JAPAN INTERNATIONAL COOPERATION AGENCY(JICA)
DEPARTMENT OF WATER AFFAIRS AND FORESTRY
REPUBLIC OF SOUTH AFRICA

THE STUDY
ON
THE EXPANSION OF CAPACITY OF
MAGALIES WATER
IN
THE REPUBLIC OF SOUTH AFRICA
(RHASE 2 AND 3)

FINAL REPORT

VOLUME 7 : DATA BOOK

JANUARY: 1998

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# THE STUDY ON THE EXPANSION OF CAPACITY OF MAGALIES WATER IN THE REPUBLIC OF SOUTH AFRICA (PHASE 2 AND 3)

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### **CURRENCY EQUIVALENTS**

(As of September, 1997)

Currency Unit = South African Rand (R)

US\$1.00 = 4.69 R

US\$1.00 = 122 Yen (Japanese Yen)

**VOLUME 1: EXECUTIVE SUMMARY** 

**VOLUME 2: FEASIBILITY STUDY FOR NORTH MANKWE AREA** 

**VOLUME 3: FEASIBILITY STUDY FOR KLIPVOOR AREA** 

**VOLUME 4: FEASIBILITY STUDY FOR MORETELE2 AREA** 

**VOLUME 5: BOUNDARY ISSUES** 

**VOLUME 6: PILOT PROJECTS** 

**VOLUME 7: DATA BOOK** 



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- B. Minutes of Meetings
- C. Scope of Works (S/W)

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A. Results of Questionnaire Survey

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<b>A</b> 4	MODETELE A EE ACIDILETY CTURY ADEA	A 4 1

### A.1 FORM OF QUESTIONNAIRE

# **JICA**

# THE STUDY ON THE EXPANSION OF CAPACITY OF MAGALIES WATER IN THE RUPUBLIC OF SOUTH AFRICA (PHASE 2)

, Area	•
Name of Community:	***********************
Date Surveyed:	
Surveyor:	
————QUESTIONNAIRE———	
Q1: How many members are there in your family?	
Male:	
Female:	
Total:	
Q2: How much is your avarage monthly household income (esti	mate only)?
Monthly Income: R	
Main Source of Income:	**************************
Q3: What is the current method/s of getting water for don	restic use including
drinking?	
□Borehole	
☐Borehole with a handpump	
☐Borehole with a windmill	
☐Borehole with a diesel engine drive	
☐Borehole with an electric motor drive	
☐ Water Vendor	
□Nearby Ponds/Rivers	
Othors (Careifu)	

Q4: Do you ha	ve any o	operational/maintenance problems with your borehole (for
borehole users o	nly)?	
□No		
□Yes:	•	
	[]Quite	often
	□Ofter	า
	□Only	once in a white
		Causes of the problems:
		☐Drying up (No groundwater)
		☐ Mechanical Problems
		☐Power failure (electric motor drive only)
		☐No money to buy fuel (diesel drive only)
		☐Other reasons (Specify)
Q5: How much	water	does your household consume a month, including water for
drinking.		
. *********	**********	litres/month
Q6: How much	do you	spend a month to get water?
Boreho	le	R/month
Water '	Vendor	R/month
Others		R/month
Q7 :To whom a	ire you j	paying and on what basis the amount is determined (only for
borehole users	who are	paying for water they use)?
To who	om :	***************************************
On Wi	hat Basis	\$
*********		
Q8: Who in	your fan	nily is generally responsible for the management of water
(making water	always :	available at home by means of fetching or buying)?
□Wif	e	
□Hus	band	
□Chi	ld/ebildr	en
□Eide	er/s	
□Oth	ers (Spe	cify)

29: How much would you be willing to pay for water per month, if it is clean and
afe and supplied by means of a standpipe within a cartage distance of 200 m from
your house?
R
Q10: How much would you be willing to pay for water per month, if it is clean and
safe and supplied by means of a yard connection (located in the frontyard or
backyard of your house)?
R
Q11: Which is your priority, water or sanitation (toilet)?
□Water
☐ Sanitation
Q12: Are you aware of any diseases which you think are related to a poor quality
of water used in your community?
□Yes
(Describe briefly the symptoms below)
□N <sub>0</sub>

### A.2 NORTH MANKWE FEASIBILITY STUDY AREA

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# North Mankwe - DATA OBTAINED FROM QUESTIONNAIRE SURVEY

The state   The		- 11 A. M 171	All farmer of library	Qd Quarational Problems			Of Cost	Q7 Who do you pay	Call Who in Family =	(R/month) Service Level	1	V Sympolity
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### 15   1   1   1   1   1   1   1   1   1	3170 (P	00(0)	word file W. De Ell Vendor River	[ GOT OF OPELDU!_	F P P Others	(Property)	BH Vendor Vrnen	10.00		3, ,	0,5 0,5	
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### 25   19   19   19   19   19   19   19   1	22.2.07			كالكن والمواز والمواز	1,	2.400			1 1	5 1		1 0,000.0
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Company   Comp	habo 22,2,97 1				1	680	3		<del></del>	9 9	)	
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### North Mankwe - DATA OBTAINED FROM QUESTIONNAIRE SURVEY

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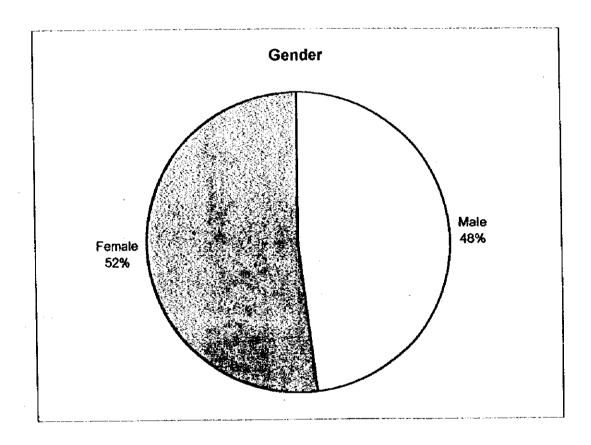
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### Gender of those participating in the survey

 Male
 305
 48%

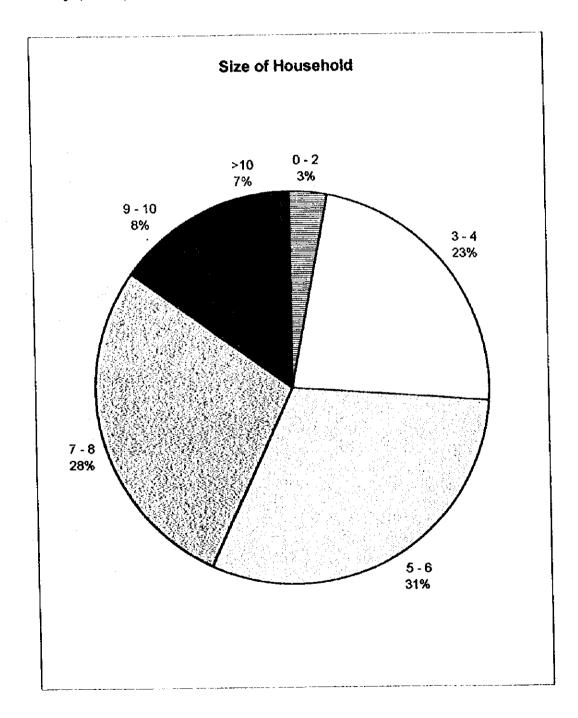
 Female
 330
 52%

 Total
 635



### Size of Household

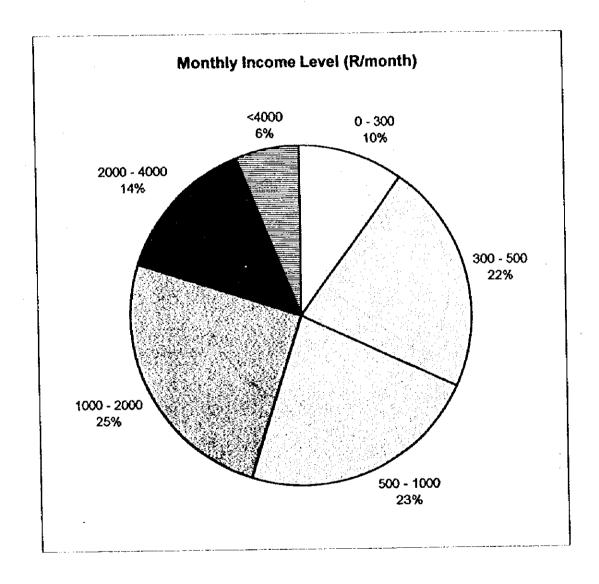
Average person per household: 6.4 person



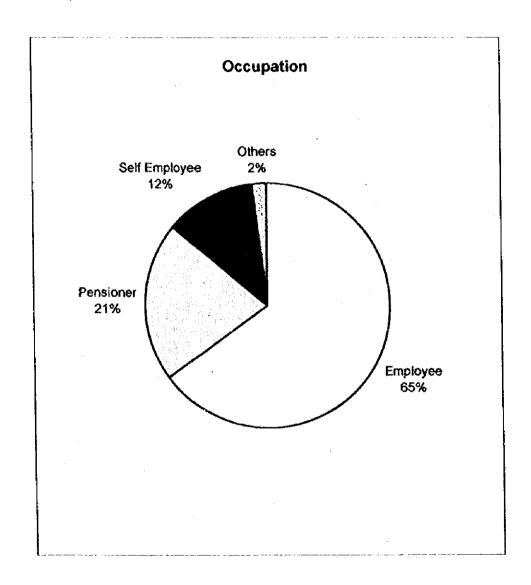
### **Monthly Income Level**

Average Monthly Income:

1,216 R/month

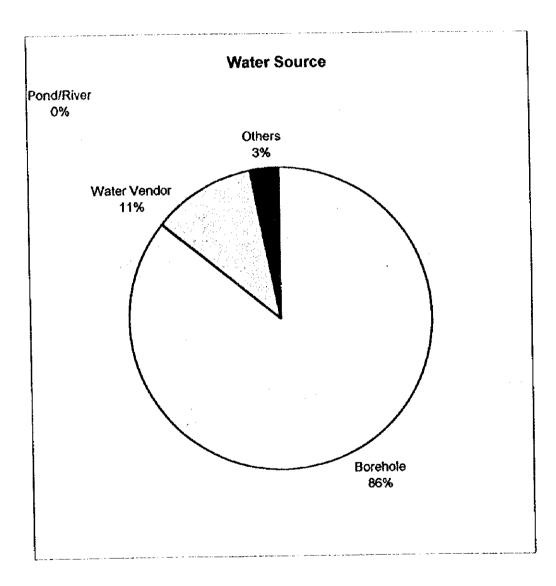


### **Occupation**



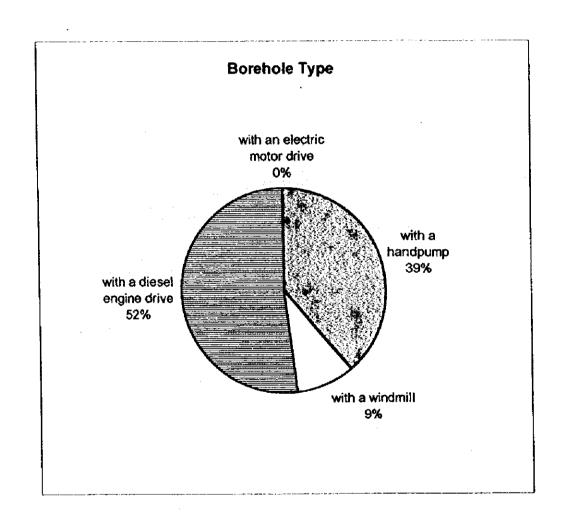
### Water Source

Borehole	108
Water Vendor	14
Pond/River	0
Others	4



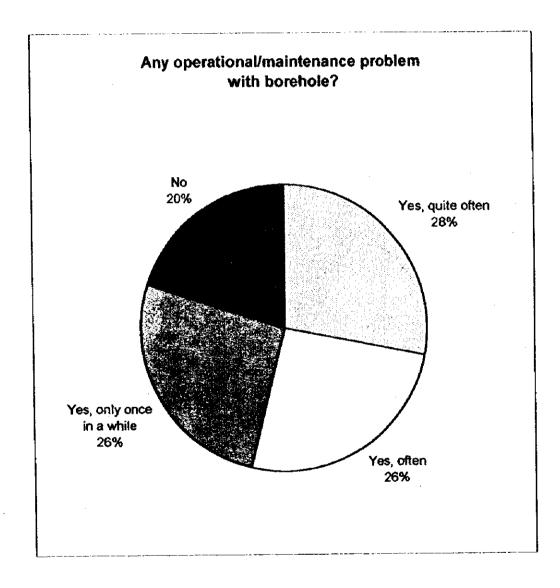
### **Borehole Type**

with a handpump	42
with a windmill	10
with a diesel engine drive	56
with an electric motor drive	0



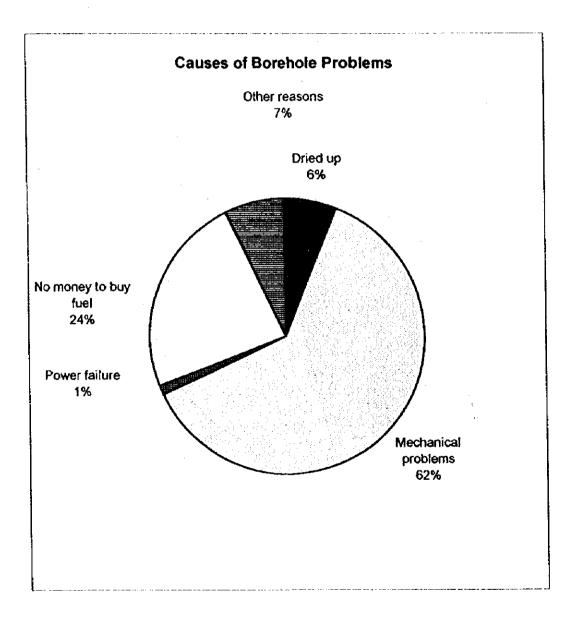
# Any operational/maintenance problems with borehole?

