the manager can be divided into:

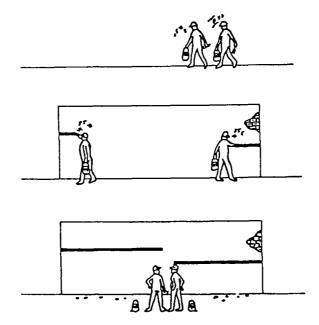
- Planning;
- Organizing;
- Directing;
- Controlling.

Planning is the first activity. It precedes the other three. However, planning is not the most important activity. All activities of the manager are equally important, but the remaining three can only be performed correctly if the plans are good.

2. PLANNING IN THE WATER ENTERPRISE

Everyone will agree with the saying: "Think before acting".

Too often, however, the meaning of this saying is forgotten in daily life. Action often starts without prior thinking. See figure 1 below.



Once a new water supply system has been constructed it must be operated, maintained, and further developed. The national development targets stipulate that an adequate water supply shall be available to 70% of the urban and semi-urban population by 1990.

Furthermore the enterprise must be financially autonomous, that is to say that enterprise revenues should cover enterprise costs.



Module	odule : PLANNING		Code	:	OBM 100
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Staff of the water enterprise work together to produce and distribute safe water (to meet the target of supplying the population with sufficient safe water) and to collect revenues from water sales (to meet the target of being financially autonomous).

They must work in the same direction and their activities must be in tune. To obtain combined efforts and synchronisation of work, people in the organisation must know what they are expected to do, how to do it and when.

Planning is thinking and deciding in advance:

WHAT to do:

HOW to do it;

WHEN to do it;

WHO is to do it.

WHAT spells out the end result of the plan.

The end result must be concrete and measurable, for example: 45 new houses connected to the supply system before the end of the year.

HOW defines the activities to be carried out to implement the plan.

WHEN indicates the starting date and completion date of each activity.

WHO indicates per activity the person who is responsible for carrying out that activity.

WHICH PLANS SHOULD BE DEVELOPED FOR THE WATER ENTERPRISE?

- A large number of different plans has to be made up for the water enterprise, for example:
- OPERATION PLANS, concerning the regular supply of water and the regular collection of revenues. Operation plans ensure that daily operations are carried out effectively.
- MAINTENANCE PLANS, indicating which maintenance activities must be carried out, when they must be carried out (once a week, once every six months), and by whom.
- DEVELOPMENT PLANS, concerning the future development of the water enterprise; how many new houses will be connected to the supply system in the coming year(s) (the plan's end result), which activities must be carried out to achieve this plan, and by whom.



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- OTHER PLANS. Besides the above mentioned, plans should also be made for new constructions, extension of the distribution system, for recruitment of new staff, for development of present staff, for training, for cash expenditures, material use and procurement, etc. Individuals make plans for the next working-day or -week.

Planning is not a one-time activity, such as preparing the annual budget for the water enterprise. Planning is a recurrent activity. Each new situation triggers a new plan. This plan details: what to do, how to do it, when to do it and who is to do it.

4. BUDGET

Men, machines, and materials are needed to implement plans. Therefore, a complete plan should not only indicate how many men are needed to implement the plan (who is to do it), but also what machines and materials are needed. The total cost or revenues of all this are laid down in the budget.

- A budget is a plan in money terms. A budget indicates:
- the revenues of a plan, and
- the costs of men, machines, and materials to implement the plan.

Each plan has its own budget. Preparing the budget is part of the planning activity of the manager. Plans are only complete after preparation of the budget.

5. SUMMARY

The most important aspect of a plan is that it indicates what should be done, when and how, and by whom. Each plan must be accompanied by a budget.



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Section 4:	HANDOUT (Exercise/E 2)	Page : 05 of 05	

WEDDING PARTY PLAN

Mr. Lomo, the eldest son of Mr. Nasution, is 30 years old. He graduated from University of Indonesia and is presently Director of a large PDAM in North Sumatra.

Mr. Lomo will get married in the near future. He already introduced his future wife to his family, who approved of the candidate. The wedding ceremony will take place in Medan on the first of January, 1983. Both families live in Medan.

On the first of November you have been appointed by the family to organise the wedding party of Mr. Lomo.

Task: Make a planning for the wedding party.

Think and decide:

- 1. What to do (activities)?
- 2. How to do it (starting and completion date of each activity) ?
- 3. When to do it (persons responsible for carrying out the activities)?

Make use of the planning forms.

* * *



What is wrong with this paper?

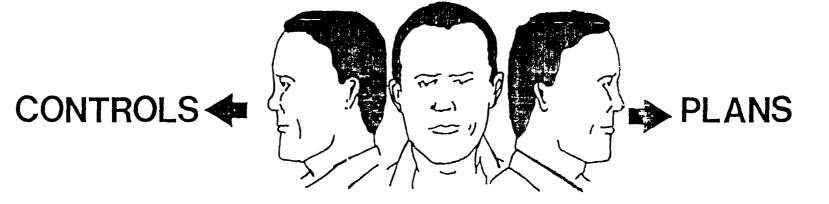
Think before acting

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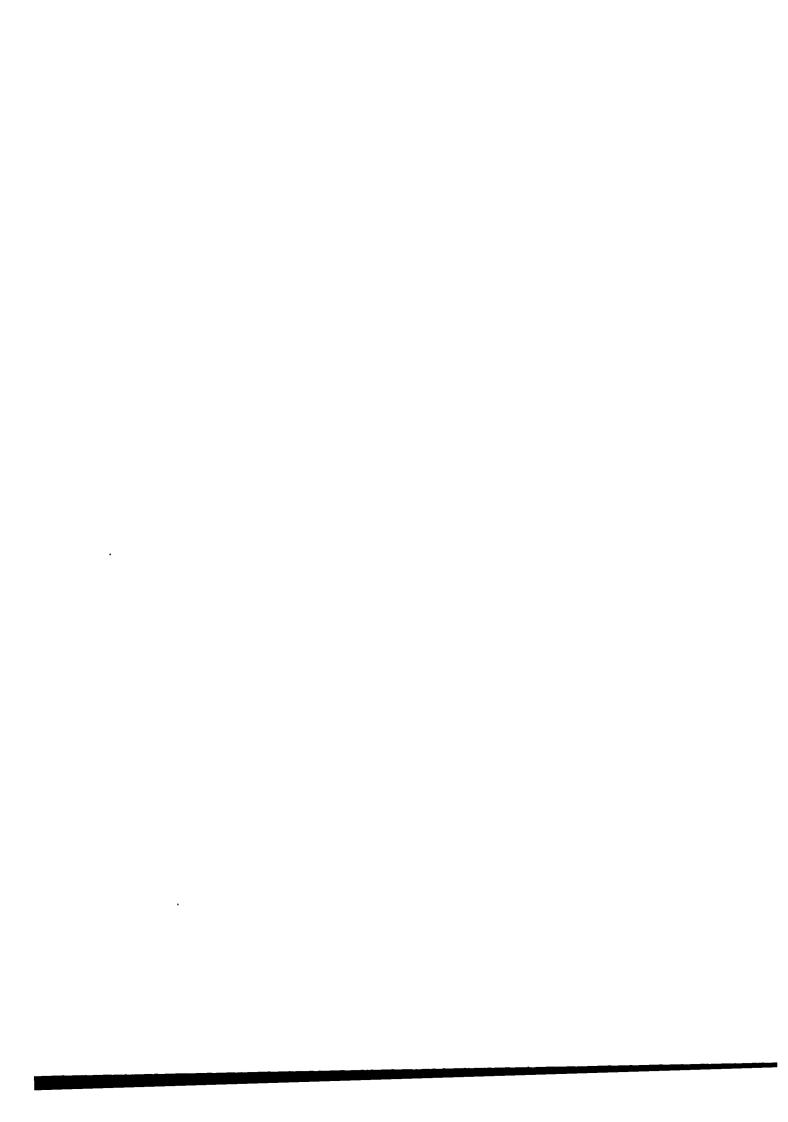
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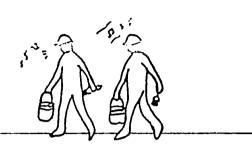