Yes, quite often	28
Yes, often	26
Yes, only once in a while	26
No	20



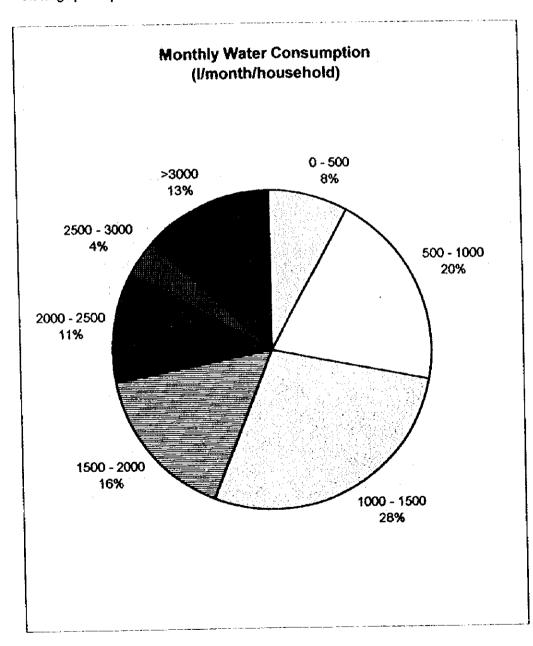
### Causes of borehole problems

Dried up	6
Mechanical problems	60
Power failure	1
No money to buy fuel	23
Other reasons	7



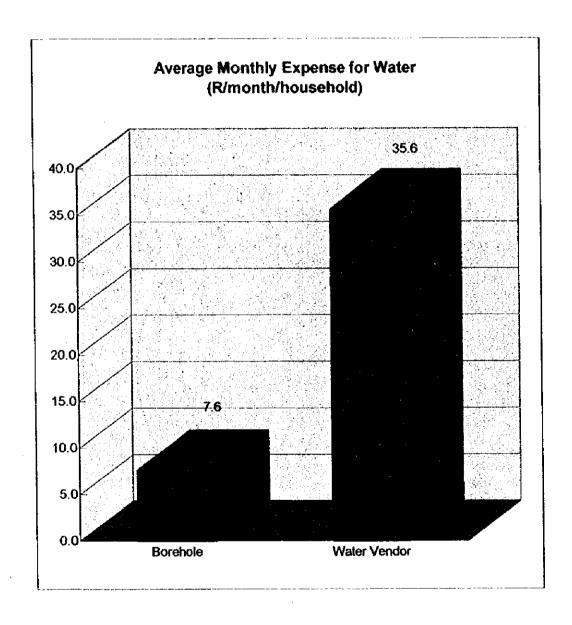
# Monthly Water Consumption (I/month/household)

Average monthly water consumption per household Average per capita water consumption 1,731 I/month 9.1 Ipcd



### Average Montly Expense for Water (R/month/household)

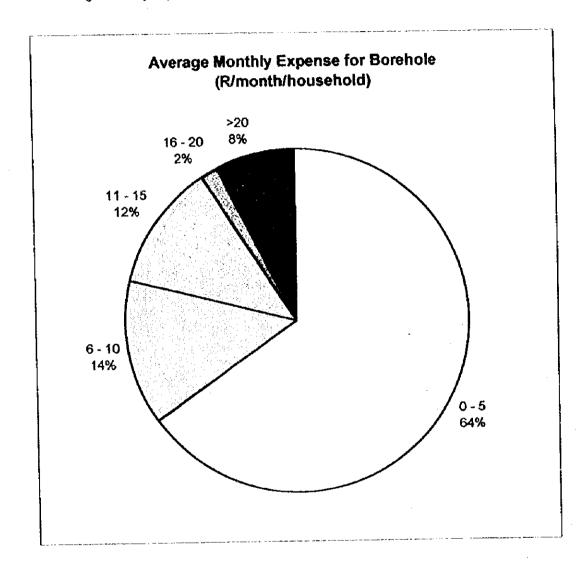
Borehole Water Vendor 7.6 35.6



# Average Monthly Expense for Borehole (R/month/household)

Average monthly expense for borehole

7.6 R/month



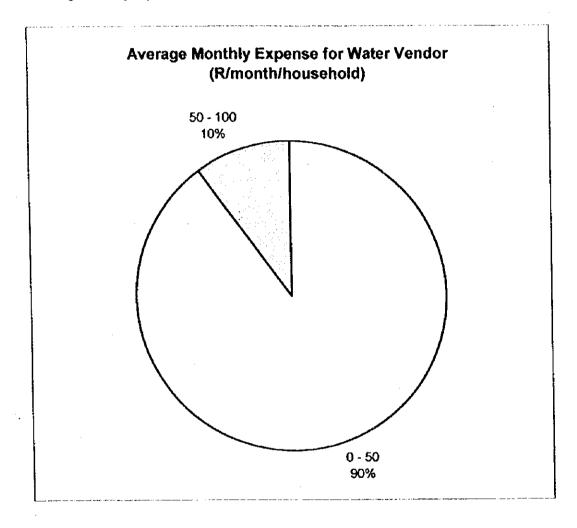
Number of sample:

66

### Average Monthly Expense for Water Vendor (R/month/household)

Average monthly expense for water vendor

35,6 R/month

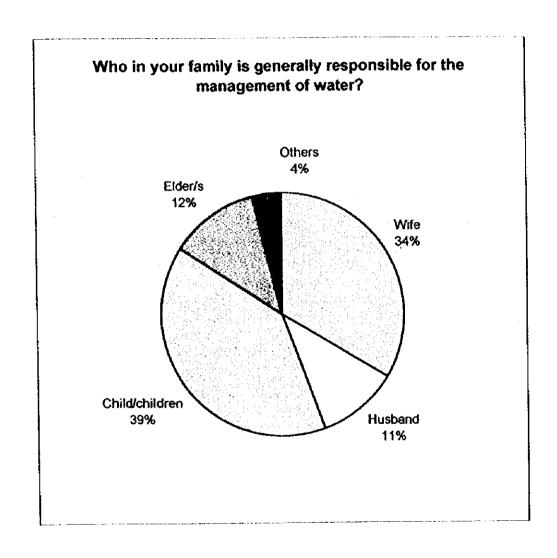


Number of sample:

10

Who in your family is generally responsible for the management of water?

Wife	34
Husband	11
Child/children	40
Elder/s	12
Others	4



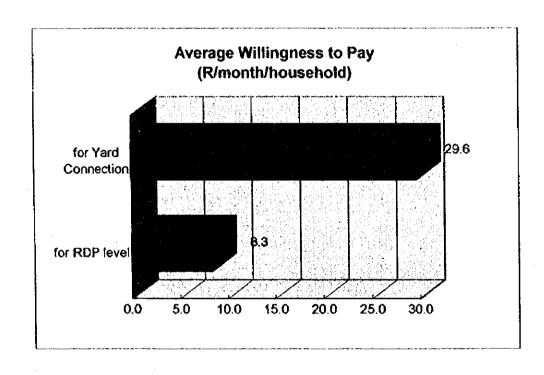
### Average Willingness to Pay (R/month/household)

for RDP level

8.3

for Yard Connection

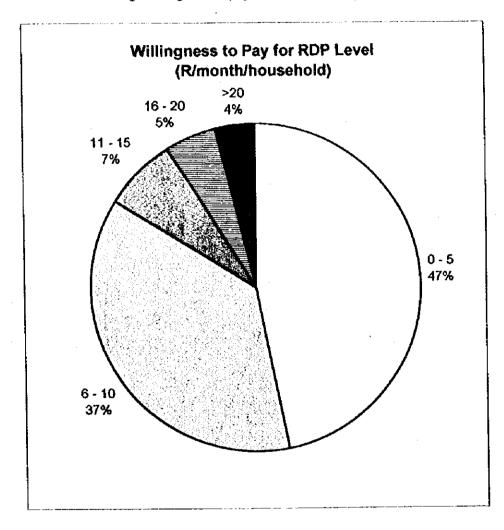
29.6



### Willingness to Pay for RDP Level of Service

Average willingness to pay for RDP Level

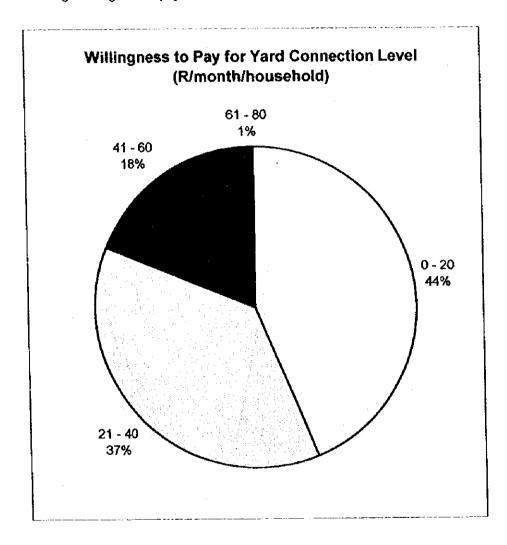
8.3 R/month



# Willingness to Pay for Yard Connection Level of Service

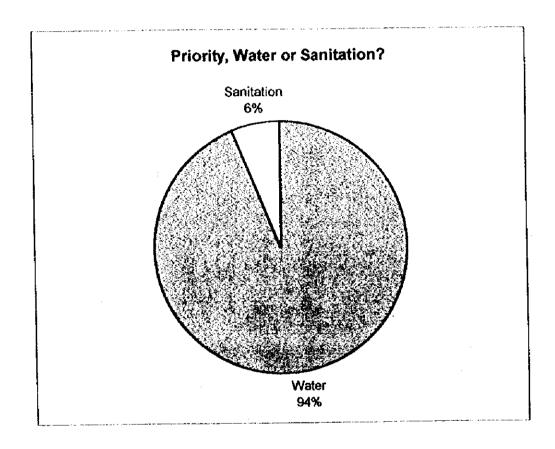
Average willingness to pay for Yard Connection Level

29.6 R/month



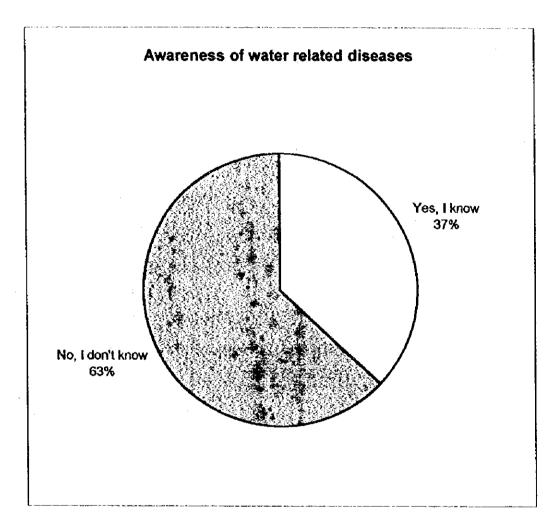
Which is your priority, water or sanitation?

Water 93 Sanitation 6



### Awareness of water related diseases

Yes, I know 37 No, I don't know 63



### Comparison of Current Expense and Willingness to Pay (R/month/household)

Current Expense for Borehole Current Expense for Water Vendor Willingness to Pay for RDP Level Willingness to Pay for Yard Conc.

7.6 R/month/household 35.6 R/month/household 8.3 R/month/household 0.63% 2.93%

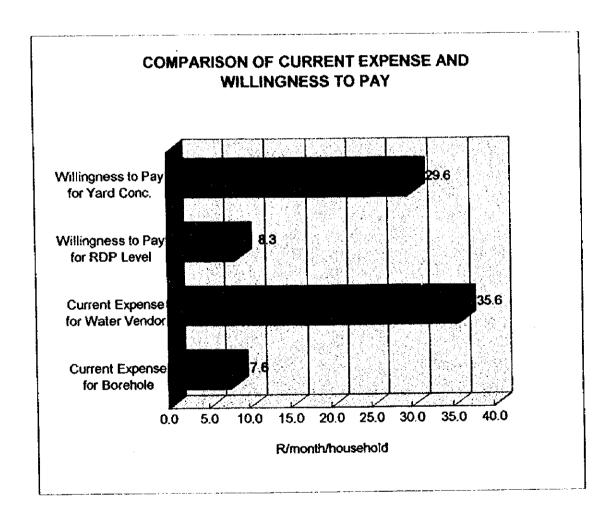
0.68%

29.6 R/month/household

2.44%

Average Monthly Income

1,216 R/month/household



### A.3 KLIPVOOR FEASIBILITY STUDY AREA

•	Data Obtained from Questionnaire Survey	A.3-1
•	Gender of those Participating in the Survey	A.3-3
•	Size of Household	A.3-4
•	Monthly Income Level	A.3-5
٠	Occupation	A.3-6
٠	Water Source	A.3-7
٠	Borehole Type	A.3-8
•	Any Operational/Maintenance Problems with Borehole?	A.3-9
•	Causes of Borehole Problems	A.3-10
	Monthly Water Consumption(1/month/household)	A.3-11
•	Average Monthly Expense for Water (R/month/household)	A.3-12
•	Average Monthly Expense for Borehole(R/month/household)	A.3-13
•	Average Monthly Expense for Water Vendor(R/month/household)	A.3-14
•	Who is Your Family is Generally Responsible for the Management of Water?	A.3-15
٠	Average Willingness to Pay(R/month/household)	A.3-16
•	Willingness to Pay for RDP Level of Service	A.3-17
•	Willingness to Pay for Yard Connection Level of Service	A.3-18
•	Which is Your Priority, Water or Sanitation?	A.3-19
•	Awareness of Water Related Diseases	A.3-20
•	Comparison of Current Expense and Willingness to Pay(R/month/household)	A.3-21

Klipvoor - DATA OBTAINED FROM QUESTIONNAIRE SURVEY

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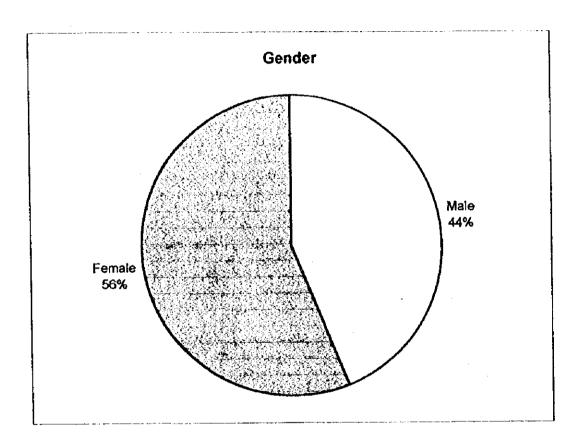
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#### Gender of those participating in the survey

 Male
 297
 44%

 Female
 378
 56%

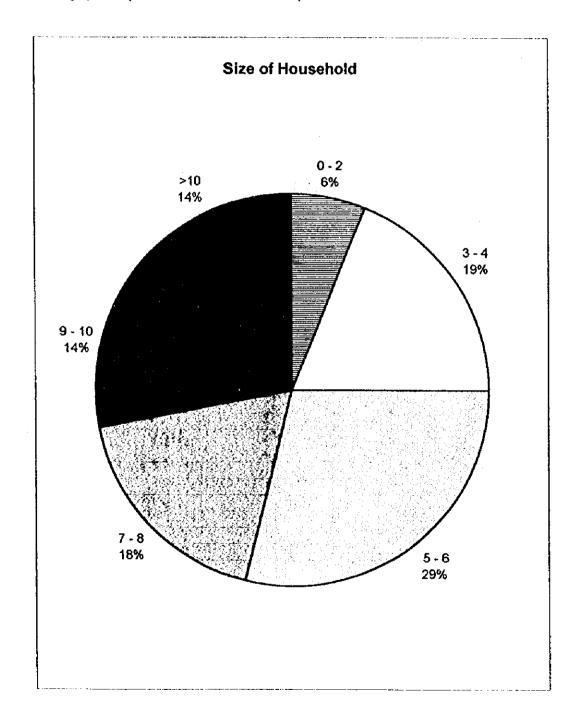
 Total
 675



#### Size of Household

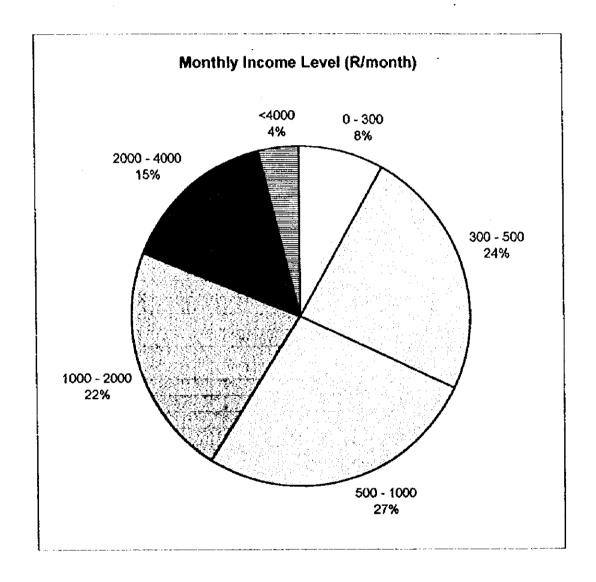
Average person per household:

6.8 person

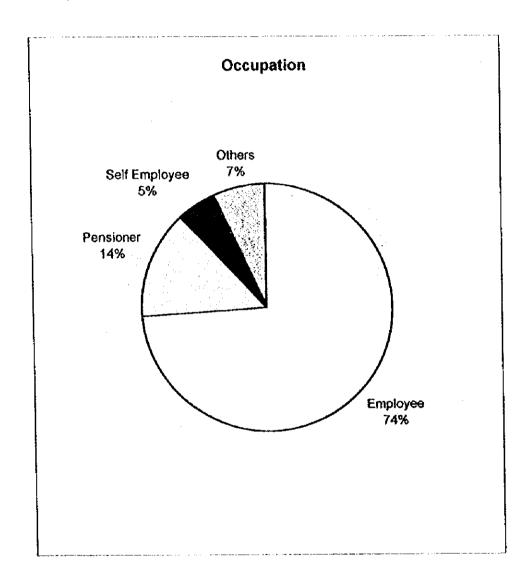


#### **Monthly Income Level**

Average Monthly Income: 1,167 R/month

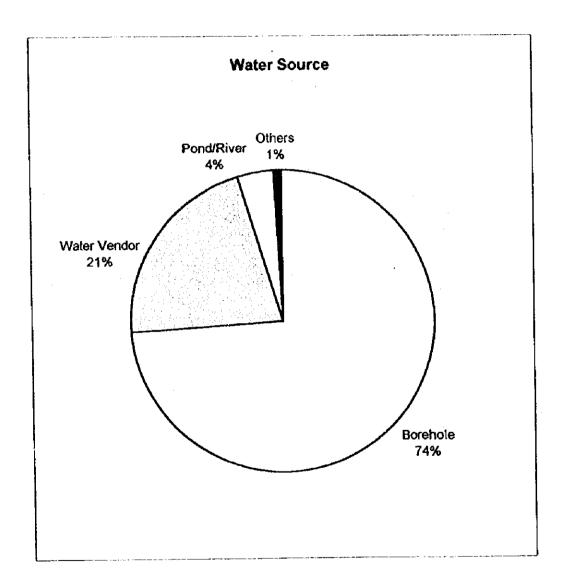


#### Occupation



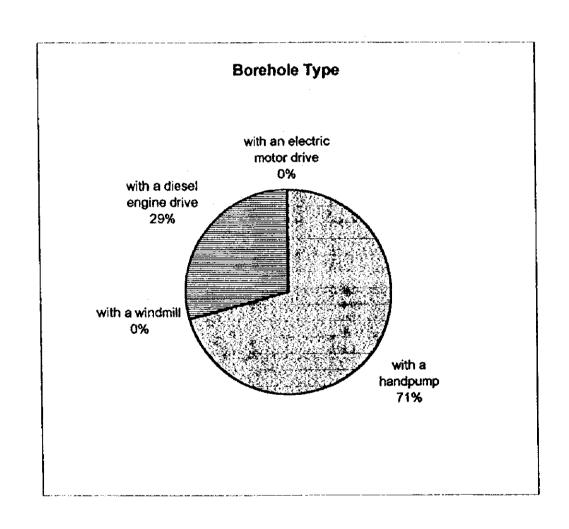
#### **Water Source**

Borehole	79
Water Vendor	23
Pond/River	4
Others	1



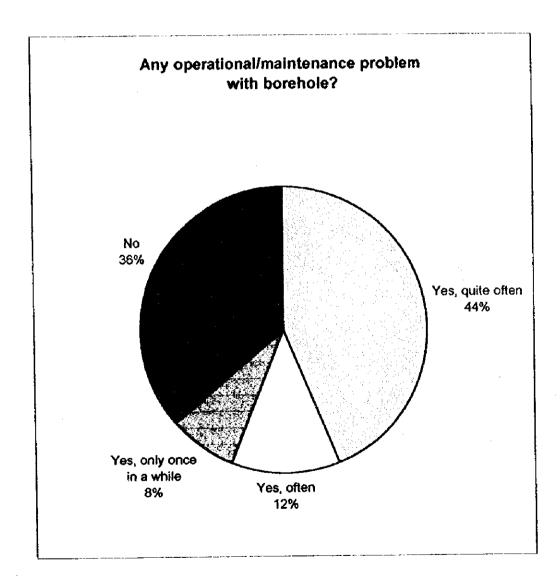
### **Borehole Type**

with a handpump	56
with a windmill	0
with a diesel engine drive	23
with an electric motor drive	0



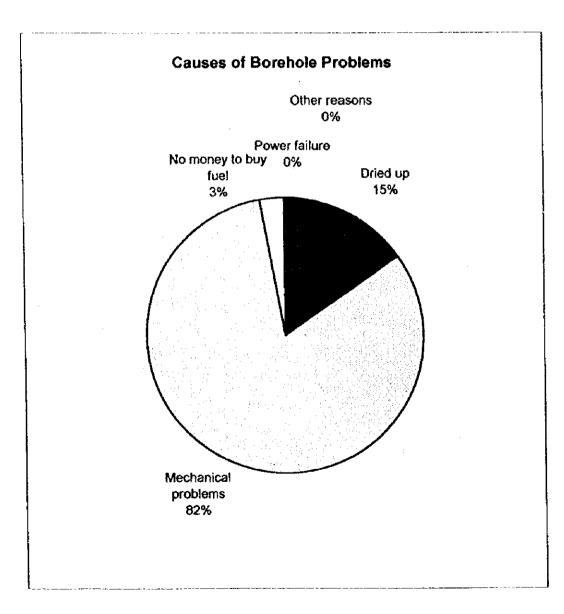
### Any operational/maintenance problems with borehole?

Yes, quite often	44
Yes, often	12
Yes, only once in a while	8
No	36



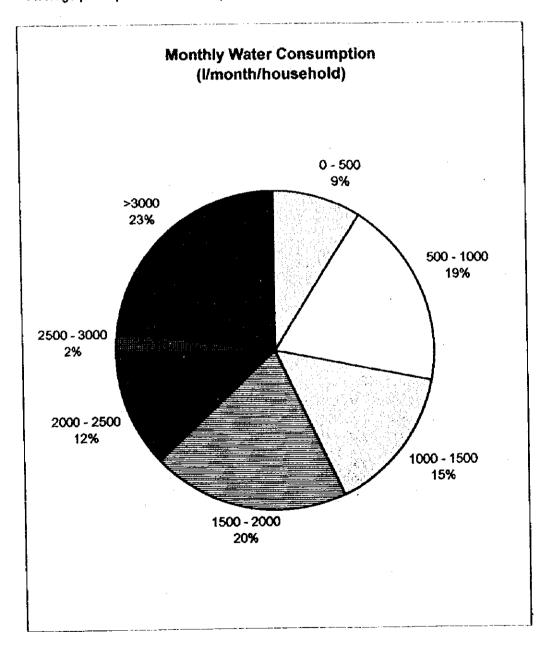
#### Causes of borehole problems

Dried up	11
Mechanical problems	59
Power failure	0
No money to buy fuel	2
Other reasons	0



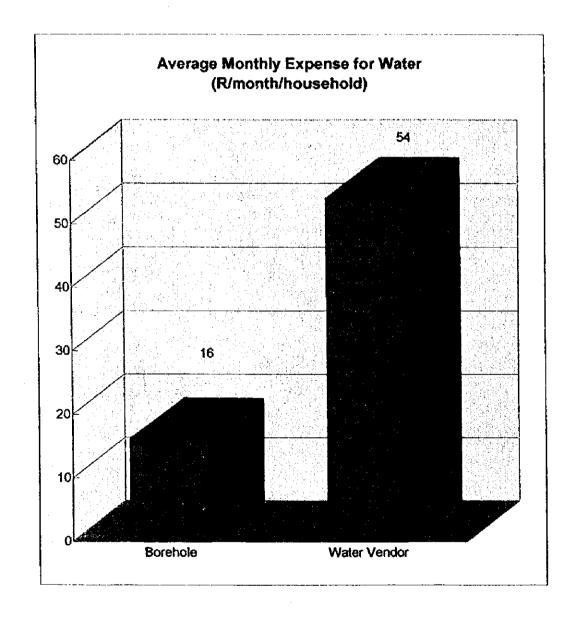
### Monthly Water Consumption (I/month/household)

Average monthly water consumption per household Average per capita water consumption 2,178 I/month 10.7 Ipcd



### Average Montly Expense for Water (R/month/household)

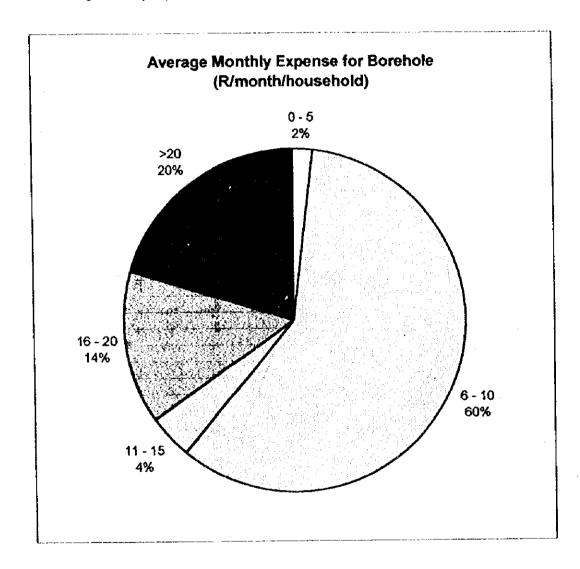
Borehole Water Vendor



### Average Monthly Expense for Borehole (R/month/household)

Average monthly expense for borehole

16.1 R/month

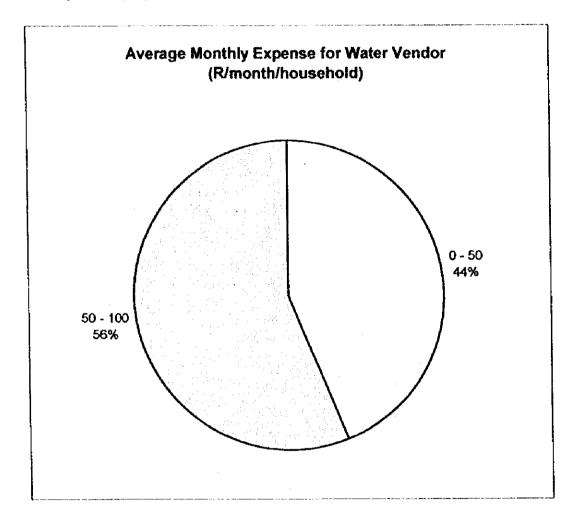


Number of sample:

### Average Monthly Expense for Water Vendor (R/month/household)

Average monthly expense for water vendor

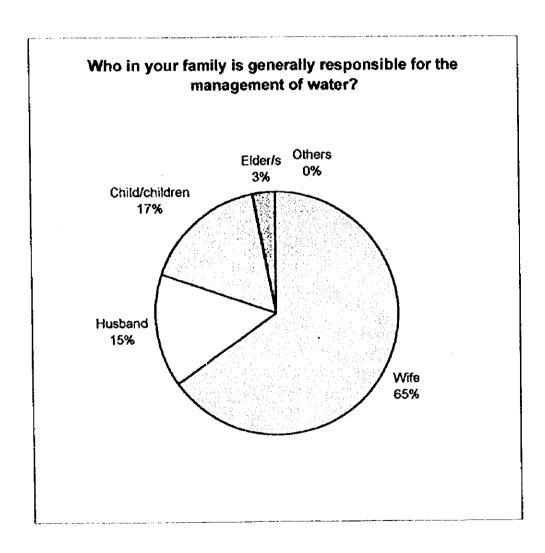
54.0 R/month



Number of sample:

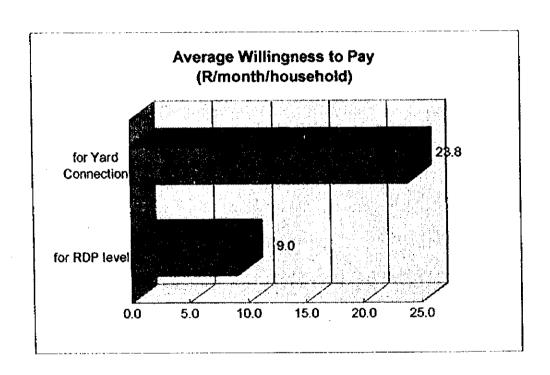
Who in your family is generally responsible for the management of water?

Wife	66
Husband	15
Child/children	17
Elder/s	3
Others	0



### Average Willingness to Pay (R/month/household)

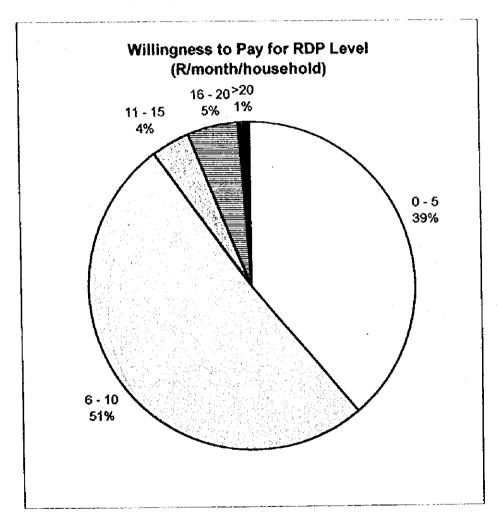
for RDP level 9.0 for Yard Connection 23.8



### Willingness to Pay for RDP Level of Service

Average willingness to pay for RDP Level

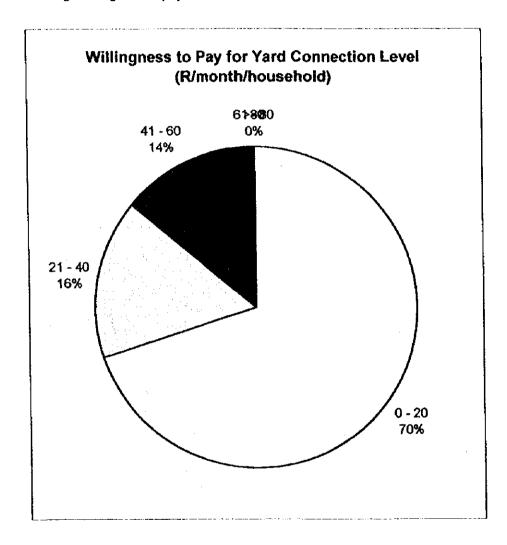
9.0 R/month



#### Willingness to Pay for Yard Connection Level of Service

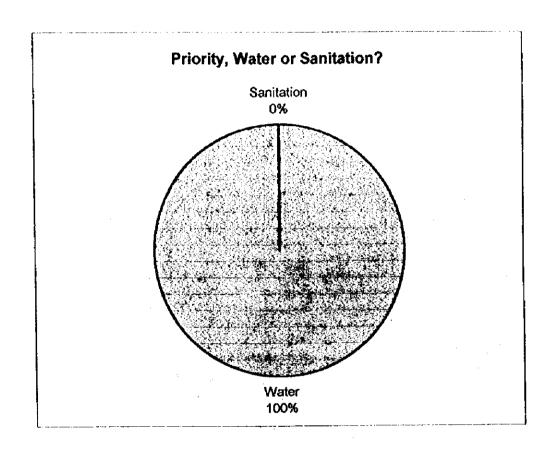
Average willingness to pay for Yard Connection Level

23.8 R/month



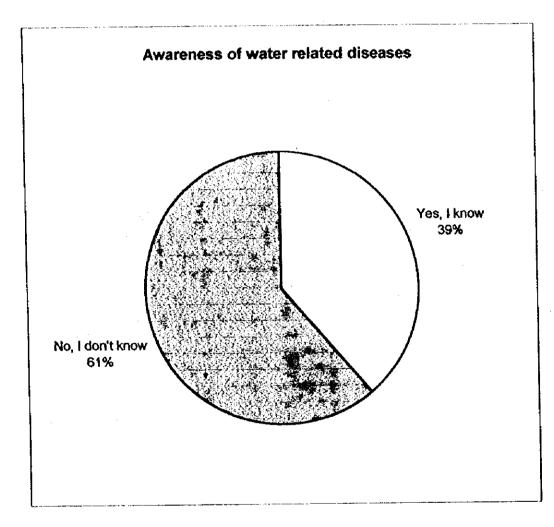
Which is your priority, water or sanitation?