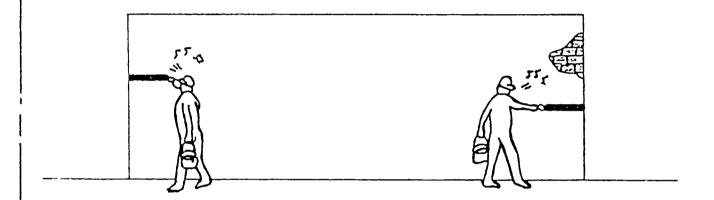
MANAGER

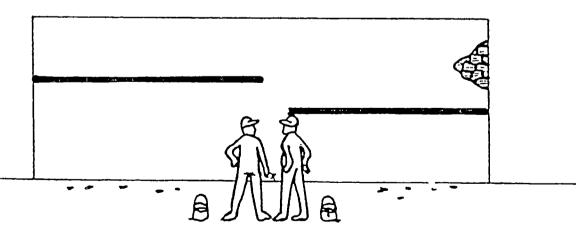












Think before acting

PLANNING

thinking and deciding in advance about

WHAT to do

HOW to do it

WHEN to do it

WHO is to do it



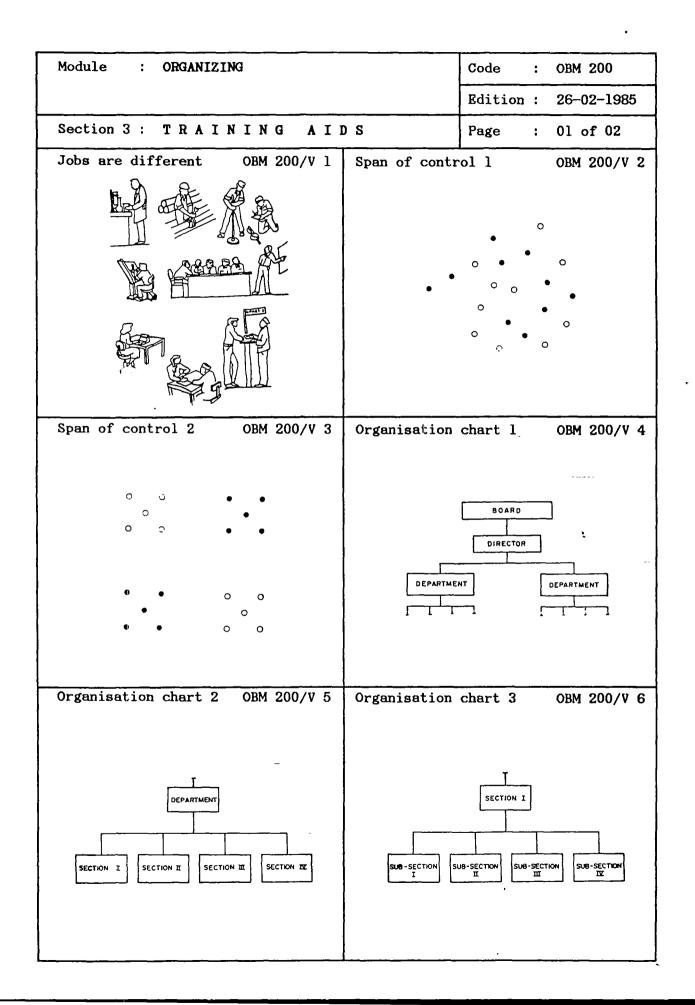




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		RMATION SHEET	Page : 01 of 01/06
Duration		45 minutes.	
	objectives :		he trainees will be able
		<pre>to: - explain the necessity sations;</pre>	y of hierarchy in organi-
নাপুট - -ৰী	The second secon	- recite what an organis	sation chart shows.
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- 4		· -— · - · · · · · · · · · · · · · · · ·	
Trainee s	election :	- Director PDAM/Head BPA	AM·
<u> </u>		- Head of Technical Depa - Head of Finance & Adm	artment;
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Training	alds :	- Viewfoils : OBM 200/V - Handout : OBM 200/H	
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Keywords	Control of the contro	Organizing/hierarchy/org	ganisation chart.



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Module : ORGANIZING	Code : OBM 200
	Edition: 26-02-198
Section 2: SESSION NOTES	Page : 01 of 01
1. Introduction	
- Organisations have a goal.	
- Different people carry out different jobs.	Show V 1
 Can the manager instruct and supervise all people in the enterprise 	
- One manager cannot instruct and supervise 20 people.	Show V 2 and 3
 To have effective guidance and supervision departments and sections are created. 	Use whiteboard
- A hierarchy is formed.	
- The number of staff instructed and super- vised by the director and the department/ section head is reduced.	
3. Organisation chart	Show V 4-6
 Organisation chart shows: paths of communication; relationship between tasks; instruction and reporting relationships. 	
4. Men, machines, and materials	
- People work with machines and materials.	
- Availability of machines and materials.	
5. Summary	
 Organizing is: grouping related activities in departments and sections; establishing paths of communication between departments and sections; making sure that men, machines, and materials are available. 	Give H 1
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Module :	ORGANIZING		Code	:	OBM 2	00
			dition	:	26-02	-198
Section 3:	TRAINING AID	S E	Page	:	02 of	02
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DEPARTMENT OF PUBLIC WORKS
DIRECTORATE GENERAL CIPTA KARYA
DIRECTORATE OF WATER SUPPLY



Module	:	ORGANIZING	Code	:	OBM 200
			Edition	:	26-02-1985
Section 4	:	HANDOUT	Page	:	01 of 02

1. ORGANISATIONS NEED PROPIR

There are many organisations around us. They exist because something must be done. Organisations have a goal.

What have all organisations in common? They have people. Without people there is no organisation. In organisations different people carry out different jobs. They work together. In the water enterprise pipe fitters, treatment operators, meter readers, storekeepers, and bookkeepers work together to produce and distribute safe water and to collect revenues from water sales.

It is the task of the manager to make sure that the people who are necessary for successful operation of the enterprise are available, that they know what is expected of them, and that they are able to execute their jobs effectively.

2. CAN ONE MANAGER ALONE INSTRUCT AND SUPERVISE ALL PROPLE IN THE ORGANISATION?

One manager cannot instruct e.g. 20 people and supervise their activities. This number is too high.

In order to have effective guidance and supervision, departments are created. Related activities are grouped in one department and a head of the department is appointed. He is responsible for instructing and guiding his staff.

In a large organisation many people work in one department. Their number can still be too high to be instructed and supervised by the department head. Smaller units - sections - are created within the department in which a smaller number of related activities are grouped. A section head is appointed and it is his duty to instruct and supervise the section staff.

In this way different levels - departments and sections - are created within the organisation: a hierarchy is formed. The number of staff directly instructed and supervised by the director, the department head and the section head is then reduced.

Once different levels have been created within the organisation, the paths of communication between the departments and sections must be established. Jobholders have to know how their tasks are related to the tasks of other jobholders. They should know by whom they are instructed and supervised and to whom they should report.

This information is presented in a diagram: the organisation chart

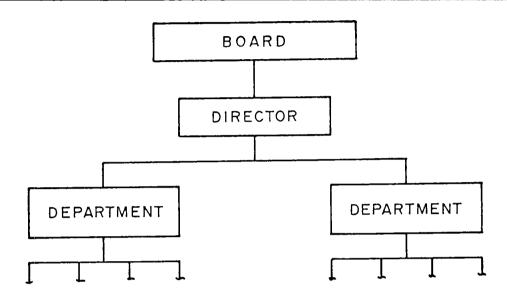
This information is presented in a diagram: the organisation chart. See figure 1 below.

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 Section 4 : H A N D O U T
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It is the task of the manager to make sure that the people in the organisation know how to cooperate.

3. ORGANISATIONS NEED MACHINES AND MATERIALS

Organisations are made up, not only of people, but also of machines and materials. In organisations people work with machines and materials to execute their job.

The manager must also see to it that the required machines and materials are available. He does not have to do all this by himself, but has to make sure that a material planning is made, that funds are available for procurement, and that the necessary machines and materials are ordered, stored, and transported. And further, that they operate according to plan.

4. SUMMARY

Organisations have plans. Organizing is making sure that:

- people are available to realise the plans of the organisation (recruitment and selection);
- they know what is expected of them (job descriptions);
- they are able to perform their jobs adequately (training);
- they know how to cooperate (clearly defined organisation structure);
- the necessary machines and materials are available.



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		Edition: 26-02-1985
Annex	: VIEWFOILS	Page : 01 of 07
TIT	LE :	CODE :
1.	Jobs are different	OBM 200/V 1
2.	Span of control 1	OBM 200/V 2
3.	Span of control 2	OBM 200/V 3
4.	Organisation chart 1	OBM 200/V 4
5.	Organisation chart 2	OBM 200/V 5
6.	Organisation chart 3	OBM 200/V 6
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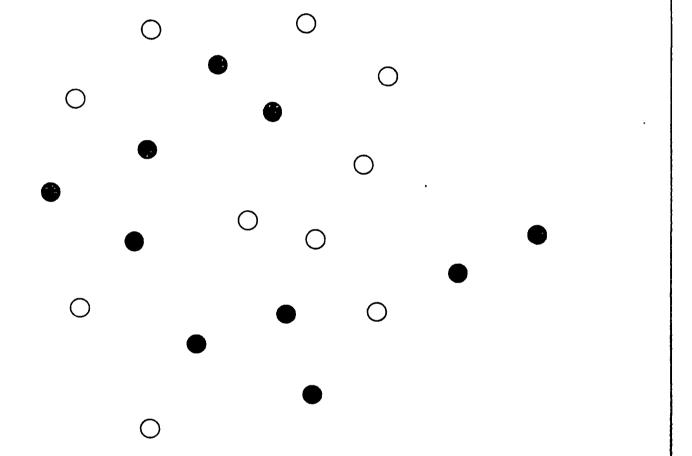
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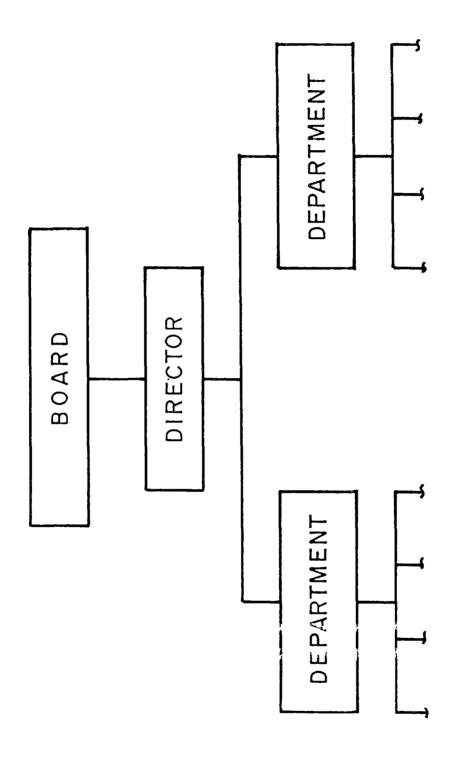




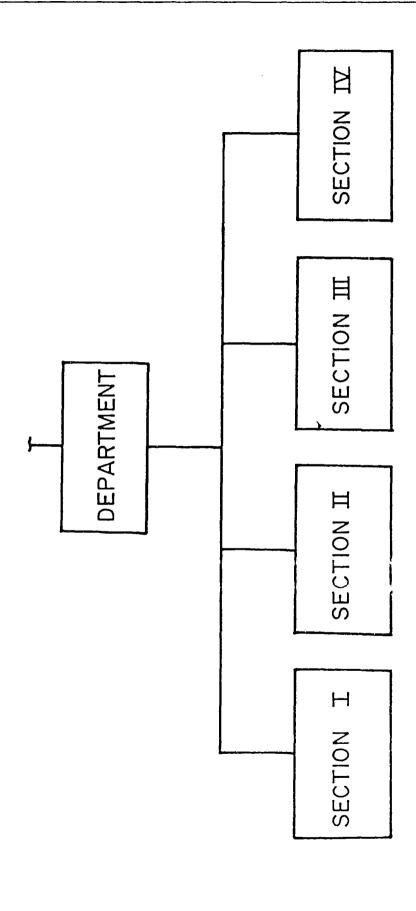


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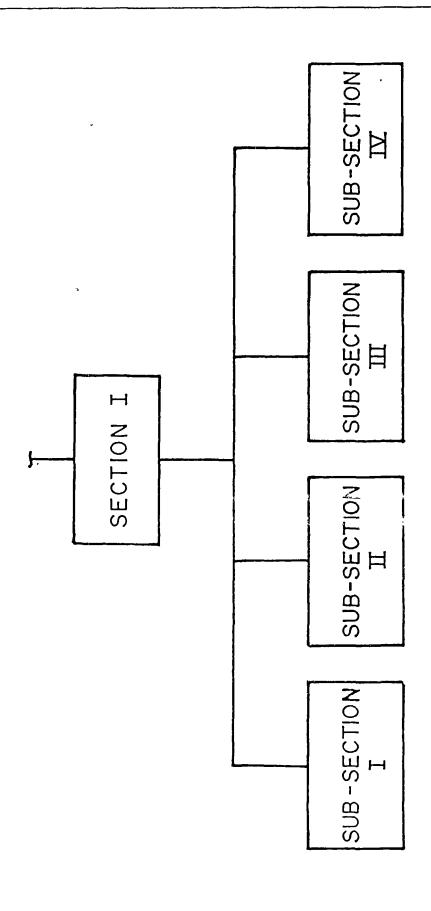


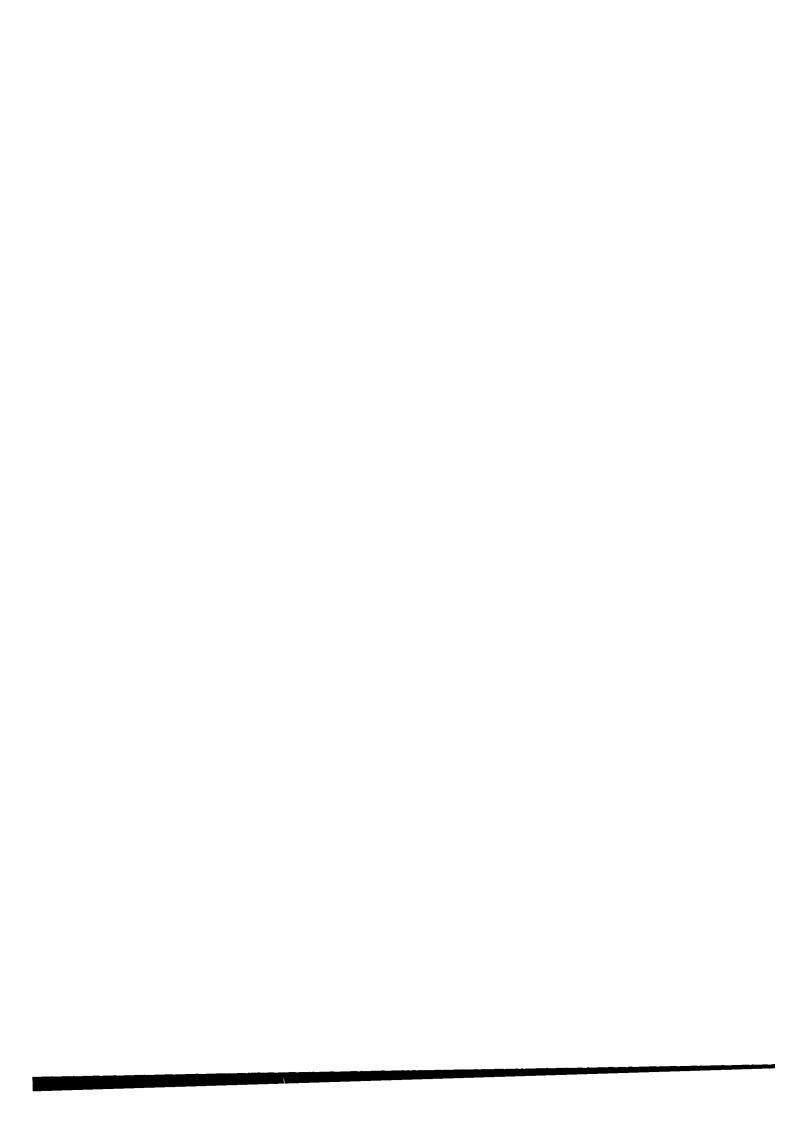














DEPARTMENT OF PUBLIC WORKS
DIRECTORATE GENERAL CIPTA KARYA
DIRECTORATE OF WATER SUPPLY



- DELEGATION Module Code : OBM 210 Edition: 26-02-1985 i de a Section 1 INFORMATION SHRET 01 of 01/07 Page Duration 45 minutes. Training objectives: After this session, trainees will be able to: explain the necessity of delegating tasks and authority; - explain why instructions should flow down the chain of command: - explain why formal communications should move production of the second upward through the same channel. nechania - me Trainee selection : - Director PDAM/Head BPAM; - Head of Technical separament, - Head of Finance/Administration Department. HEAT OF THE BOAT OF A PART OF THE PART <u> Paparing minasik</u> s i kingkin n (場合なるデ*ー*工事) / Training aids : - Viewfoils : OBM 210/V 1; - Handout : OBM 210/H 1. Special features Keywords Delegation/authority/chain of command.



Module DELEGATION Code 017 NGO Edition: 26~02-1985 Section 2: SESSION NOTES Page : 01 of 02 1. Introduction - Delegation is the transfer of tasks and Use whiteboard authority from a superior to a ordinate. 2. Responsibility - Example: preparation of the profit and loss statement. Who is responsible for mistakes? - Managers delegate tasks, but remain fully responsible for the results. 3. Authority - At all levels decisions are made. - Staff must know the limits within which they may make decisions. - Example: the shop assistant's authority to offer discounts (5%). - Delegation of tasks must be accompanied by delegation of authority to make decisions. 4. Who delegates tasks and authority? - Superior delegates tasks to subordinate. - Subordinate is responsible to his superior. To whom are tasks and authority be dele-5. gated? - The person should: . have the necessary know-how/skills; . understand the importance of the task; . have the necessary information; . be motivated.