Water	99
Sanitation	. 0



#### Awareness of water related diseases

Yes, I know 39 No, I don't know 61

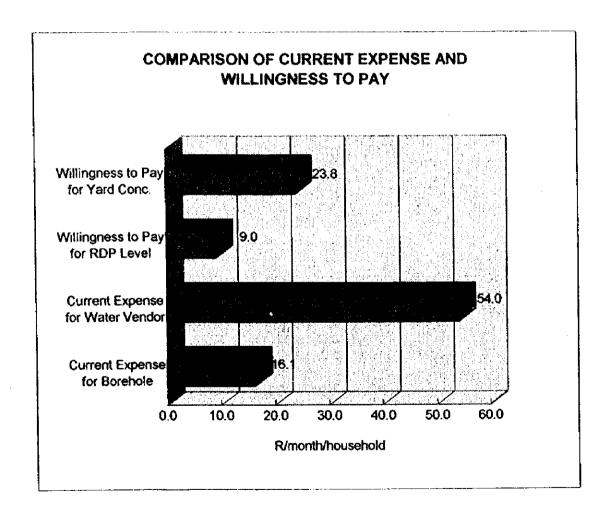


# Comparison of Current Expense and Willingness to Pay (R/month/household)

Current Expense for Borehole	16.1 R/month/household	1.38%
Current Expense for Water Vendor	54.0 R/month/household	4.63%
Willingness to Pay for RDP Level	9,0 R/month/household	0.77%
Willingness to Pay for Yard Conc.	23.8 R/month/household	2.04%

Average Monthly Income

1,167 R/month/household



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### A.4 MORETELE 2 FEASIBILITY STUDY AREA

	Data Obtained from Questionnaire Survey	A.4-1
	Gender of those Participating in the Survey	A.4-3
•	Size of Household	A.4-4
•	Monthly Income Level	A.4-5
•	Occupation	A.4-6
•	Water Source	A.4-7
	Borehole Type	A.4-8
	Any Operational/Maintenance Problems with Borehole?	A.4-9
•	Causes of Borehote Problems	A.4-10
	Monthly Water Consumption(1/month/household)	A.4-11
	Average Monthly Expense for Water (R/month/household)	A.4-12
	Average Monthly Expense for Borehole(R/month/household)	A.4-13
•	Average Monthly Expense for Water Vendor(R/month/household)	A.4-14
	Who is Your Family is Generally Responsible for the Management of Water?	A.4-15
	Average Willingness to Pay(R/month/household)	A.4-16
	Willingness to Pay for RDP Level of Service	A.4-17
	Willingness to Pay for Yard Connection Level of Service	A.4-18
	Which is Your Priority, Water or Sanitation?	A.4-19
	Awareness of Water Related Diseases	A.4-20
	Comparison of Current Expense and Willingness to Pay(R/month/household)	A.4-21

Moretele2 - DATA OBTAINED FROM QUESTIONNAIRE SURVEY

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Moretele2 - DATA OBTAINED FROM QUESTIONNAIRE SURVEY

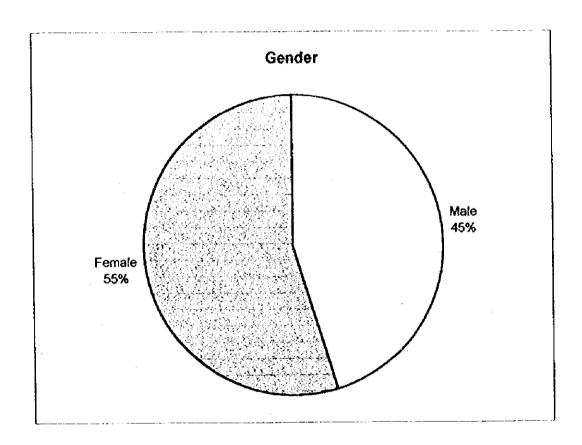
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A 4-2

### Gender of those participating in the survey

Male 291 45% Female 350 55%

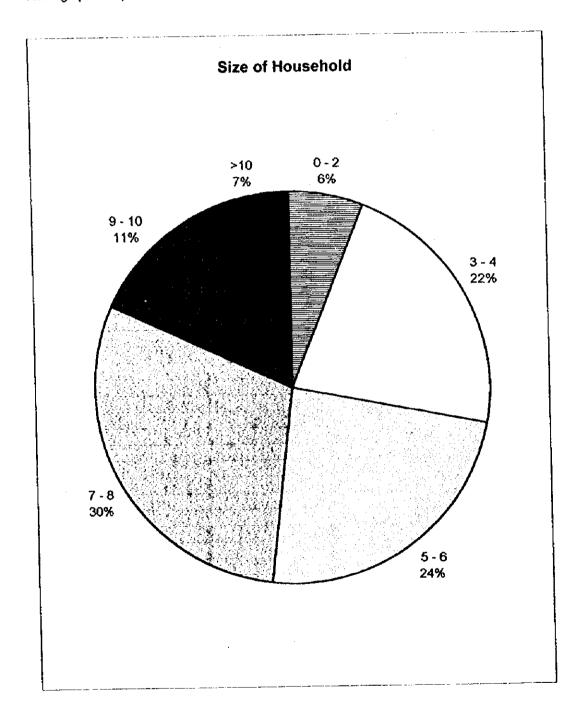
Total 641



#### Size of Household

Average person per household :

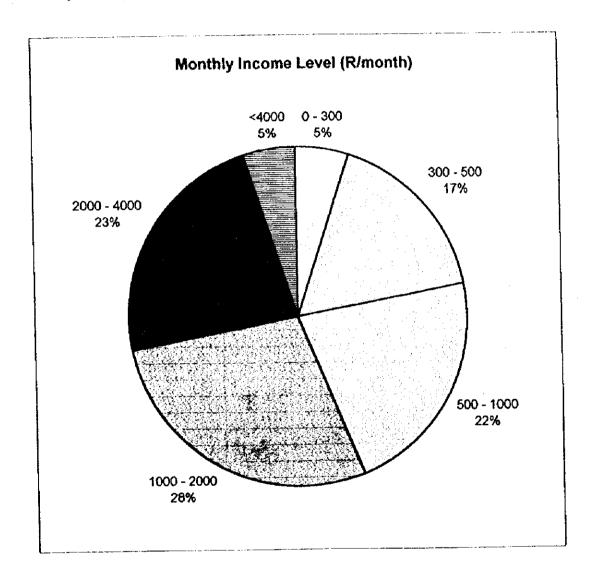
6.4 person



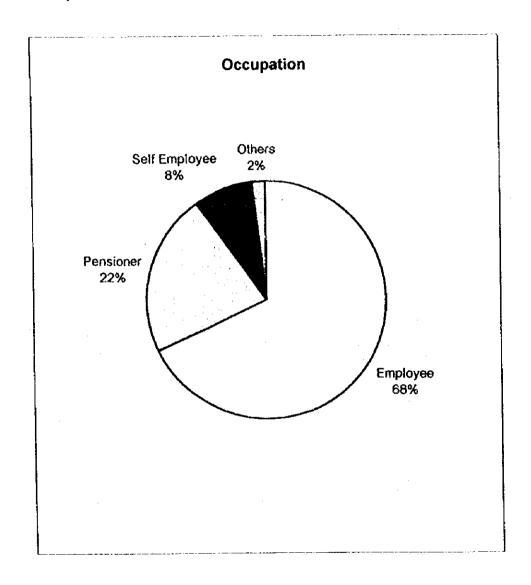
### **Monthly Income Level**

Average Monthly Income:

1,466 R/month

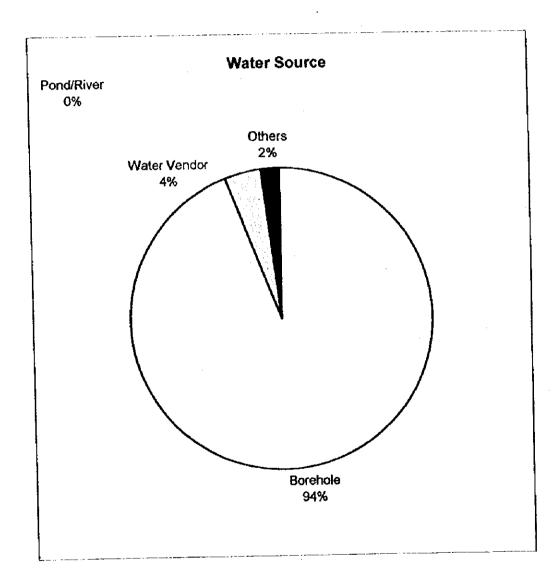


### Occupation



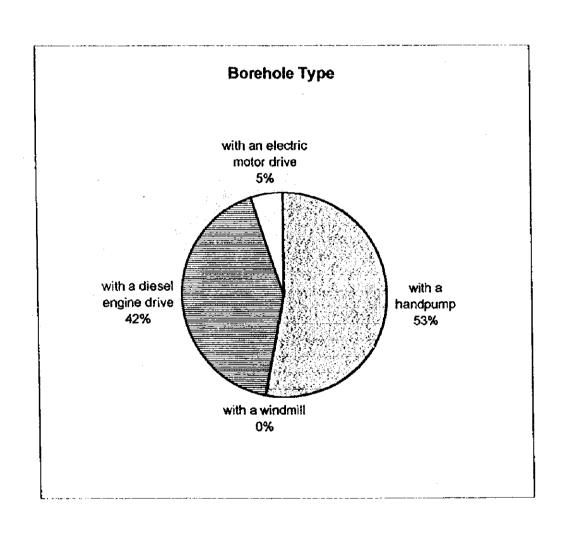
#### Water Source

Borehole	98
Water Vendor	4
Pond/River	0
Others	2



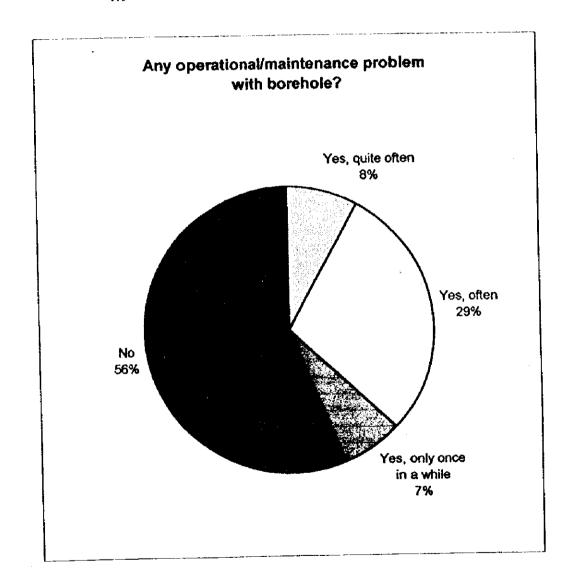
#### **Borehole Type**

with a handpump	52
with a windmill	0
with a diesel engine drive	41
with an electric motor drive	5



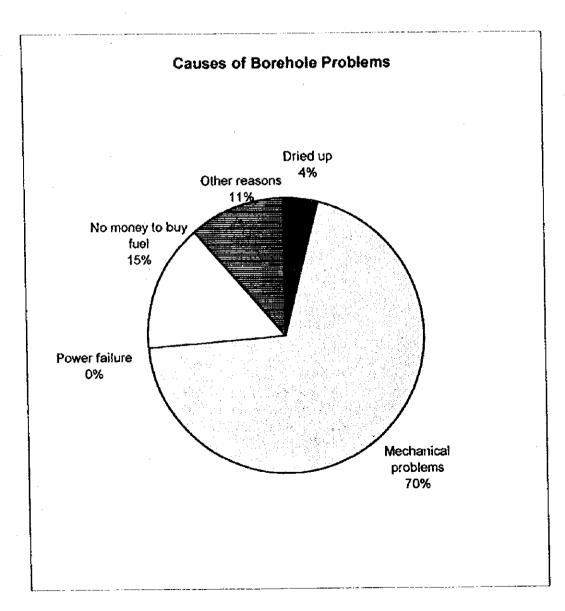
### Any operational/maintenance problems with borehole?

Yes, quite often	8
Yes, often	29
Yes, only once in a while	7
No	56



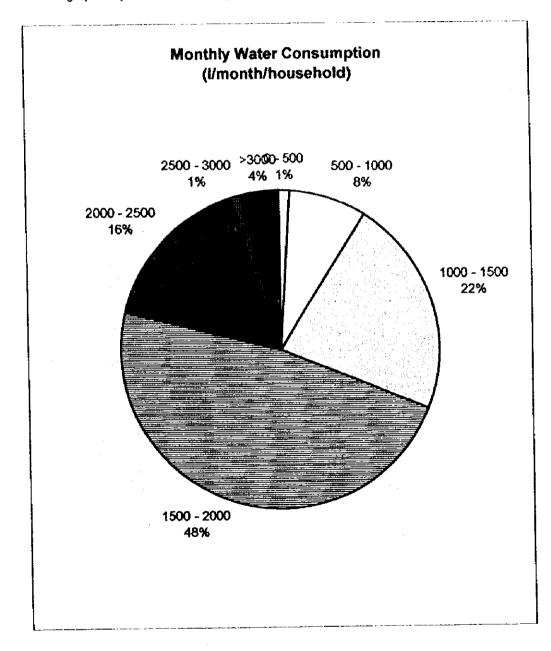
#### Causes of borehole problems

Dried up	2
Mechanical problems	37
Power failure	0
No money to buy fuel	8
Other reasons	6



### Monthly Water Consumption (i/month/household)

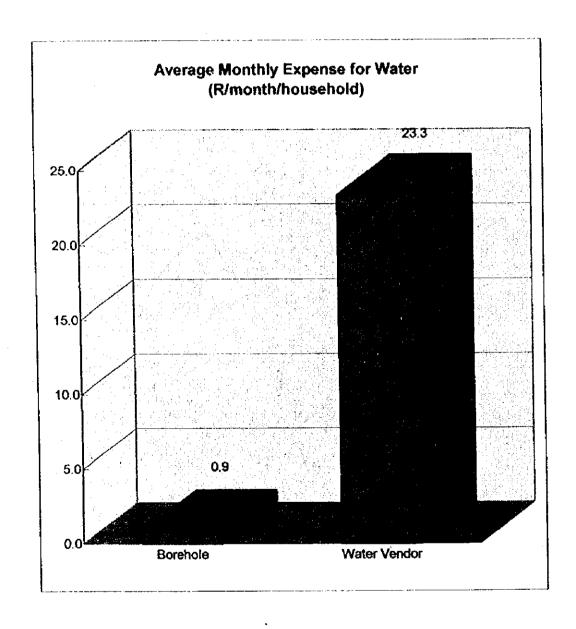
Average monthly water consumption per household Average per capita water consumption 1,761 I/month 9.2 lpcd



### Average Montly Expense for Water (R/month/household)

Borehole Water Vendor 0.9

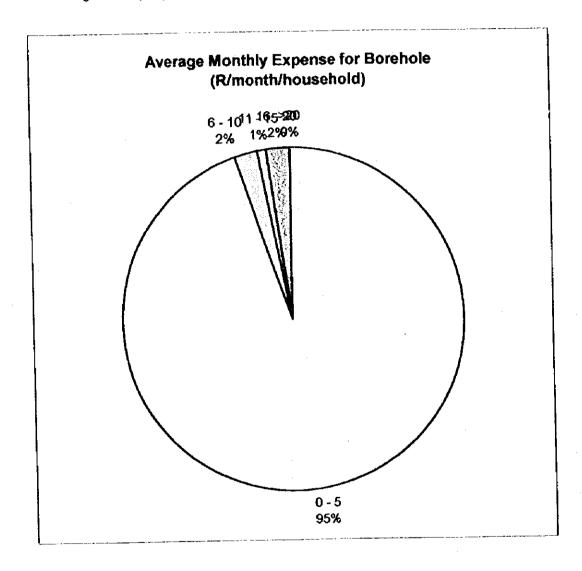
23.3



### Average Monthly Expense for Borehole (R/month/household)

Average monthly expense for borehole

0.9 R/month

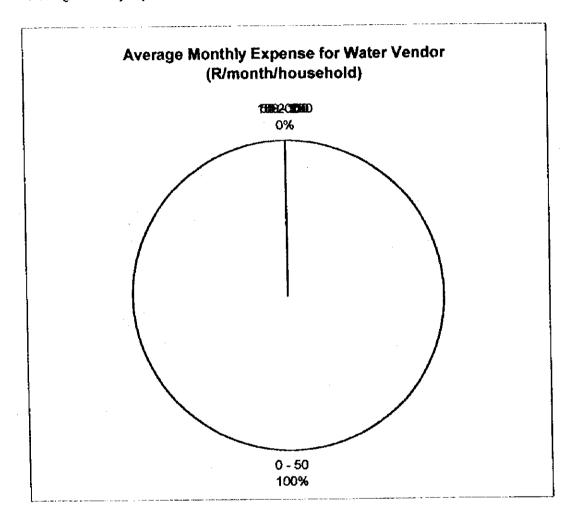


Number of sample:

### Average Monthly Expense for Water Vendor (R/month/household)

Average monthly expense for water vendor

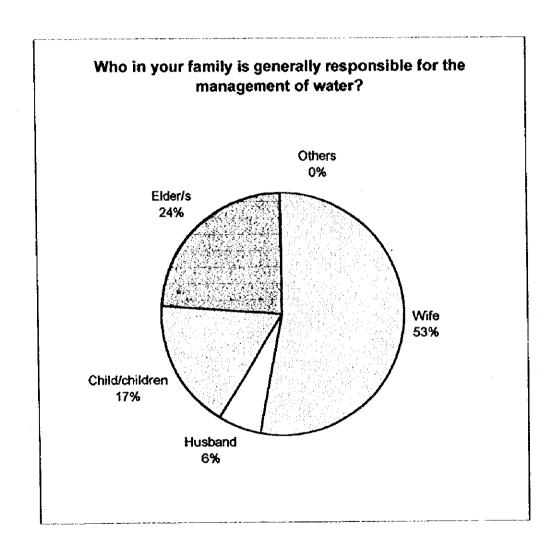
23.3 R/month



Number of sample:

Who in your family is generally responsible for the management of water?

Wife	53
Husband	6
Child/children	17
Elder/s	24
Others	0



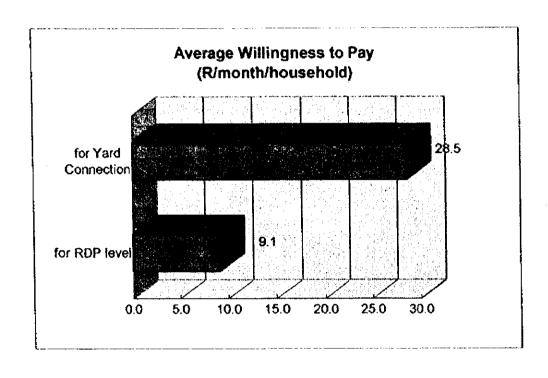
# Average Willingness to Pay (R/month/household)

for RDP level

9.1

for Yard Connection

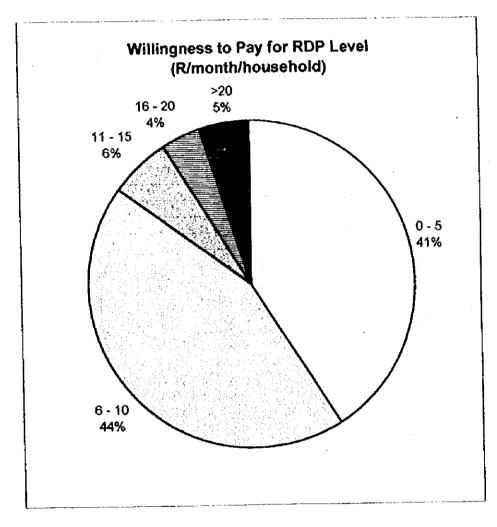
28.5



# Willingness to Pay for RDP Level of Service

Average willingness to pay for RDP Level

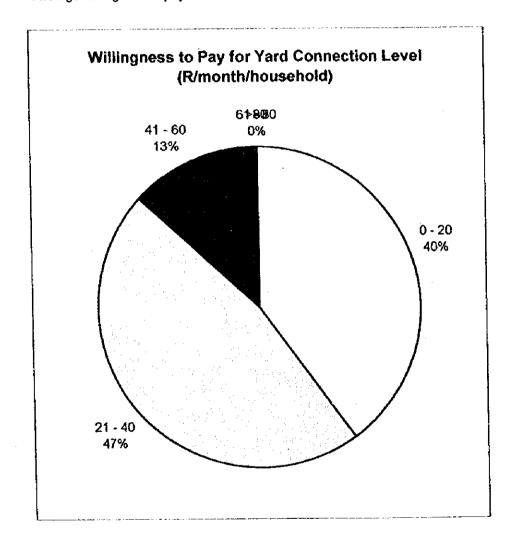
9.1 R/month



# Willingness to Pay for Yard Connection Level of Service

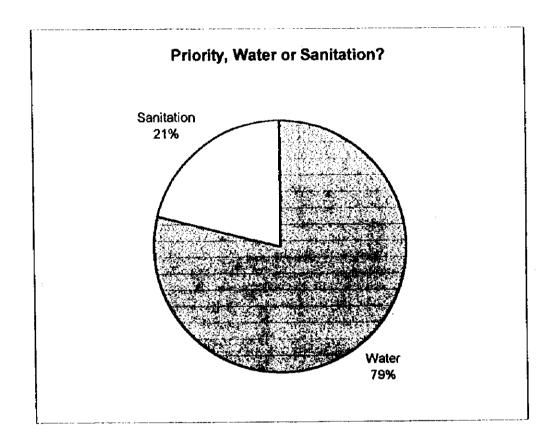
Average willingness to pay for Yard Connection Level

28.5 R/month



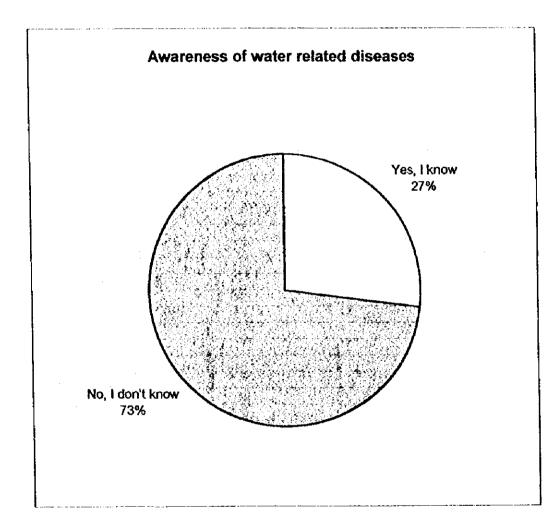
Which is your priority, water or sanitation?

Water 79 Sanitation 21



#### Awareness of water related diseases

Yes, I know 27 No, I don't know 73

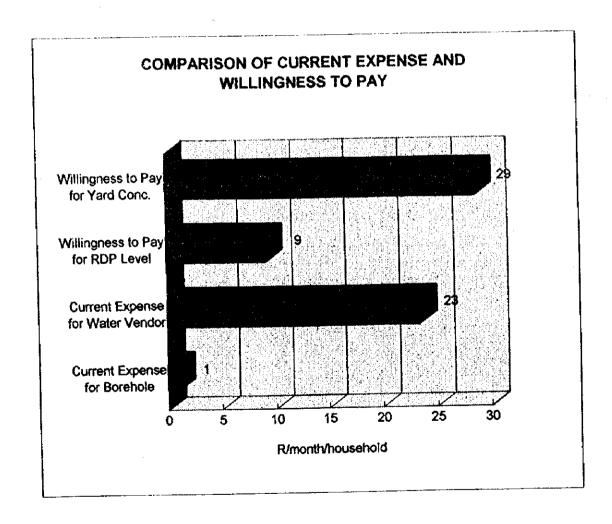


# Comparison of Current Expense and Willingness to Pay (R/month/household)

Current Expense for Borehole Current Expense for Water Vendor Willingness to Pay for RDP Level Willingness to Pay for Yard Conc. 1 R/month/household 0.06% 23 R/month/household 1.59% 9 R/month/household 0.62% 29 R/month/household 1.95%

Average Monthly income

1,466 R/month/household



# B. MINUTES OF MEETING

# B. MINUTES OF MEETING

B.1	PROJECT STEERING COMMITTEE ( PSC )	
	held 0n 18th February 1997	B.1-1
B.2	PROJECT EXECUTION GROUP meeting ( PEG )	
	held on 5th March 1997	B.2-1
B.3	PEG meeting held on 20th March 1997.	B.3-1
B.4	PSC meeting held on 25th March 1997	B.4-1
B,5	PEG meeting held on 6th May 1997	B.5-1
B.6	PEG meeting held on 3rd June 1997	B.6-1
B.7	PEG meeting held on 1st July 1997	B.7-1
<b>B.8</b>	PSC meeting held on 29th July 1997	B.8-1
B.9	PEG meeting held on 2nd September 1997	B.9-1
B.10	PEG/PEF joint meeting held on 22nd October 1997	B.10-1
R 11	PSC meeting held on 28th October 1997	B.11-1

## **MINUTES**

OF

# PROJECT STEERING COMMITTEE

**FOR** 

## THE STUDY ON

# THE EXPANSION OF CAPACITY OF MAGALIES WATER IN THE REPUBLIC OF SOUTH AFRICA

Held in Pretoria, 18th February 1997 Residensie Building, Room 1041 Present:

T. Ramaema

**DWAF** Chairperson

L. Colvin

**DWAF** 

B. Bradley

**DWAF** 

S. Ramodike

Eastern District Council
Rustenberg District Council

R. Strydom

Magalies Water

E. Khoza

Local Government Northern Province

M. Togawa

JICA Advisory Committee

Y. Omura

JICA Advisory Committee

K. Tahara

Japanese Embassy

S. Kadowaki

JICA Study Team

Y. Miyanishi

Jica Study Team

B. Sawara

Jica Study Team

T. Hart

Jica Study Team

J. Nagy

Jica Study Team

#### 1. Welcome

Mr Ramaema welcomed participants to the meeting.

### 2. Apologies

The following apologies were recorded:

Mr N. Fenner - Magalies Water

Mr J. Cunniff - Rustenberg District Council

Mr P. Pyke - DWAF

#### 3. Approval of Agenda

The agenda was approved without change.

# 4. TOR of Combined PSC & PMC/ Project Management Structures

Mr Nagy presented the proposed structures. These were set out in the slides included with the handout material. These were approved after discussion subject to the following changes and additions:

## 4.1 Project Steering Committee

Responsibilities further clarified as follows:

- Matters of policy as relates to the agreement between the Government of Japan and South Africa in respect of the Study.
- Interpretation of Water Policy in South Africa as it relates to the Study. Also discussion of findings of the study which may impact Water Policy.
- Resolving any major issues which may arise in the course of the Study.

#### 4.2 Project Execution Group

To include the Chairperson of each of the Local (Project) Steering Committees.

#### 5. Approval of Study Team

The Study Team was accepted as presented. A list of the team members is attached.

# 6. Presentation of Inception Report

6.1 Concepts of the Study / Overall Work Schedules

Mr Kadowaki presented an overview of the Study.

- (1) It was noted, in relation to the goals of the Study, that it should be made explicit that the work of the Study has the effect of assisting local government. Co-ordination with local government is therefore essential.
- (2) Mr Strydom asked whether it is possible that work could continue during April so that information out of the study will be available by the end of September, to fit in with budgeting requirements. This will not be possible due to the Government of Japan's financial year. However, information will flow from the study prior to the end date of the study. Magalies Water will therefore be able to access data in time for budget preparation.
- (3) Mr Ramodike asked whether it made sense to continue with Bapong as a pilot project in view of the fact that Rand Water have a project in Bapong.

The Chairman asked that this be investigated and if there is duplication then perhaps an alternative pilot project should be considered.

- (4) Ms Colvin asked whether counterparts could be involved with the Study Team as a learning experience. It was noted that this was the intention but difficulties had been experienced in identifying people. Ms Colvin asked that this be looked at, specifically in respect of counterparts from the Eastern District Council involved in developing Area Planning Forums.
- (5) Mr Strydom asked if the Study could look at the question of redeployment of former Northwest staff from Magalies Water to the 3<sup>rd</sup> Tier. The Chairman replied that this was in keeping with DWAF policy and would therefore be appropriate to pursue.
- (6) Mr Strydom noted that illegal connections are a major problem and asked if this could be looked at in the Study. In reply it was noted that this is clearly an objective and that one of the pilot projects (probably Bapong) will specifically look at this issue.

#### 6.2 Key Issues of Phase 2

Mr Miyanishi presented an overview of Phase 2.

- (1) The Chairman asked what consideration has been given to waste water in the Study Area. In reply Mr Sawara indicated that several options had been taken into account in the master plan based on the density of population and recommendations made accordingly. These included pit latrines (VIP), septic tanks and small waste water treatment plants. Because of poor ground water quality this source will not be used. Pollution of ground water is, therefore, not an issue.
- (2) Mr Tshite asked how water will be sourced in the Mankwe area. Mr Sawara explained this.

#### 6.3 Key Issues of Phase 3

Mr Hart presented an overview of Phase 3. It was noted that:

- (1) The essence of the pilot projects is to explore technical and institutional options and to share the lessons learned.
- (2) The pilot projects were selected to represent a variety of infrastructural and institutional circumstances.
- (3) Communities will themselves be responsible for the design of water management and operations and maintenance structures and processes.

#### 6.4 Notes on the Workshop

Mr Nagy presented a brief overview. The following points were highlighted:

- (1) All key stakeholder groups were represented.
- (2) The workshop had confirmed plans for Phases 2 and 3, had generated various proposals and suggestions, and had discussed the allocation of roles.
- (3) Key suggestions from the workshop were: simplify the management structure; conduct an awareness campaign; consider institutional arrangements for handover, and; consider DWAF's capacity audit when looking for trainers.

The Chairman endorsed the need to include women and young people in local steering committees, and suggested that consideration be given to disabled people.

#### 6.5 Boundary Issues

Mr Kadowaki presented a plan to be executed by the Study Team (see attached summary of TOR).

The Chair asked that the boundary issue be reviewed from a resource management perspective in the long term. The Team should cooperate with stakeholders by providing necessary input from time to time, for endorsement by DWAF by the end of June 1997.

### 6.6 Special Remarks

(1) Mr Strydom indicated that Magalies Water have a desire to see the development of a strong third tier. This will be the key to service delivery and cost recovery. The contribution of the study to this is critically important. This again emphasises the support for local government.

## 6.7 Approval of Inception Report

Mr Ramodike proposed that the report be accepted. This was seconded by Ms L. Colvin. There were no objections and the report was adopted.

#### 7. Counterpart Training

In the absence of Mr Pyke it was reported that counterpart training in Japan was again being made available in 1997. Two people, one from DWAF and one from Magalies Water would be selected. Mr Pyke is coordinating the selection which must be done by the end of February.

Mr Kadowaki circulated an example of the type of training program.