Module : DELEGATION Code OBM 210 Edition: 26-02-1985 Section 2: SESSION NOTES Page 02 of 02 6. How should tasks and authority be delegated? - Managers have the right to give orders but Use whiteboard remain responsible for the results. - These orders have to follow the hierarchy within the organisation. - Consequences of direct instructions of the director to the head of the bookkeeping section: . the department head cannot be held responsible for the results; . department head has difficulties instructing the section head; . the section head does not know which instruction should be followed. - Instructions should flow down the hierar-Show V 1 (a-c) chy of the organization. - Each employee will have only one boss who gives instructions. - Formal communications and complaints should move upward through the same channel. 7. Summary Delegation requires: - clear description of tasks/authority; - clear communication; - direct communication channels. Give H 1



Module : DELEGATION		Code	:	OBM 210
		Edition	:	26-02-1985
Section 3: TRAINING AII	S	Page	:	01 of 01
Chain of command OBM 210/V 1(a-c)				
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	Delegation			OBM 210/H 1
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DEPARTMENT OF PUBLIC WORKS
DIRECTORATE GENERAL CIPTA KARYA
DIRECTORATE OF WATER SUPPLY



Module	:	DELEGATION	Code	:	OBM 210
			Edition	:	26-02-1985
Section 4	: :	HANDOUT	Page	:	01 of 03

1. INTRODUCTION

Managers are responsible for a wide variety of tasks. The head of the Finance and Administration Department of the water enterprise for instance is responsible for meter reading activities, bookkeeping activities, preparing profit and loss statements, material procurement and storage, and customer relations. He does not carry out all these tasks himself.

The department head transfers tasks to his staff, his subordinates. They are responsible for carrying out the assigned tasks. Delegation is the transfer of tasks from a superior to a subordinate.

2. RESPONSIBILITY

EXAMPLE:

The head of the Finance and Administration Department had to prepare the profit and loss statement for the enterprise. His direct contribution in making statement was only limited; the greater part of the work was done by his staff (bookkeepers and section heads).

When the director found mistakes in the profit and loss statement, he asked the department head for an explanation. The department head said that he only made a part of the statement and that the mistakes were made by his subcrdinates. Therefore the director should blame them and not him.

In spite of the fact that the department head only made part of the profit and loss statement, he is held fully responsible to the director for the way in which the statement has been prepared. He is held responsible for the entire statement and not only for the part that was prepared by him.

Managers delegate tasks, but they remain fully responsible for the results.

3. AUTHORITY

At all levels in the enterprise decisions are made. Examples are:

- who has to work in which labour gang;
- how much water will be distributed (operation of the main distribution valve);
- the dosing of chlorine;
- who does what in case of absence of a staff member.



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Section 4: HANDOUT	Page :	02 of 03

Enterprise staff must know which decisions can be made by themselves and which decisions are made by their superior. They must know within which limits they are authorized to make decisions.

EXAMPLE :

A shop assistant can discuss the price of a commodity with a customer. He can offer a discount of e.g. 5%.

If the client, after being offered a discount of 5%, still does not want to buy the commodity, the shop assistant is not allowed to offer a higher discount. For this he has to ask the approval of the shop owner.

The shop assistant can only offer a discount up to 5%.

The manager should not only delegate tasks, but also the required authority to carry out these tasks.

4. WHO DELEGATES TASKS AND AUTHORITY?

Tasks and authority are delegated by the superior to the subordinate. The superior can always check whether the subordinate carries out the assigned tasks correctly. The subordinate is responsible to his superior for the tasks he has been assigned to.

5. TO WHOM ARE TASKS AND AUTHORITY DELEGATED?

The person to whom tasks and authority are delegated, should have the necessary know-how and skills to carry out these tasks. He should understand the importance of the tasks, he should have all the necessary information and he should be motivated.

The manager should not get upset when a subordinate carries out a task assigned to him in a different way or may be makes mistakes. He must train his staff to perform these new tasks.

6. HOW SHOULD TASKS BE DELEGATED?

In the first example, the Head of the Finance and Administration Department delegated tasks to his subordinates for preparing the profit and loss statements of the enterprise.

What would happen if the director gives directly instructions to the head of the bookkeeping section. He then bypasses the head of the Finance and Administration Department.



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As a consequence the Head of the Finance and Administration Department can not be held responsible for the results. Further it is difficult for the department head to give instructions to the head of the Bookkeeping Section. His instructions may contradict those of the director. Also the work of the section head is complicated.

He does not know whether he should follow the instructions of the

He does not know whether he should follow the instructions of the director or those of the department head. Orders and instructions should flow down the hierarchy of the organization, that is to say from the director to the department head, from the department head to the section head, and from the section head to the employees.

In this way each individual employee will have one boss who gives him instructions and to whom he reports.

Formal communications and complaints from employees should move upward through the same channel.

7. SUMMARY

Because a manager cannot execute all tasks falling under his responsibility all by himself, he has to delegate some tasks and authority to subordinates. To avoid misinterpretations, delegation of tasks has to follow the hierarchy of the organization.

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 : VIEWFOILS
 Page
 : 01 of 02

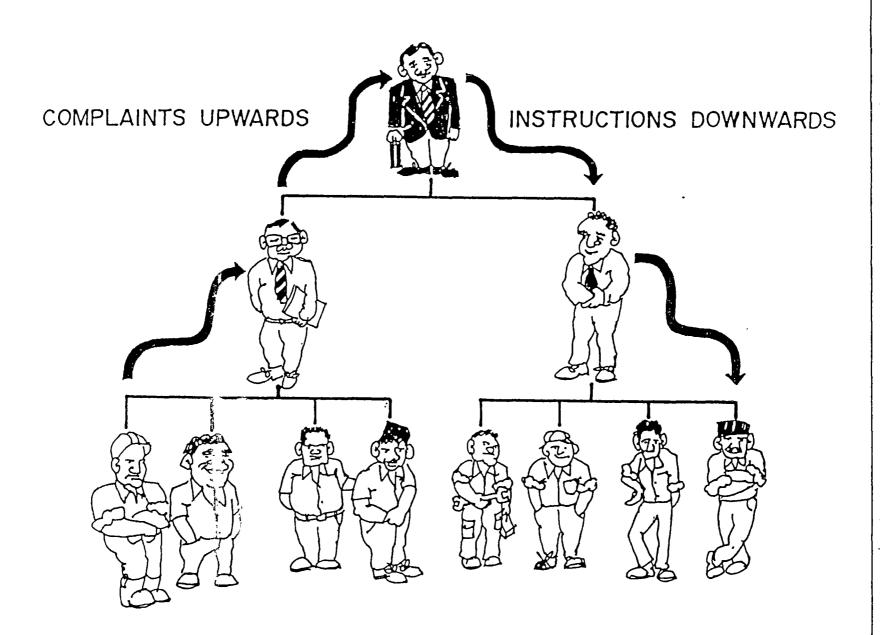
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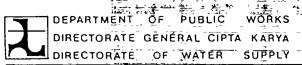
1. Chain of command

OBM 210/V 1 (a-c)











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Module : COORDINAT	· _ · _ · _ · _ · _ · _ · _ · _	Code : OBM 220
Figure 1 and	The state of the s	Edition: 26-02-1985
Section 1: INFOR	MATION SHRET	Page : 01 of 01/07
Duration ()	90 minutes.	
Training objectives:	After the session the tra- list two tools of coord- explain why procedures coordination; - tell the difference be cooperation.	dination; s are important tools of
Trainee selection :	- Director PDAM/Head BPAM - Head of Technical Depam - Head of Finance & Admin	rtment;
Training aids	- Viewfoils: OBM 220/V l- Exercise: OBM 220/E l - Tape/slide: "Procedure: - Handout : OBM 220/H	; s";
Special features	- 	
Keywords	Coordination/procedures/	meetings/cooperation.

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Module : COORDINATION	Code : OBM 220
<u> </u>	Edition: 26-02-1985
Section 2: SESSION NOTES	Page : 01 of 02
1. Introduction	
- Different people carry out different tasks.	Show V 1
- Activities must be in tune.	
Coordination through:procedures;meetings.	Show V 2-3
2. Coordination	
TOOL 1: PROCEDURES	
Recurring situation:flow of water;flow of money.	
Guides to action: procedureswhich activities to be carried out?at what moment?by whom?	Show tape/slide
- Show tape/slide "procedures".	
- Discuss contents tape/slide. (15 minutes.)	
TOOL 2: MEETINGS	
 For coordinating activities of departments/sections. 	
 Meetings should: take place at regular intervals; be carefully prepared; have a reporting system. 	

.



Module : COORDINATION Code : OBM 220 Edition: 26-02-1985 Section 2: SESSION NOTES Page : 02 of 02 3. Exercise - Willing to work together. - Distribute "cooperation" exercise. Give E l - Do exercise. - Discuss results. 4. Summary - To operate effectively, the organisation needs formal coordination through procedures and meetings, but also a willingness of the employees to cooperate. Give H l



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	Edition	: 26-02-1985		
Section 3: TRAINING AII) S	Page	: 01 of 01	
Jobs are different OBM 220/V 1	Coordinating activities 1		OBM 220/V 2	
Coordinating OBM 220/V 3 activities 2	Cooperation	· · · · · · · · · · · · · · · · · · ·	OBM 220/E 1	
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DEPARTMENT OF PUBLIC WORKS
DIRECTORATE GENERAL CIPTA KARYA
DIRECTORATE OF WATER SUPPLY



Module	:	COORDINATION	Code	:	OBM 220
			Edition	:	26-02-1985
Section 4	1 :	HANDOUT	Page	:	01 of 03

1. INTRODUCTION

In the water enterprises different people carry out different tasks. Their activities are closely interrelated and only through combined efforts good results can be achieved. Their activities must be attuned to each other: they must be coordinated.