Mr Nagy indicated that discussions with Mr Tahara had confirmed that there is flexibility regarding the length of the training.

#### 8. Cash Flow

Mr Kadowaki presented an overview which had been requested by Mr Pelpola (see the attached cashflow summary).

#### 9. General

There were no matters for general discussion. The Chairman thanked participants for attending and closed the meeting.

# Composition of Study Team

Name		Expertise	Assignment		
А.	Japanese Component				
1.	KADOWAKI Satoshi	Team Leader	Existing		
2.	MIYANISHI Yoshitomo	Financial / Investment Planner (A)	Existing		
3.	SAWARA Sadanobu	Water Supply Planner	Existing		
4.	MANNALL Chris	Water Quality and Treatment / Facility Design (B)	Existing		
5.	MAMIYA Takemasa	Facility Design (A) and Cost Estimator	New		
6.	ODA Tetsuro	Project Economist	Existing		
7.	TSURUKI Itsuro	Environmental Specialist	New		
В.	SA Component				
8.	NAGY Julian	Organisational / Human Resources Development Expert	Existing		
9.	HART Timothy	Social Scientist / Community Development Expert	Existing		
10.	RAMSDEN Peter	Water Resources Allocation Planner	New		
11.	KAPELUS Paul	Institutional Development Instructor	New		
12.	MCKUDU Charles	Financial / Investment Planner (B)	New		

#### TERMS OF REFERENCE OF STUDY TEAM ON THE BOUNDARY ISSUES

#### 1 Introduction

The issue of the water board boundary between Rand Water and Magalies Water were briefly addressed during the Master Plan study. Based on the Master Plan level study, certain recommendations were made on the future supply to the peripheral areas. The Department of Water Affairs has however identified the needs for detailed technical and economic/ financial analysis as preparation for discussions between the key stakeholders and respective institutions.

- 2. Study Outline of JICA Study Team (Draft TOR)
- 2.1 First Stage of Field Survey (February to March)
- (1) To review the preliminary analysis and recommendations of the Master Plan Study
- (2) To assess the water resources available in the study area
- (3) To collect, appraise and report on information regarding the current bulk water supply to the Vaal River Supply Area and planned future augmentation schemes
- (4) To collect, appraise and report on Rand Water's medium and long term development plans for peripheral areas under consideration
- 2.2 Second Stage of Field Survey (May to June)
- (5) To study the unit cost of water for alternative development proposals
- (6) To evaluate the water tariff systems applicable in the peripheral areas under consideration, and in the neighboring Magalies Water Board area
- (7) To examine a schedule of future water supply development for the peripheral areas under consideration
- (8) To provide necessary materials and ouputs of the study in the JICA Study Team to the DWAF (decision makers)
- 3. Time Frame of the Study for This Aspect

February 1997 till June 1997

## CASH FLOW OF JICA TECHNICAL ASSISTANCE

		( Մւ	(Unit: Thousand Rand)	
Fiscal Year	Total Budget	Japanese portion	South Africa portion	
95/96	6,096	3,940	2,156	
96/97	10,790	7,804	2,986	
97/98	10,772	6,726	4,046	
TOTAL	27,658	18,470	9,188	
(Japanese Ye	n)			
(Unit: Mil.Y	'en) 777	519	258	



## **MINUTES**

OF

# MEETING OF PROJECT EXECUTION GROUP

**FOR** 

## THE STUDY ON

# THE EXPANSION OF CAPACITY OF MAGALIES WATER IN THE REPUBLIC OF SOUTH AFRICA

Held in Rustenburg, 5th March, 1997

# JICA Magalies Water Study

## Minutes of Meeting of the Project Execution Group

# Held at 13h30, 5th March 1997, in Rustenberg

Present:

R. Strydom

Magalies Water Board

M.S. Ramodike

Eastern District Council

J. Ntshwagong

Rustenberg District Council

P. Fernandez

**DWAF North West** 

B. Bradley

DWAF Mpumalanga

I.I. Mantsho

Magalies Water

M.P. Montoedi

Magalies Water

S. Kadowaki

Jica Study Team

B. Sawara

P. Ramsden

P. Kapelus

T. Hart

J. Nagy

T. Mamiya

C. McKudu

C. Mannall

M. Moitisiwa

S. Mallony

GFJ

G. Rodgers

SRK

#### 1. Welcome / Introduction

Mr Nagy explained by way of introduction that his was the first meeting of the Project Execution Group (PEG) and that it was necessary to start by confirming participation and appointing a Chairman.

The study concerns the expansion of the area of supply of Magalies Water and it was therefore felt to be appropriate that the representative of Magalies Water Board should chair the meeting. Mr Strydom was then appointed to chair this and future meetings of the PEG.

#### 2. Confirmation of Participation

Participation in the meeting was confirmed. This consists of a representative(s) of:

Magalies Water Board

Rustenberg District Council
Eastern District Council
Highveldt District Council

DWAF North West DWAF Mapumalanga

JICA Study Team

- Agreed that it would not be necessary to include Rand Water Board, as the feasibility study areas are all north of the RW supply area. Copies of the minutes will be sent to RW to keep them informed.
- Representatives of the pilot project Local Steering Committees would be invited to the meetings as appropriate.

#### 3. Roles and Responsibilities

Mr Nagy noted that during Phases 2 and 3 the stakeholders in the study area would be playing a much more active role. Furthermore once the study is concluded in October full responsibility for taking plans and recommendations forward will be in the hands of the key players. It is therefore important the each institution involved accepts a role and certain responsibilities. At the end of Phase 1 certain proposals were put forward as a basis for further discussion. These were circulated in the meeting and briefly explained. The Chairman asked participants to study these proposals so that they can be discussed in greater depth at the next meeting.

Mr Kadowaki reminded the participants to the meeting of the role and responsibilities of this, the Project Execution Group, which are:

- To oversee the efficient implementation of Phases 2 and 3.
- To provide guidance to the Study Team.
- To assist with coordination and access.
- To provide information as required by the Study Team.

#### 4. Work Program for March

#### 4.1 Introduction

Mr Kadowaki referred to the bar chart (Master Work Schedule) which gave an overview of Phases 2 and 3.

Mr Kadowaki explained that the program is separated into two periods, firstly February - March and then May - October, which is due to the fact that the Japanese Government's financial year end is March.

Mr Kadowaki further explained that the second stage is, in turn divided into two sets of activities, being Feasibility Study and Pilot Project Implementation.

He explained that information in the schedules handed out for the meeting had been broadly discussed at the inception workshop.

The following questions were raised:

- Have the communities involved been kept consulted about the projects? Mr Hart explained the extensive consultation process which has been followed.
- What are the boundaries of the feasibility study areas? Mr Hart gave a brief overview of each of the feasibility study areas and the pilot projects.

#### 4.2 Sub-contracted Work

Mr Kadowaki referred to the hand out and explained that there would be four areas of work to be sub-contracted:

- Aerial survey and mapping.
- Drilling of boreholes.
- Test pumping and water quality analysis.
- Design of pilot project infrastructure.

Mr Montoedi expressed the view that MWs technical teams should be actively involved in the pilot projects because of their knowledge of local conditions. This was agreed.

#### 4.3 Technical

Mr Sawara explained the activities of the technical team as set out in the material circulated.

#### 4.4 Institutional

Mr Hart and Mr Nagy explained the activities of the institutional team as set out in the material circulated.

Mr Fernandez asked that the Study Team take care to ensure that there is no overlap or duplication with the work already being done e.g. Danida work.

#### 4.5 Financial

Mr Mckudu gave an overview of the financial aspects of the program which are currently concerned largely with the gathering of information related two main areas being, cost recovery and sources of future funding.

#### 4.6 General Discussion

- The Chairman cautioned that the program is very tight. In this regard he noted that the pace at which adequate consultation with communities can take place may determine the critical path.
- The Chairman asked that the financial aspects of projects should not be discussed with communities until they have been cleared with the local authority/district council.
- Mr Montoedi asked if the communities have accepted the pilot projects? Mr Ramodike indicated that the ultimate level of acceptance is by the District Council and that this acceptance has been achieved.
- Mr Feranadez warned that acceptance of a project at the start does not mean that this may not change over time. Ongoing reaffirmation of the projects is therefore important.

## 5. Counterpart Involvement

Mr Nagy explained that the project presented a good opportunity to transfer skills and share the learning experiences of the pilot projects and feasibility studies. Participants were therefore asked to consider seconding staff to work with the project team. This could be on a number of bases:

- An extended period.
- For a specific task.
- To gain insight into a specific skill / technology.

The Chairman asked participants to consider this after discussion with their respective organisations and report back at the next meeting.

#### 6. Strategy for Project Execution Forum Meetings

It was proposed and agreed that, these should take place before the finalisation of the interim and final reports so that the findings, conclusions and proposals can be tested with stakeholders to elicit their views. These views would then be taken into account in finalising these reports.

#### 7. Meeting Schedule

Mr Nagy indicated that DWAF would prefer a schedule of meetings to be set for the remainder of the project so participants can reserve the times in their diaries.

The following was proposed and agreed:

### **Project Steering Committee**

Tuesday, 25th March

Tuesday, 29th July

Tuesday, 21st October

#### **Project Execution Group**

Thursday, 20th March

@ Rustenberg

Tuesday, 6th May

@Britz

Tuesday, 3rd June

@ Rustenberg

Tuesday, 1st July

@Britz

Tuesday, 5<sup>th</sup> August

@ Rustenberg

Tuesday, 2<sup>nd</sup> September

@Britz

Wednesday, 1st October

@ Rustenberg

## **Project Execution Forum**

Tuesday, 24th June

Tuesday, 9th September

#### 8. General

Chairman summarised two requirements to be addressed by participants by the next PEG meeting:

- Review of roles and responsibilities document.
- Consider counterpart involvement and identify individuals.

Approved after amendments proposed at meeting of the PEG held on the 20<sup>th</sup> March have been made.

Mr P. Fernandez

Acting Chairman of the Project Execution Group 20th March 1997

# **MINUTES**

OF

# MEETING OF PROJECT EXECUTION GROUP

**FOR** 

# THE STUDY ON

# THE EXPANSION OF CAPACITY OF MAGALIES WATER IN THE REPUBLIC OF SOUTH AFRICA

Held in Rustenburg, 20th March, 1997

## JICA Magalies Water Study

# Minutes of Meeting of the Project Execution Group

# Held at 10h00, 20th March 1997, in Rustenberg

#### Present:

P. Fernandez DWAF North West (Acting Chairman)

J. Ntshwagong

Rustenberg District Council Highveldt District Council

P. Meintjies M. Makgopela

Eastern District Council

B. Bradley

**DWAF** Mpumalanga

M.P. Montoedi

Magalies Water

R. D. Tlale

Chairman: Pilot Proj. Steering Comm.: Ga-Rasi

K. Maveyo

Pilot Project Steering Committee; Kameelboom

S. Kadowaki

Jica Study Team

B. Sawara

P. Ramsden

P. Kapelus

T. Hart

J. Nagy

T. Mamiya

C. McKudu

C. Mannall

M. Moitisiwa

#### 1. Welcome

Mr Fernandez acted as Chairman of the meeting. He welcomed participants to the second meeting of the Project Execution Group.

#### 2. Apologies

R. Strydom M.S. Ramodike L. Lloyd

Magalies Water Board Eastern District Council Highveldt District Council

J.van Aswegen M. Thubane

**DWAF** Mpumalanga Sehoko Community

Clr. Skosana

Sehoko Community

S. Molelekeng

Magalies Water

#### 3. Agenda

The agenda was approved without amendment.

#### 4. Approval of Minutes

The minutes of the meeting of 5th March 1997 subject to minor corrections.

#### 5. Presentation of Progress Report

#### 5.1 Overview of the Work

Mr Kadowaki referred to the Progress Report which had been distributed to participants. He led participants through the structure of the report by referring to the table of contents.

Mr Kadowaki provided a general update on progress with particular reference to aerial mapping and pump testing. Both are crucial inputs to the technical design process. Good progress has been made in both tasks are now complete.

#### Discussion:

• The Chairman asked if the pump test contract had been awarded following standard procedures of Magalies Water. Mr Sawara explained that the preferred approach had been to use Magalies Water contractors. However as Magalies Water did not have any pump testers under contractor a tender process was used to select the contactors. The tender process was administered by EVN.

#### 5.2 Feasibility Study

#### 5.2.1 Engineering Aspects

Mr Sawara presented the engineering aspects with reference to the progress report pages 3-1 to 3-9.

#### Discussion:

- Mr Montoedi asked what process had been used to gain access to the communities involved. Mr Hart explained that great care has been taken to follow a process of systematic consultation, particularly with regard to establishing the local pilot project steering committees.
- The Chairman asked whether the study team was coordinating its technical activities with DWAF. It was confirmed that Mr van den Berg has been consulted and is involved.
- The Chairman cautioned that the recent experience with service delivery projects has been strong resistance to the minimum level of service and a reluctance to pay for this level of service. He therefore felt that it was appropriate that the study team look at an alternative level of service.

#### 5.2.2 Boundary Issues

Mr Ramsden presented an overview of the boundary issues as set out in pages 3-9 to 3-13 of the report.

#### 5.2.3 Financial Aspects

Mr McKudu presented an overview of his study in to financial aspects as set out on page 3-19.

#### Discussion:

- Mr Ramsden asked whether the financial institutions he had spoken to have any track
  record in lending for service provision. Mr McKudu indicated that this is a new field for
  most financial institutions in South Africa, but that many larger institutions have started
  project finance divisions and intend to enter the filed of infrastructure and service
  delivery lending field.
- Mr Ramsden asked whether the legal and authority aspects of raising loans for service delivery have been studied. Mr Kadowaki indicated that this will be dealt with in Stage 2.

#### 5.2.4 Institutional Aspects

Mr Nagy presented an overview of the institutional aspects as set out in pages 3-14 to 3-19.

He also referred to Chapter 2 where the management and coordination structure of the Study is set out. This structure supports the overall institutional planning objectives of the Study.

#### Discussion:

Mr Kadowaki noted that there were two feasibilty study areas where provision of RDP levels of service have already been initiated, these are:

- The Ramokokstad supply block comprising the communities of Botjating, Ramokokstadt, Ga-Ramokoka, Thabeng, Mmorogong and Leboaneng.
- The Mokagalwaneng group of communities including Matiametiong (and Modimong), Mokgalwana and Mokgalwaneng.

In view of service provision having already commenced, the need to retain these areas within the feasibility study areas has been questioned by the Study Team. The consensus of the meeting was that the feasibility study areas should not be changed. It was however agreed that this matter needs to be looked at given the facts and more detailed consideration is necessary before a final decision is made.

#### 5.3 Pilot Projects

#### 5.3.1 Infrastructure Development

Mr Kadowaki provided an overview of the current status of pilot projects with reference to Chapter 4 of the report. Good progress has been made and he referred to:

- Aerial photos and mapping having been completed in all areas except some area of Schoko.
- Test pumping being nearly complete at Kameelboom.
- Siting of new boreholes having proceeded at Kameelboom.
- A number of field surveys having been completed, in all areas, as the initial steps in the design process.

#### Discussion:

Mr Hart reiterated that the priority is to get water supply to those areas where there is no current supply. Hence more priority being placed on getting water to Kameelboom and Semohlase where there is currently no supply. These areas will obviously get more of the available budget than areas such Ga-Rasai and Sehoko which have an existing level of service.

#### 5.3.2 Institutional Development

Mr Hart presented an overview of the institutional development aspects of the pilot projects as set out in the report in Chapter 4. In particular he noted that a needs survey has been completed in the pilot project communities. A cost recovery audit had also been conducted.

The team will have to address two specific challenges:

- Making the newly installed water supply system at Ga-Rasai work.
- Resolving different levels of development between Sehoko and Loding which could cause tensions between the communities.