Activities in the water enterprises are formally coordinated through: - procedures;

- meetings.

However, formal coordination can only be affectuated through the willingness of the employees to cooperate.

2. COORDINATION

The two most important tools of formal coordination are procedures and meetings.

PROCEDURES:

There are many recurring situations within the water enterprises. The flow of water requires regular checks and adjustments, the quality of the water must be controlled at fixed intervals, and the system must be maintained periodically.

The same is true for the flow of money from the consumer to the enterprise. Billing operations in April are similar to those in March. The amounts will differ, but the activities to be carried out are the same. This is also the case for procurement of material and for making house connections.

To tackle these constantly recurring situations quickly and efficiently, the water enterprises has pre-planned "guides to action": procedures. Procedures specify which activities should be carried out, at what moment, and by whom. Procedures describe the work flow through the enterprise and link the activities of different staff members to each other. Procedures are important tools in the coordination of the activities of the different employees. The manager makes sure that procedures are developed and that they are applied effectively in the enterprise.



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MEETINGS:

In organisations there is a permanent need of coordination. In meetings the activities of departments/sections are coordinated. Meetings should take place at regular intervals and not only when problems arise. Meetings should be carefully prepared, and an effective reporting system should be introduced.

3. COOPERATION

Formal coordination will help the organisation to function effectively. However, the activities in the organisation are carried out by people.

They must be willing to cooperate.

Effective coordination and good cooperation together will lead to an effective enterprise.

4. SUMMARY

To operate effectively, the organisation requires not only formal coordination through procedures and meetings, but also a willingness of the employees to cooperate.



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Section 4: HANDOUT (Exercise)	Page : 03 of 03

COOPERATION

Task : Make puzzle.

Goals:

- 1. To identify aspects of cooperation in solving a problem.
- 2. To make participants aware of their own behaviour which may contribute or obstruct the solving of a problem.

Group size :

Each group will have six participants: five puzzle participants and one observer.

Physical setting:

Five tables which have been spaced far enough apart so that participants cannot see the puzzle elements of each other.

On each table there will be an envelope with five puzzle elements.

Instruction:

The group must complete as quick as possible the five puzzles.

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: OBM 220 Module : COORDINATION Code Edition: 26-02-1985 : 01 of 04 VIEWFOILS Page Annex

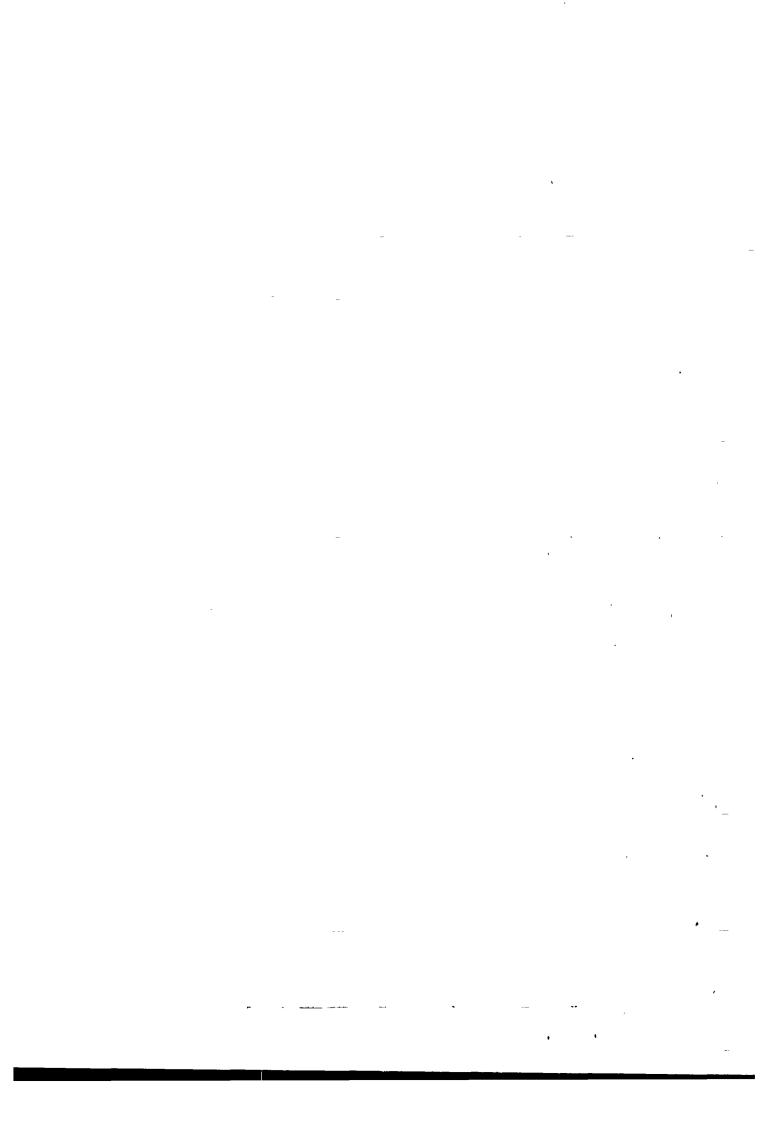
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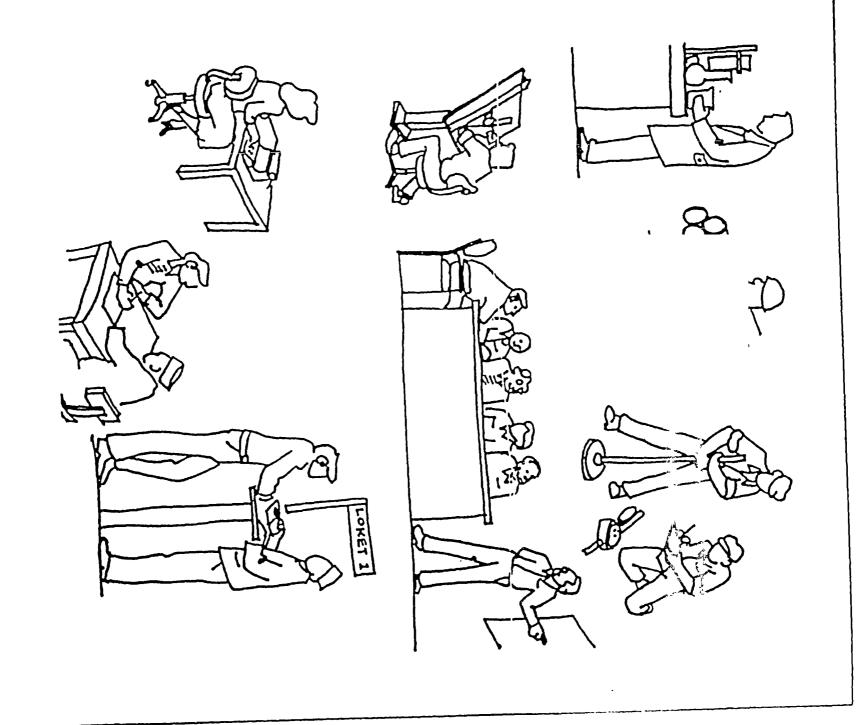
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Jobs are different _ OBM 220/V 1

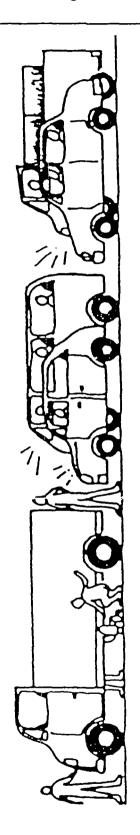
Coordinating of activities (I) OBM 220/V 2 2.