#### Discussion:

• The Chairman indicated that the Kameelboom community has a need for stock watering. Mr Hart indicated that the team is aware of this but that the priority is water of human consumption.

• The Chairman indicated that the RDP minimum standard in terms distance (i.e. supply point within 200m of the household) should not be interpreted literally as there are often physical constraints such as fences, fields and structures. A practical approach needs to be adopted which will result in some variations from this standard.

#### 6. Mobilisation of Counterpart Personnel

Mr Nagy reported that nominations had been received from Magalies Water who wish to involve their staff on an activity by activity basis, at appropriate times in the Study. When these people become involved will be discussed with the study team. The nominated individuals are:

Kameelboom:

Mr B. Dandashe

Mr S T Molelekeng

Klipvoor Dam:

Mr L Meyer (Process Design)

Mr R le Roux (Pipelines and Reservoirs)
Mr J Mooketsi (Community Liaison)

He also reported that the District Councils do not have people in place to involve in the Study. Post have been created by the district councils for people in the service delivery area and as these are filled the situation will be reviewed.

7. Local (Pilot) Project Steering Committees (LPSCs)

Mr Hart referred to page 4-17 where the formation of the LPSCs is discussed in detail. Key points to note are that:

- LPSCs have been established in all areas other than Bapong.
- Several meetings have already been held with members of these LPSCs, even before the committees were formalised. A working relationship has therefore been established.

#### Discussion:

- Mr Makgopela was concerned about the Ga-Rasai LPSC developing a constitution because of possible clashes with the role of the RDP Development Forums. Mr Hart clarified that this is more of terms of reference for the committee than a formal constitution.
- Mr Montoedi indicated that the community at Ga-Rasi are concerned that the quality of
  water from the package plant is not satisfactory or that it is of a lower quality than the
  borehole water. This was noted particularly if we are expecting people to pay for water
  i.e. people won't pay for water they consider to be of inferior quality. The Chairman
  requested that this be followed up.

## 8. General

There were no matters raised under general

## 9. Closure

The Chairman thanked participants for there attendance and closed the meeting.

# **MINUTES**

OF

# MEETING OF PROJECT STEERING COMMITTEE

**FOR** 

# THE STUDY ON

# THE EXPANSION OF CAPACITY OF MAGALIES WATER IN THE REPUBLIC OF SOUTH AFRICA

Held in Residensie Building, Room 760, 25th March 1997, 14h00

# **Project Steering Committee**

# Minutes of Meeting

# 25th March 1997 at 9h00

# Room 760, Residensie Building, Pretoria

Present:

T Ramaema

(Chairman)

O van den Berg

**DWAF** 

R Strydom

Magalies Water

S Ramodike

Eastern District Council

P Meintijies

Highveldt District Council

J van Aswegen

B Bradely

DWAF Mpumalanga

S Kadowaki

Study Team

B Sawara

C Mannall

T Mamiya

J Nagy

T Hart

C McKudu

## 1. Welcome

The Chairman welcomed participants to the meeting.

## 2. Apologies

These had been received from:

N Fenner

Magalies Water

L Colvin

**DWAF** 

P Pyke

DWAF

K Tahara

Japanese Embassy

L Lloyd

Highveldt District Council

# 3. Approval of Agenda

This was approved without amendment.

# 4. Minutes of the Previous Meeting

These were approved without amendment.

Proposed by Mr Strydom and seconded by Mr McKudu.

# 5. Presentation of Progress Report

The progress report which had been distributed prior to the meeting refers.

Copies of transparencies to be used in the presentation were also distributed and are attached as an Appendix.

### 5.1 Overview

Mr Kadowaki presented an overview of Stage 1 of the Feasibility Studies and Pilot Projects noting that all the main planned activities have been achieved.

## Discussion;

The Chairman asked the representatives of the District Council if they were satisfied with the level of participation:

- Mr Meintjies indicated that he was satisfied. He also noted that they had little expierience
  of pre-paid metering which is one of the proposed technical solutions and would like to
  see how this can be made to work
- Mr Ramodike asked that wherever possible District Council representatives be included
  in meetings with the community. Mr Hart indicated that the Study Team were committed
  to including the District Councils and TLCs in consultations and have tried to do this
  whenever practical.

The Chairman asked Magalies Water if they were satisfied with progress of the project:

 Mr Strdyom indicated that Magalies Water have played an active role in the study and are satisfied with the level of their involvement. On the question of pre-paid metering he indicated that Magalies Water have taken a
decision in principle to proceed with a project of this nature. He noted that there is a
significant cost consideration which needs to be evaluated so as not to prejudice other
customers.

# 5.2 Phase 2: Engineering

Mr Sawara presented an overview of the engineering aspects.

#### Discussion:

- The Chairman asked what had been done to consider health and sanitation aspects. Mr Sawara indicated that this was considered in the Phase 1 study. The plans are based on the VIP system. Any higher level of service has a major cost implication.
- Mr Meintjies asked what researched had been done into affordability. Mr Sawara
  indicated that this had been looked at but it need more research. In response to a questions
  from the Chairman he indicated that affordability was in the range R8-00 to R15-00 per
  month.
- Mr Strydom raised the point that there is strong resistance to stand pipes and that this needs to be recognised and addressed. While there is this resistance cost recovery is going to be a problem. He indicated that new approaches such as the Durban Metro system offer a creative alternative to stand pipes at a near equivalent cost. The Chairman stressed that the Department is not opposed to higher levels of service but cannot finance these higher levels.
- Mr van den Berg asked if it would be possible shift demand from the Hartebeestpoort
  Dam system to the Vaalkop system during the period when there is a shortage in the
  medium term. Mr Strydom indicated that this would not be possible. Other solutions need
  to be considered between DWAF and Magalies.
- Mr Kadowaki requested that there be clarification on who is responsible for the Moretele 2 area from an institutional perspective. The Chairman indicated that this is an area being considered by DWAF. He stressed that this needs to be resolved in a proper manner involving consultation between the TLCs, DWAF and Magalies Water. Mr van Asswegen indicated that the current study by ODA into the area will report by July this year and this will provide the basis for discussion and negotiation.

### 5.3 Phase 2: Institutional

Mr Nagy presented an overview of the feasibility study institutional aspects:

Discussion:

Mr Strydom requested that DWAF be included as an actor in the institutional planning model in respect of their involvement in operational aspects.

### 5.5 Phase 4: Institutional

Mr Hart presented an overview of the pilot projects institutional aspects.

### Discussion:

- Mr Bradley noted that in many areas RDCs are very influential and efforts must be made to ensure their inclusion in the consultation process.
- Mr van Aswegen observed that in the needs survey sanitation was a low priority. Mr Hart
  felt that this could have been influenced by the fact that the community perceived the
  study to be dealing with water supply delivery and that this could have influenced
  prioritisation of needs.
- Mr van Aswegen asked what the future of the Local Project Steering Committes is after the study. He felt that the experience/capacity they gain should be us used in local planning and local authorities. In this regard Mr Strydom felt that the needs of local authorities could be met by competencies developed in pilot projects.

## 5.4 Phase 3: Engineering

Mr Kadowaki presented an overview of the engineering aspects related to pilot projects.

There were no questions. It was pointed out that the technical detail is covered in depth in the progress report.

### 5.6 Finance

Mr McKudu presented an overview of the financial study.

### Discussion:

Mr Strydom felt that cost calculations and comparisons should not be replicated were these have already been done by Magalies Water and Rand Water.

Mr Strydom felt that the emphasis of the study should be on third tier tariffs. These need to be developed in consultation with the local authorities.

Mr Strydom indicated that he wished to again stress the importance of the level of service and that this be looked at in the financial aspects. In looking at higher levels of service the impact of higher levels of waste water also need to be considered.

# 5.7 Acceptance of Progress Report

The Chairman indicated that the Department accepts the report.

The Chairman noted that the Department is particularly keen to see that during Stage 2, the Study addresses the question of how, the District Councils and Magalies Water will raise funds for service delivery projects.

The meeting accepted the report taking into account the points discussed.

# 6. Report on the Project Execution Group

Mr Strydom reported back on the two meetings of the PEG held on the 5th and 20th March.

Minutes of the meetings were included in the material handed out to PSC participants.

There were no questions arising.

# 7. Counterpart Training Programme for FY 1997

Mr Kadowaki reported back that two nominations have been received from the Department for counterpart training in Japan and accepted in principle by JICA.

During Stage 2 the detail schedule / program will be worked out. The training will be in about July / August for a period of three weeks.

Mr van Asswegen report that the program was of great value.

### 8. General

A schedule of proposed dates for future meetings has been discussed by the Project Execution Group. This will facilitate diary planning. Proposed dates are as follows:

Project Steering Committee (Meetings in Pretoria)

Tuesday, 29th July

Tuesday, 21st October

# **Project Execution Group**

Thursday, 20th March

@ Rustenberg

Tuesday, 6th May

@Brits

Tuesday, 3rd June

@ Rustenberg

Tuesday, 1st July

@Brits

Tuesday, 5th August

@ Rustenberg

Tuesday, 2<sup>nd</sup> September

@Brits

Wednesday, 1st October

@ Rustenberg

# Project Execution Forum (Venues to be decided)

Tuesday, 24th June

Tuesday, 9th September

The above dates were noted and the Chairman asked participants to diarise these dates.

The Study Team will confirm these dates following normal notice and agenda processes.

## 9. Closure

There being no further business the Chairman closed the meeting.

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# **MINUTES**

OF

# MEETING OF PROJECT EXECUTION GROUP

FOR

# THE STUDY ON

# THE EXPANSION OF CAPACITY OF MAGALIES WATER IN THE REPUBLIC OF SOUTH AFRICA

Held in Rustenburg, 6th May, 1997

# JICA Magalies Water Study

# Minutes of Meeting of the Project Execution Group

# Held at 10h00, 6th May 1997, in Pretoria

Present:	R. Strydom	Magalies Water (Chairman)
	O.B. Mphachoe	Magalies Water
	B.A. Dandashe	Magalies Water
	MP. Montoedi	Magalies Water
	M.S. Ramodike	Eastern District Council
	L. Khutsoane	Rustenberg District Council
	P. Fernandez	DWAF North West
	B. Bradley	DWAF Mpumalanga
	M.R. Moloele	PSC - Sehokho
	F Sefike	PSC - Sehokho
	P Moeketsi	PSC - Sehokho
	M Moeti	PSC - Sehokho
	MW Molotsi	PSC - Kameelboom
	Rev. PD Skhosana	Mbibane TLC
	M Thubana	Mbibane TLC
	R. D. Tlale	Chairman: Pilot Proj. Steering Comm.: Ga-Rasi
	K. Maveyo	Pilot Project Steering Committee; Kameelboom
	S. Kadowaki	JICA Study Team
	T. Ramsden	JICA Study Team
	T. Hart	JICA Study Team
	J. Nagy	JICA Study Team
	C. McKudu	JICA Study Team
	M. Moitisiwa	JICA Study Team
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## 1. Welcome

The Chairman welcomed participants to the first meeting of the Project Execution Group during Stage 2 of the project in 1997.

# 2. Apologies

Mr. Lloyd

Highveldt District Council

P. Meintjies J.van Aswegen Highveldt District Council DWAF Mpumalanga

# 3. Agenda

The agenda was confirmed without amendment.

# 4. Approval of Minutes

The minutes of the meeting of 20th March 1997 were approved subject to minor corrections.

# 5. Matters Arising

### 5.1 RDP Standard

It noted that DWAF had clarified that the 200m standard means "within a 200m radius".

# 5.2 Ga-Rasai Water Quality

The Chairman indicated that water samples had been tested and these confirmed that the quality of water from the package plant was far superior to that from the boreholes. Concerns about the package plant water quality are therefore matters of perception and need to be discussed with the community.

It was noted that there are some leaks at the package plant which need to be taken up with the supplier.

# 6. Report back on Progress

### 6.1 Consultation with JICA

Mr Kadowaki reported that proposals submitted to JICA for Stage 2 had been accepted without any major changes.

### Pilot Projects

He reported that at the JICA Advisory Committee meeting the need for some ongoing technical assistance after the end of Stage 2 had been considered and was felt to be important. This will be discussed further by JICA.

## Feasibility Studies

There are no changes envisaged.

## Key Dates

The work program was included in the hand out material and the meeting was reminded of the key dates during Stage 2 which are:

Submission of the Interim Report

31st July

Preparation of Draft Final Report

October

Completion of Construction Work

12th October

Submission of Final Report

December

### Study Team

The team composition was included in hand out material and is largely unchanged from Stage 1.

6.2 Pilot Projects: Tendering

Mr Kadowaki referred to the schedule of dates in the hand out material.

He indicated that with the assistance of EVN a list of eight potential contractors had been identified. Of these only six submitted an expression of interest by the deadline date.

He noted that the time frame is very tight and that a single contractor is therefore preferred.

In discussion the following points were noted:

- The pilot projects are part of the Study activities and the client in respect of these tenders is therefore Sanyu Consultants and not DWAF nor Magalies Water. Normal State tender procedures are not therefore required to be followed.
- Provision has specifically be made in the tender documents for the use of local subcontractors and engagement of local people. The importance of this to communities should not be under emphasised and use of community resources should go beyond simply using casual labour.
- A proper motivation on the approach to and process of hiring contractors should be prepared for discussion with communities. Gaining their support for the process, and contractors appointed, will be essential to the success of the Pilot Projects.
- Communities should be given the opportunity to nominate additional contractors for the list or potential sub-contractors. The latter may be a practical route for them to involve local enterprises.
- It was proposed that the appointment of contractors be taken up with the Chairman of the Local Project Steering Committee.

 Who will take responsibility for the Pilot Projects up on completion will be addressed during Stage 2, taking into account district council policy in the area and the provisions of the new Water Services Act.

# 6.3 Pilot Projects: Institutional Aspects

Mr Hart presented and up date on activities which were comprehensively covered in the hand out material.

# General

Activities are largely as planned during Stage land are on schedule. In discussion it was noted that:

- All work should be undertaken within the framework of the new Water Services Act.
- "Operationalising" the pilot projects implies that a plan will be in place for each pilot project by October. Implementation will then proceed and support will be provided in terms of the subsequent technical support being discussed by JICA.
- Training to be provided will be in the context of the needs of the pilot projects. Where
  possible certification will be provided.
- Communities have indicated that they have difficulty discussing the concept of pre-paid
  meters as they have never seen one. Magalies Water are purchasing a test unit and this
  will be available by arrangement for demonstrations.
- Magalies Water asked that they be invited to all meetings with communities.

## Bapong

Mr Hart reported that discussions with, Rand Water and Consultburo who are both working in the area, indicate strong support for the Study undertaking some work in the area. An institutional development project focused on community-based strategies to deal with illegal connections and cost recovery is a need.

A proposed terms of reference was included in the hand out material and will be discussed with DWAF, RW, EDC and Bapong local government.

6.4 Pilot Projects: Financial Aspects

Mr McKudu presented an outline of progress on financial aspects as contained in the hand out material.

# 7. Involvement of Counterpart Personnel

Mr Nagy indicated that it was an important goal of the project to involve counterpart personnel so as to effect a transfer of knowledge and skills.

At the end of Stage 1 Magalies Water had submitted a list of personnel whom they wanted to involve in specific aspects of the work. This has not changed and will be planned for.

The district councils were keen to be involved but did not yet have staff in place who they could involve. This was however in the process of changing and Rustenberg District Council, in particular, now had people who could become involved and this was being followed up.

It was requested that an overview of the nature of the likely involvement and process be prepared and distributed to the district councils and Magalies Water. This should address optimum timing for counterpart involvement.

# 8. Counterpart Training in Japan

Mr Kadowaki reported back on the program outline included in the hand out material.

The program would start in June. It is therefore a matter of urgency that the selected candidates are officially notified so that they can plan appropriately. DWAF needs to attend to this.