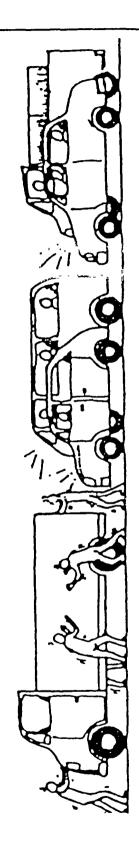
OBM 220/V 3 Coordinating of activities (II)

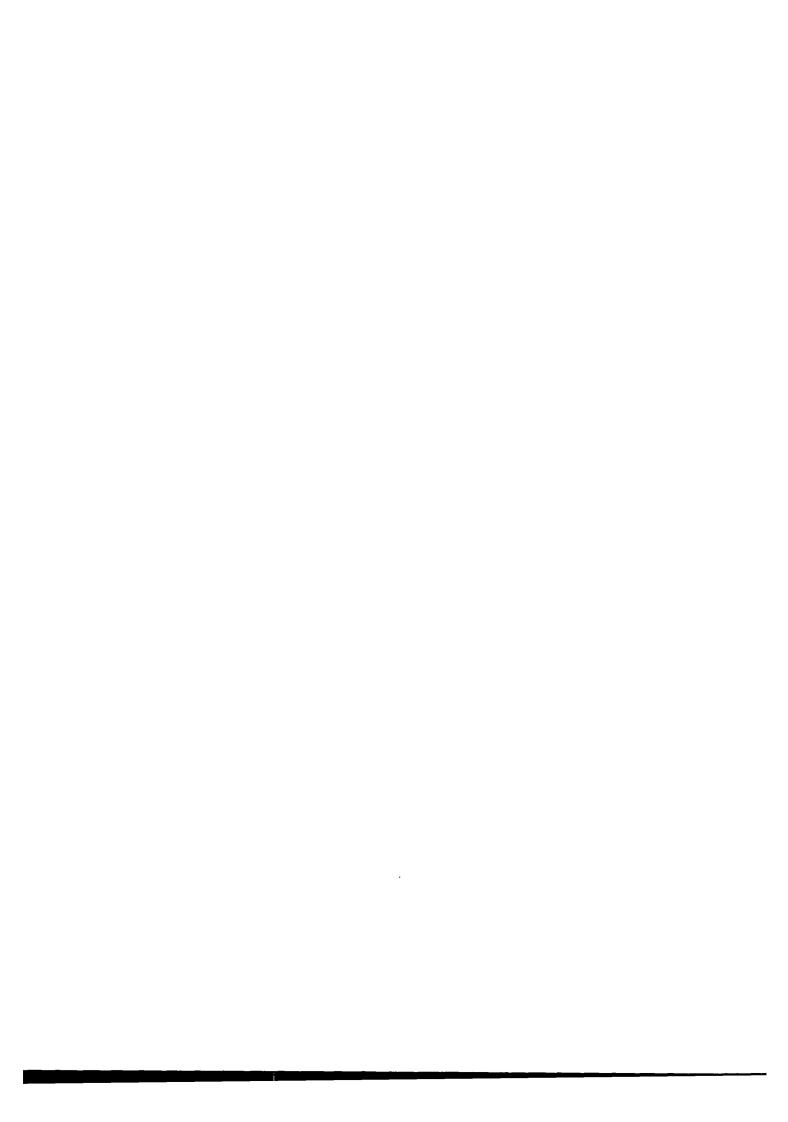


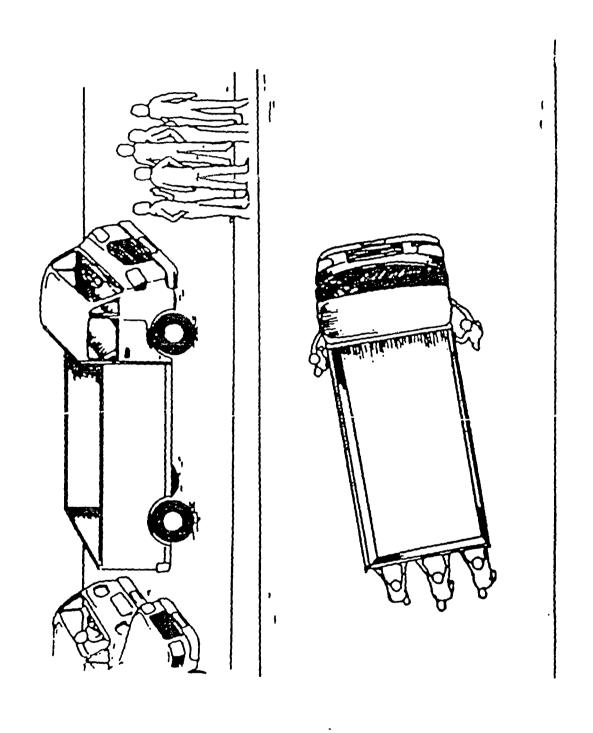














DEPARTMENT OF PUBLIC WORKS DIRECTORATE GENERAL CIPTA KARYA DIRECTORATE OF WATER SUPPLY

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Code : OBM 300 Module DIRECTING THE PARTY OF THE COLUMN TWO PARTY OF THE PAR Edition: 26-02-1985 Section 1: INFORMATION SHERT Page : 01 of 01/05

Duration

Training objectives:

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وجروف بالمراجية THE PARTY OF THE P 45 minutes.

After the session the trainees will be able to: - recite the main elements of directing.

Trainee selection :

- Director PDAM/Head BPAM;
- Head of Technical Department;
- Head of Finance & Administration Department.

ATTACHMENT COMMENTS OF THE PROPERTY OF THE PRO Training aids:

- Viewfoils : OBM 300/V 1-3 (a-e);

- Handout : OBM 300/H 1.

Special features :

Keywords

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Directing/guidames/motivation/authority/communication.

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Module : DIRECTING	Code : OBM 300
	Edition: 26-02-1985
Section 2: SESSION NOTES	Page : 01 of 02
 Introduction Directing is the third dimension of management. Planning and organizing are the other two, dealt with so far. 	Show V 1
2. Directing	
 Ask: Indicate the best way of directing. Discuss answers: There is no best way. Directing is a tool to influence people's work behaviour. Directing is concerned with the relationship between superiors and sub-ordinates. As managers and employees are human individuals their relationships differ. 	List answers on white board
 Main elements of directing: GUIDANCE, means guiding people according to their individual needs towards a good performance, which could implicate close cooperation with each other. 	Show V 2
 MOTIVATION, means to use the right incentives for a good job performance. Ask: Indicate some positive and negative incentives. Answer: Money is not the only incentive, though the most important one. 	List answers on white board
 AUTHORITY, deals with the personality and integrity of the manager. People should have confidence in him and he should set an example in his work beha- viour. 	
 COMMUNICATION, is important because in- structions should be clear and unambi- guous. People are to know what is expected of them. 	Show V 3 (a-e)

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Module DIRECTING Code : OBM 300 Edition: 26-02-1985 Section 2 : S E S S I O N NOTES Page : 02 of 02 4. Summary Directing people in the right way will result in well-motivated staff and effective organisation. Guidance, motivation, authority and communication are the main elements in directing. Give H 1



Module : DIRECTING : OBM 300 Code Edition: 26-02-1985 Section 3: TRAINING AIDS Page 01 of 01 Definition of OBM 300/V 1 Elements of directing OBM 300/V 2 directing **ELEMENTS OF DIRECTING** Guidance DIRECTING ıs Motivation guiding and motivating staff towards effective Authority performance Communication OBM 300/V 3 (a-e) Issues in directing **AUTHORITY** COMMUNICATION MOTIVATION OBM 300/H 1 Directing

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DEPARTMENT OF PUBLIC WORKS
DIRECTORATE GENERAL CIPTA KARYA
DIRECTORATE OF WATER SUPPLY



Module	:	DIRECTING	Code	:	OBM 300
			Edition	:	26-02-1985
Section 4	:	HANDOUT	Page	:	01 of 01

1. INTRODUCTION

The four principles of management are planning, organizing, directing and controlling. Directing is a tool to influence the behaviour of people. It is concerned with the relationship between peers and colleagues.

2. DIRECTING

Organisations may have perfect plans, the organisational structure may be effective, employees may know exactly what they must do and may have the necessary machines and materials to do their work. However, for successful operations more is required.

Plans are carried out by the staff of the organisation. Organisations, therefore, can only operate effectively when its employees work with care. Without the willingness and enthusiastic support of the employees, the best plan will fail.

The director, the department heads, and section heads need their staff to get the work done. Directing concerns the relationship between the superior and his sub-ordinates. Through directing the manager influences the way people behave in the organisation and how they work.

Guiding people towards good job performance is not easy.

Jobholders are individuals and their need for guidance may differ.

The manager should give attention to individual needs for appraisal after a good performance.

Bad performance can be corrected in many ways. Through appraisal and correction guiding people intends to give direction to activities and performances of employees.

Through incentives such as promotion, bonus, praise or degradation, reprimands, and the like, the manager motivates his subordinates to work effectively. Subordinates, however, must have confidence in the authority of the manager. They work better as they have more confidence in the manager's performance. Managers give instructions to their subordinates. They should understand these instructions. Effective communication between the manager and his subordinates is therefore important.

All jobholders should somehow be supervised. Even very confident jobholders who function well in the enterprise, make sometimes mistakes without knowing it. Supervision is indispensable and should be attuned to individual needs.

OBM 300 Module : DIRECTING Code 26-02-1985 Edition: 01 of 04 VIEWFOILS Page Annex TITLE : CODE : Definition of directing OBM 300/V 1 1. OBM 300/V 2 2. Elements of directing OBM 300/V 3 3. Issues of directing



DIRECTING

is guiding and motivating staff towards effective performance



ELEMENTS OF DIRECTING

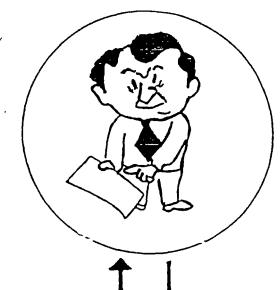
Guidance

Motivation

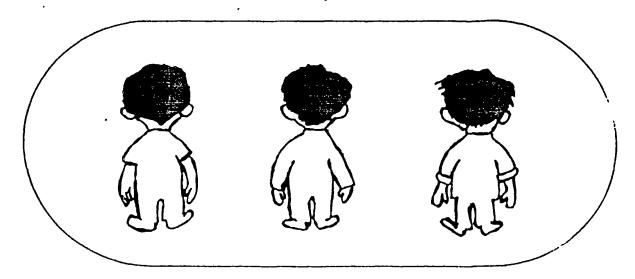
Authority

Communication

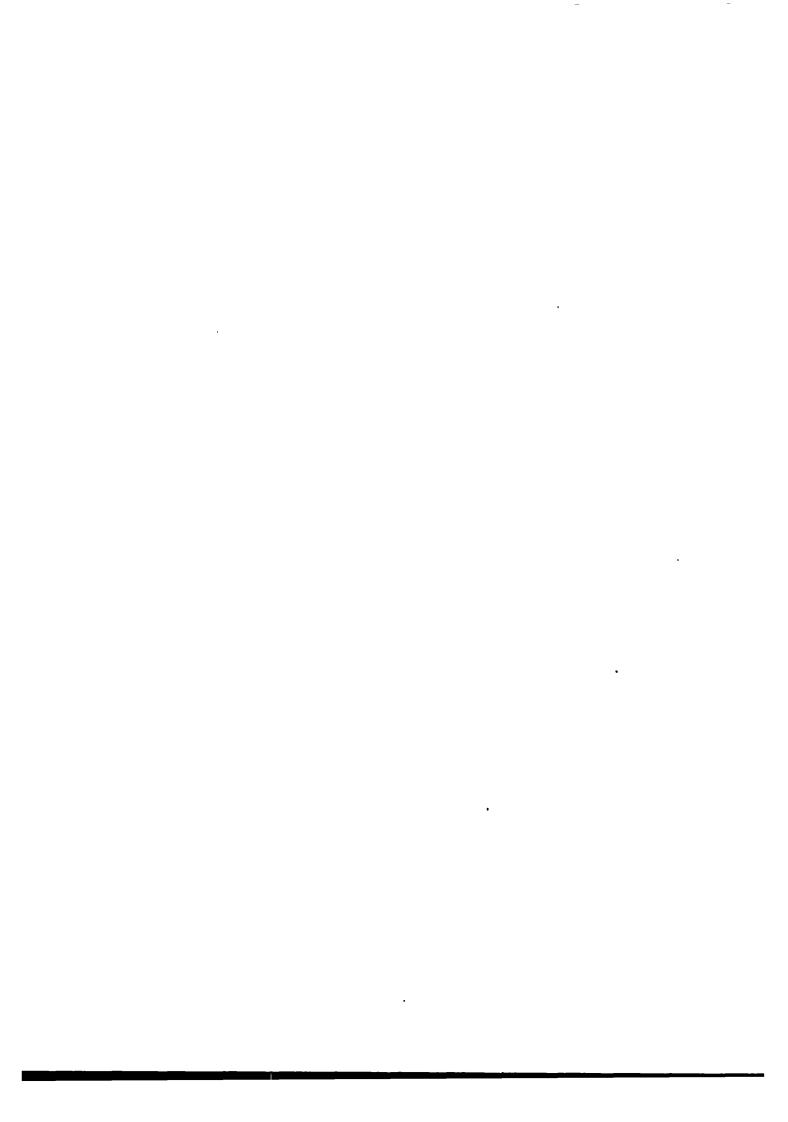
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COMMUNICATION



MOTIVATION



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	Module	MOTIVATION		Code :	OBM 310	
		tris , will 7	Property of the second of the	Edition:	26-02-1985	
	Section 1	INFOR	MATION SHEET	Page :	01 of 01/06	
	Duration	Total Control	45 minutes.			
	Training	objectives:	After this session the tr - recite four incentives			
	Trainee s	election	- Director PDAM/Head BPAM - Head of Technical Departure - Head of Finance & Admin	rtment; nistration D		
	Training	STATE OF THE PARTY	- Viewfoils: OBM 310/V 1- - Handout : OBM 310/H 1			
	Special f	Sheet of the state				

Motivation/incentives/directing.

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Keywords

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Mod	ule : MOTIVATION	Code : OBM 310
	-	Edition: 26-02-1985
Sec	tion 2: SESSION NOTES	Page : 01 of 02
1.	Introduction	
	- The enterprise needs a dedicated staff to carry out enterprise operations.	
	 Directing concerns the relationship between the manager and his subordinates. It involves influencing peoples work behaviour. 	
2.	Directing	
	Three important issues in directing are:	Show V 1
	- Motivation of enterprise staff.	
	- Authority of the manager.	
	- Communication between manager and sub- ordinates.	Show V 2 (a-e)
3.	Exercise	
	- Duration (15 minutes):	List answers on
	- Ask: Which incentives (things which induce people to work well) could be used by the director of the water enterprise to motivate his staff.	whiteboard
	- Discuss answers.	
	- Explain difference between positive and negative incentives.	
4.	How to motivate staff	
	- People have needs and expectations.	Use whiteboard
	- Examples of positive incentives: increase in salary; promotion; pleasant working environment; appreciation for good job performance; loan-facilities; training courses.	

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Module : MOTIVATION Code OBM 310 Edition: 26-02-1985 Section 2: SESSION NOTES Page 02 of 02 - Examples of negative incentives: . threat to be dismissed; . reduction of bonus; . no promotion. Satisfaction and appreciation Appreciation of job performance should be systematic in order to enable people to improve their performance if needed or to promote their work satisfaction when they perform adequately. People should know what is expected of them and they should have an idea whether they meet the requirements for their job. 6. Summary - Motivation is necessary to increase effectiveness of the enterprise. - There are positive and negative incen-Give H l tives.



Module : MOTIVATION		Code : OBM 310
		Edition: 26-02-1985
Section 3: TRAINING AI	D S	Page : 01 of 01
Definition of OBM 310/V 1 directing	Issues in directing	OBM 310/V 2 (a-e)
DIRECTING is guiding and motivating staff towards effective performance		COMMUNICATION
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DEPARTMENT OF PUBLIC WORKS
DIRECTORATE GENERAL CIPTA KARYA
DIRECTORATE OF WATER SUPPLY



Module :	MOTIVATION	Code	:	OBM 310
	,	Edition	:	26-02-1985
Section 4:	H A N D O U T	Page	:	01 of 02

1. INTRODUCTION

Organisations may have perfect plans, their organisational structure may be effective, employees may know what they must do and may be able to execute the assigned tasks adequately. However, for successful operations more is required.

The director, the department heads, and section heads need their staff to get the work done.

Staff of the enterprise carry out the plans of the organisation. Without their dedication and enthusiastic support the best plan will fail.

Directing concerns the relationship between the managerial staff and the executing staff and involves influencing the way people behave in organisations. Important issues in directing are:

- how can enterprise staff be motivated?
- has the manager sufficient authority?
- does the manager communicate effectively with his subordinates?

The enterprise needs its staff. Staff of the enterprise need their enterprise. They need their salaries to support their families, they want job security and they appreciate that they can apply what they have learnt. They have expectations.

2. HOW CAN THE MANAGER MOTIVATE HIS STAFF?

The director keeps in mind that he is motivating people who have needs and expectations. To motivate his staff the director makes use of incentives. Incentives are those things which induce people to work well.

Examples of positive incentives are:

- increase in salary;
- promotion:
- pleasant working environment (pictures, calendars, plants);
- appreciation given for a good job performance;
- job enrichment: make the job wider and more attractive;
- job rotation: change in jobs to prevent boredom;
- enterprise-cooperative store supplying cheap commodities;
- loan-facilities;
- training courses;
- professional literature;
- social outings;
- attention to the families of the staff.

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	Module	:	MOTIVATION	Code	:	ОВМ 310
ļ				Edition	:	26-02-1985
	Section 4	:	HANDOUT	Page	:	02 of 02

Examples of negative incentives:

- threat to be dismissed;
- reduction of bonus or other negative financial incentives;
- no promotion.

The director has many different incentives at his disposal and he selects incentives according to the needs of the employee and the financial capacity of enterprise. If the budget of the enterprise does not allow for a raise in salary, there are other things which are appreciated by the staff. Money is not the only effective incentive.

3. SATISFACTION AND APPRECIATION

One of the most important factors influencing work-satisfaction is the feeling to be respected and to be truly appreciated. Of course, incidental appraisals for doing a good job mean a lot to employees, but a more structural promotion of work satisfactions in the enterprise can only be achieved by a systematic approach. People should know what is expected of them and they should have an idea whether they meet the requirements for their job.

This basic human need should be acknowledged by the personnel department in arranging regular appreciation talks for individual jobholders.

In normal situations once a year will do. However, when a jobholder is having difficulties in living up to the standards for this job, his efforts should be valuated more frequently in order to enable him to improve his attitudes, efforts, skills e.g..

In becoming a good jobholder, people need feed-back from the organisation about their performance.