#### 9. General

The Chairman requested that study data be made available for use in the budgeting process being undertaken by Magalies and DWAF later this year. Data would be necessary by the end of September at the latest. This did not need to be in final form.

There were no other matters raised under general

### 10. Next Meeting

3rd June at a venue to be confirmed.

### 11. Closure

The Chairman thanked participants for there attendance and closed the meeting.

# MINUTES

OF

# MEETING OF PROJECT EXECUTION GROUP

**FOR** 

# THE STUDY ON

# THE EXPANSION OF CAPACITY OF MAGALIES WATER IN THE REPUBLIC OF SOUTH AFRICA

Held in Rustenburg, 3rd June, 1997

# JICA Magalies Water Study

# Minutes of Meeting of the Project Execution Group

# Held at 10h00, 3rd June 1997, in Rustenberg

D	D. Cambana	Magalics Water (Chairman)
Present:	R. Strydom	Maganes water (Chairman)
	P. Fernandez	DWAF North West
	B. Bradley	DWAF Mpumalanga
	O. B. Mphachoe	Magalies Water
	B. A. Dandashe	Magalies Water
	R. D. Tlale	PSC: Ga-Rasi
	S. Ndebele	PSC: Ga-Rasi
	C. Madalane	PSC: Ga-itasi
	O. M. Manamela	PSC; Ga-Rasi
	K. Manyo	PSC; Kameelboom
	M.W. Molotsi	PSC: Kameelboom
	M. Thubana	Mbibane TLC
	B. Kekana	Mbibane TLC
	B. Sawara	JICA Study Team
	T. Mamiya	JICA Study Team
	P. Ramsden	JICA Study Team
	T. Hart	JICA Study Team
	J. Nagy	JICA Study Team
	C. Mckudu	JICA Study Team
	M. Moitisiwa	JICA Study Team

## 1. Welcome

The Chairman welcomed participants to the meeting.

## 2. Apologies

5. Kadowaki	JICA Study ream	
M.P. Montoedi	Magalies Water	
L. Khutsoane	Rustenberg District Council	
J.van Aswegen	DWAF Mpumalanga	
S. Ramodike	Eastern District Council	
J. Cunniff	Rustenberg District Council	

It was noted that the district councils were not present. The Study Team was asked to ensure that a representative, or alternate, is always present because of the important role the district councils play.

## 3. Agenda

A revised agenda was included in the material circulated to participants and was accepted.

# 4. Approval of Minutes

The minutes of the meeting of 6th May 1997 were approved.

### 5. Matters Arising

There were no matters arising from the minutes of the meeting of 6th May 1997.

## 6. Phase 2 (Feasibility Projects)

# 6.1 Overall Progress

Mr Sawara advised that the focus of the Study during May had been on the Pilot Projects where good progress has been made.

In the latter part of May work on the Feasibility Studies has commenced.

# 6.2 Phase 2 (Feasibility Studies)

## (1) Engineering Aspects

Mr Sawara gave an overview of the approach and plans.

# (2) Institutional Aspects

Mr Nagy gave a brief status updated. He noted that the institutional aspects need to proceed in tandem with the development of technical plans / proposals.

The following points arose in discussion:

- Developments in the Highveldt / KwaNdebele area where a new water and sanitation authority is being considered were noted.
- Mr Mckudu noted the need for payment systems in all the communities where the study has been working. How this will be addressed needs to be considered.
- Mr Fernandes reported that North West are arranging cost recovery workshops to be held in each district council area during July. The purpose of these workshops is to explore this issue and develop strategies. It is also intended to find ways of taking this process further by cascading it downwards. He indicated that it would be desirable for the Study Team to participate in the RDC and EDC area workshops. It was also considered that it may be appropriate for a member of each LPSC to attend as part of the Study Team's representation.

## 6.3 Phase 3 (Pilot Projects)

## (1) Engineering (including Tendering)

Mr Sawara gave an update on progress with reference to the material circulated. It was note that tenders will be received and opened on the  $4^{th}$  June as scheduled.

The following points arose in discussion:

- Mr Ramsden noted a request from contractors for construction water on site. This has been addressed.
- Mr Fernandes noted that in the past there have been problems of the main contractor not paying sub-contractors. This needs to be appropriately dealt with when contracts are awarded.

### (2) Institutional (including Bapong TOR)

Mr Hart gave an overview of progress with reference to handout material. In particular he noted that:

- Good progress has been made in establishing effective LPCSs. He referred to the diagramatic model showing the organisation development process.
- A meeting will be held on the 9th June with LPSCs to discuss the tendering and selection process. This specifically provides for the use of local labour and sub-contractors.

- Good progress has been made in getting the Bapong pilot project established. Meetings
  have been held with Rand Water and Consultburo who are active in the area. They are
  supportive of the pilot project. A proposed terms of reference has been prepared which
  has been discussed with Eastern District Council.
- All pilot project activities have been planned and milestones are set out in the handout material.

# 6.4 Financial Aspects (Phase 2 & 3)

Mr Mckudu reported on progress on the financial aspects. The handout material refers.

# Boundary Issues:

- The focus of the study has been on the collection of demand and bulk tariff data.
- It was noted that the assumptions on which the calculations are based are important.

# Phase 2: Feasibility Studies

The data collected by means of a survey in Phase 1 is now ready for release. Certain of
this data needed to be reviewed to check its validity and further survey work lead to
extreme values being deleted to give a better representation. This survey reveals that there
is a strong correlation between the level of service and the willingness to pay.

# Phase 3: Pilot Projects

- Communities appear to be aware of the cost recovery issue and the problems related to it.
- Where consumers choose yard connections the question of sanitation services would need to be looked at as the two are likely to go together.

# 7. JICA Training Programme

Mr Sawara presented the program as set out in the handout material.

He noted that a letter of approval from the Minister of Water Affairs and Forestry to the Japanese Embassy confirming the proposed candidates is outstanding. Obtaining this final approval is now urgent.

The Study Team were asked to follow this up.

#### 8. General

The minutes of the PSC Meeting at Kameelboom on the 2<sup>nd</sup> June were discussed. It was agreed that the matters raised were valid but should be dealt with in the planning process and discussed at subsequent PSC meetings.

It was noted that the concern about the high nitrate content at Kameelboom is being addressed in planning by using a source outside the village. The Chairman suggested that the possibility of mixing water from different sources be considered and Mr Ramsden agreed to raise this with Mr Strauss.

The PSC needs to resolve the question of who will be the implementing agent for the additional funds applied for by Kameelboom. Magalies Water could fulfill this role if requested to do so, as could the district council.

# 9. Next Meeting

Tuesday 1st July at a venue to be confirmed.

### 10. Closure

The Chairman thanked participants for their attendance and closed the meeting.

Confirmed:

R. Strydom

Date

# **MINUTES**

OF

# MEETING OF PROJECT EXECUTION GROUP

**FOR** 

# THE STUDY ON

# THE EXPANSION OF CAPACITY OF MAGALIES WATER IN THE REPUBLIC OF SOUTH AFRICA

Held in Rustenburg, 1st July, 1997

# JICA Magalies Water Study

# Minutes of Meeting of the Project Execution Group

# Held at 10h00, 1st July 1997, in Rustenberg

Present:	R. Strydom	Magalies Water (Chairman)
	P. Fernandez	DWAF North West
	S. Ramodike	Eastern District Council
	O.A. Appies	Eastern District Council
	K.J. Ntshwagong	Rustenberg District Council
	P. Molekeng	Rustenberg District Council
	O.B. Mphachoe	Magalies Water
	M.W. Molotsi	PSC: Kameelboom
	B.M. Mabena	Mbibane TLC
	A.D. Mashishi	Mbibane TLC
	M.J. Bokaba	Mbibane TLC
	P.D. Skhosana	Mbibane TLC
	Y. Miyanishi	JICA Study Team
	B. Sawara	JICA Study Team
	T. Mamiya	ЛСА Study Team
	C. Mannall	JICA Study Team
	P. Ramsden	ЛСА Study Team
	T. Hart	JICA Study Team
	J. Nagy	JICA Study Team
	C. Mckudu	ЛСА Study Team
	M. Moitisiwa	JICA Study Team

## 1. Welcome

The Chairman welcomed participants to the meeting.

# 2. Apologies

S. Kadowaki JICA Study Team
B. Bradley DWAF Mpumalanga
J. van Aswegen DWAF Mpumalanga

## 3. Agenda

A revised agenda was included in the material circulated to participants and was accepted.

# 4. Approval of Minutes

The minutes of the meeting of 3rd June 1997 were approved without amendment.

## 5. Matters Arising

Mr Miyanishi reported that a request had been made by Kameelboom to the Japanese Embassy for a grass-root grant-in-aid to assist with water supply to the schools. An additional test drilling outside the scope of the pilot project has been completed without successfully finding a suitable water source. Three options are being looked at to try and solve this problem and a report back will be made at the next meeting on the preferred solution.

## 6. Progress of Work

Handout material contained copies of the slides used to provide an update of progress.

### 6.1 Overall Progress

Mr Miyanishi gave an overview of the main Study activities since the last PEG meeting noting:

- Completion of the tendering process for the three pilot projects.
- Successful dispatching of two JICA trainees to Japan.
- The Project Execution Forum workshop.
- Ongoing Phase 2 and 3 work including preparatory work for the Interim Report.

- 6.2 Phase 2 (Feasibility Studies)
- (1) Engineering Aspects

Mr Sawara gave an overview of the approach and plans. He specifically dealt with:

- The water supply alternatives for Klipvoor noting that there are three alternative options:
  - Supply entirely from within the feasibility study area utilising only the new Klipvoor water treatment works.
  - Supplying the Moretele North area from Klipdrift water treatment works and the balance from Klipvoor.
  - Supplying only the Klipvoor West area from Kilpvoor water treatment works and the balance from Klipdrift.
- The implications of considering two different scenarios for water demand planning:
  - RDP service level (30 lcd including losses).
  - Higher than RDP service level (80 lcd including losses).

In discussion the following was noted:

- Mr Fernandez advised that DWAF had recently suggested infra-structure planning parameters which are that:
  - Bulk pipelines on 100 litres per person per day based on present population.
  - Reservoirs should be planned on a capacity of 60 litres per person per day.

Nico Rabie has documented these guidelines and could be contacted for further information on these standards.

Mr Strydom asked if these planning parameters should be used for budgeting purposes. Mr Fernandez confirmed that this was the case. The Study would contact Mr. Rabie for details of the guidelines, and consider the impact on planning and comment at the next meeting.

- Mr Fernandez was of the opinion that because of the major implications of the costs of the proposed works they would have to be phased.
- (2) Institutional Aspects

Mr Nagy gave a brief status updated. He noted that:

- The institutional aspects need to proceed in tandem with the development of technical plans / proposals.
- Variations in capacity of institutions are such that no one single model will apply to the
  feasibility study areas. In each area the optimum structure will depend upon the strengths
  and weaknesses of the particular institutions.

## In discussion it was noted that:

- The initiatives being taken by DWAF vis-à-vis delegation of authority to local authorities need to be taken into account.
- Agreements regarding hand over of the pilot projects may take some time to formulate and should therefore be progressed as quickly as possible.

# (3) Finance

Mr Mckudu presented an overview of the financial analysis which he had undertaken. Points arising from discussion were:

- Mr Fernandez asked that the year / time period to which different figures applied be clearly stated.
- Mr Fernandez asked that training cost be added to project costs as a clearly identifiable line item. In discussion was agreed that these would be of the order of 3-4% on large projects and up to 10% on small projects.
- Financial aspects would be impacted by area planning considerations and it was therefore
  important that the Study team was up to date with developments at an area level. Mr
  Strydom undertook to seek an invitation for the Study to the next Area Planning Forum
  meetings.

# (4) Boundary Issues

Mr Ramsden presented an overview of the status of the boundary issues investigation.

Mr Mckudu commented from the financial viewpoints.

Rev. Ntshwagong asked if there were any alternative sources of water to borehole water in the rural parts of the Study area. Mr Ramsden indicated that this was largely a matter of economics and that it was more financially viable to provide a pipeline supply to higher population densities and larger communities than to small communities and low population densities.

- 6.3 Phase 3 (Pilot Projects)
- (1) Engineering (including Tendering)

Mr Miyanishi gave an update on progress with reference to the material circulated:

- Tenders had been received and evaluated as planned.
- A report back meeting had been held with communities to explain the tendering and evaluation process and this had been accepted by them.
- A contract has been signed with Roadcrete Construction and the first contact meetings with communities have started.

In discussion a number of points arose regarding the labour desk. This is a area of specific interest to communities and therefore the proper handling of the labour desk is important. The Study team undertook to monitor this.

# (2) Institutional Aspects

Mr Hart gave an overview of progress with reference to handout material. In particular he noted that:

- Material circulated can be used as a communication brief on the pilot projects.
- There are several principles which the Study Team has adopted which are critically important to the way the pilot projects are executed:

An emphasis on local planning.

An emphasis on developing networks and partnerships.

Defining, mobilising and sharing best practice.

On-going evaluation.

An emphasis on management and problem solving skills.

- Pilot projects are being handled differently from RDP projects and a lot of emphasis is being put on development during the project delivery phase.
- The document includes the activities planned for July.
- Difficulty has been experienced with getting the Bapong pilot project going. Attempts to
  meet with the community have thus far failed. He outlined several options which the
  Study Team could pursue at this point and noted that these will be considered before the
  next PEG meeting. Mr Strydom indicated that his opinion was that the Bapong pilot

should be reoriented and redefined. He felt support to the EDC in the area may be appropriate, e.g. Formulation of a water supply policy in the area.

# 6.4 Financial Aspects

Mr Mckudu reported on progress on the financial aspects. The handout material refers.

# 7. Feedback on Project Execution Forum (24th June)

Mr Nagy reported that this workshop had been well attended and considered to be a success from the comments of those present. Key points of note were:

- Forty two people had attended.
- Participation by way of discussion in all the sessions was active and useful inputs were received.
- The sharing of learning experiences by the pilot project communities was particularly
  useful and interesting. It is understood that this has not been done in other projects and is a
  practice which should be repeated. Key points raised were:

Unity and common purpose within communities is an essential prerequisite of project initiation and planning.

Creating awareness and understanding in the community of the potential project and all its challenges is the first step.

Establishing a PSC requires a process and cannot be achieved overnight.

Cost recovery planning has been aided by the process of working out the cost implications with the PSC, thereby giving them a better insight

Dealing with defaulters has been given to the communities as a problem for them to work out a solution for.

Support of local councillors is essential. This achieves sponsorship and helps integrate water committees with other structures.

## 8. Next Steps

### 8.1 Interim Report

Mr Miyanishi advised that the key dates in the preparation of this report are:

- Key points to be presented to JICA 15<sup>th</sup>- 18<sup>th</sup> July.
- Distribution of report 23<sup>rd</sup> July.

Presentation of report at joint PSC/PBG meeting on the 29th July.

# 8.2 Follow on after JICA Study

Mr Hart presented some views on this covering:

- Water management mentoring.
- Monitoring and evaluation.
- Building on the experiences to develop third tier capacity.

Mr Strydom indicated that it would be a pity if JICA did not build on the valuable work which has been done in the Study.

Mr Miyanishi cautioned that any ongoing support would be of a limited nature in future phases.

#### 9. General

There were no matters under general.

## 10. Next Meeting

The next meeting will be a combined meeting of the Project Steering Committee and Project Execution Group and will be held on Tuesday 29<sup>th</sup> July at DWAF, Room 1041 Residensie Building, Pretoria.

### 11. Closure

The Chairman thanked participants for their attendance and closed the meeting.

Approved after amendments proposed at the PSC/PEG meeting held on the 29th July 1997 have been made.

Mr T Ramaema Chairman of PSC 29<sup>th</sup> July 1997.