4. SUMMARY

To improve organizational effectiveness, motivated staff is a must. Motivation is influenced by positive and negative incentives. Promotion is a positive, reduction of bonus is a negative one.



TITLE :

CODE:

1. Definition of directing

OBM 310/V 1

2. Issues in directing

OBM 310/V 2 (a-e)

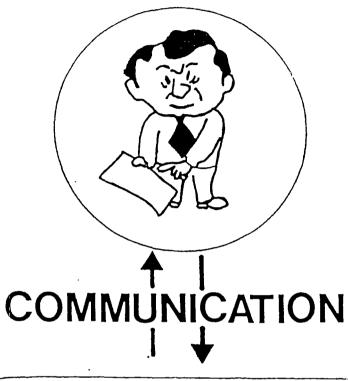
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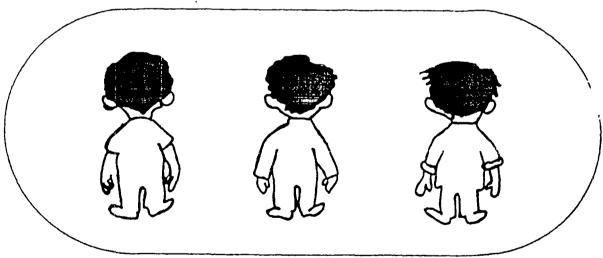
DIRECTING

guiding and motivating staff towards effective performance



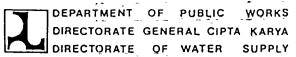
AUTHORITY





MOTIVATION





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Section	1: INFORMATION SHEET	Page	:	01 of 01/06

Duration

Training objectives:

45 minutes.

After this session trainees will be able to:

- recite three aspects of authority;
- explain the relationship between leadership style and working behaviour.

Trainee selection :

- Director PDAM/Head BPAM;
- Head of Technical Department;
- Head of Finance & Administration Department.

Training aids :

- Viewfoil: OBM 320/V 1;

- Handout : OBM 320/H 1.

Special features :

Keywords

Authority.

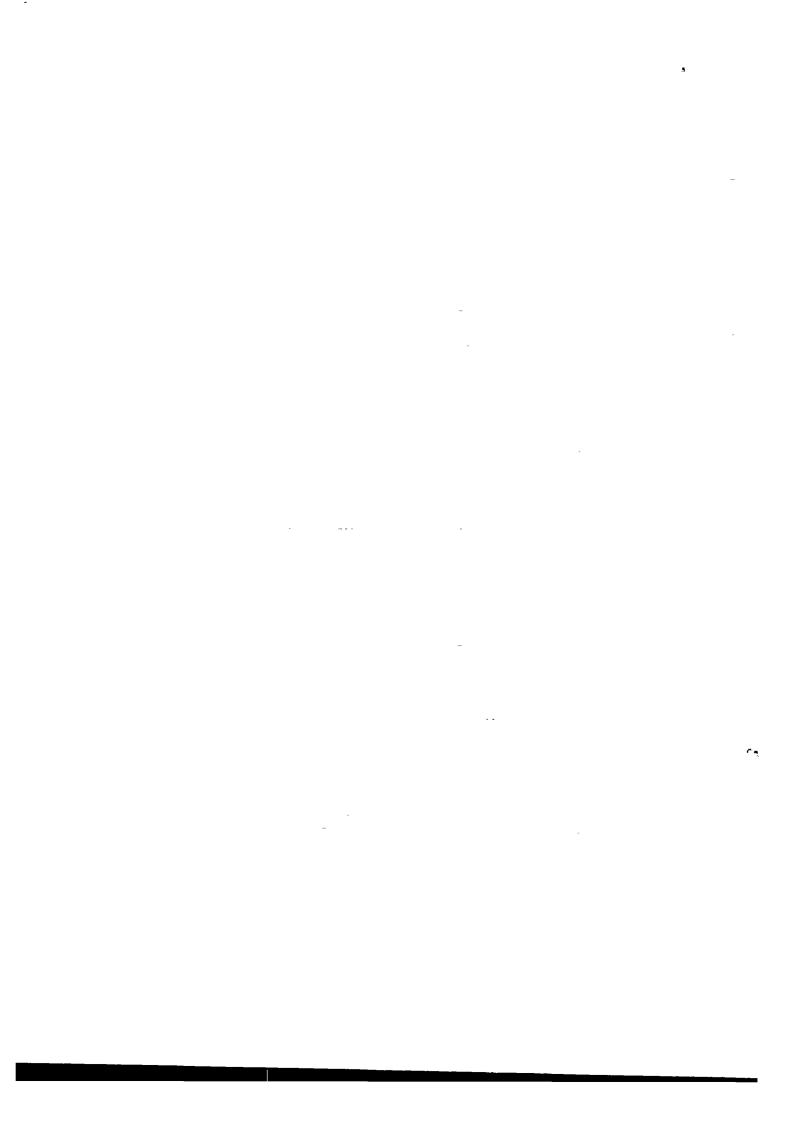
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Module : AUTHORITY	Code : OBM 320
	Edition: 26-02-1985
Section 2: SESSION NOTES	Page : 01 of 02
 Introduction The manager has formal authority: his staff must carry out his orders. 	·
2. Elements of authority	
 Formal authority however must be complemented with: knowledge and skills; integrity; personality. 	Show V 1
- Ask: What are the knowledge and skills required of the manager?	Use whiteboard
<pre>- Ask: What are important aspects of inte- grity ?</pre>	Use whiteboard
- Ask: What personal characteristics does the manager need to have ?	Use whiteboard
- Discuss answers.	
Explain:	
 Knowledge and skills are related to the position the manager occupies. They are related to: technical processes; management techniques. 	
 Integrity deals with the person rather than his position. Aspects are: respecting sub-ordinates; being honest; giving a good example; treating people equally. 	
 Personality implies to be able to inspire people, to be determined to succeed, to communicate well. 	
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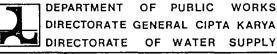


Module AUTHORITY Code : OBM 320 Edition: 26-02-1985 Section 2: SESSION NOTES Page 02 of 02 Rach manager chooses his own leadership style. There is no "best" way of directing. The way of directing interacts with people's attitude towards leadership. Summary - Formal authority alone is not sufficient. - The manager's formal authority must be completed with: . knowledge and skills; . integrity; . personality. Give H l



Code : OBM 320 Module : AUTHORITY Edition: 26-02-1985 Section 3: TRAINING AIDS Page : 01 of 01 OBM 320/V 1 Authority OBM 320/H 1 Authority







Module	:	AUTHORITY	Code	:	OBM 320
			Edition	:	26-02-1985
Section 4	:	HANDOUT	Page	:	01 of 02

1. MANAGER HAS FORMAL AUTHORITY

The manager of the water enterprise has officially been appointed to manage water enterprise operations. He directs and guides the staff of the enterprise and has the formal authority to do so: his staff must carry out his orders.

2. FORMAL AUTHORITY IS NOT ENOUGH

Formal authority, however, is not enough to direct the staff of the enterprise effectively. Formal authority must be complemented with:

KNOWLEDGE AND SKILLS

The manager must have much know-how about water enterprise operations. He is the decision-maker. He must know how to manage, plan, organize, direct and control the activities of the enterprise. Then the staff will have confidence in his way of working and his decisions.

A newly appointed manager will probably have limited experience in managing water enterprise operations. Through reading, training and asking questions to experienced managers of other organisations, the manager will develop his knowledge and skills.

INTEGRITY

Integrity refers to the person rather than his position.

Aspects of integrity include:

- respecting his staff:
- being predictable and objective;
- treating people equally;
- not hurting people's feelings;
- giving a good example;
- being honest.

Lack of integrity will negatively influence job-performance of enterprise staff.

PERSONALITY

There is not one "best" way to direct staff in the water enterprise. Each manager has a personality of his own, habits, attitudes etc.

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Module : AUTHORITY	Code :	OBM 320
	Edition :	26-02-1985
Section 4: HANDOUT	Page :	02 of 02

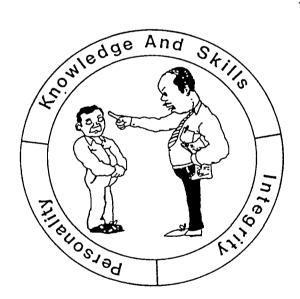
Consequently each manager must select the way of directing which suits him best.

It is important to see that personality of the manager directly influences the way staff behave in the organization. A manager who only gives orders, creates a "yes sir, no sir" situation. He should not expect his staff to come up with initiatives or proposals for improvement of the operations.

On the other hand if a manager never takes corrective actions in supervising his staff members, he should not be surprised if they do not react once he makes a critical remark.

But in all cases the manager should be able to inspire people and be determined to succeed. He will influence his staff positively, if he is a good communicator and a good listener.

So there is more to authority than the formal attribution of power. This is illustrated below.



3. SUMMARY

Formal authority is not sufficient to direct water enterprise staff effectively. The manager's formal authority must be complemented with knowledge and skills, integrity and personality.



TITLE :

CODE :

1. Authority

OBM 320/V 1

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